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

January 10, 2019 - Thursday

10:00 am
(or immediately following 9:00 am Special Board Meeting, whichever is later)

1. Call to Order / Pledge of Allegiance
2. Roll Call
3. Report of the Nominating Committee
   a. Election of Officers for 2019
4. Public Comment For Items Not on the Agenda
   Comments by each individual speaker shall be limited to two (2) minutes. Items raised that require a response will be deferred for staff reply.
5. Consent Calendar
   Members of the Board may request that an item under the Consent Calendar be considered separately
   a. Approve Special Meeting Minutes of December 6, 2018
   b. Approve Meeting Minutes of December 6, 2018
   c. Approve Special Meeting/ Study Session Minutes of December 14, 2018
   d. Accept Statements of Revenues and Expenditures for November 2018
   e. Receive Key Caltrain Performance Statistics – November 2018
   f. Receive State and Federal Legislative Update
   g. Adopt 2019 Legislative Program
   h. Receive Caltrain Business Plan Monthly Update – December 2018
6. Report of the Chair
7. Report of the Citizens Advisory Committee - None
   (The JPB CAC did not meet in December)
8. Report of the Executive Director
   a. Peninsula Corridor Electrification Project Monthly Report for November 2018

Note: All items appearing on the agenda are subject to action by the Board. Staff recommendations are subject to change by the Board.
b. Monthly Report on Positive Train Control System

9. Resolution of Support for Caltrain’s Participation in Regional Means-Based Fare Pilot Program

10. Authorize Issuance of Not to Exceed $60,000,000 Aggregate Principal Amount of Farebox Revenue Bonds; Approve Forms of Fourth Supplemental Trust Agreement, Bond Purchase Agreement, Official Statement, Continuing Disclosure Agreement and Escrow Agreement; Take Other Actions in Connection with Issuance and Ratification of Authorization of Interim Financings Approved December 6, 2018, and Take Other Actions in Connection with the Interim Financings

11. Award of Contracts to Cooper Pugeda Management, Inc. and Jacobs Project Management Company for On-Call Program Management Oversight Services

12. Update on Plans and Policies Influencing the Use of JPB Property

13. Caltrain Quarterly Performance Reports
   a. Rail Operations Performance Update 1st Quarter Fiscal Year 2019
   b. Safety and Security Update 1st Quarter Fiscal Year 2019

14. Correspondence

15. Board Member Requests

16. General Counsel Report:
   a. Closed session: Liability Claims Pursuant to Government Code Section 54956.9(d)(2):
      Claimant: Barbara Calkins
      Agency claimed against: Peninsula Corridor Joint Powers Board
   b. Closed Session Conference with Legal Counsel – Anticipated Litigation
      Initiation of litigation pursuant to Government Code section 54956.9 (d)(4): One case

17. Date/Time of Next Regular Meeting: Thursday, February 7, 2019 at 10:00 a.m. San Mateo County Transit District Administrative Building, 2nd Floor, 1250 San Carlos Avenue, San Carlos, CA 94070

18. Adjourn
INFORMATION FOR THE PUBLIC

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

If you have questions on the agenda, please contact the JPB Secretary at 650.508.6279. Agendas are available on the Caltrain website at www.caltrain.com. Communications to the Board of Directors can be e-mailed to board@caltrain.com.

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

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

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

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

Accessibility for Individuals with Disabilities
Upon request, the JPB will provide for written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. Please send a written request, including your name, mailing address, phone number and brief description of the requested materials and a preferred alternative format or auxiliary aid or service at least two days before the meeting. Requests should be mailed to the JPB Secretary at Peninsula Corridor Joint Powers Board, 1250 San Carlos Avenue, San Carlos, CA 94070-1306; or emailed to board@caltrain.com; or by phone at 650.508.6242, or TDD 650.508.6448.

Availability of Public Records
All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at 1250 San Carlos Avenue, San Carlos, CA 94070-1306, at the same time that the public records are distributed or made available to the legislative body.
Peninsula Corridor Joint Powers Board  
Board of Directors Meeting  
1250 San Carlos Avenue, San Carlos CA 94070  
MINUTES OF DECEMBER 6, 2018  
SPECIAL MEETING

MEMBERS PRESENT: J. Bruins, Chair; C. Brinkman, C. Chavez, D. Davis, J. Gee, G. Gillett, D. Pine, M. Zmuda

MEMBERS ABSENT: C. Stone

STAFF PRESENT: J. Hartnett, C. Mau, J. Cassman, B. Fitzpatrick, J. Brook

CALL TO ORDER  
Chair Bruins called the meeting to order at 9:10 a.m.

ROLL CALL  
Assistant District Secretary Brook called the roll. A quorum was present.

GENERAL COUNSEL REPORT  
Legal Counsel Cassman announced the Board would be holding two closed sessions to discuss the following issues. She noted that action was anticipated after the meeting.

The Board recessed to a Closed Session at 9:12 a.m., and reconvened into open session at 10:03 a.m.

a. Closed Session Conference with Legal Counsel – Anticipated Litigation  
   Significant exposure to litigation pursuant to Government Code section 54956.9(d)(2): One case  
   Initiation of litigation pursuant to Government Code section 54956.9 (d)(4): One case

b. Closed Session Conference with Real Property Negotiators Pursuant to Government Code Section 54956.8  
   Negotiators: Joan L. Cassman, General Counsel, and Brian Fitzpatrick, JPB Real Estate Staff  
   Property Location: Hayward Park Caltrain Station, San Mateo, California  
   Parties: Sares Regis Group  
   Under Negotiation: Price and terms of contract

PUBLIC COMMENT  
Drew Hudacek, Sares Regis Group, discussed the Hayward Park transit oriented development project with a 15% affordability component included in the project.

Roland Lebrun, San Jose, addressed the Board regarding the necessity of passing tracks at Hillsdale and Hayward Park stations.

ADJOURN  
The meeting adjouned at 10:05 a.m.
AGENDA ITEM #5 (b)

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

MINUTES OF DECEMBER 6, 2018

MEMBERS PRESENT: J. Bruins, Chair; C. Brinkman, C. Chavez, D. Davis, J. Gee, G. Gillett, D. Pine, M. Zmuda

MEMBERS ABSENT: C. Stone

STAFF PRESENT: J. Hartnett, C. Mau, J. Cassman, T. Bartholomew, C. Boland, M. Bouchard, J. Brook, A. Chan, C. Fromson, J. Funghi, D. Hansel, S. Murphy, P. Skinner

CALL TO ORDER / PLEDGE OF ALLEGIANCE
Chair Bruins called the meeting to order at 10:20 a.m. and confirmed the presence of a quorum with all present except for Director Stone. Director Gee led the Pledge of Allegiance.

Legal Counsel Joan Cassman announced that the Board met in Closed Session at a Special Meeting held immediately prior to this Regular Meeting to discuss two matters: one related to potential litigation and the second concerning a real estate transaction. No action was taken. However, she noted that action was anticipated on the real estate matter during the open session of this Regular Meeting and announced that written materials related to that were available at the back of the room.

Chair Bruins announced that several agenda items would be taken out of order so that after item 9 the Board would address items 11, 12, 15, 10, 13 and 14, in that order, and then pick up again with item 15. Board members concurred.

PUBLIC COMMENT FOR ITEMS NOT ON THE AGENDA
Melissa Platte, Redwood City, Mental Health Association San Mateo County, expressed support for inclusion of a 20 percent transit-oriented development low income element in the Hayward Park housing project.

Karen Grove, Menlo Park, urged the Board to adopt the transit-oriented housing element for low income and very-low income categories.

Adina Levin, Friends of Caltrain, stated the VTA would be discussing possible reconsideration of contributions to Caltrain.

Amulya Dhulipala, Cupertino, Greenbelt Alliance, expressed appreciation for the Board’s leadership on the transit-oriented development project.
Kevin Burke, Belmont, requested prioritization for building housing on the Caltrain right of way.

Ben McMullan, San Bruno, emphasized the need for low-income housing near transit.

Nikita Siromi, Menlo Park, thanked the Board for moving forward on a transit-oriented housing project and asked that it include 20 percent affordable element be adopted.

Mike Denham, Housing for All Burlingame, stressed the need for every public agency to facilitate the building and financing of affordable housing on the Peninsula.

Donna Colson, Burlingame, stressed the need for affordable housing and thanked the Board for considering the transit-oriented development. She noted that the City of Burlingame is rezoning areas for the addition of 2,000 housing units.

Leora Ross, Palo Alto, Housing Leadership Council of San Mateo County, expressed appreciation for the Board’s consideration of the transit-oriented development project.

Carolyn Jaramillo, Pacifica, Pacifica Housing For All, supported affordable housing.

Marsha Murphy, Pacifica, Pacifica Housing For All, expressed appreciation for transit-oriented housing project and requested that the Coast not be forgotten.

Ellen Hage, Pacifica, Pacifica for Housing for All and Faith In Action Bay Area, supported the transit-oriented development policy affordable element of 20 percent.

Michael Brownrigg, Burlingame, addressed the Board and stressed the need to build workforce housing in Burlingame.

Paul Jones, Atherton, related the issues in Denver, Colorado, with its constant warning system project.

Scott Yarborough, San Francisco, Shirley Johnson, San Francisco and Vincent de Martell, Palo Alto, displayed visuals of how the new electric multiple unit cars could be redesigned to allow for seats in view of bicycles on the train.

Roland Lebrun, San Jose, suggested entering into an exclusive negotiation agreement with Google for affordable housing and parking near the Diridon station area.

Joaquin Jimenez, Pescadero, stressed the need for affordable housing on the Coast.

Andy Chow, Redwood City, discussed a recent train fatality and ensuing delays.

**CONSENT CALENDAR**

Motion/Second: Gillett/Gee

Ayes: Brinkman, Chavez, Davis, Gee, Gillett, Pine, Zmuda, Bruins

Absent: Stone

Noes: None

Approve Special Meeting Minutes of November 1, 2018
Approve Minutes of November 1, 2018

Accept Statements of Revenues and Expenditures for October 2018

Receive Key Caltrain Performance Statistics – October 2018
  Public Comment
  Roland Lebrun, San Jose, noted that ridership was down and farebox recovery was up 10%.

Receive State and Federal Legislative Update

Receive 2019 Draft Legislative Program
  Public Comment
  Vaughn Wolffe, Pleasanton, discussed legislation affecting Amtrak passengers.

Receive Caltrain Business Plan Monthly Update – November 2018
  Public Comment
  Jeff Carter, Millbrae, addressed the Board regarding the Business Plan but stressed that more train capacity was needed immediately.

Receive 2018 Customer Satisfaction Survey Key Findings

Receive Capital Projects Quarterly Report – 1st Quarter Fiscal Year 2019

Adopted Resolution 2018-49, Caltrain Fare Policy
  Public Comment
  Jeff Carter, Millbrae, requested answers to his questions posed regarding the fare policy.

Adopted Resolution 2018-50, Award of Contract for On-Call Safety & Security Advisory Services

Adopted Resolution 2018-51, Increase Executive Director’s Contract Change Order Authority by $30,000 for Sunnyvale Station Platform Rehabilitation Project

Adopted Resolution 2018-52, Authorize Execution of Agreements with Dogpatch and NW Potrero Hill Green Benefits District for Construction of Landscaping Improvements at Southbound Entrance of 22nd Street Station
  Public Comment
  Jeff Carter, Millbrae, expressed appreciation the improvements made to the 22nd Street Station.

Adopted Resolution 2018-53, Award of Contract for Ticket Vending Machine Upgrade

Adopted Resolution 2018-54, Authorize Execution of Agreements to Receive Funding and Act as Project Lead for the Preliminary Engineering and Environmental Clearance Phases of Rengstorff Grade Separation Project

Director Chavez requested that proposed unsigned contracts be linked to the to the on-line agenda packets so that board members can review them ahead of time.
REPORT OF THE CHAIR

Resolution of Appreciation for Jeff Gee
Chair Bruins presented a Resolution of Appreciation to retiring Board Member, Jeff Gee, for his many years of service on the Board of Directors. Director Gee thanked the Board of Directors, public and staff for their support during his tenure on the board.

Public Comment
Jeff Carter, Millbrae, thanked Director Gee for his service on the Board of Directors.

Adina Levin, Friends of Caltrain, reiterated the previous speakers’ comments.

Approved by Resolution 2018-48
Motion/Second: Brinkman/Davis
Ayes: Brinkman, Chavez, Davis, Gee, Gillett, Pine, Zmuda, Bruins
Absent: Stone
Noes: None

Appointment of Nominating Committee for 2019 Officers
Chair Bruins asked for volunteers to serve on the Nominating Committee for 2019. Directors Davis, Pine, and Brinkman offered to serve on the committee.

Chair Bruins congratulated San Mateo County on the passage of Measure W, a one-half cent sales tax that passed by a close margin.

Chair Bruins expressed appreciation to all the volunteers for serving and making the holiday train a huge success.

REPORT OF THE CITIZENS ADVISORY COMMITTEE
Bian Shaw, Chair of the Citizens Advisory Committee, provided details of the last meeting held. He stated the Committee discussed the failure of Proposition 6, reviewed the proposed fare policy and reiterated the vacancy on the committee for the San Mateo County representative.

REPORT OF THE EXECUTIVE DIRECTOR
Peninsula Corridor Electrification Project Monthly Report for October 2018
John Funghi, CalMod Chief Officer, provided an update on the electrification project discussing the progress made to date on potholing, traction power, substation work, crossing and foundation work, and tunnel modification. He announced the first electric train set shells are expected to arrive in Salt Lake City very soon, with the second set arriving at the end of 2018.

Mr. Funghi responded to Board members’ questions regarding the risks involved in the Stadler contract and contingency funds in the project budget.

Monthly Report on Positive Train Control System
Michelle Bouchard, Chief Operating Officer, Rail, provided an update on the Positive Train Control System project and contractor, Wabtec. She stated substitute criteria for the safety and certification program has been established and was
conditionally approved by the Federal Rail Administration, with no interruption to operations.

Board members complimented Ms. Bouchard on the hard work she has done to become compliant with the federal mandate by the deadline.

Public Comment
Roland Lebrun, San Jose, discussed issues regarding loose catenary wires.

Director Davis expressed appreciation for the San Jose bus bridge during construction.

RECEIVE COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR)
Derek Hansel, Chief Financial Officer, stated the Comprehensive Annual Financial Report was prepared with great effort and thanked the entire team for its work. He introduced Grace Martinez, Director of Accounting, who provided details of the report along with the auditor, Ahmad Gharaibeh.

Mr. Gharaibeh, Vavrinek, Trine, Day & Co., LLP., addressed the Board and discussed the scope of the audit. He noted no significant issues with the audit and would be providing a clean opinion. All deficiencies of the past had been addressed by management.

Public Comment
Jeff Carter, Millbrae, noted the omission of weekend passenger miles from page 60 of the report.

Motion/Second: Davis/Gillett
Ayes: Brinkman, Chavez, Davis, Gee, Gillett, Pine, Zmuda, Bruins
Absent: Stone
Noes: None

APPROVAL OF THE PENINSULA CORRIDOR JOINT POWERS BOARD FINANCING
Derek Hansel, Chief Financial Officer, addressed the Board and explained the actions that needed to be taken to allow for additional debt to be incurred. He stated the funding provided by the increase in the existing credit facility would serve as a portion of the grant match for the Transit and Intercity Rail Capital Program project and either the amended or the new credit facility may be used for the interim refunding of $11m aggregate principal amount of Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2015 Series A (2015 Series A Bonds).

Mr. Hansel outlined the six actions necessary and contained in the proposed Resolution:

- Authorize and approve execution and delivery of an Amended and Restated Credit Agreement (Amended Agreement) between the JPB and DNTAsset Trust (DNT), an affiliate of JPMorgan Chase Bank, which would increase funds available for drawing-down from $150 million outstanding at any one time to $170 million outstanding at any one time;
- Authorize and approve execution and delivery of a new credit agreement between the JPB and DNTproviding for a new credit facility, with would make up to a total of $30 million in funds available at any one time;
• Authorize and approve execution and delivery of an Amended and Restated
  Fee and Pricing Agreement relating to the Amended Agreement and a Fee
  and Pricing Agreement relating to the New Agreement; and
• Authorize the use of proceeds of a loan pursuant to the New Agreement or
  the Amended Agreement to refund the JPB’s 2015 Series A Bonds on an
  interim basis; and
• Authorize and approve all of the documents required for the transactions
  described above, including those identified in the Resolution; and
• Authorize the Executive Director and/or the Chief Financial Officer to take the
  necessary steps to effectuate these transactions.

Mr. Hansel noted Kathleen Leek of Orrick was present to answer questions of the board.

Approved by Resolution 2018-55
Motion/Second: Gee/Chavez
  Ayes: Brinkman, Chavez, Davis, Gee, Gillett, Pine, Zmuda, Bruins
  Absent: Stone
  Noes: None

AUTHORIZE EXECUTION OF AGREEMENTS AND PROGRAM SUPPLEMENTS FOR TRANSIT AND
INTERCITY RAIL CAPITAL PROGRAM FUNDING FOR THE PENINSULA CORRIDOR
ELECTRIFICATION EXPANSION PROJECT AND AMEND FISCAL YEAR 2019 CAPITAL BUDGET

Peter Skinner, Manager, Grants and Fund Programming, recommended execution of
agreements and supplements with Caltrans to allow receipt of Transit and Intercity Rail
Program funding from the California State Transportation Agency for the Peninsula
Corridor Electrification Expansion Project. He reviewed all of the projects that the
$164,522,000 grant funding would cover and requested an amendment to the capital
budget from $97,548,255 to $298,186,255.

Mr. Skinner and Michelle Bouchard, Chief Operating Officer, Rail, responded to
questions of the Board members regarding the capital budget and the
broadband/wi-fi communications component.

Public Comment
  Adina Levin, Friends of Caltrain, encouraged applications for future grants to help
the JPB keep up with growing demand.

Approved by Resolution 2018-57
Motion/Second: Zmuda/Gillett
  Ayes: Brinkman, Chavez, Davis, Gee, Gillett, Pine, Zmuda, Bruins
  Absent: Stone
  Noes: None

AUTHORIZE EXERCISE OF CONTRACT OPTION WITH STADLER USA, INC. FOR PROCUREMENT
OF ADDITIONAL ELECTRIC MULTIPLE UNIT VEHICLES FOR PENINSULA CORRIDOR
ELECTRIFICATION PROGRAM

Michelle Bouchard, Chief Operating Officer, Rail, provided background information on
an opportunity to exercise a contract option with Stadler for additional Electric Multiple
Unit vehicles for the electrification program. Ms. Bouchard outlined the actions
necessary to allow for the purchase of up to 37 additional Electric Multiple Unit vehicles
in an amount not to exceed $174.6 million. The action includes a contingency fund of $3.5 million and allows the Executive Director to issue change orders for the option order up to that limit.

Following contract award, a public process would be conducted regarding the configuration of the cars, with subsequent approval by the Board of Directors. Ms. Bouchard noted the contract must be executed by December 31.

Chair Bruins invited public comment:

**Public Comment**
- Scott Yarborough, San Francisco, expressed support for the option purchase for bicyclists and passengers.
- Shirley Johnson, San Francisco, expressed concern with removal of diesel cars, requested a capacity comparison and discussed on-board bicycle theft.
- James Rozell, San Francisco, discussed improvements for bicycles and capacity.
- Roland Lebrun, San Jose, discussed the procurement process.
- Andy Chow, Redwood City, supported approval of the item.
- Adina Levin, supported the item as a bicyclist.

Directors Pine and Chavez were excused from the remainder of the meeting at 12:16 p.m.

Approved by Resolution 2018-58
Motion/Second: Gillett/Brinkman
Ayes: Brinkman, Davis, Gee, Gillett, Zmuda, Bruins
Absent: Chavez, Pine, Stone
Noes: None

**APPROVE TERM SHEET AND AUTHORIZE NEGOTIATION OF LONG-TERM GROUND LEASE FOR DEVELOPMENT OF HAYWARD PARK STATION PROPERTY**

Brian Fitzpatrick, Director of Real Estate and Property Development, outlined the terms of the long-term ground lease for development of 189 units at the Hayward Park Station Property, noting that the project is consistent with the vision of the Business Plan and that the affordability component is higher than what the zoning of the site calls for.

**Public Comment**
- Edward Evans, San Mateo, Carpenters Union 217, expressed support of the project.
- Jeff Carter, Millbrae, expressed support for the project but not at the expense of future track expansion.
- Roland Lebrun, San Jose, stated he believed 93 feet was needed for passing tracks at the site.
Peninsula Corridor Joint Powers Board
December 6, 2018 Minutes

Drew Hudacek, Seres-Regis, developer of the Hayward Park project, discussed their experience of building successful housing projects along the Peninsula.

Drew, San Mateo, stated he supported housing in general but expressed concern that the focus is moving to housing and not running the railroad.

Ms. Bouchard addressed the last speaker’s comment and ensured that the JPB’s fundamental mission is to run the railroad, however, at the same time, the agency does not set aside opportunities for housing along the right of way. She noted that she works closely with Caltrain’s real estate and engineering teams to ensure that the decisions made do not interfere with train operations or future plans for the railroad.

Approved by Resolution 2018-60
Motion/Second: Gillett/Gee
Ayes: Brinkman, Davis, Gee, Gillett, Zmuda, Bruins
Absent: Chavez, Pine, Stone
Noes: None

AUTHORIZE AMENDMENTS TO CONTRACTS FOR ON-CALL TRANSPORTATION PLANNING AND SUPPORT SERVICES
Approved by Resolution 2018-56
Motion/Second: Gee/Davis
Ayes: Brinkman, Davis, Gee, Gillett, Zmuda, Bruins
Absent: Chavez, Pine, Stone
Noes: None

Director Davis was excused from the remainder of the meeting at 12:40 p.m.

ADOPTION OF TRANSIT ASSET MANAGEMENT POLICY
Stephen Chao, Deputy Director, Quality Transit Asset Management, provided a brief presentation on the draft Transit Asset Management (TAM) policy required by the Federal Transit Administration and recommended adoption of the policy by the Board. He stated the broader TAM Plan contains several elements including the TAM policy, the program implementation, an asset inventory and a recommended capital reinvestment plan.

Mr. Chao reviewed the actual policy, as follows: “Caltrain is committed to sustainably maintaining its assets in a State of Good Repair in order to deliver a safe and reliable passenger rail service. This commitment will be ensured through financial stewardship and resource allocation, promoting a culture that supports asset management across the organization, and focusing on high quality information to provide the foundation for a risk-based approach for decision making.” Further, Mr. Chao reviewed the five focus areas contained in the policy (Safety, Fiscal Sustainability, Infrastructure & Rolling Stock, Organization Efficiencies and People & TAM Culture) and associated goals for each of the areas. He noted that the plan would need to be updated every four years.

Mr. Chao responded to questions of Board members.

Public Comment
Roland Lebrun, San Jose, inquired about the status of $125 million slated previously for State of Good Repair.

Approved by Resolution 2018-59
Motion/Second: Gee/Gillett
Ayes: Brinkman, Gee, Gillett, Zmuda, Bruins
Absent: Chavez, Davis, Pine, Stone
Noes: None

**CALTRAIN SAFETY AND SECURITY QUARTERLY PERFORMANCE REPORTS**

Rail Operations Performance Update 1st Quarter Fiscal Year 2019 and Safety and Security Update 1st Quarter Fiscal Year 2019

This item was postponed to January 2019.

**CORRESPONDENCE**
Correspondence to the Board of Directors was received and posted.

**BOARD MEMBER REQUESTS**
Director Gee updated the board on the Salesforce Transit Center in San Francisco.

**Public Comment**
Roland Lebrun, San Jose, discussed the issues with the Transbay Transit Center.

Chair Bruins reiterated her appreciation to Director Gee for his many years of service on the Board of Directors. She wished everyone a happy holiday season.

**GENERAL COUNSEL REPORT**
None.

**DATE/TIME OF NEXT REGULAR MEETING**: Thursday, January 10, 2019 at 10 a.m. San Mateo County Transit District Administrative Building, 2nd Floor, 1250 San Carlos Avenue, San Carlos, CA 94070
Chair Bruins announced the next meeting of Thursday, January 10, 2019 at 10 a.m.

**ADJOURN**
The meeting adjourned at 12:46 p.m.
Peninsula Corridor Joint Powers Board
Board of Directors Meeting
Special Meeting/Study Session
107 Broadway Avenue, Half Moon Bay, CA

MINUTES OF DECEMBER 14, 2018

MEMBERS PRESENT: J. Bruins (Chair), C. Brinkman, C. Chavez, D. Davis, J. Gee, G. Gillett, D. Pine (8:39 a.m.), C. Stone, M. Zmuda

MEMBERS ABSENT: None


CALL TO ORDER
Chair Bruins called the meeting to order at 8:38 am.

ROLL CALL
Assistant District Secretary Brook called the roll. A quorum was present.

ICEBREAKER
Board members and several members of staff participated in a brief icebreaker type of game.

PRESENTATION & DISCUSSION: MULTI-YEAR BUDGET CONSIDERATIONS/OUTLOOK
Chair Bruins invited public comment prior to the workshop commencing. No comments were offered at that time.

Michelle Bouchard, Chief Operating Officer, Rail, thanked the board members for attending the special meeting.

Ms. Bouchard outlined the objectives of the Special Meeting: to provide background information for the Board to understand the fiscal pressures that currently exist; review current service levels, ridership, member agency funding and operating expenses; review the implications of Caltrain’s fare elasticity; consider how to address operating deficits; and hold a discussion on the options for dedicated Caltrain funding.

Ms. Bouchard introduced Derek Hansel, Chief Financial Officer, who discussed operating expenses as related to farebox recovery, compared member agency contributions in Fiscal Year (FY) 2008 versus FY 2019 and discussed the current and historical sources and uses of funds.
Referring to the Capital Program for FY 2019, Ms. Bouchard reviewed the State of Good Repair program and the budget constraints for right of way/signal and communications, rolling stock, and station and intermodal access. She cautioned that there are negative repercussions from delaying repairs, especially rolling stock repairs. Mr. Hansel added that set-aside funding was needed to avoid deferring maintenance in the future.

At 9:26 a.m., Director Jeff Gee was excused from the remainder of the meeting.

Chair Bruins called for a break.

The meeting recessed at 9:49 a.m. and reconvened at 10:09 a.m.

Continuing, Derek Hansel, Chief Financial Officer, provided a review of the FY2018 actual budget, showing a surplus of $1.1 million, due mainly to a release of insurance/claim reserves. However, moving into budget years of FY2019 through FY2022, Mr. Hansel acknowledged a growing deficit of $5 million in FY2020, $13 million in FY2021, and over $17 million in FY2022, assuming the status quo with no new revenues. He reviewed the key budget drivers: the Transit America Services, Inc. (TASI) operating, diesel fuel, implementation of the Positive Train Control project and debt.

Mr. Hansel briefly paused and responded to the following board member commentary and inquiries:

- Director Gillette noted that the budget “ask” from other agencies may need adjusting to include a compelling reason for what the funding is needed for.

- Director Chavez expressed concern regarding VTA’s ability to invest in Caltrain in the future and stated the current funding asks should be reformatted with a “must have/nice to have” approach. She discussed the monetization of assets (such as land leases) and also suggested that agency employees reach out to the Peninsula’s larger employees with options for their employees to ride public transit.

- Director Davis inquired when proceeds from the Hayward Park project would be incorporated into future budgets. Responding, Mr. Hansel stated the initial project investment would not be recaptured for approximately eight years. Ms. Davis discussed “Smart City” initiatives being implemented along the right of way.

- Director Chavez suggested creating a strategic cross-agency team to discuss agency assets and develop negotiating strategies.

- Director Stone discussed the value of investing in transit-oriented development projects, citing the San Carlos project as a prime example.
• Director Gillett discussed the launching of the Business Plan for a business case and creation of a business model.

• Director Pine discussed the value of private/public partnerships.

Director Stone was excused from the remainder of the meeting at 11:06 a.m.

Continuing with his presentation, Mr. Hansel discussed “levers” that can be utilized as mechanisms to balance a budget. The levers were identified as fares, member agency funding, reserve levels, service levels, support costs, State Rail Assistance and value capture (real estate, advertising and naming rights). He discussed the implications and trade-offs of using each lever.

In response to Director Zmuda’s comment regarding moving peak riders to off-peak or shoulder-peak and/or encouraging employees/employers to flex schedules, Ms. Bouchard stated staff was reviewing opportunities to encourage mid-day ridership and provide relief for the peak capacity.

Finally, Mr. Hansel led a discussion on fares, adjusting fares, fare modeling, pricing power, reducing/removing Clipper card discounts and the effect on ridership and demand elasticity.

Ms. Bouchard introduced Melissa Jones, Principal Planner, who discussed participation in the Metropolitan Transportation Commission’s regional means-based fare program and the details associated with the program. Ms. Jones stated the program would commence in Fall 2019 and MTC would be looking for a resolution authorizing participation from the agency. Chair Bruins added to the discussion of how the program works, from the MTC perspective.

Mr. Hansel introduced Seamus Murphy, Chief Communications Officer, who discussed Senate Bill 797 (Hill), passed in 2017, which would allow the three partner agencies to place a one-eighth-cent (.125%) sales tax measure on the ballots in San Francisco, San Mateo and Santa Clara Counties to provide dedicated funding for Caltrain. He noted the measure would require 66.67% majority approval and could produce ~$95 million annually for Caltrain’s operating and capital needs.

Mr. Murphy reviewed the extensive approval process needed to place a tax measure on the ballot under SB 797, including two-thirds’ approval by the Peninsula Corridor Joint Powers Board of Directors, San Francisco Board of Supervisors, San Mateo County Board of Supervisors, Santa Clara County Board of Supervisors and majority approval by the San Francisco Municipal Transportation Agency, San Mateo County Transit District and Santa Clara Valley Transportation Agency. He noted that all agencies were polled earlier in the year with no negative feedback received at that time. He discussed the election timing of either the March or November 2020 ballot. Member agency contributions were discussed and whether the potential new funding would replace member contributions.
Mr. Murphy then briefly described a possible nine-county regional transportation measure also proposed for the 2020 ballot. Chair Bruins expressed concern and stated it was imperative for Caltrain to move forward with the implementation of SB 797, due to the amount of work it takes to place a measure on the ballot. Mr. Murphy reviewed the critical milestones on the timeline for seeking a measure under SB 797.

Ms. Bouchard introduced Sebastian Petty, Senior Policy Advisor, who discussed the timing of the Caltrain Business Plan, scheduled for completion at the end of 2019. Board members provided commentary on Caltrain’s service vision and the final Business Plan; thoughts on obtaining funding for Caltrain, and whether new sales tax revenues would be supplemental to the current budget or replacement funding, leaving the latter issue for a future discussion. Along those lines, Jim Hartnett, Executive Director, referred to wording in the Joint Powers Agreement regarding member agency funding, which is only required “if it is needed.”

Chair Bruins called for a break.

The meeting recessed at 12:04 pm. and reconvened at 12:22 pm.

Chair Bruins opened the floor for discussion on the Caltrain Service vision and Business Plan, operational costs/costs per passenger, potential sales tax measures, and financial and planning implications of a San Francisco downtown extension and High Speed Rail.

Director Davis suggested polling to determine when to place a measure on the ballot in 2020. Director Chavez commented that she would like to see more regular updates provided at board meetings, agreed that it would be good to conduct polling to determine the best ballot on which to place a measure, stressed the value of using Board committees to determine monetary strategies and of collaborating with cities along the right of way who would be most impacted by Caltrain service, capital and development decisions.

Director Chavez was excused from the remainder of the meeting at 1:11 p.m.

Concluding, Mr. Hansel reviewed thought-provoking questions for future discussions:

- Should the pre-electrification budgets be viewed in total?; Should a Bridge Plan be developed to cover the three years prior to electrified service?
- How can the agency expand its resources in order to address the funding challenges pre-electrification, provide for short-term improvements to service and implement the Business Plan during this time?
- Should private sources of support be sought?
- How much should the farebox be tapped in order to support the agency’s funding needs pre-electrification and to provide the organizational foundation for future expansion?
- Can member contributions be tapped to fund shortfalls in FY 2020-22? If not, is there an alternative to the race to the bottom?
• Will partners be willing/able to cash flow other partners unable to fund operating deficits?
• Should JPB members discuss/update the weekday boarding formula used to allocate operating costs, including looking at other methodologies?
• Should a subcommittee be established to marshal through efforts related to the FY 2020-22 funding solution?

Chair Bruins invited public comment.

Public Comment:
Roland Lebrun, San Jose, addressed the board on a variety of topics discussed over the course of the day.

Chair Bruins thanked everyone for their participation in the Special Meeting. She wished everyone happy holidays.

ADJOURN
The meeting adjourned at 1:27 p.m.

An audio recording of this meeting is available online at www.caltrain.com. Questions may be referred to the Board Secretary's office by phone at 650.508.6279 or by email to board@caltrain.com.
AGENDA ITEM #5 (d)
JANUARY 3, 2019

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
         NOVEMBER 30, 2018

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

This staff report provides a brief discussion of significant items and trends on the
attached Statement of Revenues and Expenses through November 30, 2018. The
statement has been designed to follow the Agency wide line item rollup as included in
the adopted budget. The columns have been designed to provide easy comparison of
year to date prior to current actuals for the current fiscal year including dollar and
percentage variances. In addition, the current forecast of Revenues and Expenses is
compared to the Adopted Budget for Fiscal Year 2019.

SIGNIFICANCE
Annual Forecast: The annual forecast is currently the same as budget and will be
updated twice a year and presented at the February and April board meetings.

Year to Date Revenues: As of November year-to-date actual, the Total revenue (page
1, line 17) is $5.9 million higher than the prior year. This is primarily driven by higher
Farebox Revenue (page 1, line 1), Operating Grants (page 1, line 11) and JPB Member
Agencies contributions (page 1, line 12).

Year to Date Expenses: As of November year-to-date actual, the Total Expense (page
1, line 48) is $8.0 million higher than the prior year-to-date actual. This is primarily due to
Rail Operator Services (page 1, line 23), Fuel and Lubricants (page 1, line 27), Insurance
Cost (page 1, line 29), and Wages & Benefits (page 1, line 37) due to overall salary and
benefit increases in FY2019.

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

STRATEGIC INITIATIVE
This item does not achieve a strategic initiative.

Prepared By: Maria Pascual, Accountant 650-508-6288
             Jennifer Ye, Manager, General Ledger 650-622-7890
# Statement of Revenue and Expense

**PENINSULA CORRIDOR JOINT POWERS BOARD**  
**STATEMENT OF REVENUE AND EXPENSE**  
**Fiscal Year 2019**  
**November 2018**  

## REVENUE

### OPERATIONS:

<table>
<thead>
<tr>
<th>Prior Year</th>
<th>Current Year</th>
<th>$ Variance</th>
<th>% Variance</th>
<th>Approved Budget</th>
<th>Forecast</th>
<th>$ Variance</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farebox Revenue</td>
<td>40,501,032</td>
<td>43,714,290</td>
<td>3,213,258</td>
<td>7.9%</td>
<td>107,795,329</td>
<td>107,795,329</td>
<td>-</td>
</tr>
<tr>
<td>Parking Revenue</td>
<td>2,716,761</td>
<td>2,251,373</td>
<td>(465,388)</td>
<td>(17.1%)</td>
<td>5,845,900</td>
<td>5,845,900</td>
<td>-</td>
</tr>
<tr>
<td>Shuttles</td>
<td>972,333</td>
<td>839,440</td>
<td>(132,893)</td>
<td>(13.7%)</td>
<td>2,683,400</td>
<td>2,683,400</td>
<td>-</td>
</tr>
<tr>
<td>Rental Income</td>
<td>840,058</td>
<td>857,126</td>
<td>17,068</td>
<td>2.0%</td>
<td>1,873,000</td>
<td>1,873,000</td>
<td>-</td>
</tr>
<tr>
<td>Other Income</td>
<td>534,054</td>
<td>840,011</td>
<td>305,957</td>
<td>57.3%</td>
<td>1,192,000</td>
<td>1,192,000</td>
<td>-</td>
</tr>
</tbody>
</table>

### CONTRIBUTIONS:

<table>
<thead>
<tr>
<th>Next Year</th>
<th>Prior Year</th>
<th>$ Variance</th>
<th>% Variance</th>
<th>Approved Budget</th>
<th>Forecast</th>
<th>$ Variance</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AB434 Peninsula &amp; TA Shuttle Funding</td>
<td>682,856</td>
<td>768,770</td>
<td>85,914</td>
<td>12.6%</td>
<td>1,767,700</td>
<td>1,767,700</td>
<td>-</td>
</tr>
<tr>
<td>Operating Grants</td>
<td>1,777,354</td>
<td>2,373,753</td>
<td>596,399</td>
<td>54.0%</td>
<td>3,700,607</td>
<td>3,700,607</td>
<td>-</td>
</tr>
<tr>
<td>JPB Member Agencies</td>
<td>12,083,095</td>
<td>13,957,500</td>
<td>1,874,045</td>
<td>13.5%</td>
<td>25,448,014</td>
<td>25,448,014</td>
<td>-</td>
</tr>
<tr>
<td>Use of Reserves</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

### TOTAL CONTRIBUTED REVENUE | 14,543,305 | 17,464,023 | (2,920,718) | 20.1% | 32,125,192 | 32,125,192 | - | 0.0% |

### TOTAL OPERATING REVENUE | 45,564,238 | 48,502,240 | 2,938,002 | 6.4% | 119,389,629 | 119,389,629 | - | 0.0% |

### GRAND TOTAL REVENUE | 60,107,543 | 65,966,263 | 5,858,720 | 9.7% | 151,514,821 | 151,514,821 | 0 | 0.0% |

## EXPENSE

### OPERATING EXPENSE:

<table>
<thead>
<tr>
<th>Prior Year</th>
<th>Current Year</th>
<th>$ Variance</th>
<th>% Variance</th>
<th>Approved Budget</th>
<th>Forecast</th>
<th>$ Variance</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rail Operator Service</td>
<td>31,329,830</td>
<td>35,231,234</td>
<td>3,901,404</td>
<td>12.5%</td>
<td>87,385,577</td>
<td>87,385,577</td>
<td>-</td>
</tr>
<tr>
<td>Positive Train Control</td>
<td>-</td>
<td>20,481</td>
<td>20,481</td>
<td>100%</td>
<td>1,442,000</td>
<td>1,442,000</td>
<td>-</td>
</tr>
<tr>
<td>Security Services</td>
<td>2,317,986</td>
<td>2,390,019</td>
<td>72,033</td>
<td>3.1%</td>
<td>6,172,151</td>
<td>6,172,151</td>
<td>-</td>
</tr>
<tr>
<td>Shuttles Services</td>
<td>2,047,390</td>
<td>1,799,270</td>
<td>(248,120)</td>
<td>(12.1%)</td>
<td>5,444,500</td>
<td>5,444,500</td>
<td>-</td>
</tr>
<tr>
<td>Fuel and Lubricants</td>
<td>3,872,065</td>
<td>4,940,874</td>
<td>1,068,809</td>
<td>27.6%</td>
<td>10,765,356</td>
<td>10,765,356</td>
<td>-</td>
</tr>
<tr>
<td>Timetables and Tickets</td>
<td>38,003</td>
<td>4,774</td>
<td>(33,229)</td>
<td>(87.4%)</td>
<td>143,500</td>
<td>143,500</td>
<td>-</td>
</tr>
<tr>
<td>Insurance</td>
<td>869,166</td>
<td>1,985,325</td>
<td>1,116,159</td>
<td>128.4%</td>
<td>5,750,000</td>
<td>5,750,000</td>
<td>-</td>
</tr>
<tr>
<td>Facilities and Equipment Maint</td>
<td>797,373</td>
<td>1,085,352</td>
<td>287,979</td>
<td>36.1%</td>
<td>3,158,276</td>
<td>3,158,276</td>
<td>-</td>
</tr>
<tr>
<td>Utilities</td>
<td>811,398</td>
<td>839,723</td>
<td>28,325</td>
<td>3.5%</td>
<td>2,065,720</td>
<td>2,065,720</td>
<td>-</td>
</tr>
<tr>
<td>Maint &amp; Services-Bldg &amp; Other</td>
<td>531,355</td>
<td>528,434</td>
<td>(2,921)</td>
<td>(0.5%)</td>
<td>1,529,098</td>
<td>1,529,098</td>
<td>-</td>
</tr>
</tbody>
</table>

### TOTAL OPERATING EXPENSE | 42,614,566 | 48,825,486 | 6,210,920 | 14.6% | 123,856,178 | 123,856,178 | - | 0.0% |

### GRAND TOTAL EXPENSE | 52,031,802 | 60,027,886 | 7,996,084 | 13.3% | 151,514,821 | 151,514,821 | 0 | 0.0% |

### NET SURPLUS / (DEFICIT) | 8,075,741 | 5,984,767 | (2,090,974) | (26.5%) | 0 | 0 | - | 0.0% |

12/21/18 2:39 PM
## PENINSULA CORRIDOR JOINT POWERS BOARD

### INVESTMENT PORTFOLIO

**AS OF NOVEMBER 30, 2018**

<table>
<thead>
<tr>
<th>TYPE OF SECURITY</th>
<th>MATURITY</th>
<th>INTEREST RATE</th>
<th>PURCHASE PRICE</th>
<th>MARKET PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Agency Investment Fund (Unrestricted)</td>
<td>* Liquid Cash</td>
<td>2.08%</td>
<td>12,989,348</td>
<td>12,989,348</td>
</tr>
<tr>
<td>County Pool (Restricted)</td>
<td>** Liquid Cash</td>
<td>2.066%</td>
<td>1,000,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>County Pool (Unrestricted)</td>
<td>** Liquid Cash</td>
<td>2.066%</td>
<td>1,007,092</td>
<td>1,007,092</td>
</tr>
<tr>
<td>Other (Unrestricted)</td>
<td>** Liquid Cash</td>
<td>0.000%</td>
<td>53,549,177</td>
<td>53,549,177</td>
</tr>
<tr>
<td>Other (Restricted)</td>
<td>*** Liquid Cash</td>
<td>0.200%</td>
<td>19,874,388</td>
<td>19,874,388</td>
</tr>
</tbody>
</table>

$88,420,005 $88,420,005

Accrued Earnings for November 2018 $54,348.50
Cumulative Earnings FY2019 $215,249.94

* 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 November 2018, the total cost of the Total County County was $5,372,859,928 and the fair market value per San Mateo County Treasurer’s Office was $5,359,150,569.

*** Prepaid Grant funds for Homeland Security, PTMISEA and LCTOP projects, and funds reserved for debt repayment. The Portfolio and this Investment Report comply with the Investment Policy and the provisions of SB 564 (1995). The Joint Powers Board has the ability to meet its expenditure requirements for the next six months.
AGENDA ITEM # 5 (e)
JANUARY 10, 2019

PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: 
Joint Powers Board

THROUGH: 
Jim Hartnett
Executive Director

FROM: 
Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: 
KEY CALTRAIN PERFORMANCE STATISTICS – NOVEMBER 2018

ACTION
Staff Coordinating Council recommends that the Board receive the Performance Report for November 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 November 2018, Caltrain’s Average Weekday Ridership (AWR) decreased 5.2 percent to 58,523 from November 2017 AWR of 61,735. The total number of passengers who rode Caltrain in November 2018 decreased 5.5 percent to 1,470,239 from 1,555,381 in November 2017. In November 2018, Caltrain ridership was impacted by the Weekend SF Caltrain Closure (effective Saturday, October 6, 2018 through late Spring 2019) and decreases in Special Event Ridership and Sporting Event Ridership (i.e. 49ers, Stanford Football and SJ Sharks). In comparing the weekend train counts at Bayshore Station with the 2018 Annual Count baseline, there was a decrease in ridership at Bayshore station by 35.6 percent in November 2018.

This month ticket sales for One Way tickets (up 0.4 percent) increased from November 2017. Ticket sales for ED One Way tickets (down 2.4 percent), Day Passes (down 19.6 percent), ED Day Passes (down 30.3 percent), Monthly Passes (down 7.6 percent) and ED Monthly Passes (down 13.2 percent) decreased from November 2017. The 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 2.7 percent (39,884 rides) of November 2018 rides and 3.7 percent ($288,388) of November 2018 Monthly Ticket Sales Revenue. The number of
Eligible Go Pass Employees decreased 2.7 percent to 81,523 from 83,776 from November 2017. The number of participating Go Pass Companies increased to 132 from 126 from November 2017. Farebox Revenue increased 2.9 percent to $8,340,099 from $8,106,926 in November 2017.

On-time performance (OTP) for November 2018 was 93.9 percent compared to 94.8 percent OTP for November 2017. In November 2018 there were 711 minutes of delay due to mechanical issues compared to 534 minutes in November 2017.

Looking at customer service statistics, there were 8 complaints per 100,000 passengers in November 2018 which decreased from 9.4 in November 2017.

Shuttle ridership for November 2018 decreased 7.1 percent from November 2017. For the station shuttles, the Millbrae-Broadway shuttle averaged 179 daily riders. The weekend Tamien-San Jose shuttle averaged 25 daily riders. When the Marguerite shuttle was removed, the impact to ridership was a decrease of 19.2 percent. Due to ongoing service issues with the Shuttle Partner contractor as a result of staffing shortage, shuttle routes continue to have DNOs (Did Not Operate) trips. Staff is continuing to work on resolving the issue with the Shuttle contractor. The Belmont-Hillsdale shuttle and Menlo Park Midday Shuttle remain temporarily discontinued.

<table>
<thead>
<tr>
<th>Table A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>November 2018</strong></td>
</tr>
<tr>
<td>Total Ridership</td>
</tr>
<tr>
<td>Average Weekday Ridership</td>
</tr>
<tr>
<td>Total Farebox Revenue</td>
</tr>
<tr>
<td>On-time Performance</td>
</tr>
<tr>
<td>Average Caltrain Shuttle Ridership</td>
</tr>
</tbody>
</table>

| **Year to Date** | **FY2018** | **FY2019** | **% Change** |
| --- |
| Total Ridership | 8,054,312 | 8,031,615 | -0.3% |
| Average Weekday Ridership | 61,984 | 61,972 | 0.0% |
| Total Farebox Revenue | $40,501,032 | $43,714,290 | 7.9% |
| On-time Performance | 94.9% | 93.9% | -1.1% |
| Average Caltrain Shuttle Ridership | 9,080 | 8,435 | -7.1% |
Graph A

Caltrain Average Weekday Ridership

Graph B

Caltrain Monthly Sales by Ticket Type

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

Caltrain Mobile Ticketing - Monthly Sales by Ticket Type

Graph D

Monthly Mechanical Delays
Caltrain Promotions - November 2018

Veterans Day Observance
In observance of Veterans Day, Caltrain recognized and celebrated our Veterans’ service and sacrifice by running “Caltrain Salutes America’s Veterans” on all station Visual Message Signs.

PAC-12 Championship at Levi’s Stadium - On Friday, November 30, at 5:30 p.m. the PAC-12 Championship game returned to Levi’s Stadium. The game featured the North Champions, Washington Huskies and the South Champions, Utah Utes. No extra train service was provided, but Caltrain service was promoted through organic social media, a news release and Levi Stadium’s electronic game day Event Guide.

On-going Promotions

49ers at Levi’s® Stadium - The 49ers service promotion continues through the end of November. This year, marketing efforts will flight from September through December 23. To help promote the service, strategies include geo-targeted with retargeted sponsored Facebook click ads that run one week leading up to each home game. Internal communications include news release/blogs, organic social media, and Special Event webpage, in addition to station visual messages/conductor announcements. For the month of November, there were two evening games played.
one against the Oakland Raiders (Thursday Night) and the other against the New York Giants (Monday Night). Total additional ridership alighting and boarding at Mountain View was 3,809.

San Jose Sharks at SAP Center - The regular 2018/19 San Jose Sharks season kicked off in October bringing fans to the SAP Center, just one block from the Diridon station. Caltrain service was promoted through paid sponsored geo-targeted Facebook click campaign running all season, keyword search campaign and premium sports channel display ads cross devise. Internal communications included organic social media, an online feature at go.caltrain and Special Event webpage, and news release/blog. There were nine home games in November. Total post-game Sharks fans and regular riders, boarding at San Jose Diridon station was 1,829.

Stanford Football - Stanford hosted one home-game in November. Selected trains served Stanford Stadium Station on game day. The service was promoted through sponsored geo-targeted with retargeted Facebook ads running a week leading up to each home game, geo-targeted and geo-fenced programmatic display ads cross device through Bay Area News Group and Hearst Media, and E-mail blasts. Internal communication included organic social media, a feature at go.caltrain and a Special Event webpage, and news releases/blog. Stanford sends e-mail blasts to season ticket holders before each home game and game day social media posts. Ad cards and take-ones were placed onboard all trains. Total additional ridership alighting and boarding at Stanford station was 384. Season total ridership alighting and boarding at Stanford Station was 4,264. Average ridership per game was 852, a 10 percent decrease compared to 2017.

Partnership

San Mateo Harvest Festival - On November 9 – 11, the 46th Annual 2018 Harvest Festival was held at the San Mateo Event Center for art & craft enthusiasts and featured over 250 artisans, specializing in clothing, jewelry, specialty foods, toys, holiday décor and more. Customers received a $2 discount if they rode public transit to the event and presented a take-one that was available online at go.samtrans.com and onboard trains. Internal communications to promote the event included organic social media and a feature on the Peninsula Moves transit news blog. The partnership included logos in printed collateral material, event website; ad cards placed onboard trains, social media and news release.
Caltrain Digital Metrics - NOV 2018

**New Followers**
-340  
Nov 18 - 175,015  
Oct 18 - 175,355  
Nov 17 - 169,073

**Caltrain.com Pageviews**  
Nov 18 - 708,983  
Oct 18 - 808,837  
Nov 17 - 762,885

**Monthly Yelp & FB Rating**  
(2 Nov reviews)

**Mobile App - NOV, 18**  
- Downloads  
- Active Users  
2.0 (+0.1) - 78 reviews - iTunes Rating

---

*Caltrain lost followers overall due to Twitter’s ongoing effort to crack down on automated accounts (bots).*

**Social Media Impression Spikes**  
November, 2018

Your Tweets earned 1.8M impressions over this 30 day period

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

---

Prepared by:  
Catherine David, Principal Planner – Rail Operations  650.508.6471  
Patrice Givens, Data Specialist  650.508.6347  
James Namba, Marketing Specialist  650.508.7924  
Jeremy Lipps, Social Media Officer  650.622.7845
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 2019 Appropriations Update:** Congress has passed FY 2019 funding measures for five spending bills, but the seven remaining (including Transportation/HUD) require action. Currently, these federal agencies (including Department of Transportation) are operating under a continuing resolution (CR) until midnight on December 21. Disagreement remains around the President’s request for funding for increased security at the U.S.-Mexico border, which would include construction of a border wall.

On Wednesday, December 19, the Senate passed, by voice vote, a CR which would provide funding for the federal agencies until February 8, 2019. After a meeting Vice President Mike Pence, Senate Majority Whip John Cornyn (R-TX) stated that the President would sign the CR into law.

On Thursday, December 20, the President threatened to veto the Senate CR because it does not include the border funding. The House, then passed a CR which includes $5 billion for the border wall. The vote was 217 to 185, with all the Democrats and eight Republicans--Reps. Amash (R-MI), Buck (R-CO), Curbelo (R-FL), Hurd (R-TX), Paulsen (R-MN), Ros-Lehtinen (R-FL), Valadao (R-CA)--voting in opposition. 31 members did not vote. The Senate had already adjourned for the Christmas holidays, but had to return at noon on Friday, December 21.

The Senate did not have the 60 votes necessary to pass the House passed CR with border wall funding, and the federal government shutdown.

**DOT Impact with Federal Government Shutdown:** The impact of a federal government shutdown at DOT depends on the how program is funded. Programs funded by the Highway Trust Fund will continue but those funded by appropriations will be affected.

The Federal Highway Administration (FHWA) is funded by the Highway Trust Fund by the FAST Act and will continue to operate as normal. FHWA will continue to be able to provide funding for about six months.

The Federal Motor Carrier Safety Administration (FMCSA) will also operate normally for at least two to three weeks of a shutdown. The highway safety programs of the National Highway Traffic Safety Administration (NHTSA) would be able to function as normal for a few weeks.

Most of the Federal Transit Administration (FTA) is funded by discretionary appropriations, most of its employees would be furloughed. According to the DOT shutdown plan, “FTA would
not continue any of its unfunded core agency functions. No grants, cooperative agreements,
contracts, purchase orders, travel authorizations, or other documents obligating funds would be
executed.” “FTA would discontinue reimbursements to transit agencies for ongoing operations
and construction projects to enable them to provide transit services and pay employees and
contractors.”

Of the 54,179 DOT employees:
- 25,200 (46.5 percent) are deemed essential to DOT activities that protect life and safety
and will have to work without pay. Most of these employees are air traffic controllers and
others include aviation, pipeline, and trucking safety inspectors.
- 714 employees (1.3 percent) will also have to work out pay because they support the
essential employees.
- Nine Senate-confirmed Presidential appointees are required to work.
- 7,814 employees (14.4 percent) will work and be paid because the work for FHWA and
FMCSA, which is funded by the Highway Trust Fund.
- 20,442 employees (37.7 percent) would be furloughed.

BUILD Grants Totaling $1.5 Billion Announced: On December 11, Transportation Secretary
Elaine Chao announced $1.5 billion in Better Utilizing Investments to Leverage Development
(BUILD) grant funding to 91 projects in 49 states and the District of Columbia. An interactive
map with details on the awardees is available on the Department of Transportation’s website.

DOT received a total of 851 applications requesting over $11 billion in grant funding, which is a
9.6 acceptance rate. The average 2018 grant size is $16.2 million and the average 2017 grant size
was $11.9 million. 69.6 percent of the grants went to rural areas.

Road and bridge projects received 69.4 percent the funding; transit projects received 9.5 percent;
port/maritime projects received 9.9 percent; and rail projects received 11.2 percent. The average
federal share for the BUILD projects is 34.1 percent.
December 14, 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 – DECEMBER 2018

Overview
The 2019-20 California Legislative Session began on December 3 with the swearing-in of all the new and returning members of the Assembly and Senate. As we reported in our election update, there are now 60 Democrats in the Assembly and 20 Democrats in the Senate. These overwhelmingly strong majorities mean that Democratic policy priorities should find legislative success. The key unknown is whether the Legislature’s spending priorities will match the Governor-elect’s spending priorities. Early press reports seem to indicate that Governor-elect Newsom will continue the cautious budgeting of the outgoing Governor Brown. We will know more once the Governor-elect is sworn-in on January 7, 2019, and releases his proposed budget on January 10.

Legislation
As noted above, the Legislature convened for one day on December 3 and then left town for the rest of the year. However, bill introductions have continued in their absence and there are now more than 200 bills already introduced for the session.

Key bills of interest to the Joint Powers Board are those dealing with housing near transit, redevelopment, and high-speed rail.

AB 11 (Chiu) – Redevelopment. This bill would restore a California Redevelopment Law that was eliminated in 2012.

SB 50 (Wiener) – Local Zoning. This bill, modeled similar to SB 827 from 2018, would create new zoning standards in local communities to eliminate barriers to higher-density housing near transit and job centers.

AB 145 (Frazier) – High-Speed Rail Board Members. This bill would subject the Governor’s appointments to the High-Speed Rail Authority to confirmation by the Senate.
High-Speed Rail
While the Legislature has been recessed, business is still being conducted through informational hearings. The Assembly Transportation Committee and the Joint Legislative Audit Committee held a hearing in November to hear testimony and review the California State Auditor’s report on management and cost overruns of the High-Speed Rail Authority. The State Auditor was especially critical of management decisions that have led to what is now estimated to be a $77 billion project. The Auditor questioned whether the blended system approach is consistent with a higher-speed train system and further questioned ongoing cost risks.

The Assembly Transportation Committee Chair was especially critical of the HSRA and publicly called for the resignation of the Chair of the Authority.

We expect High-Speed Rail to be a high-profile issue in the 2019 Legislative Session and will keep the Joint Powers Board informed on developments as they arise.

Grade Separation Funding
At the December 5 SamTrans Board meeting, we were asked to include in the SamTrans Board Report a list of state funding options for rail grade separations. Below is a list of the funding sources that we are aware of and/or that have been used to fund grade separations in the recent years. The funding sources below are managed across various state agencies and departments, including the Public Utilities Commission (PUC), the California State Transportation Agency (CalSTA), the California Transportation Commission (CTC), and Caltrans.

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

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

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

**Proposition 1A** – This $9.9 billion Bond Act is the primary funding source for the high-speed rail project and has been used to fund a very limited number of grade separation projects in the past, including in the City of San Mateo.
<table>
<thead>
<tr>
<th>Bill ID/Topic</th>
<th>Location</th>
<th>Summary</th>
<th>Position</th>
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<tbody>
<tr>
<td><strong>AB 5</strong> Gonzalez D</td>
<td>A. PRINT 12/4/2018-From printer. May be heard in committee January 3.</td>
<td>Current law, as established in the case of Dynamex Operations West, Inc. v. Superior Court of Los Angeles (2018) 4 Cal.5th 903 (Dynamex), creates a presumption that a worker who performs services for a hirer is an employee. Current law requires a 3-part test, commonly known as the “ABC” test, to establish that a worker is independent contractor. This bill would state the intent of the Legislature to include provisions within this bill would codify the decision in the Dynamex case and clarify its application.</td>
<td>Watch</td>
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<tr>
<td><strong>AB 11</strong> Chiu D</td>
<td>A. PRINT 12/4/2018-From printer. May be heard in committee January 3.</td>
<td>Current law dissolved redevelopment agencies as of February 1, 2012, and designates successor agencies to act as successor entities to the dissolved redevelopment agencies. This bill, the Community Redevelopment Law of 2019, would authorize a city or county, or two or more cities acting jointly, to propose the formation of an affordable housing and infrastructure agency by adoption of a resolution of intention that meets specified requirements, including that the resolution of intention include a passthrough provision and an override passthrough provision, as defined.</td>
<td>Watch</td>
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<tr>
<td><strong>AB 51</strong> Gonzalez D</td>
<td>A. PRINT 12/4/2018-From printer. May be heard in committee January 3.</td>
<td>Would prohibit a person from, as a condition of employment, continued employment, the receipt of any employment-related benefit, or as a condition of entering into a contractual agreement, prohibiting an applicant for employment, employee, or independent contractor from disclosing to any person an instance of sexual harassment that the employee or independent contractor suffers, witnesses, or discovers in the workplace or in the performance of the contract, or otherwise opposing any lawful practice, or from exercising any right or obligation or participating in any investigation or proceeding with respect to unlawful harassment or discrimination.</td>
<td>Watch</td>
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<tr>
<td><strong>AB 145</strong> Frazier D</td>
<td>A. PRINT 12/13/2018-Introduced. To print.</td>
<td>Current law creates the High-Speed Rail Authority with specified powers and duties relative to development and implementation of a high-speed train system. The authority is composed of 11 members, including 5 voting members appointed by the Governor, 4 voting members appointed by the Legislature, and 2 nonvoting legislative members. This bill would provide that the members of the authority appointed by the Governor are subject to appointment with the advice and consent of the Senate.</td>
<td>Watch</td>
</tr>
<tr>
<td><strong>ACA 1</strong> Aguiar-Curry D</td>
<td>A. PRINT 12/4/2018-From printer. May be heard in committee January 3.</td>
<td>The California Constitution prohibits the ad valorem tax rate on real property from exceeding 1% of the full cash value of the property, subject to certain exceptions. This measure would create an additional exception to the 1% limit that would authorize a city, county, or city and county to levy an ad valorem tax to service bonded indebtedness incurred to fund the construction, reconstruction, rehabilitation, or replacement of public infrastructure or affordable housing, if the proposition proposing that tax is approved by 55% of the voters of the city, county, or city and county, as applicable, and the proposition includes specified accountability requirements.</td>
<td>Watch</td>
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<tr>
<td><strong>SB 1</strong> Atkins D</td>
<td>S. RLS. 12/4/2018-From printer. May be acted upon on or after January 3.</td>
<td>Current state law regulates the discharge of air pollutants into the atmosphere. The Porter-Cologne Water Quality Control Act regulates the discharge of pollutants into the waters of the state. The California Safe Drinking Water Act establishes standards for drinking water and regulates drinking water systems. The California Endangered Species Act requires the Fish and Game Commission to establish a list of endangered species and a list of threatened species, and generally prohibits the taking of those species. This bill would require specified agencies to take prescribed actions regarding certain federal requirements and standards pertaining to air, water, and protected species, as specified.</td>
<td>Watch</td>
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<tr>
<td>Bill ID/Topic</td>
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<td>SB 4 McGuire D</td>
<td>S. RLS. 12/4/2018-From printer. May be acted upon on or after January 3.</td>
<td>Under current law, various agencies administer programs to preserve and expand safe and affordable housing opportunities and promote sound community growth. This bill would state the intent of the Legislature to enact legislation that would limit restrictive local land use policies and legislation that would encourage increased housing development near transit and job centers, in a manner that ensures that every jurisdiction contributes its fair share to a housing solution, while acknowledging relevant differences among communities.</td>
<td>Watch</td>
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<tr>
<td>SB 5 Beall D</td>
<td>S. RLS. 12/4/2018-From printer. May be acted upon on or after January 3.</td>
<td>Would establish in state government the Local-State Sustainable Investment Incentive Program, which would be administered by the Sustainable Investment Incentive Committee. The bill would authorize a city, county, city and county, joint powers agency, enhanced infrastructure financing district, affordable housing authority, community revitalization and investment authority or transit village development district to apply to the Sustainable Investment Incentive Committee to participate in the program and would authorize the committee to approve or deny applications for projects meeting specific criteria.</td>
<td>Watch</td>
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<tr>
<td>SB 43 Allen D</td>
<td>S. RLS. 12/4/2018-From printer. May be acted upon on or after January 3.</td>
<td>Would require the State Air Resources Board, in consultation with the California Department of Tax and Fee Administration, to submit a report to the Legislature on the results of a study, as specified, to propose and to determine the feasibility and practicality of, a system to replace the tax imposed pursuant to the Sales and Use Tax Law with an assessment on retail products sold or used in the state based on the carbon intensity of the product to encourage the use of less carbon-intensive products.</td>
<td>Watch</td>
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<tr>
<td>SB 50 Wiener D</td>
<td>S. RLS. 12/4/2018-From printer. May be acted upon on or after January 3.</td>
<td>Would require a city, county, or city and county to grant upon request an equitable communities incentive when a development proponent seeks and agrees to construct a residential development, as defined, that satisfies specified criteria, including, among other things, that the residential development is either a job-rich housing project or a transit-rich housing project, as those terms are defined; the site does not contain, or has not contained, housing occupied by tenants or accommodations withdrawn from rent or lease in accordance with specified law within specified time periods; and the residential development complies with specified additional requirements under existing law.</td>
<td>Watch</td>
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ACTION
The Staff Coordinating Council recommends that the Board adopt the 2019 Legislative Program.

SIGNIFICANCE
The 2019 Program establishes the principles that will guide Caltrain’s legislative and regulatory advocacy efforts through the 2019 calendar year, including the first half of the 2019-2020 State legislative session and the first session of the 116th Congress. The program is intended to be broad enough to cover the wide variety of issues that are likely to be considered during that time and flexible enough to allow Caltrain to respond swiftly and effectively to unanticipated developments. Adoption of the Program provides our legislative delegation and our transportation partners with a clear statement of Caltrain’s priorities.

The 2019 Program is organized to guide Caltrain’s actions and positions in support of three primary objectives:

1. Maintain and enhance funding opportunities to support Caltrain’s programs, projects, and services.

2. Seek a regulatory environment that streamlines project delivery and maximizes Caltrain’s ability to meet public transportation service demands.

3. Reinforce and expand programs that build and incentivize public transportation ridership.

The Program is structured to apply these core objectives to a series of issues detailed in the 2019 Legislative Program.

Should other issues surface that require Caltrain’s attention, actions will be guided by the three policy objectives listed above. If needed, potential action on issues that are unrelated to these policy goals will be brought to Caltrain’s Board of Directors for consideration.
Caltrain and its legislative consultants will employ a variety of engagement tools to support the 2019 Legislative Program, including:

1. Direct Engagement
   Engage policymakers directly and sponsor legislation, submit correspondence and provide public testimony that communicates and advances Caltrain’s legislative priorities and positions.

2. Coalition-based Engagement
   Engage local and regional stakeholders to build awareness about specific issues and participate in local, regional, statewide and national coalitions organized to advance positions that are consistent with the 2019 Program.

3. Media Engagement
   Build public awareness and communicate legislative priorities by issuing press releases, organizing media events, and through the use of social media and other electronic media.

BUDGET IMPACT
There is no impact on the budget.

BACKGROUND
Staff actively monitors legislative and regulatory activity and will seek Board positions on selected bills as appropriate to further Caltrain’s legislative objectives and to provide support for our advocacy efforts. Staff will supply updated reports summarizing relevant legislative and regulatory activities, allowing the Board to track legislative developments and providing opportunities to take appropriate action on pending legislation.

Prepared By: Casey Fromson, 650.508.6493
Government and Community Affairs Director
Peninsula Corridor Joint Powers Board

2019 Legislative Program

Purpose

Legislative and regulatory actions have the potential to significantly benefit Peninsula Corridor Joint Powers Board (JPB) programs and services. They also have potential to present serious challenges that threaten the JPB’s ability to meet Caltrain’s most critical transportation demands.

The 2019 Legislative Program establishes the principles that will guide the Agency’s legislative and regulatory advocacy efforts through the 2019 calendar year, including the first half of the 2019-2020 State legislative session and the first session of the 116th Congress. The program is intended to be broad enough to cover the wide variety of issues that are likely to be considered during that time and flexible enough to allow the Agency to respond swiftly and effectively to unanticipated developments.

Objectives

The 2019 Legislative Program is organized to guide the Agency’s actions and positions in support of three primary objectives:

• Maintain and enhance funding opportunities to support the Agency’s programs and services;
• Seek a regulatory environment that streamlines project delivery and maximizes the Agency’s ability to meet transportation service demands; and
• Reinforce and expand programs that build and incentivize public transportation ridership and improve quality transportation choices.

Issues

The Legislative Program is structured to apply these core objectives to a series of State and Federal issues falling in these categories:

• Budget and Transportation Funding Opportunities
• Transportation Projects - Funding Requests and Needs
• Regulatory and Administrative Issues

Within these categories are a detailed list of specific legislative initiatives and corresponding set of policy strategies.

Should other issues surface that require the JPB’s attention, actions will be guided by the three policy objectives listed above. If needed, potential action on issues that are unrelated to these policy goals will be brought to the JPB’s Board of Directors for consideration.
Advocacy Process
Staff will indicate on each monthly legislative update recommended positions for pending bills. Once the board has an opportunity to review the recommended position, staff will communicate the position to the relevant entity (such as the bill author, agency, or coalition). In rare circumstances, should a position on a bill be needed in advance of a board meeting, staff will confer with the Board Chair. If legislation falls outside of the scope of the Board’s adopted Legislative Program, Board approval will be required prior to the agency taking a position.

Public Engagement Strategies
Staff, led by the Communications Division and its legislative consultants, will employ a variety of public engagement strategies to support the 2019 Legislative Program, including:

- **Direct Engagement**
  Engage policymakers directly and sponsor legislation, submit correspondence and provide public testimony that communicates and advances the Agency’s legislative priorities and positions.

- **Coalition-based Engagement**
  Engage local and regional stakeholders to build awareness about specific issues and participate in local, regional, statewide and national coalitions organized to advance positions that are consistent with the 2019 Legislative Program.

- **Media Engagement**
  Build public awareness and communicate the Agency’s legislative priorities by issuing press releases, organizing media events, and through the use of social media.
### State and Regional Funding Opportunities and Challenges

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<th>Issue / Background</th>
<th>Strategy</th>
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<tr>
<td><strong>General Funding</strong> The State recently enacted SB 1, which provides $5.2 billion to maintain local streets and roads and highways, ease traffic congestion, and provide mobility options through investments in public transportation and bicycle and pedestrian programs. SB 1 provides more than $700m per year for public transit. This is the largest increase in dedicated transit funding in more than 40 years. In 2014, the Legislature called for, via SB 1077, a pilot program to study a road charge model as an alternative to the gas tax. The nine-month pilot began in July 2016, with over 5,000 participating vehicles statewide. The California State Transportation Agency (CalSTA) reported findings to the CTC and the Legislature in December 2017.</td>
<td>• Protect against the elimination or diversion of any State or regional funds that support the agency’s transportation needs. • Support State funding allocation requests for investments that benefit the agency’s transportation programs and services. • Work with statewide transit coalitions to identify and advance opportunities for funding that would support the agency’s transportation priorities. • Monitor legislative reaction of the Road Usage Charge (RUC) Technical advisory Committee and implementation of a RUC program by the California State Transportation Agency (CalSTA). • Monitor efforts to implement a mileage-based user fee as a potential revenue source.</td>
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<td><strong>Formula Funding</strong> After years of diversion to support the State’s General Fund, funding for the State Transit Assistance (STA) program has remained stable over the last few budget cycles thanks to successful legal, legislative and political efforts on behalf of the transportation community. Still, more revenue is needed in order to meet the demand of increased ridership, reduce highway congestion – especially on Highway 101 – and adhere to the</td>
<td>• Support the full funding of the STA program at levels called for in the 2011 reenactment of the 2010 gas-tax swap legislation. • Advocate for the regularly scheduled issuance of State infrastructure bonds that support the Agency’s services and programs. • Support full and timely allocation of the Agency’s STIP share. • Support legislation clarifying elements of the STA program recently changed in AB 1113 (Bloom). • Support the California Transit Association’s efforts to engage the Legislature on Transportation Development Act (TDA) reform and the review of performance measures for transit.</td>
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State’s mandate of reducing greenhouse gas emissions, and creating livable communities.

**Cap-and-Trade Revenues** In 2012, the State began implementing the cap-and-trade market-based compliance system approved as a part of the California Global Warming Solutions Act of 2006 (AB 32). Since the program began selling allowances, the program has generated billions of dollars. In 2014, legislation was enacted creating a long-term funding plan for cap-and-trade which dedicates 60 percent of cap-and-trade revenues to transportation. The remaining 40 percent is subject to annual appropriation through the state budget process. In 2017, the legislature extended the program from 2020 to 2030.

Caltrain is eligible for funding through the Low Carbon Transit Operations Program, the Transit and Intercity Rail Capital Program, and the Affordable Housing Sustainable Communities Program. Each program’s requirements, oversight, and competiveness vary. The programs require a certain percentage of funds be expended in state defined “disadvantaged communities” (as defined by CalEnviroScreen). This can prove difficult in jurisdictions with a small number of disadvantaged communities.

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<td><strong>Voter Threshold</strong> Legislation has been considered in recent years that provide a framework for lowering the thresholds for the State or a city, county, special JPB or regional public agency to</td>
<td><strong>Support efforts to amend the State Constitution to reduce the voter threshold required for the State or a city, county, special district or regional transportation agency to impose a special tax for transportation projects or programs.</strong></td>
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- Work with the Administration and like-minded coalitions to secure the appropriation of additional cap-and-trade revenues to support the Agency’s transportation needs.
- Support legislation and regional action that makes a broad array of the Agency’s emissions-reducing transportation projects, programs and services eligible for investment.
- Protect existing cap-and-trade appropriations for transit operations, capital projects and sustainable communities strategy implementation.
- Work to direct additional revenues to transit-eligible programs, including efforts to secure funding from the remaining discretionary funds and revenues dedicated to the high-speed-rail project.
- Support efforts to revise the State’s definition on “disadvantaged communities” to encompass a larger proportion of disadvantaged communities on the Peninsula.
impose a special tax.

| Other State or Local Funding Options | • Advocate for legislation that would create new local funding tools to support transportation infrastructure and services.  
• Support innovative local and regional funding options that will provide financial support for the agency.  
• Support legislation that works to ensure revenues generated through managed lane projects remain in the County of origin.  
• Advocate for funding sources that would assist transit agencies in obtaining funds for sustainability initiatives including water conservation, waste reduction, long-term resource efficiency of facilities and equipment, and greenhouse gas reductions.  
• Support funding for workforce housing to attract and retain quality personnel.  
• Support efforts that allow for public private partnerships that benefit the implementation of capital projects, efficient operation of transit services, or enhanced access to a broad range of mobility options that reduce traffic congestion. |

| Transportation Projects | • Work with partners in the region to bring business, community, and transportation stakeholders together to enhance, support and advocate for transportation and mobility in the Bay Area. |

| General | • Work with partners in the region to bring business, community, and transportation stakeholders together to enhance, support and advocate for transportation and mobility in the Bay Area. |

| Caltrain Modernization (CalMod) Program | • Advocate for the sale and allocation of Proposition 1A bonds to meet the commitments specified in SB 1029 with respect to the Caltrain corridor.  
• Support the allocation of cap-and-trade funding to advance implementation of the CalMod Program.  
• Work with state, local and regional partners to advance policies and actions that will help secure funding needed to fulfill local and regional commitments to the CalMod Program.  
• Work to address regulatory challenges that limit the implementation of solutions that |
and federal funding sources to electrify the corridor, install an advanced signaling system and replace Caltrain’s aging diesel trains with electric trains that will dramatically improve service between San Francisco and San Jose.

**Other Projects Beyond the CalMod Program,**
Caltrain has identified capital projects such as a fully electrified 8-car EMU fleet with longer platforms that will provide additional capacity and service benefits to Caltrain commuters. The capital needs also include but are not limited to grade separations and station upgrades. The Caltrain Business Plan, a 2040 vision for the corridor is currently underway will help identify future capital and operating needs.

In 2016, a new round of HSR Blended System planning, outreach and environmental clearance work kicked-off in the corridor. While this project is not being led by the JPB, the agency owns the right-of-way and has a significant interest in the process and success of the project that will “blended” with Caltrain service.

**Transit Oriented Development / First and Last Mile**
First and last mile projects, as well as transit oriented development projects are an important part of the broad transit ecosystem that will help support robust ridership in the corridor.

| will maximize Caltrain capacity and service benefits. |
| • Support the allocation of cap-and-trade or other state / regional funding to advance implementation of Caltrain projects. |
| • Work to address regulatory actions or policies that negatively impact future capacity or service improvements. |
| • Consistent with existing agreements between JPB and CHSRA, support efforts to plan, engage stakeholders, and implement the Blended System project on the Caltrain corridor. |

| • Support efforts to provide commuters with easy and convenient options to travel to and from major transit centers to their final destination. |
| • Support the development of new and innovative first and last mile options. |
| • Support increased funding opportunities for first and last mile projects. |
| • Advocate for policies that promote transit-oriented developments in ways that compliment transit services. |
| • Support the State’s GHG reduction goals by supporting transit oriented developments. |
| **Transportation Demand Management (TDM)** | • Support state funding incentives and streamlining processes for transit oriented development.  
TDM is the application of strategies and policies to reduce travel demand of single-occupancy vehicles or to redistribute this demand in space or time.  
• Support efforts that provide more TDM tools and funding opportunities  
• Support policies that encourage use of TDM |
| --- | --- |
| **Regulatory and Administrative Issues** | • Support opportunities to remove barriers to, and improve the ability to conduct, safe, efficient transportation operations, administration, planning and project delivery efforts, including alternative project delivery methods that provide flexibility to the agency.  
• Oppose efforts to impose unjustified and burdensome regulations or restrictions on the Agency’s ability to conduct efficient transportation operations, administration, planning and project delivery efforts. |
| **General** | Every year a variety of legislation or regulatory action is pursued that would affect regulations governing transportation-related service operations, administration, planning and project delivery. In addition, opportunities exist to reform or update existing regulations that are outdated, or can be improved to address potential burdens on transportation agencies without affecting regulatory goals.  
• Support opportunities to remove barriers to, and improve the ability to conduct, safe, efficient transportation operations, administration, planning and project delivery efforts, including alternative project delivery methods that provide flexibility to the agency.  
• Oppose efforts to impose unjustified and burdensome regulations or restrictions on the Agency’s ability to conduct efficient transportation operations, administration, planning and project delivery efforts. |
| **California Environmental Quality Act (CEQA)** | Several regional and statewide transportation organizations continue working to modernize CEQA and minimize unnecessary delays during the environmental review process.  
• Closely monitor efforts to modernize CEQA. Without compromising CEQA’s effectiveness as an environmental protection policy, support proposals that advantage transportation projects, such as transit expansion, pedestrian / bicycle improvements, and transit oriented development. |
| **Sustainable Communities Strategies** | Implementation In conjunction with AB 32 and SB 32 implementation, the Sustainable Communities and Climate Protection Act (SB 375) requires regions to develop Sustainable Communities Strategies (SCS) with integrated housing, land-use and transportation policies that will accommodate population growth and reduce regional greenhouse gas emissions by specific amounts. In 2017, regional authorities in the Bay  
• Advocate for policies that provide adequate and equitable funding to support increased demand and dependence on JPB’s transportation services associated with the implementation of SB 375 and Plan Bay Area. |
Area approved the update to Plan Bay Area, which includes the region’s SCS.

<table>
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<tr>
<th>State Rail Plan Caltrans released the 2018 California State Rail Plan which will provide a framework for planning and implementing California’s rail network for the next 20 years and beyond. This plan contemplates a second bay crossing for rail.</th>
</tr>
</thead>
</table>
| • Closely monitor the State Rail Plan for potential opportunities to leverage resources for the Caltrain corridor.  
• Ensure the State Rail Plan appropriately characterizes the Caltrain system and future plans.  
• Ensure any planning, development, or policy proposals for a second bay crossing are consistent with Caltrain policies and planning. |
### Funding Opportunities and Challenges

<table>
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<tr>
<th><strong>Issue / Background</strong></th>
<th><strong>Strategy</strong></th>
</tr>
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</table>
| Federal Appropriations | - Partner with local, regional, State and national coalitions to advocate appropriation of the maximum authorized amount for programs that benefit the agency’s transportation services and needs.  
- Work with local and regional coalitions to support requests for funding from discretionary programs, including the Capital Investment Grant program.  
- Communicate frequently with the agency’s federal delegation and key appropriators on the needs or concerns of pending appropriation bills. |
| Every year, Congress adopts several appropriations bills that cover 12 major issue areas, including the Transportation, Housing and Urban Development bill. These measures provide the authority for federal agencies to spend money during the upcoming fiscal year for the programs they administer.  
In September 2018, Congress passed a continuing resolution (CR) to keep federal agencies funded at the same level as the previous fiscal year, through December 7, 2018. Congress will have to pass a CR or omnibus appropriations bill to fund the government for the fiscal year 2019.  
The President and the Department of Transportation (DOT) have proposed phasing out the Capital Investment Grant program (New Starts/Small Starts/Core Capacity) in the annual budget request. However, Congress continues to provide funding for the program and has include language in the annual Transportation/HUD Appropriations bills requiring the Federal Transit Administration (FTA) to allocate funding for projects and to continue to sign full funding grant agreements. |
| Tax and Finance | - Support efforts to ensure tax provisions that benefit the agency’s priorities are included in any tax or finance proposal.  
- Protect against the elimination or diversion of any tax policies that support the agency’s transportation needs. |
| Congress also considers legislation that governs tax and finance issues that impact transit agencies. |
### Transportation Projects

<table>
<thead>
<tr>
<th>General</th>
<th>Support the efforts of partnering agencies to obtain federal funding for transit projects in San Francisco, San Mateo, and Santa Clara counties.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Work with federal delegation members, as well as local, regional, and state coalitions to support the federal funding requests for our partner transit agencies on projects that provide complimentary services for the agency.</td>
</tr>
</tbody>
</table>

**Caltrain Modernization Program** The current Caltrain Electrification Project funding plan includes funding from several federal funding sources including the Federal Transit Administration (FTA) Core Capacity Program.

Positive Train Control (PTC) is a federal mandate. The current Caltrain Positive Train Control (PTC) project includes funding from the Federal Railroad Administration.

**Other Projects Beyond the CalMod Program,**

Caltrain has identified capital projects such as a fully electrified 8-car EMU fleet with longer platforms that will provide additional capacity and service benefits to Caltrain commuters. The capital needs also include but are not limited to grade separations, station upgrades, and supporting regional projects that will increase Caltrain ridership. The Caltrain Business Plan, a 2040 vision for the corridor is currently underway will help identify future capital and operating needs.

In 2016, a new round of HSR Blended System planning, outreach and environmental clearance work kicked-off in the corridor. While this project is not being led by the JPB, the agency owns the

<table>
<thead>
<tr>
<th>Caltrain Modernization Program</th>
<th>Advocate for the Caltrain Electrification Project FTA Core Capacity funding to be included in the President’s budget request and in the THUD Appropriations bills.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Work with federal delegation members, as well as local, regional, and state coalitions to support the PCEP requests for funding.</td>
</tr>
<tr>
<td></td>
<td>• Advocate for additional PTC funding for capital and operating expenses.</td>
</tr>
<tr>
<td></td>
<td>• Support efforts to streamline regulatory administrative hurdles to supporting full PTC operations.</td>
</tr>
<tr>
<td></td>
<td>• Support the allocation of federal funding to advance implementation of Caltrain projects.</td>
</tr>
<tr>
<td></td>
<td>• Work to address regulatory actions or policies that negatively impact future capacity or service improvements.</td>
</tr>
<tr>
<td></td>
<td>• Consistent with existing agreements between JPB and CHSRA, support efforts to plan, engage stakeholders, and implement the Blended System project on the Caltrain corridor.</td>
</tr>
</tbody>
</table>
right-of-way and has a significant interest in the process and success of the project that will “blended” with Caltrain service.

**Regulatory and Administrative Issues**

| **FAST Act Reauthorization and other Regulations** | • Monitor and review guidance and rulemaking proposals affecting FAST Act implementation and other transportation issues.  
  The FAST Act expires in September 2020. Congressional authorization committees are expected to begin holding hearings early in 2019 and are looking for recommendations for the next reauthorization bill. The congressional authorization committee leadership are hoping to introduce a bill at the end of 2019. During Congress’ consideration of the reauthorization bill, there will be an opportunity to change, increase funding, and implement new policy for highway, transit, and rail programs. 

USDOT will also issue guidance, new rulemaking, and take action in response to Executive Orders on a variety of issues outside the scope of the FAST Act.  

**Infrastructure Proposals** | • Collaborate with local, regional, state and national transportation advocacy groups to coordinate comments and advocacy efforts that support regulations that maximize benefits for transportation programs, services and users.  
  Congress could consider an infrastructure package in 2019 that would include increased funding for highways, transit, aviation, and water programs. Funding for these programs has yet to be identified.  

• Collaborate with local, regional, state and national transportation advocacy groups to coordinate proposals and advocacy efforts for FAST Act reauthorization.  

• Monitor closely and take action as needed on new Administration or Congressional policies that may have a significant impact on transit / transportation projects and programs.  
  • Advocate for funding for the agency’s projects and needs in the President’s and Congressional infrastructure proposals.
PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Caltrain

SUBJECT: CALTRAIN BUSINESS PLAN – MONTHLY UPDATE COVERING DECEMBER 2018

ACTION
Staff Coordinating Council recommends the Board of Directors (Board) receive the attached memo providing an update on Caltrain Business Plan activities and progress during December of 2018.

SIGNIFICANCE
Peninsula Corridor Joint Powers Board (JPB) staff has prepared the attached memo describing project activities and outreach related to the Caltrain Business Plan that occurred during December of 2018.

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

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

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

The initial concept for a Caltrain “Business Plan” was brought to the Board in April of 2017. The Board reviewed a draft scope of work for the Business Plan in December of 2017 and adopted a final Business Strategy and Scope of Work in February of 2018. The Business Plan has been scoped to include long-range demand modeling, and service and infrastructure planning, as well as organizational analysis and an assessment of Caltrain’s interface with the communities it traverses. It is an extensive planning effort that includes outreach in multiple venues. The plan will be completed in 2019.

Prepared by: Sebastian Petty, Senior Policy Advisor 650.622.7831
PROJECT UPDATE

The following is the fourth in a series of monthly project updates for the Caltrain Business Plan. These updates provide a high level summary of project activities and progress and are paired with an annotated presentation that reflects project materials and messaging shared with stakeholder groups during the subject month. The following “December” update covers work completed in late November and December of 2018.

ONGOING TECHNICAL WORK

The Caltrain Business Plan consulting team is continuing technical work on the Business Plan. Key areas of focus for the team during December have included;

- Continuation of major service planning work focused on the development of a “high growth” 2040 service scenario for the corridor including;
  - Evaluation and refinement of peak hour “High Growth” concepts
  - Development of draft recommendation regarding “High Growth” concepts to advance for further analysis
  - Development of service analysis for South San Jose and Gilroy service
  - Development of off-peak and weekend service concepts
  - Summary of “Baseline Growth” service planning work developed in prior Caltrain and HSR planning
  - Work with agency partners to agree to terminal planning parameters and approach
- Continued development of technical modeling tools and approaches that will be used to support the articulation of a 2040 service vision and accompanying business case. Key areas of focus include;
  - The ongoing development and calibration of an integrated business modeling tool
  - The population of a capital costing framework with initial cost estimates
  - Further development of economic analysis and regional benefit assessment methodology
- Continued research related to national and international peer organizations
- Documentation of community interface and identification of key issues and areas of focus for peer corridor analysis

MEETINGS AND OUTREACH

Regular stakeholder outreach continued in November and December. Key meetings have included;

Meetings focused on new Technical Materials

- Project Partner Committee Meetings, December 3 and December 18
- CSCG, December 12
- JPB Business Plan Ad Hoc Committee, December 17
- LPMG, December 20

The Caltrain Business Plan website is updated regularly with all project materials and will be periodically promoted through social media and other channels. It can be accessed at www.caltrain2040.org

NEXT STEPS

The first part of the Business Plan is focused on the development of a long-range service vision for the railroad accompanied by an assessment of the community-corridor interface and the Caltrain organization. The remainder of the project will be focused on the creation of the implementation plan, including a detailed business plan and funding approach. The Business Plan team will continue to provide monthly updates throughout the Business Plan.
During the month of January the team will launch another quarterly round of major public and stakeholder outreach focused on presenting service planning concepts developed over the preceding months.
The 2040 Vision: A Continued Focus on Service Planning
### What is the Caltrain Business Plan?

<table>
<thead>
<tr>
<th><strong>What</strong></th>
<th>Addresses the future potential of the railroad over the next 20-30 years. It will assess the benefits, impacts, and costs of different service visions, building the case for investment and a plan for implementation.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Why</strong></td>
<td>Allows the community and stakeholders to engage in developing a more certain, achievable, financially feasible future for the railroad based on local, regional, and statewide needs.</td>
</tr>
</tbody>
</table>

### What Will the Business Plan Cover?

#### Technical Tracks

<table>
<thead>
<tr>
<th><strong>Service</strong></th>
<th>Number of trains</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency of service</td>
</tr>
<tr>
<td></td>
<td>Number of people riding the trains</td>
</tr>
<tr>
<td></td>
<td>Infrastructure needs to support different service levels</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Business Case</strong></th>
<th>Value from investments (past, present, and future)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Infrastructure and operating costs</td>
</tr>
<tr>
<td></td>
<td>Potential sources of revenue</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Community Interface</strong></th>
<th>Benefits and impacts to surrounding communities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Corridor management strategies and consensus building</td>
</tr>
<tr>
<td></td>
<td>Equity considerations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Organization</strong></th>
<th>Organizational structure of Caltrain including governance and delivery approaches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Funding mechanisms to support future service</td>
</tr>
</tbody>
</table>

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**Caltrain**
Where Are We in the Process?

Service Planning: High Growth
Review & Evaluate Concepts

Context: Different Ways to Grow

- **2018**: Current Operations
- **2022**: Start of Electrified Operations
- **2033**: High Speed Rail Phase 1
- **2040**: Higher Growth Scenario
- **2040**: Baseline Growth Scenario
2040 Demand

The Caltrain corridor is growing

- Corridor expected to add 1.2 million people and jobs within 2 miles of Caltrain (+40%)¹
- 80% of growth expected in San Francisco and Santa Clara Counties

Major transit investments are opening new travel markets to Caltrain

- Downtown Extension and Central Subway to provide more direct connections to downtown San Francisco
- Dumbarton Rail, BART to San Jose, and improvements to Capitol Corridor and ACE to strengthen connectivity with East Bay
- HSR and Salinas rail extensions to increase interregional travel demand

With greatly improved service, 2040 Ridership demand could reach up to 240,000 riders per day²

¹Based on Plan Bay Area forecasts and approved projects by individual cities
²Derived from a rough order-of-magnitude sensitivity test using the C/CAG Model

2040 Land Use & Transportation Context

1/2 Mile Station Area

1 million people and jobs within ½ mile of Caltrain stations

2 Mile Station Area

4.2 million people and jobs within 2 miles of Caltrain stations

Indicates a station where substantial growth beyond Plan Bay Area forecasts is anticipated, but not yet approved
Throughput Demand vs. Capacity

To comfortably serve the potential market for rail in 2040, Caltrain would need to operate 8 trains per hour, per direction (TPHPD) with 10 car trains or 12 TPHPD with 8 or 10 car trains.

Seated capacity based on Stadler EMU with different door and bike car configurations. Does not include consideration of potential HSR capacity to serve demand.

Selecting a “High Growth” Service Concept

Why
Last month we reviewed seven different “High Growth” service concepts. We now want to evaluate these concepts and select an option that provides the best illustrative example of a “High Growth” service strategy for the corridor. This will allow us to pursue a more detailed analysis and comparison with the “Baseline Growth” Scenario.

Next Steps
The selected “High Growth” concept will be further refined and expanded into a full day service plan including Gilroy service, off-peak service and terminal operations.

The “High Growth” and “Baseline” service plans will then be compared as part of a “business case” analysis that includes full ridership runs, operations simulation, infrastructure and operations costing, and economic benefit assessments.
## Service Concepts - Recap

### Zone Express

- **A** - 12 Trains
- **B** - 16 Trains

### Local/Express (Minimal Passing Tracks)

- **C** - 12 Trains
- **D** - 16 Trains

### Local/Express (Expanded Passing Tracks)

- **E** - 12 Trains
- **F** - 16 Trains

### Skip Stop

- **G** - 16 Trains

---

Assumes standardized HSR service; the 2018 HSR Business Plan expects 2 trains per hour, per direction at Millbrae.

### Initial Screening Not Recommended for Further Evaluation

- **B** - Zone Express 16 Trains
  - Infrastructure needs are extensive and incompatible with other service options
  - Increased train throughput does not result in additional service at most stations

- **E** - Local/Express 12 Trains (More Passing Tracks)
  - Requires significantly more infrastructure to achieve the same throughput as other 12-train concepts
  - Infrastructure is compatible with and builds toward Local/Express 16-train concept (option **F**). Can be considered as a variant of this option.

- **G** - Skip Stop 16 Trains
  - Challenging internal connectivity and service legibility
  - Increased train throughput does not result in additional service at most stations
  - Similar to and compatible with Local/Express 16 Train pattern with less passing tracks (option **D**) - can be considered as a variant of this option.
**Service Goals**

1. **Maximize Ridership** - with fast and frequent service between major markets
2. **Improve Coverage and Connectivity** - by ensuring that most stations are connected with frequent service
3. **Enhance Capacity and Convenience** - with service that is comfortable and easy to understand
4. **“Right Size” New Infrastructure** - by investing strategically to provide corridor-wide benefits
### Service Concept Evaluation

#### 1. Maximize Ridership

<table>
<thead>
<tr>
<th>Goal</th>
<th>Metric</th>
<th>Existing</th>
<th>Minimal Passing Tracks</th>
<th>Expanded Passing Track</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide high frequency service</td>
<td>Number of stations served every 10 minutes</td>
<td>0 Stations</td>
<td>6 Stations</td>
<td>14 Stations</td>
</tr>
<tr>
<td>Improve travel times between major markets</td>
<td>Average travel times plus wait times between major stations</td>
<td>55 Minutes</td>
<td>28 Minutes</td>
<td>24 Minutes</td>
</tr>
</tbody>
</table>

*1Averaged matrix of travel times between the eight busiest stations accounting for approximately ¾ of existing ridership (4th & King, Millbrae, Hillsdale, Redwood City, Palo Alto, Mountain View, Sunnyvale, and San Jose). Includes travel time riding the train plus half of train headway.

#### 2. Improve Coverage and Connectivity

<table>
<thead>
<tr>
<th>Goal</th>
<th>Metric</th>
<th>Existing</th>
<th>Minimal Passing Tracks</th>
<th>Expanded Passing Track</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieve 15-minute frequencies at most stations during peak</td>
<td>Number of stations without service every 15 minutes</td>
<td>17 Stations</td>
<td>4 Stations</td>
<td>4 stations</td>
</tr>
<tr>
<td>Maintain connectivity between stations</td>
<td>Percentage of stations directly connected by local trains without a transfer</td>
<td>83%***</td>
<td>66%</td>
<td>99%</td>
</tr>
</tbody>
</table>

*2Stations that do not receive 4 TPHPD are served with 2 TPHPD except Atherton (1 TPHPD) and Menlo Park (3 TPHPD)

All metrics include Broadway and Atherton stations but exclude College Park station.
Service Concept Evaluation

3. Enhance Capacity and Convenience

<table>
<thead>
<tr>
<th>Goal</th>
<th>Metric</th>
<th>Existing</th>
<th>Minimal Passing Tracks</th>
<th>Expanded Passing Track</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide capacity responsive to 2040 demand</td>
<td>Percent demand served relative to seated capacity</td>
<td>35%</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>2040 demand</td>
<td></td>
<td>2040 demand</td>
<td>2040 demand</td>
</tr>
<tr>
<td>Provide legible service structure</td>
<td>Complexity of stopping pattern</td>
<td>High Complexity</td>
<td>Moderate Complexity</td>
<td>Moderate Complexity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5+ patterns per hour</td>
<td>2 patterns without connected local service</td>
<td>3 patterns with 2 local service variants</td>
</tr>
</tbody>
</table>

All metrics include Broadway and Atherton stations but exclude College Park station.

3. Enhance Capacity and Convenience

Provide legible service structure

- Complexity of stopping pattern
  - High Complexity: 3 patterns with 2 distinct local skip stop patterns
  - Moderate Complexity: 2 patterns with 2 local service variants
  - Low Complexity: 2 patterns with fully connected local service

All metrics include Broadway and Atherton stations but exclude College Park station.

Service Concept Evaluation

4. “Right Size” Infrastructure

<table>
<thead>
<tr>
<th>Goal</th>
<th>Metric</th>
<th>Existing</th>
<th>Minimal Passing Tracks</th>
<th>Expanded Passing Track</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimize mainline track expansions</td>
<td>Miles of new passing track</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 Hayden Park-Hillsdale, a northern Santa Clara County station and a 4-track Redwood City Station</td>
<td>3 Hayden Park-Hillsdale, a northern Santa Clara County station and a 4-track Redwood City Station</td>
</tr>
</tbody>
</table>

See appendix slides for additional detail on infrastructure needs and options (excerpted and repeated from November presentation)

All metrics include Broadway and Atherton stations but exclude College Park station.
### Evaluation Results

<table>
<thead>
<tr>
<th>Goal</th>
<th>Metric</th>
<th>Existing</th>
<th>Minimal Passing Tracks</th>
<th>Expanded Passing Track</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Maximize Ridership</strong></td>
<td>Provide high frequency service</td>
<td>Number of stations served every 10 minutes or more</td>
<td>5 Stations</td>
<td>A - 12 TPH Zone Express</td>
</tr>
<tr>
<td></td>
<td>Improve travel times between major markets</td>
<td>Average travel times plus wait times between major stations</td>
<td>55 Minutes</td>
<td>C - 12 TPH Local/Express</td>
</tr>
<tr>
<td><strong>2. Improve Connectivity</strong></td>
<td>Achieve 15-minute frequencies at major stations</td>
<td>Number of stations without service every 15 minutes</td>
<td>17 Stations</td>
<td>D - 16 TPH Local/Express</td>
</tr>
<tr>
<td></td>
<td>Maintain connectivity between stations</td>
<td>Percentage of stations directly connected by local track without a transfer</td>
<td>83% *** (at 60 min headways)</td>
<td>E - Local/Express</td>
</tr>
<tr>
<td><strong>3. Enhance Convenience</strong></td>
<td>Provide capacity responsive to 2040 demand</td>
<td>% 2040 demand relative to seated capacity</td>
<td>85%</td>
<td>F - 16 TPH Local/Express</td>
</tr>
<tr>
<td></td>
<td>Provide legible service structure</td>
<td>Complexity of stopping pattern</td>
<td>High Complexity</td>
<td>95%</td>
</tr>
<tr>
<td><strong>4. &quot;Right Size&quot; Infrastructure</strong></td>
<td>Minimize mainline track expansions</td>
<td>Miles of new passing track</td>
<td>0</td>
<td>64%</td>
</tr>
</tbody>
</table>

**A - Zone Express 12 TPH**
- Insufficient capacity to fully meet future demand
- Longest average travel times
- Least stations with high-frequency service

**D – Local/Express 16 TPH**
- High complexity and poor connectivity
- 15% of stations are not connected at all due to skip stop service
Evaluation Results

Local/Express (Reduced Passing Tracks)

### 12 Trains

- **San Francisco**
- **22nd St**
- **Bayshore**
- **South San Francisco**
- **San Bruno**
- **Millbrae**
- **Broadway**
- **Burlingame**
- **San Mateo**
- **Hayward Park**
- **Hillsdale**
- **Belmont**
- **San Carlos**
- **Redwood City**
- **Atherton**
- **Palo Alto**
- **California Ave**
- **High Speed rail**
- **Conceptual 4-track segment**

### Features
- Regional Express serves all Major Activity Centers at 15-minute headways
- Most stations served by local service at 15 minute headways
- Closely-spaced mid-Peninsula stations served at 30 minute headways (Broadway, Burlingame, San Mateo, Belmont, and San Carlos)
- Timed local-express transfer at Redwood City

### Passing Track Needs
- 3 miles of new passing tracks: Hayward Park to Hillsdale, at Redwood City, and at a station in northern Santa Clara county- either Palo Alto, California Ave (shown), San Antonio or Mountain View

### Options with Service Structure
- Each local pattern can only stop once Millbrae to Hillsdale
- Each local pattern can only stop once Hillsdale to Redwood City
- Flexible station overtake location in northern Santa Clara County

### Local/Express 12 Summary
- Provides good travel times, frequency, and connectivity for most markets, though with some shortcomings
- Insufficient capacity to fully meet projected demand
- Minimizes extent of overtakes required
- **Recommended for further analysis**

Local/Express (Expanded Passing Tracks)

### 16 Trains

- **San Francisco**
- **22nd St**
- **Bayshore**
- **South San Francisco**
- **San Bruno**
- **Millbrae**
- **Broadway**
- **Burlingame**
- **San Mateo**
- **Hayward Park**
- **Hillsdale**
- **Belmont**
- **San Carlos**
- **Redwood City**
- **Atherton**
- **Palo Alto**
- **California Ave**
- **High Speed rail**
- **Conceptual 4-track segment**

### Features
- Complete local stop service
- Two express lines serving major markets
- All stations receive at least 4 TPH, with many receiving 8 or 12 TPH

### Passing Track Needs
- 15 miles of new passing tracks: South San Francisco to Millbrae, Hayward Park to Redwood City, and northern Santa Clara County (shown: California Avenue to north of Mountain View)

### Options with Service Structure
- Second express pattern must run non-stop from 22nd St to San Mateo, but has some flexibility in number and location of stops along mid-Peninsula
- Flexible 5 mile passing track location in northern Santa Clara County

### Local/Express 16 Summary
- Provides fastest, most frequent, most reliable service to the most people
- Strong connectivity
- Appropriate capacity to serve future demand
- However, passing tracks needs represent major infrastructure challenge
- **Recommended for further analysis**
Recommendation

1. Analyze a Local/Express service in the Business Plan as the “High Growth” Scenario

2. Carry forward and evaluate two "high growth" service scenarios
   • A 12-train local / express service using limited passing tracks
   • A 16 train local / express using full passing tracks

3. Continue dialogue with project partners and local jurisdictions to understand interests and concerns with each variant

Context: Different Ways to Grow

Amount of Investment/Number of Trains

- 2018: Current Operations
- 2022: Start of Electrified Operations
- 2033: High Speed Rail Phase 1
- 2040: Baseline Growth Scenario
- 2040: High Growth Scenarios
Do you have any questions about the evaluation process or scoring criteria?

How do you feel about the findings of the evaluation?

Do you agree with the recommendation to evaluate two "high growth" scenarios?
Considerations

Off-peak and weekend service provides unique opportunities and challenges for Caltrain

- The Caltrain corridor has very high all-day travel demand, 7 days a week
- Demand for off-peak service may increase overtime along with corridor development and densities
- Early morning, midday, evening, and weekend periods all present different challenges and opportunities related to operating costs and work windows for construction and maintenance

These slides illustrate options of how Caltrain may respond to these factors over time

Off-Peak & Weekend Demand

Existing Off-Peak Service
- Most Caltrain service and ridership occurs during the morning and evening periods. Hourly midday and evening service captures a very small market share
- US-101 experiences a 14-hour bidirectional peak period from 6 AM to 8 PM

Existing Weekend Service
- Hourly weekend service that primarily serves long-distance trips and captures a very small market share
- US-101 experiences a 12-hour peak period from 9 AM to 9 PM with volumes near weekday levels

Based on US-101, BART, and Caltrain person trip volumes at San Francisco County line. Volumes are comparable along most of Caltrain corridor.
Off-Peak Demand: BART vs. Caltrain

Transbay Corridor
BART serves about 20-30% of midday and weekend travel on the Transbay corridor, whereas Caltrain serves about 2-3% of travel on the Peninsula.

Caltrain Corridor
Assuming similar peaking patterns to BART, Caltrain may serve approximately 4,000-5,000 passengers per hour during the midday and evening periods.

Weekend Demand: BART vs. Caltrain

Transbay Corridor
BART serves about 20-30% of weekend travel on the Transbay corridor, whereas Caltrain serves about 3-4% of travel on the Peninsula.

Caltrain Corridor
Assuming similar weekend service to BART, Caltrain may serve approximately 4,000-5,000 passengers per hour during most of the day on weekends.
Off-Peak & Weekend Service Options

Caltrain may serve Early Morning, Midday, Evening, and Weekend periods with various potential service types depending on demand and construction/maintenance needs.

8 TPHPD with Local and Express

- Maximizes mobility by mirroring all-day corridor demand; potential to carry highest mode share
- Highest operating and maintenance cost
- Best suited for midday service

6 TPHPD with Reduced Express or Reduced Local

- Prioritizes either station coverage or maximizing ridership between major markets
- Moderate operating and maintenance cost

4 TPHPD with Local Only

- Prioritizes coverage while sacrificing ridership between major markets
- Lower operating and maintenance cost
- Best suited for evening and weekend service

SHARING SESSION

What sorts of off-peak service improvements are most important to your community?

Do you have any thoughts about the specific mix of service types and frequencies that would work at different times of day?
South San Jose & Gilroy Planning

Review & Evaluate Concepts  Off-Peak Service Planning  Terminal Planning

South San Jose & Gilroy Planning

What’s Different South of San Jose?

North of San Jose
- Corridor between San Francisco and Tamien owned by Caltrain
- Electrification under construction
- Caltrain will share corridor with HSR

South of San Jose
- Union Pacific owns existing corridor between Tamien and Gilroy
- HSR and State of California negotiating with UP
- 2018 HSR Business Plan contemplates building two electrified tracks alongside non-electrified freight track
- Creates an opportunity to extend electrified Caltrain service south to Gilroy
Opportunities & Constraints

Track Capacity is Constrained
• Caltrain service is limited by operational constraints of a two track corridor
• HSR plans to operate up to 8 trains per hour, per direction south of San Jose

Demand is Unevenly Distributed
• Southern San Jose stations serve densely populated area with bidirectional demand
• Morgan Hill, San Martin, and Gilroy serve fewer people with directionally peaked demand
• HSR provides more competitive travel times between Gilroy and San Francisco/ Millbrae

2040 Land Use & Transportation Context

![](chart1.png)

- Indicates a station where substantial growth beyond Plan Bay Area forecasts is anticipated, but not yet approved
2040 Land Use & Transportation Context

Indicates a station where substantial growth beyond Plan Bay Area forecasts is anticipated, but not yet approved.

Morgan Hill & Gilroy Demand

Weekday Demand
- Caltrain serves about 2% of existing peak period travel
- US-101 experiences a morning and evening peak periods, with lower reverse-peak travel
- Potential 2040 demand of about 1,000 passengers per hour in the peak direction and 500 passengers per hour in the reverse-peak direction

Weekend Demand
- Volumes on US-101 are comparable to weekday periods, with the highest demand between 9 AM and 7 PM
- Potential 2040 demand of about <500 passengers per hour, per direction
Peak Period Service Concepts

1. Two Track Corridor
   • 8-12 TPH at Tamien, depending on mainline service levels
   • 2 TPH south of Tamien except San Martin

2. Conceptual Turn Tracks at Blossom Hill
   • 8-12 TPH at Tamien, depending on mainline service levels
   • 4 TPH at Capitol and Blossom Hill
   • 2 TPH at Morgan Hill and Gilroy

3. Conceptual Four Track Corridor
   • 8-12 TPH at Tamien, depending on mainline service levels
   • 8 TPH at Capitol and Blossom Hill
   • 2 TPH at Morgan Hill and Gilroy

Off-Peak & Weekend Concepts

1. Two Track Corridor
   • 4-8 TPH at Tamien, depending on mainline service levels
   • 1 TPH at each station except San Martin
   • Subject to further analysis to assess compatibility with HSR service

2. Conceptual Turn Tracks at Blossom Hill
   • 4-8 TPH at Tamien, depending on mainline service levels
   • 4 TPH at Capitol and Blossom Hill
   • 1 TPH at Morgan Hill and Gilroy

3. Conceptual Four Track Corridor
   • 4-8 TPH at Tamien, depending on mainline service levels
   • 4-8 TPH at Capitol and Blossom Hill, depending on mainline service levels
   • 1 TPH at Morgan Hill and Gilroy
Do you understand the service options shown south of San Jose?

Are there particular options that seem better or worse to you? Why?

Service Planning: 2040 Baseline
Context: Different Ways to Grow

DRAFT

2040 Baseline

Operational Parameters
- Blended service with 10 trains per hour, per direction north of San Jose (6 Caltrain, 4 HSR)
- Blended operations with existing/committed levels of Caltrain service assumed south of San Jose (equivalent of 4 round trip Caltrain trains per day)

Service Pattern
- Historically, Caltrain has planned to operate a skip stop service after electrification
  - Emphasizes increasing service for high ridership origin-destination pairs
  - No service differentiation within Caltrain service
- Blended service planning with HSR has carried forward this concept
- There is some flexibility in service levels and stopping patterns at individual stations
**2040 Baseline Service Plan**

**Features**
- Six skip stop patterns with 60-65 minute run times
- Most stations receive 2 or 4 TPHPD, with a few stations receiving 6 TPHPD in both directions
- Schedule varies by direction with 10 minute frequencies at San Francisco and San Jose

**Passing Tracks**
- Uses existing locations at Bayshore and Lawrence stations

**Options with Service Structure**
- Flexibility in service levels at individual stations

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**Caltrain Electrification EIR (6 TPHPD)**

### Northbound AM
- San Francisco 22nd St
- Bayshore
- South San Francisco
- San Bruno
- Millbrae
- Broadway
- Burlingame
- San Mateo
- Hayward Park
- Hillsdale
- Belmont
- San Carlos
- Redwood City
- Altheon
- Menlo Park
- Palo Alto
- California Ave
- San Antonio
- Mountain View
- Sunnyvale
- Lawrence
- Santa Clara
- College Park
- San Jose Diridon

### Southbound AM
- San Francisco 22nd St
- Bayshore
- South San Francisco
- San Bruno
- Millbrae
- Broadway
- Burlingame
- San Mateo
- Hayward Park
- Hillsdale
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- San Carlos
- Redwood City
- Altheon
- Menlo Park
- Palo Alto
- California Ave
- San Antonio
- Mountain View
- Sunnyvale
- Lawrence
- Santa Clara
- College Park
- San Jose Diridon

**HSR EIR (10 TPHPD)**

### Northbound AM
- San Francisco 22nd St
- Bayshore
- South San Francisco
- San Bruno
- Millbrae
- Broadway
- Burlingame
- San Mateo
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- Lawrence
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**Off-Peak & Weekend**

**Features**
- Same skip stop patterns at hourly headways
- Most stations receive service every 30 or 60 minutes

**Southern SJ/Gilroy**

### Features
- Skip stop pattern equivalent to 4 northbound AM trains and 4 southbound PM trains
- Replicates committed service levels within parameters of new, Blended infrastructure
- Gilroy Station served by 2 Caltrain trains per hour and 2 HSR trains per hour
- Connection to Central Coast rail service at Gilroy
- No off-peak or weekend service south of Tamien

### Passing Tracks
- None

### Options with Service Structure
- Service levels between Morgan Hill and San Martin could be varied based on further demand analysis

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*Includes minor modifications to standardize Caltrain and HSR service patterns.*
SHARING SESSION

Do you understand the 2040 “Baseline” service pattern shown and how it relates to prior planning work and policy commitments?

Terminal Planning
Proposed Process

- North and South Terminal working sessions with relevant partner and city staff
- Define key outcomes and constraints
- Identify range of acceptable planning-level analysis and assumptions that can serve as basis for continued Business Plan development including completion of service plans, ridership modeling and costing
- Define operations simulation parameters, methodology and process. Simulation completion required to confirm terminal assumptions

Community Interface Assessment Update
Business Plan Website is Up!

- Project timeline
- Project summary
- Corridor-wide factsheet
- Jurisdiction-specific factsheets
- Monthly presentations
- Glossary of key terms
- FAQs

www.caltrain2040.org

Round 1 Community Interface Meetings

Purpose
Introduce Business Plan and understand breadth of community interface concerns

Attendees
City and county staff representing public works, planning, economic development, and city managers offices + Caltrain Community Interface team

When
September – October 2018
Community Interface Meeting Results

Service Priorities

Prioritized Caltrain Service Improvements

<table>
<thead>
<tr>
<th>Service Improvement</th>
<th>Most Important</th>
<th>Moderately Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>More Commute Service</td>
<td></td>
<td></td>
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<tr>
<td>Increased Frequency</td>
<td></td>
<td></td>
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<tr>
<td>Reduced Travel Times</td>
<td></td>
<td></td>
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<tr>
<td>Multimodal access</td>
<td></td>
<td></td>
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<tr>
<td>Regional Connections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Better off-peak service midday/evenings</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number Responses

Community Interface Meeting Results

Key Themes

Service Levels & Schedules
Travel demand and mode split goals in relation to existing and anticipated roadway congestion

Physical Corridor
Grade crossings, grade separations, and the stretches of fencing, walls, and vegetation in between

Land Development
Placemaking, jobs-housing balance, transit-oriented development, and zoning changes

Station Connectivity & Access
Local first/last mile solutions, multi-modal access, and equitable incentive programs
Next Steps

Upcoming Work

- Finalize recommendations for high growth and baseline growth service plans to be studied further
- Terminal planning working sessions with Caltrain partners
- Capital costing, ridership projections and business model integration
- Ongoing organizational assessment and community interface work
## Appendix:
### Land Use Details & Service Concept Stringlines

### Land Use Planning Along Caltrain Corridor

<table>
<thead>
<tr>
<th>Station</th>
<th>Major Projects Included in Forecasts (Approved or consistent with Plan Bay Area projections)</th>
<th>Major Projects Noted but Not Quantified in Forecasts (Not yet approved and potentially inconsistent with Plan Bay Area)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th &amp; King</td>
<td>Central SoMa Plan, Mission Bay &amp; Mission Rock</td>
<td>The Hub Plan</td>
</tr>
<tr>
<td>22nd St</td>
<td>Pier 70, Potrero Power Plant, India Basin</td>
<td></td>
</tr>
<tr>
<td>Bayshore</td>
<td>Hunters Point, Candlestick Point, Schlage Lock, Sierra Point buildout, Brisbane Baylands</td>
<td>Other employment projects in pipeline such as Genentech Master Plan</td>
</tr>
<tr>
<td>South SF</td>
<td>6 MSF of approved East of 101 developments and the Downtown Station Area Specific Plan</td>
<td></td>
</tr>
<tr>
<td>San Bruno</td>
<td>Transit Corridors Plan, Bayhill Specific Plan (Youtube)</td>
<td></td>
</tr>
<tr>
<td>Millbrae</td>
<td>Station Plan</td>
<td></td>
</tr>
<tr>
<td>Burlingame</td>
<td>Burlingame Point (Facebook)</td>
<td></td>
</tr>
<tr>
<td>San Mateo</td>
<td>Downtown Area Plan, General Plan/Downtown Plan Update</td>
<td></td>
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<tr>
<td>Hayward Park</td>
<td>Nearby TOD projects under construction</td>
<td></td>
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<tr>
<td>Hillsdale</td>
<td>Bay Meadows, Hillsdale Station Plan</td>
<td></td>
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<tr>
<td>Belmont</td>
<td>General Plan Update, Belmont Village Specific Plan</td>
<td></td>
</tr>
<tr>
<td>San Carlos</td>
<td>Meridian 25, Downtown TOD projects</td>
<td></td>
</tr>
<tr>
<td>Redwood City</td>
<td>Downtown Precise Plan, Stanford Redwood City Campus, Facebook campus expansion in Menlo Park (Caltrain connection via Dumbarton Rail)</td>
<td></td>
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<tr>
<td>Menlo Park</td>
<td>El Camino Real Downtown Specific Plan</td>
<td></td>
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<tr>
<td>Palo Alto</td>
<td>Stanford Hospital Expansion, Model General Use Permit</td>
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<tr>
<td>California Ave</td>
<td>Stanford Research Park redevelopment</td>
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<tr>
<td>San Antonio</td>
<td>San Antonio Precise Plan, East Whitman Specific Plan, additional Moffett Field redevelopment</td>
<td></td>
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<tr>
<td>Mountain View</td>
<td>El Camino Real Precise Plan, North Bayshore Precise Plan, Moffett Field redevelopment</td>
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<tr>
<td>Lawrence</td>
<td>Lawrence Station Plan, City Place, Google Campus, Downtown Strategy 2040</td>
<td></td>
</tr>
<tr>
<td>San Jose Diridon</td>
<td>Downtown Specific Plan, Station Plan</td>
<td></td>
</tr>
</tbody>
</table>
How to Read a Stringline

Distance

Shallow lines show slower trains (Local)

Steep lines show faster trains (Express)

Horizontal lines show station dwell (Time but no distance)

Time

Distance

Zone Express: 12 Trains

Features
- Provides 15-minute service to all stations except Broadway/Burlingame with two semi express zone patterns
- Major activity centers receive 8 TPH
- Direct service from all markets to major activity centers, but transfer required between minor stations in different zones

Passing Track Needs
- 2 new miles of passing track between Hayward Park to Hillsdale and at a station in northern Santa Clara county (shown: California Ave)

Options with Service Structure
- Each pattern can at only stop at 2 of the 4 stations north of Millbrae
- Middle-zone train needs to stop at two stations south of California Ave
- Flexible station overtake location in northern Santa Clara County
### Zone Express: 16 Trains

**Features**
- Provides 15-minute service to all stations except Broadway/Burlingame with three semi-express zone patterns (with major activity centers receiving 12 TPH)
- Direct service from all markets to major activity centers, but transfer required between minor stations in different zones

**Passing Track Needs**
- 15 miles of new passing track:
  - south of Bayshore to San Bruno, mid-Peninsula (shown: Hillsdale to San Carlos), northern Santa Clara County (shown: California Avenue to north of Mountain View), and south of Lawrence to Santa Clara

**Options with Service Structure**
- Flexible location for 3 mile passing track in mid-Peninsula and 5 mile passing track in northern Santa Clara County

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### Local/Express: 12 Trains

**Features**
- Regional Express serves all Major Activity Centers at 15-minute headways
- All stations receive local service at 15-minute headways except Broadway and Burlingame
- Timed local-express transfer at Redwood City

**Passing Track Needs**
- 10 miles of new passing tracks:
  - Hayward Park to Redwood City and northern Santa Clara County (shown: California Avenue to north of Mountain View)

**Options with Service Structure**
- One stop on Express Train between Millbrae and Redwood City
- One or two stops on express south of Palo Alto
- Flexible 5 mile passing track location in northern Santa Clara County
Local/Express: 12 Trains, Less Passing Tracks

**Features**
- Regional Express serves all Major Activity Centers at 15-minute headways
- Most stations served by local service at 15 minute headways
- Closely-spaced mid-Peninsula stations served at 30 minute headways (Broadway, Burlingame, San Mateo, Belmont, and San Carlos)
- Timed local-express transfer at Redwood City

**Passing Track Needs**
- 3 miles of new passing tracks: Hayward Park to Hillsdale, at Redwood City, and at a station in northern Santa Clara county (shown: California Ave)

**Options with Service Structure**
- Each local pattern can only stop once Millbrae to Hillsdale
- Each local pattern can only stop once Hillsdale to Redwood City
- Flexible station overtake location in northern Santa Clara County

Local/Express: 16 Trains, Less Passing Tracks

**Features**
- Local service becomes skip-stop service
- All stations receive 15 minute headways with major stations receiving 8 or 12 trans per hour
- Many station pairs require transfer at regional hubs
- Half of station OD pairs between 22nd Street and Redwood City are not served at all

**Passing Track Needs**
- 3 miles of new passing tracks: Hayward Park to Hillsdale, at Redwood City, and at a station in northern Santa Clara county (shown: California Ave)

**Options with Service Structure**
- Generally need each pattern to stop at every other station
- Pattern overtaken by express must stop at Hayward Park & Hillsdale; other pattern cannot stop at these stations
- Flexible station overtake location in northern Santa Clara County
Local/Express: 16 Trains

Features
- Complete local stop service
- Two express lines serving major markets
- All stations receive at least 4 TPH, with many receiving 8 or 12 TPH

Passing Track Needs
- 15 miles of new passing tracks: South San Francisco to Millbrae, Hayward Park to Redwood City, and northern Santa Clara County (shown: California Avenue to north of Mountain View)

Options with Service Structure
- Express B pattern must run non-stop from 22nd St to San Mateo, but has some flexibility in number and location of stops along mid-Peninsula
- Flexible 5 mile passing track location in northern Santa Clara County
- Passing tracks between Lawrence and San Jose may enhance reliability and save 1-2 min of travel time for HSR and Caltrain (for passengers traveling south of Diridon)

For more information
www.caltrain.com
Date: December 21, 2018

To: Board of Directors

From: Jim Hartnett, Executive Director

Subject: January 10, 2019 JPB Board Meeting Executive Director's Report

- On-time Performance –
  - Through December 20: The preliminary December 2018 OTP was 89.9 percent compared to 93.9 percent for December 2017.
    - **Trespasser Strike** – There was one trespasser strike on December 19, resulting in a fatality.
  - November: The November 2018 OTP was 93.9 percent compared to 94.8 percent for November 2017.
    - **Trespasser Strike** – There was one trespasser strike on November 23, resulting in a fatality.

- SF Weekend Caltrain Closure Update – The SF Weekend Closure effective Saturday, October 6 continues through late Spring 2019 with the exception of Saturday, January 5 and Sunday January 6, 2019 (the weekend prior to the 2019 College Football Playoff National Championship on Monday, January 7, 2019 at Levi’s Stadium). In comparing the weekend train counts at Bayshore Station with the 2018 Annual Count baseline, total year-to-date weekend ridership at Bayshore station decreased by 28.1 percent as of December 17.

- Caltrain 2019 Annual Count Survey – The 2019 Caltrain Annual Count Survey will be conducted starting the week of Tuesday, January 22, 2019 (the day after the Martin Luther King Holiday) and is anticipated to be completed in February. No weekend train counts will be conducted due to
ridership impacts from the SF Weekend Caltrain Closure. A presentation to the Board summarizing the findings is targeted for Summer 2019.

- **CAC Meeting** – The Citizens Advisory Committee meeting for Wednesday, December 19 was cancelled. The next CAC meeting is scheduled for Wednesday, January 16, in San Carlos.

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

- **Special Event Train Service**

  **Services Provided:**

  - **San Jose Sharks** – There were 9 home games in November. Total post-game riders, including regular riders and Sharks fans, boarding at San Jose Diridon station in November was 1,829.

  Total year-to-date post-game additional riders, boarding at San Jose Diridon station, was 3,721, which represents a 16 percent decrease compared to the same number of games in the 2017/2018 season.

  - **Holiday Service** – During the following Holidays, Caltrain operated the following services:
    - Thanksgiving Day – Thursday, Nov. 22, 2018 (Holiday Schedule)
    - Day After Thanksgiving – Friday, Nov. 23, 2018 (Modified Schedule)

  - **PAC-12 College Football Championship (Washington Huskies vs. Utah Utes)** – The PAC-12 College Football Championship game was held at Levi’s Stadium on Friday, November 30 at 5:00 p.m. Caltrain monitored pre- and post-game ridership.

  - **Holiday Train** – Caltrain operated the Holiday Train in collaboration with the Silicon Valley Community Foundation (SVCF) on Saturday, December 1 and Sunday, December 2. With glittering lights and holiday decorations, the dazzling show-train visited nine Caltrain stations between San Francisco and Santa Clara over two nights in December, providing holiday entertainment and collecting toy and monetary donations for local children who otherwise might not receive a gift during the holidays. Caltrain and SVCF also partner with local organizations to collect toys and donations at each station for underserved children in our communities.
o **SF 49ers Regular Season** – The 49ers hosted the Indianapolis Colts on Sunday, December 9 at 1:05 p.m. and the Seattle Seahawks on Sunday, December 16 at 1:05 p.m. Caltrain operated one extra pre-game train with limited stops and one extra post-game local train from Mountain View to San Francisco. Event ridership will be provided in February.

**Services Scheduled:**

o **San Jose Sharks** – The Sharks will host seven games in December. Caltrain will track post-game ridership for all home games. No extra special trains are planned. For weeknight and Saturday night games, the last northbound train departs SJ Diridon station at 10:30 p.m. or 15 minutes after the game ends but departs no later than 10:45 p.m.

For the Sharks home game at SAP Center on Saturday, January 5 at 8 p.m. and in conjunction with the College Football Playoff National Championship - Championship Campus service, the last northbound bullet train that will depart San Jose Diridon at 12:05 a.m.

o **SF 49ers Regular Season** – The 49ers will host the Chicago Bears on Sunday, December 23 at 1:05 p.m. in their last regular season home game. Caltrain will operate one additional pre-game southbound train with limited stops from Bayshore to Mountain View for passengers to connect to the VTA light rail. The extra train will then express to San Jose Diridon station, the last station stop.

o **Holiday Service** – During the following Holidays, Caltrain will operate following services:

- Christmas Eve – Monday, Dec. 24, 2018 (Regular Weekday Schedule)
- Christmas Day – Tuesday, Dec. 25, 2018 (Holiday Schedule)
- New Year’s Eve – Monday, December 31 (Regular Weekday Schedule plus Pre & Post-SF Fireworks Special Trains)
  - Caltrain will provide **FREE** service beginning at 8:00 p.m. until the last train post-event departs SF at 2:00 a.m., making all local stops.
- New Year’s Day – Tuesday, Jan. 1, 2019 (Holiday Schedule)
- Presidents Day – Tuesday, Feb. 18, 2019 (Modified Schedule)

Schedule Information is available at [www.caltrain.com/Holidays](http://www.caltrain.com/Holidays)

o **Redbox Bowl (Oregon Ducks vs. Michigan State Spartan)** – The Redbox Bowl College Football game will be held at Levi’s Stadium on Monday,
December 31 at 12:00 p.m. Caltrain will monitor pre- and post-game ridership.

- **2019 College Football Playoff National Championship** – Caltrain will operate special event service schedules Friday, January 4 through Monday, January 7, 2019 to accommodate the College Football National Championship festivities in Downtown San Jose and at Levi’s Stadium. The special event weekend schedule includes train service to all San Francisco stations (no weekend bus bridge service January 5 and 6 only). Additional information is available on Caltrain’s dedicated webpage: [www.caltrain.com/cfbp](http://www.caltrain.com/cfbp)

  The Championship Campus events in downtown San Jose includes:
  - Playoff Fan Central – San Jose McEnery Convention Center
  - The Quad – Plaza de Cesar Chavez
  - AT&T Playoff Playlist Live! – Discovery Meadow Park
  - Media Day – SAP Center
  - Extra Yard for Teachers Summit – San Jose McEnery Convention Center
  - Extra Yard 5K – Plaza De Cesar Chavez

  On Friday, January 4, Caltrain will operate one extra late night northbound bullet train that will depart San Jose Diridon at 12:05 a.m.

  On Saturday January 5 and January 6, Caltrain will operate three extra southbound bullet trains and three extra northbound bullet trains between San Francisco and San Jose stations. The last northbound bullet train that will depart San Jose Diridon at 12:05 a.m.

  On Monday, January 7 (game day), Caltrain customers can take the train to Mountain View station and transfer to VTA light rail for service to Levi’s Stadium. Caltrain will operate one extra express northbound pre-game trains and extra post-game service in coordination with the VTA. Additionally Caltrain and VTA will offer a special College Football Championship joint ticket to get fans to the game through official Caltrain Mobile ticketing app. This day pass will be available for pre-purchase on the app starting January 1 and is valid on game day only.

- **Caltrain NorCalMLK Celebration Train** – The Caltrain NorCalMLK Celebration Train will operate on Monday, January 21, 2019. The Celebration Train will provide free service for those who wish to attend the annual celebration of the life and legacy of Dr. King in San Francisco hosted
by the Northern California Dr. Martin Luther King, Jr. Community Foundation (NorCalMLK).

Attendees must register in advance in order to receive a free Celebration Train commemorative ticket. Commemorative tickets will be valid for the Celebration Train and for one southbound Caltrain trip after 1 p.m. on January 21, 2019. The train will depart from the San Jose Diridon Caltrain Station at 9:45 a.m. It will make stops in Palo Alto at 10:05 a.m. and San Mateo at 10:25 a.m. before arriving in San Francisco by 10:50 a.m. There is no special southbound service. However, Celebration Train tickets will be accepted on southbound trains departing San Francisco after 1 p.m. that day.

**Capital Projects –**

The Capital Projects information is current as of December 14, 2018 and is subject to change between December 14 and January 10, 2019 (Board Meeting). Additional information can be found in the quarterly report presented at this Board meeting.

- **San Francisco Highway Bridges:** Replace three obsolete overhead vehicular bridges located in San Francisco at 23rd Street, 22nd Street, and Paul Avenue. Construction started in March 2015 and was substantially completed in May 2017.

  Resolution of a Buy America issue with Caltrans continues that will also resolve funding issues for the project. Discussions regarding cost reimbursement from the City of San Francisco for their Auxiliary Water Supply System (AWSS) also continue. The AT&T relocation reimbursement request for performing utility relocation on their behalf is in the process of being transmitted.

- **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 December, the relocation of underground PG&E electrical lines, and, third-party and Caltrain’s Positive Train Control (PTC) Fiber Optic cable continued. Construction of the Pedestrian Underpass, and, 25th Avenue,
28th Avenue, and 31st Avenue Bridges also continued. The precast bridge girders for the 25th Avenue Bridge will not be placed until the temporary street closure period, for street lowering, due to vertical vehicle clearances until the street is lowered. Construction of the 3rd of 5 tiers of Mechanically Stabilized Earth (MSE) retaining walls was completed at the northern section of the project near Borel Creek and 25th Avenue.

The temporary closure of the Hillsdale Station, to allow completion of the project, is now forecast to occur in the Fall of 2019 until Spring of 2020. During the temporary closure, enhanced bus and shuttle service to the Belmont Station will be provided to minimize the temporary inconvenience.

Due to delays associated with obtaining UPRR approvals and its impact to beginning 3rd party fiber optic relocations; the project schedule has been affected. Overall construction completion is forecast to be approximately 10-months late, with the completion date extended from early 2020 to October 2020. In addition, to the schedule impacts, the project has experienced significant impacts due to the inefficiency of working around a live fiber facility, as well as incurring additional construction costs associated with installing and working around temporary steel plate, and soldier pile walls, required to protect the 3rd party fiber optic during construction.

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

In December, third party utility relocations for water, gas and electric continued. Construction of a retaining wall for the parking lot was completed. Construction of a storm water treatment facility on Poletti Way was also in progress. Coordination for foundations for the Overhead Contact System (OCS) poles for the Electrification project was completed.

Critical third-party utility relocations that were originally scheduled to begin in November 2017 were delayed until August 2018 due to delays in obtaining Caltrans permits. Due to physical conflicts between third-party utility relocations and civil construction for critical path activities such as the pedestrian underpass, a partial suspension has been issued for construction to minimize delays and inefficiencies that would be caused by the stacking of the utilities and construction work. Critical path construction is now planned to resume in April 2019. Non-critical path activities such as
OCS foundations for the Electrification project and work on Poletti Way will continue during the suspension period. Project delays due to Caltrans issues are projected to extend project completion from mid-2019 to mid-2020.

**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.

In December, work has been completed at 16th Street in San Francisco and at Rengstorff Avenue and in Mountain View. The work at Castro Street is pending favorable weather to allow weather sensitive thermoplastic striping to be placed on the pavement. This site is the last work location of the construction contract. All of the punchlist work for medians in Santa Clara County was also completed and accepted by the cities. Overall construction is on schedule and 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. The construction is being phased in six partial sections of the station platforms so that passenger service may continue during construction.
In December, final construction of the extension of the platforms to the north continued. Cutover and activation of the new north pedestrian crossing gates and the extended platform is tentatively scheduled for the end of December 2018. This will eliminate the blockage of the southern crossing by 6-car train consists, and, also eliminate the potential tripping hazards of the uneven platform surfaces. These activities will substantially complete the project.

- **Ticket Vending Machine (TVM) Rehabilitation**: Upgrade the existing TVM Server and retrofit and refurbish two existing TVM machines to become prototypes for new TVM’s so that the machines are capable of performing the functions planned for the current Clipper program. The prototype machine are to be able to dispense new Clipper cards (excluding discount Clipper cards that require verification of eligibility) and have the ability of increasing the cash values of existing Clipper cards. There is also an option to retrofit 12 additional TVM’s.

  In December, the contract approved by the Board to be awarded to VenTek; the manufacturer of the existing TVM’s. The contract is currently being executed and a Notice to Proceed is to be issued in early January and completion of the 2 prototype machines by the Summer 2019. The option for retrofitting 12 additional TVM's, if executed, would follow on.

- **F-40 Locomotive Mid-Life Overhaul Project**: Perform mid-life overhaul of three F40PH2C locomotives. The mid-life overhaul of the locomotives shall include compete disassembly of the main diesel engine, overhauling by reconditioning re-usable main frame components and re-assembly with new engine components and replacement of the Separate Head-End Power (SEP-HEP) unit and all electrical components of the SEP-HEP compartment. All areas of the locomotive car body, trucks, wheels and electrical components shall be reconditioned to like-new condition or replaced with new material. The work shall be completed off-site at contractor’s (Motive Power) facility location at Boise, Idaho. The three locomotives are Locomotive #’s 920, 921 and 922.

  Locomotives #’s 920 and 921 were shipped to the vendor’s facility in February and March. Both locomotives are still undergoing overhaul; the expected returned to the CEMOF facility in San Jose for acceptance testing has been delayed until late February for #920 and late March for #921 due to the vendor’s labor shortages. Locomotive #922 is now scheduled to be shipped to the vendor’s facility after Locomotive #920 is returned to minimize the number of locomotives that are off the property at any one time.
- **MP-36 Locomotive Mid-Life Overhaul Project**: Perform mid-life overhaul of six MP-36-3C Locomotives. The mid-life overhaul of the locomotives shall include complete disassembly of the main diesel engine, overhauling by reconditioning re-usable main frame components and re-assembly with new engine components and the replacement of the Separate Head-End Power (SEP-HEP) unit and all electrical components of the SEP-HEP compartment. All areas of the locomotive car body, trucks, wheels and electrical components shall be reconditioned to like-new condition or replaced with new material. The project work shall be completed off-site at the contractor’s facility location. The six locomotives are Locomotive #’s 923, 924, 925, 926, 927 and 928.

A Resolicitation of the RFP is forecast for the Spring of 2019.
TO: Joint Powers Board

THROUGH: Jim Hartnett
          Executive Director

FROM: John Funghi
       Chief Officer, Caltrain Modernization Program

SUBJECT: PENINSULA CORRIDOR ELECTRIFICATION PROJECT MONTHLY PROGRESS REPORT

ACTION

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

BUDGET IMPACT
There is no impact on the budget.

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

Prepared by: Josh Averill, Program Management Administrator 650.508.6453
TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: CALTRAIN POSITIVE TRAIN CONTROL PROJECT UPDATE - DECEMBER 2018

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

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

BUDGET IMPACT
There is no budget impact.

MONTHLY UPDATE

1. Status on Major Milestones to Successfully Obtain An Alternative Schedule

<table>
<thead>
<tr>
<th>Key Project Activity</th>
<th>Expected Completion</th>
<th>Progress As Of 12/31/18</th>
<th>Progress On Track?</th>
<th>Mitigation Required or Approvals Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval of Designated RSD Test Request</td>
<td>May 31st</td>
<td>Completed</td>
<td>Completed</td>
<td>Formal conditional approval received on September 10. Team incorporating FRA conditions in test plan to ensure compliance to approval.</td>
</tr>
<tr>
<td>Approval of revised project PTC Implementation Plan (PTCIP) and Request for Amendment (RFA)</td>
<td>May 31st</td>
<td>Completed</td>
<td>Completed</td>
<td>Formal approval received on September 20.</td>
</tr>
<tr>
<td>Pilot Installations (4) Completed</td>
<td>June 20th</td>
<td>Completed</td>
<td>Completed</td>
<td>All pilots completed</td>
</tr>
<tr>
<td>Submit Designated RSD Application</td>
<td>Oct 15th</td>
<td>Completed</td>
<td>Completed</td>
<td>RSD Application submitted and in review by FRA.</td>
</tr>
<tr>
<td>Complete Critical Feature V&amp;V for Designated RSD area</td>
<td>Oct 30th</td>
<td>Completed</td>
<td>Completed</td>
<td>Designated RSD area V&amp;V survey completed and submitted to FRA. Integrator is surveying remainder of Caltrain property</td>
</tr>
<tr>
<td>Designated RSD Training Complete</td>
<td>Nov 14th</td>
<td>Completed</td>
<td>Completed</td>
<td>Training for designated RSD personnel completed</td>
</tr>
<tr>
<td>Designated RSD - Required Vehicle Install Completion*</td>
<td>Dec 3rd</td>
<td>Completed</td>
<td>Completed</td>
<td>(44) installs required for designated RSD completed, punch list items being addressed by Wabtec. Installations will continue on the remainder of the fleet.</td>
</tr>
<tr>
<td>Complete All Designated RSD Testing (Lab, Functional and FQT)</td>
<td>Dec 18th</td>
<td>In Process</td>
<td>No</td>
<td>Functional testing delayed, Wabtec investigating issues, testing expected to recommence in December</td>
</tr>
<tr>
<td>Start of Designated RSD*</td>
<td>Dec 19th</td>
<td>Not Started</td>
<td>No</td>
<td>Caltrain Substitute Criteria has been approved by FRA, Alternative Schedule Request to achieve RSD was submitted to FRA on December 14th</td>
</tr>
<tr>
<td>Obtain Alternative Schedule approval from FRA</td>
<td>Mar 15th 2019</td>
<td>In Process</td>
<td>Yes</td>
<td>Submitted Alternative Schedule Request on November 16, expect 90 day review cycle</td>
</tr>
</tbody>
</table>

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

- Completed installations on (44) locomotives and cab cars required per Caltrain’s Implementation Plan in November. On board installations was a statutory criteria to Caltrain requesting an alternative schedule.
  - Punch list items are still being addressed, expectation to complete in December. No performance incentive payment was released to Wabtec due to open punch list items remaining past payment deadline date.
- Training by Wabtec for Caltrain and TASI staff (62 total to support RSD) completed in December. Training was a statutory criteria to Caltrain requesting an alternative schedule.
- Field Integrated Testing (FIT) began in November but was stopped due to wayside communication issues requiring Wabtec to analyze and perform modifications as necessary. Wabtec presented a resolution plan in December to recommence FIT, with testing expected to restart in December.
  - Delay in testing required to move into RSD resulted in no performance payment being released to Wabtec.
- Wabtec announced a replacement Project Manager (a key personnel position requiring Caltrain approval) to begin work in December. Caltrain approved the replacement.
- Contract submittals continue to be submitted and re-submitted by Wabtec, reviewed and comments returned by Caltrain project team. A sampling of the submittals in December included:
  - PTC Schematics for F40 and MP36 locomotives and Bombardier Cab Cars
  - Static Bulletin Delivery Test Results
  - Upgrade to Electronic Bell Circuit for F40 locomotives
  - FQT Plan
  - PTC Antenna VSWR Test Procedure
  - Bombardier Car Brake Test Results
  - Base Stations OM Binder All Equipment
  - Bill of Materials for Gallery and Bombardier Cab Car
  - RSD Application
  - Multiple Requests for Information

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 Caltrain.

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

To date no risks have been identified requiring use of the risk funds. 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>Project team continues to 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 ensure all submittals are done correctly and within required time frame to achieve approval for an alternative schedule to achieve RSD</td>
</tr>
<tr>
<td>FRA review cycle delays</td>
<td>External</td>
<td>Delays were being incurred initially due to significant volume of submittals from all properties requiring review and approval of RSD documentation prior to year end. Team working with FRA to minimize any delays incurred with Caltrain documentation and speed FRA review process. Caltrain has successfully managed this risk, it will be removed after this month.</td>
</tr>
<tr>
<td>Interoperability delays</td>
<td>External</td>
<td>Caltrain is working with UPRR and tenants to ensure agreed to interoperability schedule dates are maintained</td>
</tr>
<tr>
<td>Onboard installation delays</td>
<td>Internal</td>
<td>Onboard installations are complete, excluding punch list items. Wabtec must ensure production installation schedule is maintained to achieve remaining fleet installs in first quarter 2019.</td>
</tr>
<tr>
<td>Track access delays</td>
<td>Internal</td>
<td>Ensure field test schedule is maintained by coordinating all field work in combination with other capital project’s needs, particularly the PCEP project.</td>
</tr>
<tr>
<td>Back Office Server (BOS) documentation scope creep</td>
<td>Internal</td>
<td>Ensure standard documentation supplied by Wabtec meets requirements of Caltrain specification criteria</td>
</tr>
<tr>
<td>FRA approval of an Alternative Schedule</td>
<td>External</td>
<td>Caltrain has received FRA approval of Substitute Criteria to be used rather than the statutory requirement of achieving RSD on one subdivision of the railroad by Dec 31, 2018. Caltrain submitted an Alternative Schedule request in December for FRA approval showing RSD and full system certification after 2018.</td>
</tr>
</tbody>
</table>

### 4. Caltrain PTC Project FRA Documentation Status

Weekly calls with FRA review team instituted in August have continued through October. Continued progress occurred this month to gain FRA approval of key project documents required to enter RSD (see below), in particular receiving the formal written approval of the revised PTC Implementation Plan.

<table>
<thead>
<tr>
<th>Document Name</th>
<th>Status - Through November 21, 2018</th>
<th>Projected Submittal Date</th>
<th>Actual Submittal Date</th>
<th>Need FRA Approval By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updated PTC Implementation Plan and Request for Amendment of the PTCIP</td>
<td>Formal approval received 9/26/18</td>
<td>Already submitted</td>
<td>6/22/2018 (final)</td>
<td>Received September 2018</td>
</tr>
<tr>
<td>Test Request</td>
<td>Formal approval received 9/10/18</td>
<td>Already submitted</td>
<td>6/22/2018 (final)</td>
<td>Received September 2018</td>
</tr>
<tr>
<td>Subdivision and Critical Asset Configuration Management Plan</td>
<td>Final approved by FRA - 8/13/2018</td>
<td>Already submitted</td>
<td>7/25/2018</td>
<td>Received September 2018</td>
</tr>
<tr>
<td>Critical Features Verification and Validation Procedure</td>
<td>Final approved by FRA - 8/16/2018</td>
<td>Already submitted</td>
<td>8/15/18</td>
<td>Received August 2018</td>
</tr>
<tr>
<td>Critical Features Verification and Validation Plan - Designated Track Section</td>
<td>Final approved by FRA - 8/16/2018</td>
<td>Already submitted</td>
<td>8/15/18</td>
<td>Received August 2018</td>
</tr>
</tbody>
</table>
**Critical Features Verification and Validation Plan - Brake Test Area**
- Final approved by FRA - 8/16/2018
- Already submitted - 8/15/2018
- Received August 2018

**Signal and Switch (WIU) Verification and Validation Procedure**
- Final approved by FRA - 8/16/2018
- Already submitted - 8/15/2018
- Received August 2018

**Signal and Switch (WIU) Verification and Validation Plan - Designated Track Section**
- Final approved by FRA - 8/16/2018
- Already submitted - 8/15/2018
- Received August 2018

**Static Bulletin Delivery Confirmation**
- Final approved by FRA - 8/16/2018
- Already submitted - 8/15/2018
- Received August 2018

**Brake Test Plan - F40 locomotive**
- Final approved by FRA - 8/22/2018
- Already submitted - 8/21/2018
- Received August 2018

**Brake Test Plan - Gallery cab car**
- Final approved by FRA - 8/22/2018
- Already submitted - 8/21/2018
- Received August 2018

**Brake Test Plan - MP36 locomotive**
- Final approved by FRA - 9/21/2018
- Already submitted - 9/20/2018
- Received September 2018

**Brake Test Plan - Bombardier Cab Cars**
- Final approved by FRA - 9/2/2018
- Already submitted - 9/2/2018
- Received September 2018

**Field Integrated Test (FIT) Plan - Designated Track Section**
- Final approved by FRA - 10/19/2018
- Already submitted - 10/10/2018
- Received October 2018

**Field Qualification Test (FQT) Plan - Designated Track Area**
- Final approved by FRA - 11/28/2018
- Already submitted - 11/27/2018
- Received November 2018

**RSD Application**
- In FRA review process
- Already submitted - 11/8/2018
- December 2018

**Substitute Criteria Strategy**
- Final approved by FRA - 11/9/2018
- Already submitted - 09/20/2018
- Received November 2018

**Response to Substitute Criteria Conditions**
- In FRA review process
- Already submitted - 11/30/2018
- December 2018

**Alternative Schedule Request and revised PTCIP/RFA**
- In FRA review process
- Already submitted - 12/14/2018
- March 2019

---

**Test Results: Critical Features Verification and Validation - Designated Track Section**
- Final submitted as information only
- Already submitted - 8/22/2018
- No approval required

**Test Results: Critical Features Verification and Validation - Brake Test Area**
- Final submitted as information only
- Already submitted - 8/22/2018
- No approval required

**Test Results: Signal and Switch (WIU) Verification and Validation - Designated Track Section**
- Final submitted as information only
- Already submitted - 10/09/2018
- No approval required

**Brake Test Results – F40 locomotives and Gallery Cab cars**
- Final submitted as information only
- Already submitted - 11/29/2018
- No approval required

**Static Bulletin Delivery Test Results**
- Final submitted as information only
- Already submitted - 12/06/2018
- No approval required

**Brake Test Results - MP36 locomotives and Bombardier Cab cars**
- Final submitted as information only
- Already submitted - 12/13/2018
- No approval required

---

5. **Caltrain Roadmap to Alternative Schedule and RSD**
   - Caltrain is pursuing the following steps to first achieve FRA approval of an Alternative Schedule, followed by Revenue Service Demonstration (RSD), in order to achieve overall system certification.
   1. Complete training of personnel required to support Designated RSD – completed.
   2. Complete installation of I-ETMS equipment on vehicles required to support Designated RSD – completed, punch list items nearing completion.
   3. Completed required brake testing of designated RSD vehicles and two rounds of lab integration testing - in process – Brake testing and lab testing completed, FIT (Field Integrated Test) testing for the Designated RSD area (15 miles of track on
Caltrain property was temporarily stopped in November for Wabtec to work through some wayside communication issues. Re-start of FIT expected in January.

4. Submission of RSD application – submitted to FRA for approval in November. FRA reviewing.

5. Once Designated RSD is achieved, Caltrain will complete remaining vehicle installations, train remaining personnel, and finish testing the remainder of the Caltrain property to achieve full RSD. Caltrain will also complete tenant testing on Caltrain property and interoperability requirements on UPRR property as well.
   - Caltrain has completed the required Statutory Criteria and FRA approved Substitute Criteria. Caltrain has submitted an Alternative Schedule request for FRA approval, allowing for continued testing and implementation and full system certification by December 2020.

6  Cost - Spend vs budget - through November 30, 2018 -

<table>
<thead>
<tr>
<th>Project Cost Analysis</th>
<th>(A) Original Budget (US$MM)</th>
<th>(B) Approved Changes (Contractor) (US$MM)</th>
<th>(C) Project Current Budget (US$MM)</th>
<th>(D) Expended and Accrual To-Date (US$MM)</th>
<th>(E) Estimated at Completion (EAC) (US$MM)</th>
<th>(F) = (C - E)</th>
<th>(G) = (D / E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBOSS PTC Project (Jan 2008 - Feb 2018)</td>
<td>$231.00</td>
<td>$239.88</td>
<td>$202.26</td>
<td>$202.26</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caltrain PTC Project (March 1st 2018 - June 2020):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrator WABTEC Contract</td>
<td>$43.01</td>
<td>$43.01</td>
<td>$11.55</td>
<td>$43.01</td>
<td>-</td>
<td>26.84%</td>
<td></td>
</tr>
<tr>
<td>Other Contractors</td>
<td>$6.00</td>
<td>$6.00</td>
<td>$0.43</td>
<td>$6.00</td>
<td>-</td>
<td>7.21%</td>
<td></td>
</tr>
<tr>
<td>Potential Changes</td>
<td>$2.00</td>
<td>$2.00</td>
<td>$2.00</td>
<td>$2.00</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential Incentive - WABTEC</td>
<td>$2.00</td>
<td>$2.00</td>
<td>$2.00</td>
<td>$2.00</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Program Costs</td>
<td>$30.34</td>
<td>$30.34</td>
<td>$5.90</td>
<td>$30.45</td>
<td>(0.11)</td>
<td>19.36%</td>
<td></td>
</tr>
<tr>
<td>Project Contingency</td>
<td>$6.06</td>
<td>$6.06</td>
<td>$5.95</td>
<td>$5.95</td>
<td>0.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total PTC Project</td>
<td>$89.41</td>
<td>$89.41</td>
<td>$17.87</td>
<td>$89.41</td>
<td>0.00</td>
<td>19.99%</td>
<td></td>
</tr>
</tbody>
</table>

Note:
1). Expended and Arrual to Date is through November 30, 2018;
2). Integrator Wabtec Contract Value includes Shared Risk with Not to Exceed Total of $1.91MM;
3). Other Contractors amount includes ROCS Modification and potential fiber fixes;
4). Potential Changes amount is set for future project change orders as result of WABTEC assessment and survey for the communications and office subsystems;
5). Potential incentive amount reflects what is in the WABTEC conformed agreement;
6). Other Program Costs includes JPB project oversight costs, TASI support and Other Direct Cost for PTC project delivery;
7). Project contingency includes a) contingencies for WABTEC contract per Board Staff Report; b) JPB project team cost contingency;
8). CBOSS PTC project budget and actual cost are highlighted to reflect prior March 1st, 2018 CBOSS project financial data.

7 Items of note in December - This section reports on PTC general progress and issues being tracked outside the Wabtec contract during the current reporting month.

1) Team submitted for FRA approval the Caltrain Alternative Schedule Request (supported by a revised Caltrain PTCIP) to achieve full system certification by December 2020.
2) The Federal Railroad Administration (FRA) announced that Caltrain was awarded nearly $4m of additional grant money as part of the Consolidated Rail Infrastructure and Safety Improvements Grant Program
3) Team received FRA approval of its FQT (Field Qualification Test) plan for the Designated RSD track area. FQT testing occurs after successful completion of FIT (Field Integrated Test).
4) Team supported a visit by FRA national and regional representatives to review the status of Caltrain PTC efforts as well as discuss Caltrain’s Alternative Schedule strategy.
5) Team continued to work with ARINC to clarify modifications required for ROC$ to support PTC implementation, including CCF and BCCF updates as required.
6) 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 in-depth or immediate decisions are held as needed. Data sharing of fiber audit results and testing schedules (sharing of track and time) ongoing to ensure both teams coordinate needs.

7) Caltrain configuration management (CM) manager continues full integration into project team to ensure all Caltrain CM requirements are maintained during project execution and transition to daily operations upon project completion.

8) Caltrain Go Live team reinstated to ensure smooth transition of PTC operations and maintenance upon project completion. These efforts include drafting a RSD rollout strategy, manload planning for both Caltrain and TASI operations and maintenance, and coordination of Master Service Agreements (MSA) negotiations with key suppliers required to support PTC long term service needs.

8. Upcoming Key Activities in January -

1) Continue Critical Feature Validation and Verification (V&V) field testing of non-designated RSD.

2) Assuming a January re-start of Field Integration Testing (FIT), complete FIT and start Final Qualification Test (FQT). Once FQT is complete and the FRA has approved the Caltrain RSD Application, Caltrain may start implementing PTC on a rollout basis within the designated RSD segment of the Caltrain property.

3) Close out all punch list items on onboard installs and continue installations on remaining Caltrain fleet.

4) Continue meeting with UPRR PTC counterparts to strengthen relationship needed to successfully implement interoperability on both properties. Caltrain must complete interoperability requirements on UPRR territory in 2019.

5) Continue regular monthly review with Wabtec senior management to ensure the Wabtec project team maintains focus on 2019 activities.

6) Continue to work closely with the FRA regional and national representatives to ensure all aspects of documentation and testing requirements are maintained and approvals (by FRA) granted.

9. Vehicle Installation -

The project integrator has completed installation of (44) I-ETMS modules on the Caltrain locomotives and cab cars required based on Caltrain’s Implementation Plan. Caltrain is working with Wabtec to insure all punch list items are completed as quickly as possible. Wabtec must also focus on completing the remaining Caltrain fleet (23 additional locomotives and cab cars) by first quarter 2019.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Completed</th>
<th>In Progress</th>
<th>Pending</th>
</tr>
</thead>
<tbody>
<tr>
<td>F40PH-2CAT</td>
<td>16</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MP36</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bombardier Cab</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Gallery Cab</td>
<td>17</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

%: 100% | 0% | 0%

Prepared By: Matt Scanlon, Deputy Director, Systems     650.622.7819
AGENDA ITEM #9  
JANUARY 10, 2019

PENINSULA CORRIDOR JOINT POWERS BOARD  
STAFF REPORT

TO: Joint Powers Board

THROUGH: Jim Hartnett  
Executive Director

FROM: Michelle Bouchard  
Chief Operating Officer, Rail

SUBJECT: RESOLUTION OF SUPPORT FOR CALTRAIN’S PARTICIPATION IN REGIONAL MEANS-BASED FARE PILOT PROGRAM

ACTION  
Staff Coordinating Council recommends the Board adopt a resolution of support by the Peninsula Corridor Joint Powers Board (JPB) for Caltrain’s participation in the regional means-based fare pilot program.

SIGNIFICANCE  
This resolution of support indicates that the JPB intends to approve Caltrain’s participation in the regional means-based fare pilot program (Pilot Program). An effort led by staff from the Metropolitan Transportation Commission (MTC) and regional transit operators, the Pilot Program is anticipated to commence in fall 2019. If the Board of Directors (Board) approves the resolution, additional Board actions would be necessary to formally approve Caltrain’s participation in the Pilot Program, including completing the process of updating the agency’s Codified Tariff and approving a Pilot Program agreement with MTC.

BUDGET IMPACT  
There is no budget impact associated with adopting this resolution of support. However, staff and MTC estimate that there would be a revenue loss if the JPB participates in the pilot program, with the extent of the revenue loss depending on the level of participation in the program. At this time, MTC estimates that the gross fare revenue loss due to Caltrain’s participation in the Pilot Program would be in the range of approximately $400,000 to $1,800,000 annually, depending on the level of program participation. However, MTC estimates that up to 50 percent of fare revenue losses would be offset by regional financial contributions to Caltrain; thus, the net revenue loss is estimated to be approximately $200,000 to $900,000 annually for Caltrain.
**BACKGROUND**

**Regional Means-Based Fare Pilot Program**
MTC has been leading an effort to create a regional means-based fare pilot program with large transit operators in the region to help address the issue of transportation affordability in the Bay Area. Under this new Pilot Program, participating agencies would provide a fare discount for low-income transit riders.

MTC approved a Means-Based Fare Pilot Program Framework (Pilot Program Framework) on May 23, 2018. In addition to the JPB/Caltrain, the other potential Pilot Program participants include the Bay Area Rapid Transit District (BART); Golden Gate Bridge, Highway and Transportation District for both its bus and ferry services; and San Francisco Municipal Transportation Agency (SFMTA), with program participation subject to approval from each transit operator's governing board. MTC staff has been working in partnership with staff from the potential participants, including the JPB, to define, develop, and implement the Pilot Program.

**Caltrain Fare Policy**
Throughout fall 2018, Caltrain staff worked with the Board of Directors to develop a foundational Caltrain Fare Policy to guide future decision-making regarding the agency's fares. The Caltrain Fare Policy was adopted by the Board at its December 6, 2018 meeting. Under the Equity category, the Caltrain Fare Policy contains the following goal: “Advocate for and participate in State and regional programs that make it more affordable for low-income customers to use transit.”

**Pilot Program Framework**
Per the approved Pilot Program Framework, the Pilot Program will run for 12 to 18 months and be implemented through a Clipper Card discount coupon on the existing Clipper system. The discount amount offered to eligible adults will be a minimum of 20 percent on single-ride adult Clipper Card fares. Adults earning less than 200 percent of the Federal Poverty Level annually will be eligible to participate in the Pilot Program.

Much of the Pilot Program will be centrally administered on behalf of all participating agencies using a program implementation structure modeled on the existing Clipper-based Regional Transit Connection (RTC) card administration. Aspects of the Pilot Program that are intended to be centrally administered include:

- Developing and implementing the discount coupon on Clipper;
- Creating an application process for the program (likely online or by mail);
- Evaluating applications for those seeking to enroll in the program and determining participation eligibility;
- Sending Clipper Cards to eligible applicants;
- Providing customer service support as needed; and,
- Developing and implementing the Pilot Program’s branding, outreach, and marketing plan.

While MTC staff is leading implementation of this Pilot Program, this process requires significant and ongoing coordination between staff at MTC, participating transit...
agencies, county social services agencies, and Cubic, the Clipper contractor. Once launched, the Pilot Program’s performance will be monitored and evaluated for improvements and potential revisions based on financial sustainability, efficiency, and effectiveness.

Pilot Program Funding
MTC is setting aside about $11 million in funding each year for the program. Per the Pilot Program Framework, these funds will first cover the Pilot Program’s annual administrative costs (which are currently unknown), including costs for the activities described above, while the remaining funds will be available to defray up to 50 percent of operators’ fare revenue losses from the Pilot Program. As part of each participating agency’s program agreement with MTC, a mathematical formula will be established to calculate the maximum amount of funding that could be available to offset up to half of the revenue losses for each agency. MTC’s funding sources for this pilot program include a combination of the State Transit Assistance (STA) funds through SB-1, the Road Repair and Accountability Act of 2017, and funds from the Low Carbon Transit Operators Program (LCTOP).

At this time, MTC is setting aside $3 million for initial start-up costs for the Pilot Program implementation and administration, leaving about $8 million available to defray operators’ revenue losses in the first year (or more, if administrative costs total less than $3 million initially). The program is focused on keeping administrative costs to a minimum.

Estimated Revenue Losses for Caltrain
Based on a discount level of 20 percent for single-ride adult Clipper Card fares, MTC estimates the annual gross revenue loss for Caltrain to be in the range of $400,000 to $1,800,000, depending on the level of participation in the program. MTC further estimates that up to half of that amount would be offset by regional funds from MTC; thus, Caltrain’s net revenue loss would be in the range of approximately $200,000 to $900,000 annually.

These amounts are only estimates, and actual revenue losses are dependent on actual participation rates. As noted above, the Pilot Program will be closely monitored and evaluated for its effectiveness and efficiencies, including participation rates and financial impacts to participating agencies.

Current Implementation Efforts
As discussed above, staff from MTC are leading efforts to implement the Pilot Program, and they are working in close coordination with staff from transit agencies and county social service and public health agencies in the process. This significant effort involves a number of start-up tasks that are estimated to total about $3 million, as specified in the MTC Program Framework. As implementation efforts proceed through winter and spring 2019, more information will become available on the administrative costs for the program.

The following tasks have been identified to create and implement the means-based fare program on the existing Clipper system and are currently underway:
a. Developing an application portal to accept and track applications in a central database system. The portal is anticipated to be capable of processing both online and regular mail applications.

b. Contracting with a third party entity to serve as the eligibility verifier, who will be responsible for processing applications and determining which applicants are eligible to participate in the program (similar to the RTC program). They will use the application portal, manage the application database, and communicate with Cubic to issue cards for those eligible for the cards.

c. Creating the new discount coupon on the existing Clipper system with Cubic. The Clipper Cards for the Pilot Program will have full inter- and intra-agency functionality, including transfers between agencies. Cubic will also be responsible for producing the unique Clipper Cards for each eligible participant.

d. Creating and launching a marketing and outreach campaign to brand the program and successfully attract users to this new program.

e. Working with social service and public health agencies to maximize their existing client network with residents in the Bay Area who may be eligible for this Pilot Program.

f. Defining a framework and process for evaluating the performance of the Pilot Program.

Board Direction Sought
As JPB staff continues to work with other transit operator staff and MTC staff to develop this new regional Pilot Program, staff requests the Board’s direction on Caltrain’s potential participation in this program. By approving this nonbinding resolution of support, the Board will indicate that it supports Caltrain’s participation in the Pilot Program and intends to go through the processes to formalize the agency’s participation in the months to come. At this time, while additional action is needed to formalize participation, the governing boards of BART, SFMTA, and Golden Gate Bridge, Highway and Transportation District have indicated that they intend to support their agencies’ participation in the Pilot Program.

Next Steps
If the Board supports the Caltrain’s participation in the Pilot Program, it will be necessary to change the Codified Tariff to add the new means-based fare discount for eligible persons. This will include a Title VI fare equity analysis and public hearing process, similar to the process for changing other Caltrain fares. The update to the Codified Tariff would need to be complete by late summer 2019, before the program begins testing and then launches in fall 2019. Additionally, the Board will need to authorize a formal agreement with MTC for Pilot Program participation, which should specify the revenue loss reimbursement distribution from MTC to Caltrain. These actions would unfold in winter 2019 to late summer 2019. Pending all of the agencies’ necessary approvals, the Pilot Program is currently scheduled to begin in the region in fall 2019.

Prepared by: Melissa Jones, Principal Planner, Caltrain Planning  650.295.6852
RESOLUTION NO. 2019-

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

***

SUPPORTING CALTRAIN’S PARTICIPATION IN THE
REGIONAL MEANS-BASED FARE PILOT PROGRAM

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code Section 66500 et seq.; and

WHEREAS, transit affordability has been highlighted as a regional issue in MTC’s Coordinated Plan, Plan Bay Area, and other plans; and

WHEREAS, MTC has conducted a Regional Means-Based Fare Pricing Study, and on May 23, 2018, approved the implementation of a regional means-based fare pilot program (Pilot Program), which would offer discounted transit rides to eligible low-income adults on participating transit systems in the Bay Area during the pilot period; and

WHEREAS, the participating agencies in the Pilot Program, as planned by MTC, are the Golden Gate Bridge, Highway and Transportation District; Bay Area Rapid Transit District; Peninsula Corridor Joint Powers Board (JPB); and San Francisco Municipal Transportation Agency, with each agency’s participation subject to its governing board’s approval; and

WHEREAS, the Pilot Program will be centrally-administered on behalf of all participating agencies; and
WHEREAS, the Pilot Program, expected to begin in fall 2019 and run for 12 to 18 months, would offer eligible adults a standardized 20 percent discount on single-ride adult Clipper fares on Caltrain; and

WHEREAS, MTC estimates Caltrain will experience gross annual fare revenue losses in the range of $400,000 to $1,800,000 depending on the level of program participation; and

WHEREAS, MTC expects to offset up to half of Caltrain's gross annual fare revenue loss using regional funding, resulting in an estimated annual net loss to Caltrain of $200,000 to $900,000; and

WHEREAS, Staff Coordinating Council recommends that the Board of Directors (Board) adopt a resolution of the JPB's support for Caltrain's participation in the Pilot Program; and

WHEREAS, prior to returning to the Board for final approval of participation in the Pilot Program, staff will follow its fare change policies and processes, including conducting a Title VI fare equity analysis, public hearing process, and change to the Codified Tariff, and negotiate a program agreement with MTC.

NOW, THEREFORE, BE IT RESOLVED that the Peninsula Corridor Joint Powers Board hereby expresses its support for Caltrain's participation in the regional means-based fare pilot program as described above.
Regularly passed and adopted this 10th day of January, 2019 by the following vote:

AYES:

NOES:

ABSENT:

______________________________
Chair, Peninsula Corridor Joint Powers Board

ATTEST:

______________________________
J PB Secretary
AGENDA ITEM #10
JANUARY 10, 2019

PENINSULA CORRIDOR JOINT POWERS BOARD

STAFF REPORT

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Derek Hansel
Chief Financial Officer

SUBJECT: APPROVAL OF ISSUANCE OF FAREBOX REVENUE BONDS AND ASSOCIATED ACTIONS AND DOCUMENTS AND RATIFICATION OF PRIOR ACTIONS

ACTION

Staff recommends the Board:

1. Authorize and approve the issuance of Farebox Revenue Bonds (Bonds) in an aggregate amount not to exceed $60,000,000 and execution of all required documents, including, but not limited to: Fourth Supplemental Trust Agreement, Bond Purchase Agreement, Continuing Disclosure Agreement, and Escrow Agreement.

2. Approving the proposed form of the Official Statement placed on file with the JPB Secretary and authorizing the Executive Director or the Chief Financial Officer to execute a final Official Statement in substantially said form.

3. Approving the use of the proceeds of the Bonds to finance the costs of the purchase of two leased facilities housing Caltrain operations, to finance a portion of the costs of capacity improvements associated with the 2018 TIRCP Grant, to refund the 2007 Series A Bonds, to repay indebtedness incurred to refund the 2015 Series A Bonds on an interim basis, to fund a Reserve Fund and to purchase municipal bond insurance to provide additional security for the Bonds, and to pay certain costs of issuance, including, but not limited to a premium for the municipal bond insurance and/or a premium for an insurance policy or surety bond (Reserve Facility) to fund the Reserve Fund.

4. Authorize the Chief Financial Officer to take certain steps with respect to the financing, as necessary, including the purchase of Escrow Securities, the purchase of municipal bond insurance, and/or the purchase of a Reserve Facility.

5. Authorize the Executive Director and/or the Chief Financial Officer to take all other necessary steps to effectuate issuance of the Bonds.

6. Ratify the actions taken previously by officers and agents of the JPB and by the governing body of the JPB (Board) with respect to the issuance of the Bonds and existing and contemplated revolving lines of credit with DNT Asset Trust, including, but not limited to, adoption of the declaration of official intent by the Board on August 2, 2018 and adoption of Resolution No. 2018-55, by the Board on December 6, 2018.
SIGNIFICANCE
The proposed debt would be incurred to refund on a long-term basis all of the JPB's outstanding farebox revenue bonds, comprised of (i) $22,960,000 aggregate principal amount of Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2007 Series A (2007 Series A Bonds) and (ii) $11,000,000 aggregate principal amount of Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2015 Series A (2015 Series A Bonds) (which will have been refunded on an interim basis by a draw on a credit facility to be provided by DNTAsset Trust), to finance the purchase of certain real property, and, to the extent proceeds are available, to fund costs of certain capacity improvements and system enhancements approved to be funded in part from a portion of the local match associated with funding the JPB will receive under the State’s Transit and Intercity Rail Capital Program (TIRCP Grant).

Board authorization is required to (i) approve proceeding with the proposed debt and (ii) authorize staff to take such actions as are necessary to incur the proposed debt.

BUDGET IMPACT
Issuance of the bonds will result in net cost savings for the JPB. The refunding of the 2007 Series A Bonds will produce net present value savings of approximately $____ million, the refinancing of the interim refunding of the 2015 Series A Bonds provides a refinancing that was effectively required by the terms of the 2015 Series A Bonds, and the debt service associated with the purchased facilities will produce cost savings when compared to anticipated lease payments.

BACKGROUND
Staff has been working with our Financial Advisors, Bond Counsel and investment bankers to implement a comprehensive financing plan, which includes issuance of the Bonds and the revolving lines of credit with DNTAsset Trust, to accomplish a number of objectives:

• Refinance existing farebox revenue bonds
• Provide new financing for real property acquisition, costs associated with implementation of positive train control, possible electric multiple vehicles, platform modifications, wayside bicycle parking improvements and/or installation of a broadband communications system, and other corporate purposes
• Provide a new working capital line of credit

Pursuant to Section 6586.5 of the California Government Code, each of the JPB's member agencies has conducted a public hearing and, subsequent to conducting the public hearing, adopted a resolution approving the proposed debt and making a finding of significant public benefit in accordance with the criteria specified in Section 6586.5 of the California Government Code.
Government Code Section 5852.1, added by Senate Bill 450 (Chapter 625 of the 2017-2018 Session of the California Legislature), requires that prior to authorization of the issuance of bonds with a term of greater than 13 months, the governing body of a public body shall obtain and disclose all of the following information in a meeting open to the public. This staff report satisfies Government Code Section 5852.1.

a) The true interest cost of the 2019 Bonds, which means the rate necessary to discount the amounts payable on the respective principal and interest dates to the purchase price received for the 2019 Bonds is estimated to be 3.74% (based on interest rates as of January 4, 2019). The all-in true interest cost, including all transaction costs, is estimated to be 3.85%.

b) The finance charge of the 2019 Bonds, which means the sum of all fees and charges paid to third parties, is estimated at $1,956,978.

c) The amount of proceeds received by the JPB, less the finance charges for the 2019 Bonds described in b) above and any reserves or capitalized interest paid or funded with the 2019 Bonds is estimated to be $57,886,098.

d) The total payment amount, which means the sum of debt service on the 2019 Bonds through maturity plus any finance charges described in paragraph b) above not paid with the proceeds of the 2019 Bonds is estimated to be $95,553,069.

This information was provided to the JPB by J.P. Morgan as underwriter and Ross Financial/PFM Financial Advisors, co-Municipal Advisors to the JPB.

Prepared By: Derek Hansel, Chief Financial Officer 650.508.6466
Connie Mobley-Ritter, Director-Treasury 650.508.7765
RESOLUTION NO. 2019-55

PENINSULA CORRIDOR JOINT POWERS BOARD
STATE OF CALIFORNIA

* * *

AUTHORIZING THE ISSUANCE OF NOT TO EXCEED $60,000,000 AGGREGATE PRINCIPAL AMOUNT OF PENINSULA CORRIDOR JOINT POWERS BOARD FAREBOX REVENUE BONDS, APPROVING THE FORMS OF A FOURTH SUPPLEMENTAL TRUST AGREEMENT, A BOND PURCHASE AGREEMENT, AN OFFICIAL STATEMENT, A CONTINUING DISCLOSURE AGREEMENT AND AN ESCROW AGREEMENT TO BE EXECUTED IN CONNECTION THEREWITH, AUTHORIZING THE EXECUTION AND DELIVERY THEREOF AND AUTHORIZING THE TAKING OF ALL OTHER ACTIONS NECESSARY IN CONNECTION WITH THE ISSUANCE, SALE AND DELIVERY OF THE FAREBOX REVENUE BONDS.

WHEREAS, the Peninsula Corridor Joint Powers Board (the "JPB"), a public entity duly organized and existing as a joint exercise of powers agency under and by virtue of the laws of the State of California, created pursuant to the Joint Exercise of Powers Agreement-Peninsula Corridor Project, made and entered into as of October 3, 1996 (the "JPA Agreement"), among the Santa Clara Valley Transportation Authority, formerly known as the Santa Clara County Transit District, the City and County of San Francisco and the San Mateo County Transit District (each, a "Member Agency," and, hereinafter collectively referred to as the "Member Agencies"), oversees and operates the Caltrain commuter rail service ("Caltrain"); and

WHEREAS, pursuant to Article 4 of Chapter 5 of Division 7 of Title 1 of the Government Code of the State of California (the "Act") and the JPA Agreement, the JPB is authorized to issue bonds, including revenue bonds, from time to time to finance the costs of public capital improvements, including mass transit facilities and vehicles, whenever there are significant public benefits (as such term is defined in the Act) from doing so; and

WHEREAS, the JPB proposes to finance costs of the purchase of two leased facilities housing Caltrain operations or, in the event that the JPB is unable to acquire one or both of the leased facilities or to the extent proceeds are available, to finance a portion of the costs of certain capacity improvements and system enhancements approved to be funded in part from a grant awarded to the JPB in April 2018 (the "2018
TIRCP Grant") by the Transit and Intercity Rail Capital Program, which capacity improvements and system enhancements (hereinafter referred to as the "2018 TIRCP Grant Projects") may include electrical multiple unit vehicles, platform modifications, wayside bicycle parking improvements and/or installation of a broadband communication system; and

WHEREAS, the capital improvements (herein referred to as the "Project"), which will be financed from proceeds of the hereinafter defined Bonds, will be utilized to provide commuter rail service within the geographic boundaries of each of the Member Agencies and will constitute public capital improvements which will result in significant public benefits, including more efficient delivery of transit services to residential and commercial development within the geographic boundaries of the Member Agencies; and

WHEREAS, on October 31, 2007, the JPB issued $23,140,000 aggregate principal amount of Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2007 Series A (the "2007 Series A Bonds") to finance and refinance the costs of certain other capital improvements used in connection with providing Caltrain commuter rail service, $22,960,000 of which are currently outstanding; and

WHEREAS, in order to achieve debt service savings and certain other benefits, the JPB desires to refund and redeem the 2007 Series A Bonds and to repay certain existing indebtedness incurred to refund and redeem the Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2015 Series A (the "2015 Series A Bonds") on an interim basis; and

WHEREAS, in order to facilitate the financing of costs of the Project, the refunding and redemption of the 2007 Series A Bonds and the repayment of the indebtedness incurred to refund and redeem the 2015 Series A Bonds on an interim basis (hereinafter collectively referred to as the "Financing"), the JPB proposes to authorize the issuance of a series of farebox revenue bonds, in an aggregate principal amount not to exceed $60,000,000 pursuant to the provisions of the Act; and
WHEREAS, the farebox revenue bonds will be issued pursuant to a Trust Agreement, dated as of October 1, 2007, as supplemented and amended by a First Supplemental Trust Agreement, dated as of October 1, 2007, a Second Supplemental Trust Agreement, dated as of September 1, 2010, and a Third Supplemental Trust Agreement, dated as of January 1, 2015 (hereinafter collectively referred to as the "Existing Trust Agreement"), between the JPB and U.S. Bank National Association ("U.S. Bank"), as trustee (U.S. Bank acting in such capacity being hereinafter referred to as the "Trustee"), as further supplemented and amended by a Fourth Supplemental Trust Agreement thereto (the "Fourth Supplemental Trust Agreement," and, together with the Existing Trust Agreement, hereinafter collectively referred to as the "Trust Agreement"), which is proposed to be entered into between the JPB and the Trustee; and

WHEREAS, the farebox revenue bonds will be designated as the "Peninsula Corridor Joint Powers Board Farebox Revenue Bonds" (the "Bonds") and will bear the series designation specified in the Fourth Supplemental Trust Agreement; and

WHEREAS, there has been prepared and placed on file with the Secretary of the governing body of the JPB (hereinafter referred to as the "JPB Secretary") a proposed form of Fourth Supplemental Trust Agreement; and

WHEREAS, the proceeds of the Bonds will be applied pursuant to the provisions of the Fourth Supplemental Trust Agreement as finally executed and delivered (i) to finance costs of the Project, (ii) to refund and redeem the 2007 Series A Bonds, (iii) to repay the existing indebtedness incurred to refund and redeem the 2015 Series A Bonds on an interim basis, (iv) to fund a bond reserve fund established pursuant to the provisions of the Fourth Supplemental Trust Agreement (the "Reserve Fund"), and (v) to pay certain costs incurred in connection with the issuance of the Bonds; and

WHEREAS, J.P. Morgan Securities LLC (the "Underwriter") intends to purchase the Bonds pursuant to a Bond Purchase Agreement (the "Bond Purchase Agreement"), which Bond Purchase Agreement is proposed to be entered into between the Underwriter and the JPB; and
WHEREAS, there has been prepared and placed on file with the JPB Secretary a proposed form of Bond Purchase Agreement; and

WHEREAS, in order to facilitate the offering of the Bonds by the Underwriter, the JPB proposes to approve, execute and deliver an Official Statement (the "Official Statement") describing the Bonds and certain related matters; and

WHEREAS, there has been prepared and placed on file with the JPB Secretary a proposed form of Official Statement describing the Bonds and certain related matters; and

WHEREAS, in order to assist the Underwriter in complying with Securities and Exchange Commission Rule 15(c)2-12(b)(5) ("Rule 15(c)2-12"), the JPB proposes to enter into a Continuing Disclosure Agreement (the "Continuing Disclosure Agreement") with U.S. Bank, acting as Trustee and as dissemination agent; and

WHEREAS, there has been prepared and placed on file with the JPB Secretary a proposed form of Continuing Disclosure Agreement; and

WHEREAS, in order to obtain the lowest cost of borrowing obtainable at a prudent level of risk, it may be desirable to obtain municipal bond insurance for the Bonds of one or more stated maturity dates, and/or to secure a surety bond or an insurance policy (hereinafter collectively referred to as a "Reserve Facility") to fund any amount required to be deposited in the Reserve Fund upon the issuance of the Bonds; and

WHEREAS, in order to provide for the refunding and redemption of the 2007 Series A Bonds, it may be desirable for the JPB to enter into an Escrow Agreement (the "Escrow Agreement"), such Escrow Agreement, if necessary, to be entered into with U.S. Bank, acting as Trustee and as escrow agent (U.S. Bank acting in such capacity being hereinafter referred to as the "Escrow Agent"); and

WHEREAS, there has been prepared and placed on file with the JPB Secretary a proposed form of Escrow Agreement; and
WHEREAS, in order to accomplish the foregoing, it will be necessary for the JPB to enter into or approve and deliver the following agreements and instruments, forms of which have been prepared and placed on file with the JPB Secretary prior to this meeting:

(1) Fourth Supplemental Trust Agreement;
(2) Bond Purchase Agreement;
(3) Official Statement;
(4) Continuing Disclosure Agreement; and
(5) Escrow Agreement; and

WHEREAS, the JPB desires to authorize the issuance and sale of the Bonds, to authorize the negotiation of, and, as applicable, the securing of municipal bond insurance to provide credit support for the Bonds, to authorize the negotiation of, and as applicable, the securing of a Reserve Facility to fund any amount required to be deposited in the Reserve Fund upon issuance of the Bonds, and to authorize the taking of such other actions as shall be necessary to consummate the issuance and sale of the Bonds described in the Fourth Supplemental Trust Agreement, the Bond Purchase Agreement, the Official Statement, the Continuing Disclosure Agreement and the Escrow Agreement (hereinafter collectively referred to as the "Bond Documents") and herein, and to authorize the taking of various actions in connection therewith; and

WHEREAS, the Financing is being undertaken to enable the JPB to (i) meet current and future transportation demand between San José and San Francisco, (ii) offset existing and future worsening roadway congestion, (iii) address continuing regional air quality issues, (iv) reduce greenhouse gas emissions, (v) provide electrical infrastructure compatible with contemplated future high-speed rail service and (vi) enhance safety throughout the Caltrain system; and

WHEREAS, each of the Member Agencies within whose geographic boundaries the Caltrain commuter rail service operates, has scheduled and conducted a public hearing, each of which public hearing was duly noticed, concerning the Financing for
purposes of Section 6586.5 of the Government Code of the State of California (the "Government Code"); and

WHEREAS, subsequent to the applicable public hearing, the governing body of each of the Member Agencies adopted a resolution approving the Financing for purposes of Section 6586.5 of the Government Code, each of which resolutions also made a finding of significant public benefit in accordance with the criteria specified in Section 6586.5 of the Government Code.

NOW THEREFORE, BE IT RESOLVED by the governing body of the PENINSULA CORRIDOR JOINT POWERS BOARD as follows:

Section 1. Findings. The JPB hereby finds and determines that the foregoing recitals are true and correct.

Section 2. Authorization of Issuance of the Bonds. The issuance by the JPB of the Bonds, such Bonds to be issued in an aggregate principal amount not to exceed $60,000,000, is hereby authorized and approved. The Bonds shall be executed by the manual or facsimile signature of the Executive Director of the JPB (the "Executive Director") and shall be countersigned by the manual or facsimile signature of the Chief Financial Officer of the JPB (the "Chief Financial Officer"), who also functions as the treasurer of the JPB.

Section 3. Approval of Fourth Supplemental Trust Agreement. The proposed form of Fourth Supplemental Trust Agreement placed on file with the JPB Secretary prior to this meeting is hereby approved. The Executive Director or the Chief Financial Officer, each acting alone (each, an "Authorized Representative"), is hereby authorized and directed, for and in the name and on behalf of the JPB, to execute and deliver, and the JPB Secretary is hereby authorized and directed, for and in the name and on behalf of the JPB, to acknowledge and deliver, a Fourth Supplemental Trust Agreement, in substantially said form, with such changes therein as the Authorized Representative executing the same, with the advice of the general counsel to the JPB (the "General Counsel"), may require or approve, such approval to be conclusively evidenced by the
execution and delivery thereof. The date, maturity date or dates (not to exceed thirty-one (31) years from the date of issuance of such Bonds), interest rate or rates (not to exceed 5.25% per annum), interest payment dates, denominations, forms, series designation, registration and exchange privileges, place or places of payment, tender provisions, terms of redemption and other terms of the Bonds shall be as provided in the Fourth Supplemental Trust Agreement, as finally executed and delivered, the approval by the JPB of said final form of Fourth Supplemental Trust Agreement to be conclusively evidenced by the execution and delivery thereof.

Section 4. **Application of Proceeds of the Bonds.** The proceeds of the Bonds shall be applied to finance the costs of the Project, to refund and redeem the 2007 Series A Bonds, to repay the indebtedness incurred to refund and redeem the 2015 Series A Bonds on an interim basis, to fund the Reserve Fund if the Reserve Fund is cash funded and to pay certain costs incurred in connection with the issuance of the Bonds, including, but not limited to, the premium payable for bond insurance if bond insurance is purchased and/or the premium payable for a Reserve Facility if a Reserve Facility is purchased to fund the Reserve Fund, all in accordance with the provisions of the Fourth Supplemental Trust Agreement as finally executed and delivered.

Section 5. **Approval of Bond Purchase Agreement.** The proposed form of Bond Purchase Agreement placed on file with the JPB Secretary prior to this meeting is hereby approved. The sale of the Bonds to the Underwriter at the principal amount thereof, less an underwriter's discount of not to exceed 0.75% of such principal amount, less any original issue discount, plus any original issue premium, in accordance with said form of Bond Purchase Agreement, is hereby approved. Each Authorized Representative, acting alone, is hereby authorized and directed, for and in the name and on behalf of the JPB, to execute and deliver a Bond Purchase Agreement in connection with the sale by the JPB and the purchase by the Underwriter of the Bonds, such Bond Purchase Agreement to be in substantially said form, with such changes therein as the Authorized Representative executing the same, with the advice of the General Counsel, may require or approve, such approval to be conclusively evidenced by the execution and delivery thereof.
Section 6. **Approval of Official Statement** The proposed form of Official Statement placed on file with the JPB Secretary prior to this meeting is hereby approved. Each Authorized Representative, acting alone, is hereby authorized and directed, for and in the name and on behalf of the JPB, to execute and deliver to the Underwriter a final Official Statement, in substantially said form, with such changes therein as the Authorized Representative executing the same, with the advice of the General Counsel, may require or approve, such approval to be conclusively evidenced by the execution and delivery thereof. The Underwriter is hereby authorized to distribute copies of said Official Statement, as finally executed, to persons who may be interested in the purchase of Bonds and is hereby directed to deliver such copies to all actual purchasers of Bonds.

The execution by either Authorized Representative of a certificate deeming the Official Statement in preliminary form final on behalf of the JPB for purposes of Rule 15c2-12, and the distribution of the Official Statement, in such preliminary form as shall be deemed final by either Authorized Representative, is hereby authorized and approved.

Section 7. **Approval of Continuing Disclosure Agreement** The proposed form of Continuing Disclosure Agreement placed on file with the JPB Secretary prior to this meeting is hereby approved. Each Authorized Representative, acting alone, is hereby authorized and directed, for and in the name and on behalf of the JPB, to execute and deliver a Continuing Disclosure Agreement, in substantially said form, with such changes therein as the Authorized Representative executing the same, with the advice of the General Counsel, may require or approve, such approval to be conclusively evidenced by the execution and delivery thereof.

Section 8. **Approval of Escrow Agreement** The proposed form of Escrow Agreement placed on file with the JPB Secretary prior to this meeting is hereby approved. In the event that it is necessary for the JPB to enter into an Escrow Agreement in connection with the refunding and redemption of the 2007 Series A Bonds, each Authorized Representative, acting alone, is hereby authorized and directed to execute and deliver an Escrow Agreement, in substantially said form, with
such changes therein as the Authorized Representative executing the same, with the advice of the General Counsel, may require or approve, such approval to be conclusively evidenced by the execution and delivery thereof.

Section 9. **Escrow Securities.** In the event an Escrow Agreement is entered into in connection with the refunding and redemption of the 2007 Series A Bonds and an escrow fund is established pursuant to such Escrow Agreement, the Chief Financial Officer is hereby authorized and directed to take such actions as are necessary in connection with the investment of funds deposited in the escrow fund established pursuant to the Escrow Agreement (the “Escrow Fund”), and, if applicable, U.S. Bank, acting as Trustee and as Escrow Agent, is hereby authorized and directed to file such applications and other documents on behalf of the JPB as may be required to order and obtain U.S. Treasury Obligations - State and Local Government Series to be purchased for deposit in the Escrow Fund established pursuant to the Escrow Agreement.

Section 10. **Bond Insurance.** The Chief Financial Officer is hereby authorized and directed, for and in the name and on behalf of the JPB, to negotiate with providers of municipal bond insurance, and, if the Chief Financial Officer determines that it is in the best interest of the JPB, to commit to purchase municipal bond insurance for Bonds of one or more stated maturity dates, the Chief Financial Officer is authorized to commit to purchase municipal bond insurance on such terms as the Chief Financial Officer, with the advice Ross Financial and PFM Financial Advisors LLC (hereinafter collectively referred to as the "JPB Municipal Advisors") and the Underwriter, determines are appropriate.

Section 11. **Reserve Facility.** The Chief Financial Officer is hereby authorized and directed, for and in the name and on behalf of the JPB, to negotiate with providers of Reserve Facilities, and, if the Chief Financial Officer determines that it is in the best interest of the JPB to secure a Reserve Facility to fund the amount required to be deposited in the Reserve Fund upon the issuance of the Bonds, the Chief Financial Officer is authorized to commit to purchase or secure a Reserve Facility to fund the amount required to be deposited in the Reserve Fund upon the issuance of the Bonds.
on such terms as the Chief Financial Officer, with the advice the JPB Municipal Advisors
and the Underwriter, determines are appropriate.

Section 12.  Ratification of Actions. All actions heretofore taken by the officers
of the JPB, the agents of the JPB and the governing body of the JPB (hereinafter
referred to as the "Board of Directors") with respect to the Financing and the
transactions approved by Resolution No. 2018 – 55 adopted by the Board of Directors
on December 6, 2018 (the "December 6 Resolution"), including, but not limited to, the
adoption by the Board of Directors of a declaration of official intent on August 2, 2018,
the execution and delivery of the Bond Documents and the execution and delivery of
the documents authorized to be executed pursuant to the December 6 Resolution, are
hereby ratified, confirmed, and approved.

Section 13.  Completion of Financing. Each Authorized Representative, the JPB
Secretary and other appropriate staff of the JPB are each hereby authorized and
directed, for and in the name and on behalf of the JPB, to do any and all things and to
take any and all actions and to execute and deliver any and all agreements,
certificates, documents, instruments and instructions, including, without limitation,
certificates concerning the representations in any of the Bond Documents, disclosure
certificates, no-litigation certificates, signature certificates, tax certificates, investment
instructions and contracts for rebate compliance services or other post-issuance
compliance services, including, but not limited to, post-issuance tax-compliance
services, and to do any and all things and take any and all actions which may be
necessary or advisable to effectuate the actions which the JPB has approved in this
Resolution and in the December 6 Resolution, including, but not limited to, any and all
actions which may be necessary or advisable to effectuate the refunding and
redemption of the 2007 Series A Bonds and the repayment of the indebtedness incurred
to refund and redeem the 2015 Series A Bonds on an interim basis, and to carry out,
comsume and perform the duties of the JPB set forth in the Bond Documents and in
all other documents executed in connection with the Financing, including, but not
limited to, all documents authorized to be executed pursuant to the December 6
Resolution.
Section 14. **Authorized Representative; Subsequent Actions.** All approvals, consents, directions, notices, orders, requests and other actions permitted or required by any of the Bond Documents or by any of the other documents authorized by this Resolution, including, without limitation, any of the foregoing which may be necessary or desirable in connection with any investment of the proceeds of the Bonds, any investment or reinvestment of the amounts held on deposit in any of the funds and accounts established by any of the Bond Documents, any amendment of any of the Bond Documents, any amendment of any other agreements, documents or certificates authorized by this Resolution, the refunding, redemption, or defeasance of any Bonds, may be given or taken or made, as applicable, by either Authorized Representative without further authorization or direction by the governing body of the JPB, and each Authorized Representative is hereby authorized and directed to give any such approval, consent, direction, notice, order, request or other action and to take any such action which such Authorized Representative may deem necessary or desirable to further the purposes of this Resolution.

Section 15. **Severability of Invalid Provisions.** If any section, paragraph, clause or provision of this Resolution shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this Resolution which shall continue in full force and effect.

Section 16. **Effective Date.** This Resolution shall take effect immediately upon its passage.
Regularly passed and adopted this 10th day of January, 2019 by the following vote:

AYES:

NOES:

ABSENT:

______________________________
Chair, Peninsula Corridor Joint Powers Board

ATTEST:

_________________________________
JPB Secretary
FOURTH SUPPLEMENTAL TRUST AGREEMENT

between

PENINSULA CORRIDOR JOINT POWERS BOARD

and

U.S. BANK NATIONAL ASSOCIATION,

as Trustee

Dated as of February 1, 2019

Authorizing the Issuance of
$[Par Amount] Principal Amount
of
Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019 Series A

(Supplemental to the Trust Agreement dated as of October 1, 2007)
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Article</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXIII</td>
<td>TERMS OF 2019 SERIES A BONDS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Section 23.01. Definitions</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Section 23.02. Additional Definitions</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Section 23.03. Amendment of Certain Definitions</td>
<td>4</td>
</tr>
<tr>
<td>XXIV</td>
<td>TERMS OF 2019 SERIES A BONDS</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Section 24.01. Authorization and Terms of 2019 Series A Bonds</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Section 24.02. Form of 2019 Series A Bonds</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Section 24.03. Issuance of 2019 Series A Bonds</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Section 24.04. Application of Proceeds of 2019 Series A Bonds</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Section 24.05. Establishment and Application of 2019 Series A Costs of Issuance Fund</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Section 24.06. Establishment and Application of 2019 Series A Project Fund</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Section 24.07. Establishment, Funding and Application of the 2019 Series A Bond Reserve Fund; 2019 Series A Bond Reserve Requirement</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Section 24.08. Investment of Funds; Investment Earnings</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Section 24.09. Redemption and Purchase in Lieu of Redemption of 2019 Series A Bonds</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Section 24.10. 2019 Series A Sinking Accounts</td>
<td>9</td>
</tr>
<tr>
<td>XXV</td>
<td>PROVISIONS RELATING TO 2019 SERIES A INSURANCE AND 2019 SERIES A RESERVE FACILITY</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Section 25.01. General Provisions</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Section 25.02. Additional Provisions Required by 2019 Series A Insurer</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Section 25.03. Claims Upon 2019 Series A Insurance and Payments by and to 2019 Series A Insurer</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Section 25.04. Information to be Provided to 2019 Series A Insurer</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Section 25.05. Provisions Relating to 2019 Series A Reserve Facility</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Section 25.06. 2019 Series A Insurer and 2019 Series A Reserve Facility Provider as Third Party Beneficiaries</td>
<td>11</td>
</tr>
<tr>
<td>XXVI</td>
<td>AMENDMENTS</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Section 26.01. Amendment of Section 3.02 - Issuance of Additional Bonds</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Section 26.02. Amendment of Section 5.05 - Establishment, Funding and Application of Bond Reserve Funds</td>
<td>11</td>
</tr>
</tbody>
</table>
ARTICLE XXVII MISCELLANEOUS PROVISIONS ................................................................. 12
Section 27.01. Terms of 2019 Series A Bonds Subject to the Trust Agreement .......... 12
Section 27.02. Effective Date of Supplemental Trust Agreement ............................... 13
Section 27.03. Execution in Counterparts ................................................................. 13

Execution ...................................................................................................................... S-1

Exhibit A Form of 2019 Series A Bond ...................................................................... A-1
Exhibit B Form of Requisition – 2019 Series A Costs of Issuance Fund .................... B-1
Exhibit C Form of Requisition – 2019 Series A Project Fund ...................................... C-1
Fourth Supplemental Trust Agreement
(Supplemental to the Trust Agreement dated as of October 1, 2007)
Authorizing the Issuance
of
$[Par Amount] Principal Amount
of
Peninsula Corridor Joint Powers Board
Farebox Revenue Bonds,
2019 Series A

This Fourth Supplemental Trust Agreement, dated as of February 1, 2019 (this "Supplemental Trust Agreement"), between the Peninsula Corridor Joint Powers Board (the "Issuer") and U.S. Bank National Association, as trustee (the "Trustee");

WITNESSETH:

WHEREAS, this Supplemental Trust Agreement is supplemental to the Trust Agreement, dated as of October 1, 2007 (as heretofore supplemented and amended, the "Existing Trust Agreement"), between the Issuer and the Trustee;

WHEREAS, the Existing Trust Agreement provides that the Issuer may issue Bonds (as such term is defined in the Existing Trust Agreement) from time to time as authorized by a Supplemental Trust Agreement;

WHEREAS, in accordance with the Act (as such term is defined in the Existing Trust Agreement) and pursuant to Article III of the Existing Trust Agreement and Section 9.01(B) of the Existing Trust Agreement, the Issuer has determined to issue the Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019 Series A (the "2019 Series A Bonds"), in the aggregate principal amount of $[Par Amount], in order (i) to finance costs of certain capital improvement projects (as more fully described in Section 23.02 hereof, the "2019 Series A Project") for the commuter rail service administered by the Issuer, which is known as Caltrain ("Caltrain"), (ii) to refund and redeem $22,960,000 aggregate principal amount of Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2007 Series A (the "2007 Series A Bonds"), (iii) to repay certain existing indebtedness incurred to refund and redeem $11,000,000 aggregate principal amount of Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2015 Series A (the "2015 Series A Bonds") on an interim basis;

WHEREAS, in order to increase the debt service coverage required in order to issue additional Bonds and to provide for certain other changes, including changes to reflect current market standards, the Issuer also desires to amend certain provisions of the Existing Trust Agreement as hereinafter set forth in this Supplemental Trust Agreement;

WHEREAS, all capitalized terms used and not otherwise defined in this Supplemental Trust Agreement shall have the meanings assigned to such terms in the Existing Trust Agreement (as it may from time to time be further supplemented or amended pursuant to
its terms, including as supplemented and amended by this Supplemental Trust Agreement, the "Trust Agreement"), between the Issuer and the Trustee;

WHEREAS, pursuant to Section 9.01(A) of the Existing Trust Agreement, the Existing Trust Agreement and the rights and obligations of the Issuer, the Holders of the Bonds and the Trustee may be modified or amended from time to time and at any time by a Supplemental Trust Agreement, which the Issuer and the Trustee may enter into when the written consent of (i) each Credit Enhancement Provider then providing Credit Enhancement for any Series of Bonds, provided that the Credit Enhancement provided by such Credit Enhancement Provider is in full force and effect and the Credit Enhancement Provider is not then failing to make a payment as required in connection therewith or (ii) the Holders of a majority in aggregate amount of Bond Obligation of the Bonds (or, if such Supplemental Trust Agreement is only applicable to a Series of Bonds, such Series of Bonds) then Outstanding shall have been filed with the Trustee, provided that if such modification or amendment will, by its terms, not take effect so long as any Bonds of any particular maturity remain Outstanding, the consent of the Holders of such Bonds shall not be required and such Bonds shall not be deemed to be Outstanding for the purpose of any calculation of Bonds Outstanding under Section 9.01(A) of the Trust Agreement;

WHEREAS, upon the issuance of the 2019 Series A Bonds and the concurrent refunding and redemption of the 2007 Series A Bonds and the 2015 Series A Bonds, the 2019 Series A Bonds will be the only Bonds Outstanding under the Trust Agreement;

WHEREAS, pursuant to Section 9.01(A) of the Existing Trust Agreement, the written consent of the Holders of the 2007 Series A Bonds shall not be required and the 2007 Series A Bonds shall not be deemed to be Outstanding for the purpose of calculation of any Bonds Outstanding under Section 9.01(A) of the Existing Trust Agreement nor shall the written consent of the Credit Enhancement Provider providing Credit Enhancement for the 2007 Series A Bonds be required upon the refunding and redemption of 2007 Series A Bonds;

WHEREAS, pursuant to Section 9.01(A) of the Existing Trust Agreement, the written consent of the Holders of the 2015 Series A Bonds shall not be required and the 2015 Series A Bonds shall not be deemed to be Outstanding for the purpose of calculation of any Bonds Outstanding under Section 9.01(A) of the Existing Trust Agreement;

WHEREAS, the Issuer hereby determines that the provisions of the Existing Trust Agreement relating to the issuance of the 2019 Series A Bonds and relating to amendment of the Existing Trust Agreement have been complied with; and

WHEREAS, all acts, conditions and things required by law to exist, to have happened and to have been performed precedent to and in connection with the execution and the entering into of this Supplemental Trust Agreement do exist, have happened and have been performed in regular and due time, form and manner as required by law, and the parties hereto are now duly authorized to execute and enter into this Supplemental Trust Agreement;

NOW, THEREFORE, the parties hereto agree, as follows:
ARTICLE XXIII
DEFINITIONS

Section 23.01. Definitions. Unless otherwise specifically provided in this Supplemental Trust Agreement to the contrary or unless the context otherwise requires, all capitalized terms used and not otherwise defined herein shall have the meanings ascribed to such terms in Section 1.02 of the Existing Trust Agreement.

Section 23.02. Additional Definitions. Unless the context otherwise requires, the following terms shall, for all purposes of this Supplemental Trust Agreement, have the following meanings:

Authorized Denomination means $5,000 or any integral multiple thereof.

[Escrow Agreement means the Escrow Agreement, dated as of February 1, 2019, between the Peninsula Corridor Joint Powers Board and U.S. Bank National Association, as trustee and escrow agent, as originally executed or as it may from time to time be supplemented or amended pursuant to its terms.]

Issue Date means February __, 2019.

2007 Series A Bonds means the Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2007 Series A.

2015 Series A Bonds means the Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2015 Series A.

2019 Series A Bond Reserve Fund means the fund by that name established pursuant to Section 24.07 hereof.

2019 Series A Bond Reserve Requirement means, as of any date of calculation, including, but not limited to, a date of calculation requested by the Issuer, an amount equal to the least of (i) ten percent (10%) of the original principal amount of the 2019 Series A Bonds (or if the amount of original issue discount or original issue premium applicable to the 2019 Series A Bonds exceeds two percent (2%), ten percent (10%) of the issue price of the 2019 Series A Bonds), (ii) one hundred twenty-five percent (125%) of average Annual Debt Service on the 2019 Series A Bonds, and (iii) Maximum Annual Debt Service on the 2019 Series A Bonds.

2019 Series A Bonds means the Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019 Series A.

2019 Series A Costs of Issuance Fund means the fund by that name established pursuant to Section 24.05 hereof.
2019 Series A Insurance means the insurance policy issued by the 2019 Series A Insurer guaranteeing the scheduled payment of principal of and interest on the 2019 Series A Bonds when due.


2019 Series A Interest Payment Date means each October 1 and April 1, commencing October 1, 2019.

2019 Series A Project means the acquisition of two leased facilities housing services utilized in the operation of the Caltrain; provided that in the event that the Issuer is unable to acquire one or both of the leased facilities, proceeds of the 2019 Series A Bonds may be applied to finance a portion of the costs of capacity and system improvements for Caltrain, including procurement of electric powered rolling stock, platform modifications, and installation of a broadband communication system.

2019 Series A Project Fund means the fund by that name established pursuant to Section 24.06 hereof.

2019 Series A Record Date means the fifteenth day of the calendar month prior to the calendar month in which a 2019 Series A Interest Payment Date occurs, whether or not such day is a Business Day.

2019 Series A Reserve Facility means the [Municipal Debt Service Reserve Insurance Policy], dated the Issue Date, and issued by the 2019 Series A Reserve Facility Provider.

2019 Series A Reserve Facility Provider means _______________ and its successors and assigns.

Section 23.03. Amendment of Certain Definitions. The definition of "Rating Agency" set forth in Section 1.02 of the Existing Trust Agreement is hereby amended and restated to read in its entirety as follows:

Rating Agency means, as and to the extent applicable to a particular Series of Bonds, each of Fitch, Kroll Bond Rating Agency, Inc., Moody's, Standard & Poor's or any other nationally recognized securities rating agency then maintaining a rating on such Series of Bonds at the request of the Issuer, and means, for purposes of assigning a rating to the issuer of an irrevocable letter of credit authorized to fund a Bond Reserve Requirement for a Series of Bonds pursuant to Section 5.05(A) of the Trust Agreement and to the issuer of a surety bond or insurance policy authorized to fund a Bond Reserve Requirement for a Series of Bonds pursuant to Section 5.05(B) of the Trust Agreement, any nationally recognized securities rating agency.
ARTICLE XXIV

TERMS OF 2019 SERIES A BONDS

Section 24.01. Authorization and Terms of 2019 Series A Bonds. (A) The Issuer hereby authorizes the creation and issuance of an additional Series of Bonds in the principal amount of $[Par Amount] in accordance with the Act and pursuant to the Trust Agreement for the purpose of: (i) financing the cost of the 2019 Series A Project; and (ii) refunding the 2007 Series A Bonds and the 2015 Series A Bonds.

(B) Said Series of Bonds shall be known as the "Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019 Series A". The 2019 Series A Bonds shall be issued in fully registered form, in denominations of $5,000 or any integral multiple thereof (each, an "Authorized Denomination") and shall be initially issued registered in the name of "Cede & Co.," as nominee of the Depository, and shall be evidenced by one Current Interest 2019 Series A Bond in the principal amount of the 2019 Series A Bonds of each maturity and interest rate as set forth below in this subsection. Registered ownership of the 2019 Series A Bonds, or any portion thereof, may not thereafter be transferred except as set forth in Section 2.10, or in the event the use of a Depository is discontinued, in accordance with the provisions set forth in Section 2.05.

The 2019 Series A Bonds shall be dated the Issue Date, shall bear interest from the Issue Date at the following rates per annum and shall mature on October 1 in the following years in the following amounts:

<table>
<thead>
<tr>
<th>Maturity Date (October 1)</th>
<th>Principal Amount</th>
<th>Interest Rate</th>
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</table>

Interest on the 2019 Series A Bonds shall be payable on October 1, 2019 and semiannually thereafter on April 1 and October 1 of each year by check mailed by first class mail on the interest payment date to the Holder thereof as of the close of business on the fifteenth (15th) day of the calendar month immediately preceding the month in which such interest payment date occurs (each, a "Record Date") or, upon the written request of any Holder of $1,000,000 or more in aggregate principal amount of 2019 Series A Bonds who has provided the Trustee with wire transfer instructions, by wire transfer to an account within the United States on each interest payment date, to the Holder thereof as of the close of business on the Record Date. Interest on the 2019 Series A Bonds will be calculated on the basis of a 360-day year consisting of twelve 30-day months. Principal on the 2019 Series A Bonds shall be payable when due upon presentation and surrender thereof at the Corporate Trust Office of the Trustee in lawful money of the United States of America.

Section 24.02. Form of 2019 Series A Bonds. The 2019 Series A Bonds and the certificate of authentication to be executed thereon shall be in substantially the form set forth...
as Exhibit A to this Supplemental Trust Agreement. The 2019 Series A Bond maturity dates and interest rates shall be inserted therein in conformity with Section 24.01. The 2019 Series A Bonds shall be numbered in consecutive numerical order commencing with R-1.

Section 24.03. Issuance of 2019 Series A Bonds. At any time after the execution and delivery of this Supplemental Trust Agreement, the Issuer may execute and the Trustee shall authenticate and deliver the 2019 Series A Bonds in an aggregate principal amount of $[Par Amount] upon the Order of the Issuer.

Section 24.04. Application of Proceeds of 2019 Series A Bonds. The proceeds of the sale of the 2019 Series A Bonds, $[Sale Proceeds], comprised of $[Par Amount].00 aggregate principal amount, [plus net original issue premium of $[OIP], less an underwriter's discount of $[UD], less the premium of $[Insurance Premium] for the 2019 Series A Insurance, which shall be wired by the underwriter of the 2019 Series A Bonds directly to the 2019 Series A Insurer, and less the premium of $[Reserve Facility Premium] for the 2019 Series A Reserve Facility, which shall be wired by the underwriter of the 2019 Series A Bonds directly to the 2019 Series A Reserve Facility Provider, shall be held in trust and set aside or transferred by the Trustee as follows:

(A) The Trustee shall hold the 2019 Series A Reserve Facility on deposit in the 2019 Series A Bond Reserve Fund, which is established pursuant to Section 24.07, such 2019 Series A Reserve Facility to be in the amount of $[Reserve Facility Amount], representing the amount necessary to be deposited in the 2019 Series A Bond Reserve Fund upon issuance of the 2019 Series A Bonds in order to fund the 2019 Series A Bond Reserve Fund in an amount equal to the 2019 Series A Bond Reserve Requirement applicable upon issuance of the 2019 Series A Bonds.

(B) The Trustee shall deposit in the 2019 Series A Costs of Issuance Fund, which is established pursuant to Section 24.05, $[COI Deposit] to pay Costs of Issuance of the 2019 Series A Bonds.

(C) The Trustee shall deposit in the 2019 Series A Project Fund, which is established pursuant to Section 24.06, $[Project Fund Deposit] to pay costs of the 2019 Series A Project.

(D) [The Trustee shall apply $[2007 Series A Redemption Deposit] of the proceeds of the 2019 Series A Bonds to the redemption of the 2007 Series A Bonds, such 2007 Series A Bonds to be redeemed on the Issue Date.]

(E) [The Trustee shall deposit $[2007 Series A Escrow Deposit] of the proceeds of the 2019 Series A Bonds to the escrow fund created pursuant to the Escrow Agreement in order to defease and refund the 2007 Series A Bonds.]

(F) The Trustee shall transfer $_______ of the proceeds of the 2019 Series A Bonds to DNT Asset Trust, a Delaware trust ("DNT"), to repay a draw on a revolving line of credit provided by DNT to the Issue, which draw was applied to refund and redeem the 2015 Series A Bonds on an interim basis.
Section 24.05. Establishment and Application of 2019 Series A Costs of Issuance Fund. There is hereby established and maintained with the Trustee a fund designated as the "2019 Series A Costs of Issuance Fund." Amounts in the 2019 Series A Costs of Issuance Fund shall be disbursed by the Trustee to pay for Costs of Issuance in connection with issuance of the 2019 Series A Bonds upon Requisition of the Issuer, such Requisition to be in substantially such form as is set forth in Exhibit B hereto. Each Requisition shall be numbered sequentially. Any amounts remaining in the 2019 Series A Costs of Issuance Fund one hundred eighty (180) days after the Issue Date shall be transferred to the Revenue Fund.

Section 24.06. Establishment and Application of 2019 Series A Project Fund. (A) There is hereby established and maintained with the Trustee a fund designated as the "2019 Series A Project Fund." The moneys in the 2019 Series A Project Fund shall be used and withdrawn to pay costs of the 2019 Series A Project. Before any payment from the 2019 Series A Project Fund shall be made by the Trustee, the Issuer shall file or cause to be filed with the Trustee a Requisition of the Issuer, such Requisition to be in substantially such form as is set forth in Exhibit C hereto.

(B) When the Issuer determines that the 2019 Series A Project has been completed, a Certificate of the Issuer shall be delivered to the Trustee by the Issuer stating: (i) the fact and date of such completion; (ii) that all of the costs thereof have been determined and paid (or that all of such costs have been paid less specified claims which are subject to dispute and for which a retention in the 2019 Series A Project Fund is to be maintained in the full amount of such claims until such dispute is resolved); and (iii) that the Trustee is to transfer the remaining balance in the 2019 Series A Project Fund, less the amount of any such retention, to the 2019 Series A Bond Reserve Fund, to the extent of any deficiency therein, and then to the Revenue Fund.

Section 24.07. Establishment, Funding and Application of the 2019 Series A Bond Reserve Fund; 2019 Series A Bond Reserve Requirement. There is hereby established and maintained with the Trustee a fund designated as the "2019 Series A Bond Reserve Fund." The Trustee shall hold the 2019 Series A Reserve Facility on deposit in the 2019 Series A Bond Reserve Fund, such 2019 Series A Reserve Facility to be in the amount of $[Reserve Facility Amount], which is equal to the 2019 Series A Bond Reserve Requirement applicable on the Issue Date. All amounts in the 2019 Series A Bond Reserve Fund (including all amounts which may be obtained from any irrevocable letter of credit, surety bond or insurance policy on deposit in the 2019 Series A Bond Reserve Fund) shall be used and withdrawn by the Trustee solely: (i) for the purpose of making up any deficiency in the Interest Fund or the Principal Fund relating to the 2019 Series A Bonds; or, (ii) together with any other moneys available therefor, (x) for the payment of all of the 2019 Series A Bonds then Outstanding, (y) for the defeasance or redemption of all or a portion of the 2019 Series A Bonds then Outstanding, provided, however, that if funds on deposit in the 2019 Series A Bond Reserve Fund are applied to the defeasance or redemption of a portion of the 2019 Series A Bonds, the amount on deposit in the 2019 Series A Bond Reserve Fund immediately subsequent to a partial defeasance or redemption shall equal the 2019 Series A Bond Reserve Requirement then applicable to all 2019 Series A Bonds Outstanding immediately subsequent to such partial
defeasance or redemption, or (z) for the payment of the final principal and interest payment of the 2019 Series A Bonds.

Section 24.08. Investment of Funds; Investment Earnings. The Trustee shall invest the funds on deposit in the 2019 Series A Costs of Issuance Fund, the 2019 Series A Project Fund and the 2019 Series A Bond Reserve Fund in accordance with the provisions set forth in Section 5.11 of the Trust Agreement. The Trustee shall retain all investment earnings with respect to the 2019 Series A Project Fund in the 2019 Series A Project Fund, unless and to the extent directed by the Issuer to deposit such moneys in the Rebate Fund, shall retain all investment earnings with respect to the 2019 Series A Bond Reserve Fund in the 2019 Series A Bond Reserve Fund to the extent of any deficiency therein, and otherwise shall deposit such investment earnings in the 2019 Series A Project Fund, and shall deposit all investment earnings with respect to the Revenue Fund, the Interest Fund, the Principal Fund, and the 2019 Series A Costs of Issuance Fund in the 2019 Series A Project Fund. Upon delivery of the Certificate of the Issuer described in Section 24.06(B), all investment earnings shall be transferred to the Revenue Fund in accordance with the provisions set forth in Section 5.11 of the Trust Agreement.


(A) Optional Redemption. All 2019 Series A Bonds shall be subject to redemption prior to their respective stated maturities at the option of the Issuer in whole or in part on any date on or after October 1, ___ at the principal amount thereof, plus accrued interest to the date fixed for redemption[, without premium].

(B) Selection of Bonds for Optional Redemption. The Issuer shall designate which maturities of the 2019 Series A Bonds are to be called for optional redemption pursuant to Section 24.09(A). If less than all 2019 Series A Bonds maturing by their terms on any one date are to be redeemed at any one time, the Trustee shall select the 2019 Series A Bonds of such maturity date to be redeemed by lottery or by such other method as the Issuer may direct and in Authorized Denominations. For purposes of such selection, 2019 Series A Bonds shall be deemed to be composed of multiples of minimum Authorized Denominations and any such multiple may be separately redeemed. In the event Term Bonds are designated for redemption, the Issuer may designate the Mandatory Sinking Account Payments under Section 24.10, or portions thereof, that are to be reduced and allocated to such redemption.

(C) Mandatory Redemption. The 2019 Series A Bonds maturing on October 1, ___ and October 1, ___ shall also be subject to redemption prior to their respective stated maturities, in part, by lot, from Mandatory Sinking Account Payments required by and as specified in Section 24.10, on each October 1: (i) on or after October 1, ___ with respect to the 2019 Series A Bonds maturing on October 1, ___; and (ii) on or after October 1, ___ with respect to the 2019 Series A Bonds maturing on October 1, ___, in each case at the principal amount thereof plus accrued interest thereon to the date fixed for redemption, without premium.

(D) Purchase in Lieu of Redemption. The Issuer reserves the right at all times to purchase any of its 2019 Series A Bonds on the open market. In lieu of mandatory
redemption, the Issuer may surrender to the Trustee for cancellation 2019 Series A Bonds purchased on the open market, and such 2019 Series A Bonds shall be cancelled by the Trustee. If any 2019 Series A Bonds are so cancelled, the Issuer may designate the Mandatory Sinking Account Payments or portions thereof within the 2019 Series A Bonds so purchased that are to be reduced as a result of such cancellation.

(E) **Notice of Redemption.** Notice of redemption shall be given by the Trustee not less than twenty (20) nor more than sixty (60) days prior to the redemption date in the form and in accordance with the provisions of Section 4.02 of the Trust Agreement; provided, however, that notice of redemption may be mailed or delivered by email or other electronic means or by overnight delivery. Notice of optional redemption may be rescinded as provided in Section 4.02.

**Section 24.10. 2019 Series A Sinking Accounts.**

(A) An account is hereby established within the Principal Fund created by Section 5.02 of the Trust Agreement to be designated the "2019 Series A - ___ Sinking Account." On each Business Day prior to the following dates, the Trustee shall transfer the designated amount of the following payments from the Principal Fund to the 2019 Series A - ___ Sinking Account:

<table>
<thead>
<tr>
<th>Mandatory Sinking Account Payment Date (October 1)</th>
<th>Mandatory Sinking Account Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>

*Final Maturity

Moneys in the 2019 Series A - ___ Sinking Account shall be applied as provided in Section 5.02 and in this Section 24.10.

(B) An account is hereby established within the Principal Fund created by Section 5.02 of the Trust Agreement to be designated the "2019 Series A - ___ Sinking Account." On each Business Day prior to the following dates, the Trustee shall transfer the designated amount of the following payments from the Principal Fund to the 2019 Series A - ___ Sinking Account:

<table>
<thead>
<tr>
<th>Mandatory Sinking Account Payment Dates (October 1)</th>
<th>Mandatory Sinking Account Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>

*Final Maturity
Moneys in the 2019 Series A - ___ Sinking Account shall be applied as provided in Section 5.02 and in this Section 24.10.

ARTICLE XXV

PROVISIONS RELATING TO 2019 SERIES A INSURANCE AND 2019 SERIES A RESERVE FACILITY

Section 25.01. General Provisions. Each of the provisions set forth in this Article XXV or elsewhere in the Trust Agreement, including, without limitation, the provisions authorizing the 2019 Series A Insurer to direct certain actions or requiring the written consent of, or the delivery of notice or any other information or documentation to, the 2019 Series A Insurer, shall be in effect only so long as the 2019 Series A Insurance remains in full force and effect and the 2019 Series A Insurer is not then failing to make a payment as required in connection therewith. Any covenant or provision contained in this Article XXV may be modified, amended or waived with the prior written consent of the 2019 Series A Insurer and without the consent of the Trustee or the Holder of any 2019 Series A Bond.

Section 25.02. Additional Provisions Required by 2019 Series A Insurer. Subject to Section 25.01, the provisions of this Section shall apply notwithstanding any provision of the Trust Agreement to the contrary.

[Note: Copy to come upon receipt and review of Commitment for 2019 Series A Insurance.]

Section 25.03. Claims Upon the 2019 Series A Insurance and Payments by and to the 2019 Series A Insurer.

[Note: Copy to come upon selection of 2019 Series A Insurer.]

Section 25.04. Information to be Provided to 2019 Series A Insurer.

[Note: Copy to come upon receipt and review of Commitment for 2019 Series A Insurance.]

Section 25.05. Provisions Relating to 2019 Series A Reserve Facility.

[Note: Copy to come upon receipt and review of Commitment for 2019 Series A Reserve Facility.]

Section 25.06. 2019 Series A Insurer and 2019 Series A Reserve Facility Provider as Third Party Beneficiaries. To the extent that the Trust Agreement confers upon or gives or grants to the 2019 Series A Insurer and/or the 2019 Series A Reserve Facility Provider, as applicable, any right, remedy or claim under or by reason of the Trust Agreement, each of the 2019 Series A Insurer and the 2019 Series A Reserve Facility Provider is hereby explicitly recognized as being a third-party beneficiary hereunder and may enforce any such right remedy or claim conferred, given or granted hereunder.
ARTICLE XXVI

AMENDMENTS

Section 26.01. Amendment of Section 3.02 - Issuance of Additional Bonds. Effective upon the issuance of the 2019 Series A Bonds, Section 3.02(D) of the Existing Trust Agreement is hereby amended to read in its entirety as follows:

"The Issuer shall place on file with the Trustee a Certificate of the Issuer certifying that the lesser of (i) the amount of Farebox Revenues for a period of twelve (12) consecutive months (selected by the Issuer) during the eighteen (18) months immediately preceding the date on which such additional Series of Bonds will become Outstanding, or (ii) the estimated Farebox Revenues for the Fiscal Year in which such Series of Bonds are to be issued, shall have been, or will be, as applicable, at least equal to 4.0 times Maximum Annual Debt Service, on all Series of Bonds and Parity Obligations then outstanding and the additional Series of Bonds then proposed to be issued, which Certificate shall also set forth the computations upon which such Certificate is based; provided, however, that for purposes of calculation of Maximum Annual Debt Service, Interest Rate Swap Agreements which constitute Parity Obligations shall not be included in such calculation."

Section 26.02. Amendment of Section 5.05 - Establishment, Funding and Application of Bond Reserve Funds. Effective upon the issuance of the 2019 Series A Bonds, Section 5.05(A) of the Trust Agreement and Section 5.05(B) of the Existing Trust Agreement are hereby amended to read in their entirety as follows:

"(A) In lieu of making the Bond Reserve Requirement deposit applicable to one or more Series of Bonds in cash or in replacement of moneys then on deposit in any Bond Reserve Fund (which shall be transferred by the Trustee to the Issuer), or in substitution of any Reserve Facility comprising part of the Bond Reserve Requirement relating to one or more Series of Bonds, the Issuer may, at any time and from time to time, deliver to the Trustee an irrevocable letter of credit issued by a financial institution having unsecured debt obligations rated at the time of delivery of such letter of credit in at least the "AA" or equivalent Rating Category by at least one Rating Agency, in an amount, which, together with cash, Investment Securities or other Reserve Facilities, as described in Section 5.05(B), then on deposit in such Bond Reserve Fund, will equal the Bond Reserve Requirement relating to the Bonds to which such Bond Reserve Fund relates. Such letter of credit shall have a term no less than three (3) years or, if less, the final maturity of the Bonds in connection with which such letter of credit was obtained and shall provide by its terms that it may be drawn upon as provided in this Section 5.05. At least one (1) year prior to the stated expiration of such letter of credit, the Issuer shall either (i) deliver a replacement letter of credit, (ii) deliver an extension of the letter of credit for at least one (1) additional year or, if less, the final maturity of the Bonds in connection with which such letter of credit
was obtained, or (iii) deliver to the Trustee a Reserve Facility satisfying the requirements of Section 5.05(B). Upon delivery of such replacement Reserve Facility, the Trustee shall deliver the then-effective letter of credit to or upon the order of the Issuer. If the Issuer shall fail to deposit a replacement Reserve Facility with the Trustee, the Issuer shall immediately commence to make monthly deposits with the Trustee so that an amount equal to the Bond Reserve Requirement relating to the Bonds to which such Bond Reserve Fund relates will be on deposit in such Bond Reserve Fund no later than the stated expiration date of the letter of credit. If an amount equal to the Bond Reserve Requirement relating to the Bonds to which such Bond Reserve Fund relates as of the date following the expiration of the letter of credit is not on deposit in such Bond Reserve Fund one (1) week prior to the expiration date of the letter of credit (excluding from such determination the letter of credit), the Trustee shall draw on the letter of credit to fund the deficiency resulting therefrom in such Bond Reserve Fund."

"(B) In lieu of making a Bond Reserve Requirement deposit in cash or in replacement of moneys then on deposit in a Bond Reserve Fund (which shall be transferred by the Trustee to the Issuer) or in substitution of any Reserve Facility comprising part of a Bond Reserve Requirement for any Bonds, the Issuer may, at any time and from time to time, deliver to the Trustee a surety bond or an insurance policy securing an amount which, together with moneys, Investment Securities, or other Reserve Facilities then on deposit in a Bond Reserve Fund, is no less than the Bond Reserve Requirement relating to the Bonds to which such Bond Reserve Fund relates. Such surety bond or insurance policy shall be issued by an insurance company whose unsecured debt obligations (or for which obligations secured by such insurance company's insurance policies) are rated at the time of delivery in at least the "AA" or equivalent Rating Category by at least one Rating Agency. Such surety bond or insurance policy shall have a term of no less than the final maturity of the Bonds in connection with which such surety bond or insurance policy is obtained. In the event that such surety bond or insurance policy for any reason lapses or expires, the Issuer shall immediately implement (i) or (iii) of the preceding paragraph or make the required deposits to such Bond Reserve Fund."

ARTICLE XXVII

MISCELLANEOUS PROVISIONS

Section 27.01. Terms of 2019 Series A Bonds Subject to the Trust Agreement. Except as in this Supplemental Trust Agreement expressly provided, every term and condition contained in the Existing Trust Agreement shall apply to this Supplemental Trust Agreement and to the 2019 Series A Bonds with the same force and effect as if the same were herein set forth at length, with such omissions, variations and modifications thereof as may be appropriate to make the same conform to this Supplemental Trust Agreement.
This Supplemental Trust Agreement and all the terms and provisions herein contained shall form part of the Trust Agreement as fully and with the same effect as if all such terms and provisions had been set forth in the Trust Agreement. The Existing Trust Agreement is hereby ratified and confirmed and shall continue in full force and effect in accordance with the terms and provisions thereof, as supplemented and amended hereby.

Section 27.02. Effective Date of Supplemental Trust Agreement. This Supplemental Trust Agreement shall take effect upon the Issue Date.

Section 27.03. Execution in Counterparts. This Supplemental Trust Agreement may be executed in several counterparts, each of which shall be deemed an original, and all of which shall constitute but one and the same instrument.
IN WITNESS WHEREOF, the parties hereto have executed this Fourth Supplemental Trust Agreement by their officers thereunto duly authorized as of the day and year first written above.

PENINSULA CORRIDOR JOINT POWERS BOARD

By_________________________________________
Chief Financial Officer

Attest:

By_________________________________________
Secretary

U.S. BANK NATIONAL ASSOCIATION,
as Trustee

By _________________________________________
Authorized Officer
Exhibit A

[Form of 2019 Series A Bond]

No._______ $______________

PENINSULA CORRIDOR JOINT POWERS BOARD
FAREBOX REVENUE BOND,
2019 SERIES A

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Interest Rate Per Annum</th>
<th>Issue Date</th>
<th>CUSIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 1,</td>
<td>___%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Registered Holder:  Cede & Co.

Principal Amount:

PENINSULA CORRIDOR JOINT POWERS BOARD, a public entity duly organized and existing as a joint exercise of powers agency under and by virtue of the laws of the State of California (the "Issuer"), for value received, hereby promises to pay to the registered holder named above or registered assigns, on the maturity date specified above (unless this Bond shall have been called for redemption and payment of the redemption price made or provided for), the principal amount specified above, together with interest thereon from the issue date specified above until the principal hereof shall have been paid, at the interest rate per annum specified above, payable on October 1, 2019, and semiannually thereafter on April 1 and October 1 in each year (each, an "Interest Payment Date"), but only out of the Farebox Revenues and other assets pledged therefor as specified in the Trust Agreement, dated as of October 1 2007, as supplemented and amended from time to time pursuant to its terms, including as supplemented and amended by the Fourth Supplemental Trust Agreement thereto, dated as of February 1, 2019 (hereinafter collectively referred to as the "Trust Agreement"), between the Issuer and U.S. Bank National Association, as trustee (together with any successor trustee, the "Trustee"). All capitalized terms used and not otherwise defined herein shall have the meanings assigned to such terms in the Trust Agreement.

Interest hereon is payable in lawful money of the United States of America by check mailed by first-class mail on each Interest Payment Date to the registered holder as of the close of business on the applicable Record Date. The principal hereof is payable when due in lawful money of the United States of America upon presentation hereof at the Corporate Trust Office of the Trustee. Notwithstanding the foregoing, however, for so long as a Depository is utilized, interest hereon and principal hereof shall be payable in accordance with the payment procedures established by such Depository.

This Bond is one of a duly authorized issue of Peninsula Corridor Joint Powers Board Farebox Revenue Bonds (the "Bonds") issued pursuant to the provisions of the Act and the Trust Agreement. Said authorized issue of Bonds is not limited in aggregate principal amount, except
as otherwise provided in the Trust Agreement, and consists or may consist of one or more Series of varying denominations, dates, maturities, interest rates and other provisions, as in the Trust Agreement provided, all issued or to be issued pursuant to the Trust Agreement. This Bond is a Current Interest Bond of the Series and designation indicated above (each, a "2019 Series A Bond"), which Series of Bonds is limited in aggregate principal amount to [Amount Par Written] dollars ($[Par Amount]).

Reference is hereby made to the Trust Agreement and the Act for a description of the terms on which the Bonds are issued and to be issued, the provisions with regard to the nature and extent of the Farebox Revenues, and the rights of the registered holders of the Bonds, and all the terms of the Trust Agreement are hereby incorporated herein and constitute a contract between the Issuer and the registered holder from time to time of this Bond, and to all the provisions thereof the registered holder of this Bond, by its acceptance hereof, consents and agrees. Additional Bonds may be issued, and additional indebtedness may be incurred, on a parity with the Bonds of this authorized issue, but only subject to the conditions and limitations contained in the Trust Agreement.

The 2019 Series A Bonds are subject to redemption prior to their respective stated maturities on the dates, at the prices and following such notice as are set forth in the Trust Agreement.

The Bonds and the interest thereon (to the extent set forth in the Trust Agreement), together with any Parity Obligations hereafter issued or incurred by the Issuer, and the interest thereon, are payable from, and are secured by a charge and lien on, the amounts generated and collected by the Issuer in connection with the operation of the commuter rail service known as Caltrain, including all passenger fares, parking, shuttle and pass revenues and other revenues from operations (as more particularly defined in the Trust Agreement, the "Farebox Revenues") and certain other funds held by the Trustee under the Trust Agreement. All of the Bonds and Parity Obligations are equally secured by a pledge of, and charge and lien upon, all of the Farebox Revenues, and the Farebox Revenues constitute a trust fund for the security and payment of the interest on and principal of the Bonds; but nevertheless out of Farebox Revenues certain amounts may be applied for other purposes as provided in the Trust Agreement.

The Bonds are limited obligations of the Issuer and are payable, both as to principal and interest, out of the Farebox Revenues. The general fund of the Issuer is not liable, and the credit of the Issuer (other than as described above) is not pledged, for the payment of the Bonds or their interest. The Issuer has no taxing power. The Bonds are not secured by a legal or equitable pledge of, or charge, lien or encumbrance upon, any of the property of the Issuer or any of its income or receipts, except the Farebox Revenues.

This Bond is transferable or exchangeable for other Authorized Denominations by the registered holder hereof, in person or by its attorney duly authorized in writing, at the Corporate Trust Office of the Trustee, but only in the manner, subject to the limitations and upon payment of the charges provided in the Trust Agreement, and upon surrender and cancellation of this Bond. Upon such transfer a new fully registered Bond or Bonds without coupons, of
authorized denomination or denominations, of the same Series, tenor, interest rate and maturity for the same aggregate principal amount will be issued to the transferee in exchange herefor.

The Issuer, the Trustee and any paying agent may deem and treat the registered holder hereof as the absolute owner hereof for all purposes, and the Issuer, the Trustee and any paying agent shall not be affected by any notice to the contrary.

The rights and obligations of the Issuer and of the registered holders of the Bonds may be modified or amended at any time in the manner, to the extent, and upon the terms provided in the Trust Agreement, which provide, in certain circumstances, for modifications and amendments without the consent of or notice to the registered holders of bonds.

It is hereby certified and recited that any and all acts, conditions and things required to exist, to happen and to be performed, precedent to and in the incurring of the indebtedness evidenced by this Bond, and in the issuing of this Bond, do exist, have happened and have been performed in due time, form and manner, as required by the Act and by the Constitution and statutes of the State of California, and that this Bond, together with all other indebtedness of the Issuer pertaining to the Farebox Revenues, does not exceed any debt or other limit prescribed by the Act or by the Constitution and the statutes of the State of California, and is not in excess of the amount of Bonds permitted to be issued under the Trust Agreement.

This Bond shall not be entitled to any benefit under the Trust Agreement, or become valid or obligatory for any purpose, until the certificate of authentication hereon endorsed shall have been manually signed by the Trustee.

IN WITNESS WHEREOF, the PENINSULA CORRIDOR JOINT POWERS BOARD has caused this 2019 Series A Bond to be executed in its name and on its behalf by the facsimile signature of the Executive Director of the Issuer and countersigned by the facsimile signature of the Chief Financial Officer of the Issuer and this 2019 Series A Bond to be dated the Issue Date specified above.

PENINSULA CORRIDOR JOINT POWERS BOARD

By ________________________________

Executive Director

Countersigned:

______________________________

Chief Financial Officer
[FORM OF CERTIFICATE OF AUTHENTICATION]

This is one of the 2019 Series A Bonds described in the within-mentioned Trust Agreement and authenticated on the date set forth below.

Dated: _______________________

U.S. BANK NATIONAL ASSOCIATION,
as Trustee

By __________________________
Authorized Officer

[FORM OF STATEMENT OF INSURANCE]

[Copy to come upon receipt and review of Commitment of 2019 Series A Insurer.]

[FORM OF DTC LEGEND]

Unless this 2019 Series A Bond is presented by an authorized representative of The Depository Trust Company to the Issuer or its agent for registration of transfer, exchange or payment, and any 2019 Series A Bond issued is registered in the name of Cede & Co. or such other name as requested by an authorized representative of The Depository Trust Company and any payment is made to Cede & Co., any transfer, pledge or other use hereof for value or otherwise by or to any person is wrongful since the registered owner hereof, Cede & Co., has an interest herein.
[FORM OF ASSIGNMENT]

For value received ___________________, whose taxpayer identification number is ____________, does hereby sell, assign and transfer unto ________________ the within 2019 Series A Bond and hereby irrevocably constitute and appoint ___________________ attorney, to transfer the same on the books of the Issuer at the office of the Trustee, with full power of substitution in the premises.

NOTE: The signature to this Assignment must correspond with the name on the face of the within registered bond in every particular, without alteration or enlargement or any change whatsoever.

Dated: _________________

Signature Guaranteed by:

NOTE: Signature must be guaranteed by an eligible guarantor institution.
Exhibit B

[Form of Requisition – 2019 Series A Costs of Issuance Fund]

REQUISITION NO. ____

2019 Series A Costs of Issuance Fund

The undersigned, ____________________, hereby certifies as follows:

1. I am ______________________ of the Peninsula Corridor Joint Powers Board, a public entity duly organized and existing as a joint exercise of powers agency under and by virtue of the laws of the State of California (the "Issuer").

2. Pursuant to the provisions of that certain Trust Agreement, dated as of October 1, 2007, as supplemented and amended, including as supplemented and amended by that certain Fourth Supplemental Trust Agreement, dated as of February 1, 2019 (hereinafter collectively referred to as the "Trust Agreement"), between the Issuer and U.S. Bank National Association, as trustee (the "Trustee"), I am an Authorized Representative (as such term is defined in the Trust Agreement) of the Issuer and am delivering this Requisition on behalf of the Issuer.

3. The undersigned hereby requests that the Trustee pay from the 2019 Series A Costs of Issuance Fund (the "Costs of Issuance Fund") established pursuant to Section 24.05 of the Trust Agreement the amounts specified in Schedule I hereto to the persons identified in Schedule I.

4. The undersigned hereby certifies that: (i) obligations in the amounts stated in Schedule I have been incurred by the Issuer and are presently due and payable; (ii) each item is a proper charge against the Costs of Issuance Fund; and (iii) each item has not been previously paid from said Costs of Issuance Fund.

Dated: ________________.

Peninsula Corridor Joint Powers Board

By: __________________________

Authorized Representative
### Schedule I

**2019 Series A Costs of Issuance Fund**

<table>
<thead>
<tr>
<th>To</th>
<th>Amount</th>
<th>Purpose</th>
<th>Wire Or Payment Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>


Exhibit C

[Form of Requisition – 2019 Series A Project Fund]

REQUISITION NO. ___

2019 Series A Project Fund

The undersigned, _____________, hereby certifies as follows:

1. I am the ________________ of the Peninsula Corridor Joint Powers Board, a public entity duly organized and existing as a joint exercise of powers agency under and by virtue of the laws of the State of California (the "Issuer").

2. Pursuant to the provisions of that certain Trust Agreement, dated as of October 1, 2007, as supplemented and amended, including as supplemented and amended by that certain Fourth Supplemental Trust Agreement, dated as of February 1, 2019 (hereinafter collectively referred to as the "Trust Agreement"), between the Issuer and U.S. Bank National Association, as trustee (the "Trustee"), I am an Authorized Representative (as such term is defined in the Trust Agreement) of the Issuer and am delivering this Requisition on behalf of the Issuer.

3. The undersigned, acting on behalf of the Issuer, does hereby request disbursement of funds from the 2019 Series A Project Fund (the "Project Fund") created pursuant to Section 24.06 of the Trust Agreement (the "Project Fund") in connection with the payment of the costs of the Project (as such term is defined in the Trust Agreement) being financed with the proceeds of the Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019 Series A.

TOTAL DISBURSEMENT AMOUNT REQUESTED: $__________

4. The undersigned, acting on behalf of the Issuer, hereby certifies that: (a) the costs of the Project in the amount set forth herein have been incurred by the Issuer and are presently due and payable; and (b) that each item is a proper charge against the Project Fund and has not been previously paid from the Project Fund.

5. The undersigned, acting on behalf of the Issuer, hereby certifies that there has not been filed with or served upon the Issuer notice of any lien, right to lien, or attachment upon, or claim affecting the right to receive payment of, any of the amounts payable to any of the parties identified on Schedule I to this Requisition, which has not been released or will not be released simultaneously with the payment of such obligation, other than materialmen's or mechanics' liens accruing by mere operation of law.
6. Payment should be made in accordance with the instructions set forth on Schedule I hereto.

Dated: _________________.

Peninsula Corridor Joint Powers Board

By: __________________________

Authorized Representative
Schedule I

2019 Series A Project Fund

<table>
<thead>
<tr>
<th>Party To Be Paid</th>
<th>Payment Amount</th>
<th>Nature Of Expenditure</th>
<th>Payment Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>
CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (this "Disclosure Agreement") is executed and delivered by the Peninsula Corridor Joint Powers Board (the "Issuer") and U.S. Bank National Association, as trustee (the "Trustee") and as dissemination agent (the "Dissemination Agent") in connection with the issuance of $[Par Amount] Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019 Series A (the "Bonds"). The Bonds are being issued pursuant to a Trust Agreement, dated as of October 1, 2007 (as supplemented and amended from time to time pursuant to its terms, including as supplemented and amended by the Fourth Supplemental Trust Agreement, dated as of February 1, 2019, hereinafter collectively referred to as the "Trust Agreement"), between the Issuer and the Trustee. The Issuer, the Dissemination Agent and the Trustee covenant and agree as follows:

SECTION 1. Purpose of this Disclosure Agreement. This Disclosure Agreement is being executed and delivered by the Issuer, the Trustee and the Dissemination Agent for the benefit of the Holders and Beneficial Owners (as such term is defined herein) of the Bonds and in order to assist the Participating Underwriter (as such term is defined herein) in complying with Securities and Exchange Commission Rule 15c2-12(b)(5).

SECTION 2. Definitions. In addition to the definitions set forth in the Trust Agreement, which apply to any capitalized term used in this Disclosure Agreement unless otherwise defined in this Section, the following capitalized terms shall have the following meanings:

Annual Report shall mean any Annual Report provided by the Issuer pursuant to, and as described in, Sections 3 and 4 of this Disclosure Agreement.

Beneficial Owner shall mean any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries).

Disclosure Representative shall mean the Chief Financial Officer of the Issuer or his or her designee, or such other officer or employee as an Authorized Representative of the Issuer shall designate in writing to the Trustee and Dissemination Agent from time to time.

Dissemination Agent shall mean U.S. Bank National Association, acting in its capacity as Dissemination Agent hereunder, or any successor Dissemination Agent designated in writing by an Authorized Representative of the Issuer and which has filed with the Trustee and Dissemination Agent a written acceptance of such designation.

Listed Events shall mean any of the events listed in Section 5(a) or Section 5(b) of this Disclosure Agreement.

Participating Underwriter shall mean any of the original underwriters of the Bonds required to comply with the Rule in connection with offering of the Bonds.

Repository shall mean the Municipal Securities Rulemaking Board or any other
entity designated or authorized by the SEC to receive reports pursuant to the Rule.

Rule shall mean Rule 15c2-12(b)(5) adopted by the SEC under the Securities Exchange Act of 1934, as the same may be amended from time to time.

SEC shall mean the Securities and Exchange Commission or any successor agency thereto.

State shall mean the State of California.

SECTION 3. Provision of Annual Reports.

(a) The Issuer shall, or shall cause the Dissemination Agent to, not later than eight (8) months after the end of the Issuer's Fiscal Year (presently June 30), commencing with the Annual Report for the Fiscal Year ending June 30, 2019, provide to the Repository an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Agreement. Each Annual Report must be submitted in electronic format, accompanied by such identifying information as is prescribed by the Repository, and may include by reference other information as provided in Section 4 of this Disclosure Agreement; provided that the audited financial statements of the Issuer may be submitted separately from the balance of the Annual Report and later than the date required above for the filing of the Annual Report if they are not available by that date. If the Issuer's Fiscal Year changes, it shall give notice of such change in the same manner as for a Listed Event under Section 5(f).

(b) Not later than five (5) Business Days prior to the date specified in subsection (a) for providing the Annual Report to the Repository, the Issuer shall provide the Annual Report to the Dissemination Agent and the Trustee (if the Trustee is not the Dissemination Agent). The Issuer shall provide a written certification with each Annual Report furnished to the Dissemination Agent and the Trustee to the effect that such Annual Report constitutes the Annual Report required to be furnished by it hereunder. The Dissemination Agent and the Trustee may conclusively rely upon such certification of the Issuer and shall have no duty or obligation to review such Annual Report. If by such date, the Trustee has not received a copy of the Annual Report, the Trustee shall contact the Issuer and the Dissemination Agent to determine if the Issuer is in compliance with the first sentence of this subsection (b).

(c) If the Dissemination Agent is unable to verify that an Annual Report has been provided to the Repository by the date required in subsection (a), the Dissemination Agent shall send a notice, in electronic format, to the Repository, such notice to be in substantially the form attached as Exhibit A to this Disclosure Agreement.

(d) If the Annual Report is delivered to the Dissemination Agent for filing, the Dissemination Agent shall file a report with the Issuer and (if the Dissemination Agent is not the Trustee) the Trustee certifying that the Annual Report has been provided pursuant to this Disclosure Agreement, and stating the date it was provided.

SECTION 4. Content of Annual Reports. The Issuer's Annual Report shall contain or include by reference the following:
(a) The audited financial statements of the Issuer for the prior Fiscal Year, prepared in accordance with generally accepted accounting principles as promulgated to apply to governmental entities from time to time by the Governmental Accounting Standards Board. If the Issuer's audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a), the Annual Report shall contain unaudited financial statements in a format similar to the financial statements contained in the final Official Statement, dated [Official Statement Date], relating to the Bonds (the "Official Statement") and the audited financial statements shall be filed in the same manner as the Annual Report when such audited financial statements become available.

(b) An update (as of the most recently ended fiscal year of the Issuer): [(i) for the table entitled "Peninsula Corridor Joint Powers Board Ridership and Passenger Fare Information" set forth in the Official Statement under the caption "Financial Information - Ridership and Passenger Fare Information;" (ii) for the table entitled "Peninsula Corridor Joint Powers Board Farebox Revenues" set forth in the Official Statement under the caption "Financial Information - Farebox Revenues;" (iii) for the table entitled Peninsula Corridor Joint Powers Board Passenger Fares, Operating Expenses and Farebox Recovery Ratio" set forth in the Official Statement under the caption "Financial Information - Farebox Recovery Ratio;" (iv) for the table entitled "Peninsula Corridor Joint Powers Board Historical Debt Service Coverage" set forth in the Official Statement under the caption "Financial Information - Debt Service Coverage - Historical Debt Service Coverage;" (v) for the table entitled Peninsula Corridor Joint Powers Board Member Agency Operating Contributions" set forth in the Official Statement under the caption "Financial Information - Operating Contributions and Other Operating Assistance - Member Agency Operating Contributions;" (vi) for the table entitled "Peninsula Corridor Joint Powers Board Other Operating Assistance" set forth in the Official Statement under the caption "Financial Information - Operating Contributions and Other Operating Assistance - Other Operating Assistance;" (vii) for the table entitled "Peninsula Corridor Joint Powers Board Statement of Revenues, Expenses and Changes in Net Position" set forth in the Official Statement under the caption "Financial Information - Revenues and Expenses for Caltrain Commuter Rail Service;" and (viii) an update of the information concerning insurance coverage set forth in the Official Statement under the caption "Financial Information - Insurance."]

[Note: Entire Section to be reviewed and revised to conform to disclosure agreed upon at time of posting of Preliminary Official Statement.]

Any or all of the items listed above may be included by specific reference to other documents, including official statements of debt issues of the Issuer or related public entities, which have been filed with the Repository or the SEC. If the document included by reference is a final official statement, it must be available from the Repository. The Issuer shall clearly identify each such other document so included by reference.

SECTION 5. Reporting of Listed Events.

(a) Pursuant to the provisions of this Section 5, the Issuer shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Bonds not later than ten (10) Business Days after the occurrence of the event, such notice to be provided in
accordance with the provisions set forth in Section 6:

1. principal and interest payment delinquencies;
2. unscheduled draws on debt service reserves reflecting financial difficulties;
3. unscheduled draws on credit enhancements reflecting financial difficulties;
4. substitution of credit or liquidity providers, or their failure to perform;
5. adverse tax opinions or issuance by the Internal Revenue Service of proposed or final determination of taxability or of a Notice of Proposed Issue (IRS Form 5701 TEB);
6. tender offers;
7. defeasances;
8. rating changes; or;
9. bankruptcy, insolvency, receivership or similar event of the obligated person.

Note: for the purposes of the event identified in subsection (9) above, the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the Issuer in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Issuer, or if such jurisdiction has been assumed by leaving the existing governmental body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Issuer.

(b) The Issuer shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Bonds, if material, not later than ten (10) Business Days after the occurrence of the event, such notice to be provided in accordance with the provisions set forth in Section 6:

1. unless described in Section 5(a)(5), other material notices or determinations by the Internal Revenue Service with respect to the tax status of the Bonds or other material events affecting the tax status of the Bonds;
2. modifications to rights of Bond holders;
3. optional, unscheduled or contingent Bond calls;
4. release, substitution, or sale of property securing repayment of the Bonds;

5. non-payment related defaults;

6. the consummation of a merger, consolidation, or acquisition involving the Issuer person or the sale of all or substantially all of the assets of the Issuer, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms; or

7. Appointment of a successor or additional paying agent or the change of name of a trustee.

(c) Whenever the Issuer obtains knowledge of the occurrence of a Listed Event described in Section 5(a) or determines that knowledge of a Listed Event described in Section 5(b) would be material under applicable federal securities laws, whether because of a notice from the Dissemination Agent pursuant to Section 5(d) or otherwise, the Issuer shall within ten (10) Business Days of occurrence file a notice of such occurrence or cause a notice of such occurrence to be filed with the Repository. Notwithstanding the foregoing, notice of the Listed Event described in Section 5(b)(3) need not be given under this Section 5(c) any earlier than the notice (if any) of the underlying event is given to Holders of affected Bonds pursuant to the Trust Agreement.

(d) The Dissemination Agent shall, within one (1) Business Day, or as soon thereafter as reasonably practicable, of obtaining actual knowledge of the occurrence of any of the Listed Events, contact the Disclosure Representative, inform such person of the event, and request that the Disclosure Representative promptly notify the Dissemination Agent in writing whether or not to report the event pursuant to Section 5(h). For purposes of this Disclosure Agreement "actual knowledge" of the occurrence of such Listed Events shall mean actual knowledge by the officer at the Corporate Trust Office of the Trustee and Dissemination Agent with regular responsibility for the administration of matters related to the Trust Agreement. The Dissemination Agent shall have no responsibility to determine the materiality of any of the Listed Events described in Section 5(b). In the absence of such direction from the Issuer (upon which the Dissemination Agent may conclusively rely), the Dissemination Agent shall not report such event. The Dissemination Agent is under no obligation to notify the Issuer or the Disclosure Representative of an event that may constitute a Listed Event.

(e) Whenever the Issuer obtains knowledge of the occurrence of a Listed Event described in Section 5(b), whether because of a notice from the Dissemination Agent pursuant to Section 5(d) or otherwise, the Issuer shall as soon as possible determine if such event would be material under applicable federal securities laws.

(f) If the Issuer has determined that knowledge of the occurrence of a Listed Event described in Section 5(b) would be material under applicable federal securities laws, the Issuer shall promptly notify the Dissemination Agent in writing. Such notice shall instruct the Dissemination Agent to report the occurrence pursuant to Section 5(h).
(g) If in response to a request under Section 5(d), the Issuer determines either (i) that a Listed Event has not occurred or (ii) that a Listed Event described in Section 5(b) has occurred but would not be material under applicable federal securities laws, the Issuer shall so notify the Dissemination Agent in writing and instruct the Dissemination Agent not to report the occurrence.

(h) If the Dissemination Agent has been instructed by the Issuer to report the occurrence of a Listed Event described in Section 5(b), the Dissemination Agent shall file a notice of such occurrence with the Repository, such notice to be provided in accordance with the provisions set forth in Section 6.

SECTION 6. Format for Filings with the Repository. Any notice, report or filing with the Repository pursuant to this Disclosure Agreement must be submitted in electronic format, in word searchable pdf format, accompanied by such identifying information as is prescribed by the Repository. Until otherwise designated by the Repository or the SEC, filings with the Repository are to be made through the Electronic Municipal Market Access (EMMA) website of the Municipal Securities Rulemaking Board, currently located at http://emma.msrb.org.

SECTION 7. Termination of Reporting Obligation. The obligations of the Issuer, the Trustee and the Dissemination Agent under this Disclosure Agreement shall terminate upon the legal defeasance, prior redemption or payment in full of all of the Bonds.

SECTION 8. Dissemination Agent. The Issuer may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Agreement, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. The Dissemination Agent shall not be responsible in any manner for the content of any notice or report prepared by the Issuer pursuant to this Disclosure Agreement. If at any time there is not any other designated Dissemination Agent, the Trustee shall be the Dissemination Agent. The initial Dissemination Agent shall be the Trustee. The Dissemination Agent may resign by providing thirty (30) days written notice to the Issuer and the Trustee. The Dissemination Agent shall not be responsible for filing any report in a form not eligible for filing or not provided to it by the Issuer in a timely manner.

SECTION 9. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Agreement, the Issuer, the Trustee and the Dissemination Agent may amend this Disclosure Agreement (and the Trustee and the Dissemination Agent shall agree to any amendment so requested by the Issuer, provided, neither the Trustee nor the Dissemination Agent shall be obligated to enter into any such amendment that modifies or increases its duties or obligations hereunder), and any provision of this Disclosure Agreement may be waived, provided that the following conditions are satisfied:

(a) If the amendment relates to the provisions of Section 3(a), Section 4, Section 5(a) or Section 5(b), such amendment may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of an obligated person with respect to the Bonds, or the type of business
conducted;

(b) This Disclosure Agreement, as amended or taking into account the waiver proposed, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) The amendment or waiver either: (i) is approved by the Holders of the Bonds in the same manner as provided in the Trust Agreement with respect to amendments to the Trust Agreement which require the consent of Holders; or (ii) does not, in the opinion of the Trustee or nationally recognized bond counsel, materially impair the interests of the Holders or Beneficial Owners of the Bonds.

In the event of any amendment or waiver of a provision of this Disclosure Agreement, the Issuer shall describe such amendment in the next Annual Report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or, in the case of a change of accounting principles, on the presentation) of financial information or operating data being presented by the Issuer. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements: (i) notice of such change shall be given in a filing with the Repository; and (ii) the Annual Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

SECTION 10. Additional Information. Nothing in this Disclosure Agreement shall be deemed to prevent the Issuer from disseminating any other information, using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Agreement. If the Issuer chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Agreement, the Issuer shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

SECTION 11. Default. In the event of a failure of the Issuer or the Trustee or the Dissemination Agent to comply with any provision of this Disclosure Agreement, the Trustee, at the written request of any Participating Underwriter or the Holders of at least 25% aggregate principal amount of Outstanding Bonds, shall (but only to the extent funds in an amount satisfactory to the Trustee have been provided to it or it has been otherwise indemnified to its satisfaction from any cost, liability, expense or additional charges and fees of the Trustee whatsoever, including, without limitation, fees and expenses of its attorneys), or any Holder or Beneficial Owner of the Bonds may, take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the Issuer or the Trustee or the Dissemination Agent, as the case may be, to comply with its obligations under this
Disclosure Agreement. A default under this Disclosure Agreement shall not be deemed an Event of Default under the Trust Agreement, and the sole remedy under this Disclosure Agreement in the event of any failure of the Issuer or the Trustee or the Dissemination Agent to comply with this Disclosure Agreement shall be an action to compel performance.

SECTION 12. Duties, Immunities and Liabilities of Trustee and Dissemination Agent. Article VIII of the Trust Agreement, including, without limitation, Section 8.04 of the Trust Agreement, is hereby made applicable to this Disclosure Agreement as if this Disclosure Agreement were (solely for this purpose) contained in the Trust Agreement, and the Trustee and the Dissemination Agent shall be entitled to the protections, limitations from liability and indemnities afforded the Trustee thereunder. The Dissemination Agent and the Trustee shall have only such duties as are specifically set forth in this Disclosure Agreement, and the Issuer agrees to indemnify and save the Dissemination Agent and the Trustee, their officers, directors, employees and agents, harmless against any loss, expense and liabilities which they may incur arising out of or in the exercise or performance of their powers and duties hereunder, including the costs and expenses (including attorneys' fees) of defending against any claim of liability, but excluding liabilities due to the Dissemination Agent's or the Trustee's respective negligence or willful misconduct. The obligations of the Issuer under this Section shall survive resignation or removal of the Dissemination Agent and the Trustee and payment of the Bonds. The Dissemination Agent shall be paid compensation by the Issuer for its services provided hereunder in accordance with its schedule of fees as amended from time to time, and all expenses, legal fees and advances made or incurred by the Dissemination Agent in the performance of its duties hereunder. The Dissemination Agent and the Trustee shall have no duty or obligation to review any information provided to them hereunder and shall not be deemed to be acting in any fiduciary capacity for the Issuer, the Bondholders, or any other party.

SECTION 13. Notices. Any notices or communications to or among any of the parties to this Disclosure Agreement may be given as follows:

To the Issuer: Peninsula Corridor Joint Powers Board
1250 San Carlos Avenue
San Carlos, California 94070-2400
Attention: Chief Financial Officer
Telephone: (650) 508-6946

With a copy to: Peninsula Corridor Joint Powers Board
1250 San Carlos Avenue
San Carlos, California 94070-2400
Attention: Director of Treasury
Telephone: (650) 508-7765

With an additional copy to: debt@samtrans.com
To the Trustee: U.S. Bank National Association  
One California Street, Suite 1000  
San Francisco, California 94111  
Attention: Global Corporate Trust Services  
Telephone: (415) 677-3599  

To the Dissemination Agent: U.S. Bank National Association  
One California Street, Suite 1000  
San Francisco, California 94111  
Attention: Global Corporate Trust Services  
Telephone: (415) 677-3599  

Any person may, by written notice to the other persons listed above, designate a different address or telephone number(s) to which subsequent notices or communications should be sent. Notices may also be given by email or other electronic means.

SECTION 14. **Beneficiaries.** This Disclosure Agreement shall inure solely to the benefit of the Issuer, the Trustee, the Dissemination Agent, the Participating Underwriter and Holders and Beneficial Owners from time to time of the Bonds, and shall create no rights in any other person or entity.

SECTION 15. **Counterparts.** This Disclosure Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.
Date: [Issue Date].

PENINSULA CORRIDOR JOINT POWERS BOARD

By________________________________________

Chief Financial Officer

U.S. BANK NATIONAL ASSOCIATION, as Trustee and Dissemination Agent

By________________________________________

Authorized Officer
Exhibit A

Notice to Repository of Failure to File Annual Report

Name of Issuer: Peninsula Corridor Joint Powers Board (the "Issuer")

Name of Issue: Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019 Series A

Date of Issuance: [Issue Date]

NOTICE IS HEREBY GIVEN that the Issuer has not provided an Annual Report with respect to the above-named Bonds as required by Section 6.12 of the Trust Agreement, dated as of October 1, 2007, as supplemented and amended, between the Issuer and U.S. Bank National Association, as trustee. [The Issuer anticipates that the Annual Report will be filed by _____________.]

Dated: ________________

U.S. BANK NATIONAL ASSOCIATION,
as dissemination agent

cc: Peninsula Corridor Joint Powers Board
ESCROW AGREEMENT

between

PENINSULA CORRIDOR JOINT POWERS BOARD

and

U.S. BANK NATIONAL ASSOCIATION,
as Trustee and Escrow Agent

Dated as of February 1, 2019

Relating to

Peninsula Corridor Joint Powers Board
Farebox Revenue Bonds,
2007 Series A
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Definitions</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Creation and Purpose of 2007 Series A Escrow Fund</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Redemption and Payment of 2007 Series A Bonds; Notice of Redemption</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Investment of 2007 Series A Escrow Fund; Substitution; Reinvestment</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Sufficiency of 2007 Series A Escrow Fund</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Payment of the 2007 Series A Bonds</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Fees and Costs</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Merger or Consolidation</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>Resignation of Escrow Agent</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>Indemnification</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>Capacity of Escrow Agent</td>
<td>6</td>
</tr>
<tr>
<td>12</td>
<td>Amendment</td>
<td>6</td>
</tr>
<tr>
<td>13</td>
<td>Notices</td>
<td>6</td>
</tr>
<tr>
<td>14</td>
<td>Severability</td>
<td>7</td>
</tr>
<tr>
<td>15</td>
<td>Law Governing</td>
<td>7</td>
</tr>
<tr>
<td>16</td>
<td>Counterparts</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Execution</td>
<td>S-1</td>
</tr>
<tr>
<td>Exhibit A</td>
<td>Initial Cash Deposits and Escrow Securities</td>
<td></td>
</tr>
<tr>
<td>Exhibit B</td>
<td>Refunding Requirements</td>
<td></td>
</tr>
</tbody>
</table>
This Escrow Agreement, dated as of February 1, 2019 (this "Escrow Agreement"), is entered into by the Peninsula Corridor Joint Powers Board, a public entity duly organized and existing as a joint exercise of powers agency under and by virtue of the laws of the State of California (the "JPB"), and U.S. Bank National Association ("U.S. Bank"), a national banking association duly organized and existing under and by virtue of the laws of the United States of America, as trustee (U.S. Bank acting in such capacity being hereinafter referred to as the "Trustee") and as escrow agent (U.S. Bank acting in such capacity being hereinafter referred to as the "Escrow Agent").

WITNESSETH:

WHEREAS, the JPB has heretofore issued $23,140,000 aggregate principal amount of Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2007 Series A (the "2007 Series A Bonds"), $22,960,000 of which are outstanding, pursuant to a Trust Agreement, dated as of October 1, 2007, as supplemented and amended by a First Supplemental Trust Agreement, dated as of October 1, 2007, a Second Supplemental Trust Agreement, dated as of September 1, 2010, and a Third Supplemental Trust Agreement, dated as of January 1, 2015 (hereinafter collectively referred to as the "Existing Trust Agreement"), between the JPB and the Trustee;

WHEREAS, the JPB has determined to refund and defease all of the 2007 Series A Bonds and is issuing $[Par Amount] aggregate principal amount of Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019 Series A (the "2019 Series A Bonds") pursuant to the Existing Trust Agreement, as further supplemented and amended by a Fourth Supplemental Trust Agreement thereto, dated as of February 1, 2019 (the "Fourth Supplemental Trust Agreement," and, together with the Existing Trust Agreement, hereinafter collectively referred to as "Trust Agreement"), between the JPB and the Trustee;

WHEREAS, the Trust Agreement provides for the transfer and deposit of a portion of the proceeds of the 2019 Series A Bonds to an escrow fund (the "2007 Series A Escrow Fund") created hereunder, such proceeds to be applied[, together with certain other funds held on deposit with the Trustee and transferred to the 2007 Series A Escrow Fund], to refund and defease the 2007 Series A Bonds; and

WHEREAS, the amount deposited in the 2007 Series A Escrow Fund shall be in such amount as is necessary, together with interest earnings thereon, to insure the full and timely payment of the 2007 Series A Refunding Requirements (as hereinafter defined);

NOW, THEREFORE, in consideration of the mutual agreements herein contained, in order to secure the payment of the 2007 Series A Refunding Requirements as heretofore provided, the parties hereto mutually undertake, promise and agree for themselves, their respective representatives, successors and assigns, as follows:
Section 1. Definitions.

As used in this Escrow Agreement the following terms have the following meanings:

Chief Financial Officer means the officer of the San Mateo County Transit District, the managing agency of the JPB, who is then performing the functions of Chief Financial Officer of the JPB.

Escrow Agent means U.S. Bank National Association or any successor thereto appointed to act as Escrow Agent under this Escrow Agreement.

Escrow Funding Date means the date of issuance of the 2019 Series A Bonds.

2007 Series A Bonds means the Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2007 Series A.

2007 Series A Escrow Fund means the fund by that name created pursuant to Section 2 hereof.

2007 Series A Escrow Securities means those certain Escrow Securities described in Exhibit A to this Escrow Agreement.

2007 Series A Refunding Requirements means all installments of principal and interest on the 2007 Series A Bonds, commencing on the date hereof and concluding when all the 2007 Series A Bonds which will be redeemed, as set forth in B to this Escrow Agreement.

Verification Report means the verification report prepared by the Verification Agent.

Verification Agent means [Name of Verification Agent].

All other capitalized terms used but not defined herein shall have the respective meanings given to such terms in the Trust Agreement.

Section 2. Creation and Purpose of 2007 Series A Escrow Fund.

A. The 2007 Series A Escrow Fund is hereby created and established with the Escrow Agent as a special and irrevocable escrow fund. The Escrow Agent shall keep the 2007 Series A Escrow Fund separate and apart from all other funds and moneys held by it and shall hold the 2007 Series A Escrow Fund in escrow for the purposes described herein. All 2007 Series A Escrow Securities and moneys in the 2007 Series A Escrow Fund are hereby irrevocably pledged, subject to the provisions of Section 4 hereof, to secure the payment of the 2007 Series A Bonds.

B. On the Escrow Funding Date, the JPB shall deposit or cause to be deposited with Escrow Agent $[2007 Series A Escrow Deposit Amount], consisting of $________ from the proceeds of the 2019 Series A Bonds [and $________ from moneys...
currently on deposit in the funds established under the Trust Agreement, comprised of 
$__________ on deposit in the Interest Fund established under the Trust Agreement and
$__________ on deposit in the Principal Fund established under the Trust Agreement] which
amount the Escrow Agent shall immediately deposit into the 2007 Series A Escrow Fund. Such
amount shall be sufficient for the purchase of the 2007 Series A Escrow Securities identified in
Exhibit A to this Escrow Agreement and to make the cash deposit to the 2007 Series A Escrow
Fund identified in Exhibit A and shall be used by the Escrow Agent to purchase the 2007 Series
A Escrow Securities identified in Exhibit A to this Escrow Agreement and make such cash
deposit on the Escrow Funding Date. The principal of and interest on the 2007 Series A Escrow
Securities and any uninvested cash held hereunder in the 2007 Series A Escrow Fund shall be
applied by the Escrow Agent to the payment of the 2007 Series A Refunding Requirements.

C. As verified by the Verification Report, the 2007 Series A Escrow Securities are such that, if interest thereon and principal thereof are paid when due, the proceeds from the collection of such interest and principal, together with any uninvested cash held hereunder in the 2007 Series A Escrow Fund, will be sufficient to meet the 2007 Series A Refunding Requirements. The Escrow Agent may rely upon the conclusion of the Verification Agent that the 2007 Series A Escrow Securities listed in Exhibit A will mature and bear interest payable in such amounts and at such times as, together with cash on deposit in the 2007 Series A Escrow Fund, will be necessary and sufficient to pay when due the principal of and interest on the 2007 Series A Bonds to their date of redemption which is specified in Section 3 hereof.

D. The Escrow Agent shall hold all 2007 Series A Escrow Securities in the 2007 Series A Escrow Fund whether acquired as initial investments, subsequent investments or reinvestments hereunder, and the money received from time to time as principal and interest thereon, in escrow, to secure, and for the payment of, the 2007 Series A Refunding Requirements and shall collect the principal of and interest on such 2007 Series A Escrow Securities held by it hereunder in the 2007 Series A Escrow Fund promptly as such principal and interest become due.

Section 3. Redemption and Payment of 2007 Series A Bonds; Notice of Redemption.

The Escrow Agent, acting as Trustee, is hereby irrevocably instructed to redeem all 2007 Series A Bonds on [2007 Series A Redemption Date] (the "2007 Series A Redemption Date"), at a redemption price of 100% of the principal amount thereof, together with the interest accrued thereon to the 2007 Series A Redemption Date, at the times and places and in the manner specified in the Trust Agreement, such payment to be made from the 2007 Series A Escrow Fund. The Escrow Agent, acting as Trustee, is hereby further instructed to give notice of such redemption of the 2007 Series A Bonds at the time and in the manner provided in Section 4.02 of the Trust Agreement and in accordance with Section 10.03 of the Trust Agreement.
Section 4. Investment of 2007 Series A Escrow Fund; Substitution; Reinvestment.

A. The JPB and the Escrow Agent each shall take all remaining necessary action to have issued and registered in the name of the Escrow Agent, for the account of the 2007 Series A Escrow Fund, the 2007 Series A Escrow Securities.

B. There shall be no exchange or substitution of the 2007 Series A Escrow Securities, except upon: (i) the written direction of the JPB; and (ii) receipt by the JPB and the Trustee and the Escrow Agent of a new verification report, prepared by an independent certified public accountant, verifying the sufficiency of the amount of 2007 Series A Escrow Securities and cash on deposit in the 2007 Series A Escrow Fund. The Escrow Agent shall not be liable or responsible for any loss resulting from any substitution of securities made pursuant to this Escrow Agreement and in full compliance with the provisions hereof.

C. Except as otherwise provided herein, the Escrow Agent shall not reinvest any cash portion of the 2007 Series A Escrow Fund and shall hold such cash portion uninvested in the 2007 Series A Escrow Fund; provided, however, that after receiving a new verification report, prepared by an independent certified public accountant, to the effect that such reinvestment will not adversely affect the sufficiency of the amount of 2007 Series A Escrow Securities and cash on deposit in the 2007 Series A Escrow Fund, the Escrow Agent may, at the written direction of the JPB, reinvest any cash portion of the 2007 Series A Escrow Fund in 2007 Series A Escrow Securities. The Escrow Agent shall not be liable or responsible for any loss resulting from any reinvestment made pursuant to this Escrow Agreement and in full compliance with the provisions hereof.


Moneys deposited in the 2007 Series A Escrow Fund, including the investment earnings thereon and any uninvested cash, shall be in an amount, as determined by the JPB and as verified by the Verification Report, which at all times shall be sufficient to meet the 2007 Series A Refunding Requirements not theretofore met.

If at any time it shall appear to the Escrow Agent that the moneys in the 2007 Series A Escrow Fund, including the investment earnings thereon and any uninvested cash, will not be sufficient to meet the 2007 Series A Refunding Requirements, the Escrow Agent shall notify the Chief Financial Officer of the JPB of such deficiency in writing as soon as reasonably practicable. Upon receipt of such notice, the JPB shall promptly use its best efforts to pay to the Escrow Agent, from any legally available moneys, and the Escrow Agent shall deposit in the 2007 Series A Escrow Fund, the amount necessary to make up the deficiency. The Escrow Agent shall not be liable or responsible for any loss resulting from its failure to give such notice nor from the JPB's failure to make any such payment.

Section 6. Payment of the 2007 Series A Bonds.

The JPB hereby requests and irrevocably instructs the Escrow Agent, and the Escrow Agent hereby agrees to collect and deposit in the 2007 Series A Escrow Fund the
principal of and interest on all 2007 Series A Escrow Securities held for the account of such 2007 Series A Escrow Fund promptly as such principal and interest become due, and to apply, subject to the provisions of Section 4 hereof, such principal and interest, together with any other moneys and the principal of and interest on any other 2007 Series A Escrow Securities deposited in such 2007 Series A Escrow Fund, to the payment of the principal of and interest on the 2007 Series A Bonds at the places and in the manner stipulated in the Trust Agreement.

Section 7. Fees and Costs.

A. The Escrow Agent's fees, expenses and reimbursement for costs incurred for and in carrying out the provisions of this Escrow Agreement have been fixed by separate agreement. The Escrow Agent shall also be entitled to additional fees, expenses and reimbursement for costs incurred, including but not limited to, legal and accounting services in connection with any litigation or other proceedings which may at any time be instituted involving this Escrow Agreement not due to the negligence or willful misconduct of the Escrow Agent.

B. Payments to the Escrow Agent pursuant to this Section 7 shall not be for deposit in the 2007 Series A Escrow Fund, and the fees of and the costs incurred by the Escrow Agent shall not be a charge on and in no event shall be deducted from the 2007 Series A Escrow Fund.

Section 8. Merger or Consolidation.

Any company into which the Trustee and Escrow Agent may be merged or converted or with which it may be consolidated or any company resulting from any merger, conversion or consolidation to which it shall be a party or any company to which the Trustee and Escrow Agent may sell or transfer all or substantially all of its corporate trust business, provided such company shall be eligible under Section 8.01 of the Trust Agreement, shall be the successor to such Trustee and Escrow Agent without the execution or filing of any paper or any further act, notwithstanding anything herein to the contrary.

Section 9. Resignation of Escrow Agent.

The Escrow Agent may resign and be discharged of its duties hereunder, in accordance with the procedures set forth in Article VIII of the Trust Agreement, if and at such time as the Escrow Agent shall be discharged as Trustee under the Trust Agreement. Any successor trustee under the Trust Agreement shall succeed as the Escrow Agent under this Escrow Agreement.

Section 10. Indemnification.

To the extent permitted by law, the JPB hereby assumes liability for, and hereby agrees to indemnify, protect, save and hold harmless the Escrow Agent and its respective successors, assigns, agents and servants from and against any loss, damages, liability or expenses (including legal fees and disbursements) incurred without negligence or willful misconduct on the part of the Escrow Agent and in any way relating to or arising out of the execution and
delivery of this Escrow Agreement, the establishment of the 2007 Series A Escrow Fund, the retention of the moneys therein and any payment, transfer or other application of moneys, securities or investments by the Escrow Agent in accordance with the provisions of this Escrow Agreement; provided, however, that the JPB shall not be required to indemnify the Escrow Agent against its own negligence or willful misconduct. The indemnities contained in this Section shall survive the termination of this Escrow Agreement.

Section 11. Capacity of Escrow Agent.

The Escrow Agent is entering into this Escrow Agreement in its capacity as Trustee under the Trust Agreement and shall be entitled to the protections, limitations from liability and indemnification afforded in Article VIII of the Trust Agreement. The Escrow Agent shall not be liable or responsible for any loss resulting from any investment or reinvestment made pursuant to this Escrow Agreement and in full compliance with the provisions hereof. Moneys held by the Escrow Agent hereunder are to be held and applied for the payment of the 2007 Series A Bonds in accordance with the provisions hereof and the provisions of the Trust Agreement.

Section 12. Amendment.

This Escrow Agreement is made for the benefit of the JPB and the registered owners from time to time of the 2007 Series A Bonds. This Escrow Agreement shall not be repealed, revoked, altered or amended without the written consent of all such registered owners; provided, however, that the JPB and the Escrow Agent may, without the consent of, or notice to, such registered owners, enter into such agreements supplemental to this Escrow Agreement for any one or more of the following purposes: (i) to cure any ambiguity or inconsistency or formal defect or omission in this Escrow Agreement; (ii) to grant to, or confer upon, the Escrow Agent for benefit of such registered owners any additional rights, remedies, powers or authority that may lawfully be granted to, or conferred upon, such registered owners or the Escrow Agent; (iii) to subject to this Escrow Agreement additional funds, securities or properties; and (iv) to make any other amendment that does not materially adversely affect the rights of any registered owners of the 2007 Series A Bonds; provided, however that no such agreement supplemental to this Escrow Agreement shall modify or amend the irrevocable pledge of the 2007 Series A Escrow Fund, the provisions requiring delivery of a verification report to the Escrow Agent prior to any substitution of securities and the provisions requiring delivery of a verification report to the Escrow Agent prior to any reinvestment, without the consent of all registered owners of the 2007 Series A Bonds.


All notices and communications hereunder shall be in writing and shall be deemed to be duly given if received or if sent by email or other electronic means of communication or by first class mail, as follows:
Section 14. Severability.

If any section, paragraph, clause or provision of this Escrow Agreement shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this Escrow Agreement.

Section 15. Law Governing.

This Escrow Agreement is made in the State of California and is to be construed under the Constitution and laws of such State.

Section 16. Counterparts.

This Escrow Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.
IN WITNESS WHEREOF, the Peninsula Corridor Joint Powers Board has caused this Escrow Agreement to be signed in its name by its duly authorized officer, and U.S. Bank National Association, has caused this Escrow Agreement to be signed in its name by its duly authorized officer, all as of the day and year first above written.

PENINSULA CORRIDOR JOINT POWERS BOARD

By: _______________________________________
    Chief Financial Officer

U.S. BANK NATIONAL ASSOCIATION,
    as Trustee and Escrow Agent

By: _______________________________________
    Authorized Officer
EXHIBIT A

INITIAL CASH DEPOSIT AND ESCROW SECURITIES

2007 Series A Escrow Fund

Initial Cash Deposit: $_____.

The following securities will be deposited into the 2007 Series A Escrow Fund on [Escrow Funding Date]: See Schedule ___ to the Verification Report.
EXHIBIT B

REFUNDING REQUIREMENTS

2007 Series A Escrow Fund

See Schedule ___ to Verification Report.
Peninsula Corridor Joint Powers Board
1250 San Carlos Avenue
San Carlos, California 94070

Ladies and Gentlemen:

1. **Agreement to Purchase Bonds.**

   The Peninsula Corridor Joint Powers Board (the “Issuer”) and J.P. Morgan Securities LLC (the “Underwriter”), as underwriter, are entering into this Bond Purchase Agreement (the “Agreement”), to provide for the purchase and sale of the above captioned bonds (the “Bonds”). The Bonds have been authorized pursuant to a Resolution adopted by the governing body of the Peninsula Corridor Joint Powers Board on [January 10], 2019 (the “Resolution”). The Bonds are being issued pursuant to the Trust Agreement, dated as of October 1, 2007 (as supplemented and amended from time to time pursuant to its terms, the "Existing Trust Agreement"), as further supplemented and amended by the Fourth Supplemental Trust Agreement, dated as of [February] 1, 2019 (the "Fourth Supplemental Trust Agreement," and together with the Existing Trust Agreement, the "Trust Agreement"), each between the Issuer and U.S. Bank National Association ("U.S. Bank"), as trustee. The Bonds are payable solely from Farebox Revenues, as defined in the Trust Agreement.

   The Underwriter hereby offers to purchase all (but not less than all) of the Bonds from, and to enter into this Agreement with the Issuer. This offer is subject to acceptance by the Issuer at or before 5:00 P.M., California Time, on the date hereof (the “Effective Date”) and, if not so accepted, will be subject to withdrawal by the Underwriter by written notice delivered to the Issuer at any time prior to acceptance. The Issuer shall accept by its execution of this Agreement. Upon such execution, the Agreement will be binding upon the Underwriter and the Issuer. This Agreement is effective as of the Effective Date.

   Terms used but not defined in this Agreement shall have the meaning assigned in the Preliminary Official Statement, dated [February __], 2019 (the “Preliminary Official Statement”).
2. **Purchase of Bonds.**

The Underwriter shall purchase from the Issuer, and the Issuer shall sell to the Underwriter, all (but not less than all) of the Bonds on the Closing Date (as hereinafter defined) at the purchase price (the “Purchase Price”) set forth below. The Bonds shall bear interest at the rates per annum, mature on the dates, be sold to the public at the prices and be subject to optional and mandatory sinking fund redemption prior to maturity and to such other terms and provisions, all as set forth in Schedule I. The Bonds otherwise shall be as described in the Official Statement and the Trust Agreement. The Underwriter’s agreement to purchase the Bonds from the Issuer is made in reliance upon the Issuer’s representations, covenants and warranties and on the terms and conditions set forth in this Agreement.

The Issuer acknowledges and agrees that (i) the purchase and sale of the Bonds pursuant to this Agreement is an arm’s-length commercial transaction between the Issuer and the Underwriter, (ii) in connection with such transaction, the Underwriter is acting solely as a principal and not as an agent or a fiduciary of the Issuer, the Underwriter has not assumed (individually or collectively) a fiduciary responsibility in favor of the Issuer with respect to the offering of the Bonds or the process leading thereto (whether or not the Underwriter, or any affiliate of an Underwriter, has advised or is currently advising the Issuer on other matters) or any other obligation to the Issuer except the obligations expressly set forth in this Agreement and the Issuer has consulted with its own legal and financial advisors to the extent it deemed appropriate in connection with the offering of the Bonds.

3. **Purchase Price.**

The Purchase Price of the Bonds is $______ (representing the principal amount of the Bonds, less/plus net original issue discount/premium of $______, less an underwriter’s discount of $______). The Purchase Price shall be payable on the Closing Date by the Underwriter by wire transfer in immediately available funds. [From the Purchase Price, the Underwriter shall wire directly to ______ (the “Bond Insurer”) $__________ representing the premium [on the bond insurance policy guarantying the scheduled payment of principal of and interest on the Bonds (the “Policy”)] [and] [on the municipal bond debt service reserve insurance policy (the “Reserve Facility”)] to be issued by [_____ (the “Reserve Facility Provider”) Bond Insurer] simultaneously with the issuance of the Bonds. The remainder of the Purchase Price in the amount of $__________ shall be wired by the Underwriter to the Trustee on account of the Issuer.]

4. **Liquidated Damages.**

If the conditions to the obligations of the Underwriter contained in this Agreement shall not be satisfied by the Issuer or if the obligations of the Underwriter shall be terminated for any reason permitted herein, all obligations of the Underwriter hereunder may be terminated by the Underwriter at or at any time prior to the Closing Date by written notice to the Issuer and neither the Underwriter nor the Issuer shall have any further obligations hereunder. In the event that the Underwriter fails to accept and pay for the Bonds at the Closing (as hereinafter defined), other than for a reason permitted by this Agreement, the amount of one percent (1.0%) of the principal amount of the Bonds will be accepted by the Issuer as liquidated damages for such failure and for
any and all defaults hereunder on the part of the Underwriter and the acceptance of such amount shall constitute a full release and discharge of all claims and rights of the Issuer against the Underwriter.

5. **Public Offering.**

The Underwriter agrees to make a bona fide public offering of all the Bonds initially at prices set forth on Schedule I hereto. After such initial public offering, the Underwriter reserves the right to change such offering prices from time to time as the Underwriter deems necessary.

6. **Establishment of the Issue Price.**

(a) The Underwriter agrees to assist the Issuer in establishing the issue price of the Bonds and shall execute and deliver to the Issuer at Closing an “issue price” or similar certificate, substantially in the form attached hereto as Schedule II, together with the supporting pricing wires or equivalent communications, with such modifications as may be appropriate or necessary, in the reasonable judgment of the Underwriter, the Issuer and Orrick, Herrington & Sutcliffe LLP (“Bond Counsel”), to accurately reflect, as applicable, the sales price or prices or the initial offering price or prices to the public of the Bonds.

(b) [Except as otherwise set forth in Schedule II attached hereto,] based on reporting by the Underwriter to the Issuer, the Issuer will treat the first price at which 10% of each maturity of the Bonds (the “10% test) is sold to the public as the issue price of that maturity (if different interest rates apply within a maturity, each separate CUSIP number within that maturity will be subject to the 10% test). At or promptly after the execution of this Agreement, the Underwriter shall report to the Issuer the price or prices at which it has sold to the public each maturity of Bonds. If at that time the 10% test has not been satisfied as to any maturity of the Bonds, the Underwriter agrees to promptly report to the Issuer the prices at which it sells the unsold Bonds of that maturity to the public. That reporting obligation shall continue, whether or not the Closing Date has occurred, until the 10% test has been satisfied as to the Bonds of that maturity or until all Bonds of that maturity have been sold to the public.

(c) The Underwriter confirms that it has offered the Bonds to the public on or before the date of this Agreement at the offering price or prices (the “initial offering price”), or at the corresponding yield or yields, set forth in Schedule II attached hereto, except as otherwise set forth therein. Schedule II also sets forth, as of the date of this Agreement, the maturities, if any, of the Bonds for which the 10% test has not been satisfied and for which the Issuer and the Underwriter agree that the restrictions set forth in the next sentence shall apply, which will allow the Issuer to treat the initial offering price to the public of each such maturity as of the sale date as the issue price of that maturity (the “hold-the-offering-price rule”). So long as the hold-the-offering-price rule remains applicable to any maturity of the Bonds, the Underwriter will neither offer nor sell unsold Bonds of that maturity to any person at a price that is higher than the initial offering price to the public during the period starting on the sale date and ending on the earlier of the following:

(i) the close of the fifth (5th) business day after the sale date; or
(ii) the date on which the Underwriter has sold at least 10% of that maturity of the Bonds to the public at a price that is no higher than the initial offering price to the public.

The Underwriter shall promptly advise the Issuer when it has sold 10% of that maturity of the Bonds to the public at a price that is no higher than the initial offering price to the public, if that occurs prior to the close of the fifth (5th) business day after the sale date.

(d) The Underwriter confirms that:

(i) any selling group agreement and any third-party distribution agreement relating to the initial sale of the Bonds to the public, together with the related pricing wires, contains or will contain language obligating each dealer who is a member of the selling group and each broker-dealer that is a party to such third-party distribution agreement, as applicable:

(A)(i) to report the prices at which it sells to the public the unsold Bonds of each maturity allocated to it, whether or not the Closing Date has occurred, until either all Bonds of that maturity allocated to it have been sold or it is notified by the Underwriter that the 10% test has been satisfied as to the Bonds of that maturity, provided that, the reporting obligation after the Closing Date may be at reasonable periodic intervals or otherwise upon request of the Underwriter, and (ii) to comply with the hold-the-offering-price rule, if applicable, if and for so long as directed by the Underwriter,

(B) to promptly notify the Underwriter of any sales of Bonds that, to its knowledge, are made to a purchaser who is a related party to an underwriter participating in the initial sale of the Bonds to the public (each such term being used as defined below), and

(C) to acknowledge that, unless otherwise advised by the dealer or broker-dealer, the Underwriter shall assume that each order submitted by the dealer or broker-dealer is a sale to the public.

(ii) any selling group agreement relating to the initial sale of the Bonds to the public, together with the related pricing wires, contains or will contain language obligating each dealer that is a party to a third-party distribution agreement to be employed in connection with the initial sale of the Bonds to the public to require each broker-dealer that is a party to such third-party distribution agreement to (A) report the prices at which it sells to the public the unsold Bonds of each maturity allocated to it, whether or not the Closing Date has occurred, until either all Bonds of that maturity allocated to it have been sold or it is notified by the Underwriter or the dealer that the 10% test has been satisfied as to the Bonds of that maturity, provided that, the reporting obligation after the Closing Date may be at reasonable periodic intervals or otherwise upon request of the Underwriter or the dealer, and (B) comply with the hold-the-offering-price rule, if applicable, if and for so long as directed by the Underwriter or the dealer and as set forth in the related pricing wires.
(e) The Issuer acknowledges that, in making the representations set forth in this section, the Underwriter will rely on (i) in the event a selling group has been created in connection with the initial sale of the Bonds to the public, the agreement of each dealer who is a member of the selling group to comply with the requirements for establishing issue price of the Bonds, including, but not limited to, its agreement to comply with the hold-the-offering-price rule, if applicable to the Bonds, as set forth in a selling group agreement and the related pricing wires, and (ii) in the event that a third-party distribution agreement was employed in connection with the initial sale of the Bonds to the public, the agreement of each broker-dealer that is a party to such agreement to comply with the requirements for establishing issue price of the Bonds, including, but not limited to, its agreement to comply with the hold-the-offering-price rule, if applicable to the Bonds, as set forth in the third-party distribution agreement and the related pricing wires. The Issuer further acknowledges that the Underwriter shall not be liable for the failure of any dealer who is a member of a selling group, or of any broker-dealer that is a party to a third-party distribution agreement, to comply with its corresponding agreement to comply with the requirements for establishing issue price of the Bonds, including, but not limited to, its agreement to comply with the hold-the-offering-price rule, if applicable to the Bonds.

(f) The Underwriter acknowledges that sales of any Bonds to any person that is a related party to the Underwriter shall not constitute sales to the public for purposes of this section. Further, for purposes of this section:

(i) “public” means any person other than an underwriter or a related party to an underwriter,

(ii) “underwriter” means (A) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the public and (B) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (A) to participate in the initial sale of the Bonds to the public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the public),

(iii) a purchaser of any of the Bonds is a “related party” to an underwriter if the underwriter and the purchaser are subject, directly or indirectly, to (i) at least 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other), and

(iv) “sale date” means the date of execution of this Agreement by all parties.

7. **Official Statement.**

The Issuer hereby consents to and ratifies the use and distribution by the Underwriter of the Preliminary Official Statement in connection with the public offering of the Bonds by the
Underwriter, and further confirms the authority of the Underwriter to use, and consents to the use of, the final Official Statement, dated as of the date hereof (the “Official Statement”) with respect to the Bonds in connection with the public offering and sale of the Bonds. The Issuer hereby represents and warrants that the Preliminary Official Statement previously furnished to the Underwriter was “deemed final” by the Issuer as of its date for purposes of Securities and Exchange Commission Rule 15c2-12 (“Rule 15c2-12”), except for permitted omissions. In accordance with Section 7(a) hereof, the Issuer agrees, at its cost, to provide to the Underwriter copies of the Official Statement. To the extent required by applicable the Municipal Securities Rulemaking Board (the “MSRB”) Rules, the Issuer hereby confirms that it does not object to distribution of the Preliminary Official Statement and the Official Statement in electronic form.

(a) The Issuer shall provide, or cause to be provided, to the Underwriter within seven business days after the date of this Agreement (but in any event not later than one business day prior to the Closing Date), copies of a final Official Statement in sufficient quantity to permit the Underwriter to comply with Rule 15c2-12 and other applicable rules of the Securities and Exchange Commission (the “SEC”) and the MSRB.

(b) The Issuer authorizes the Underwriter to file, to the extent required by applicable SEC or MSRB rule, and the Underwriter agrees to file or cause to be filed, the Official Statement with (i) the MSRB or its designee (including the MSRB’s Electronic Municipal Market Access system (“EMMA”)) or (ii) other repositories approved from time to time by the SEC (either in addition to or in lieu of the filings referred to above). If a supplemented or amended Official Statement is prepared in accordance with Section 7(c), the Underwriter also shall make any filings of the supplemented and amended Official Statement required by applicable SEC or MSRB rule.

(c) During the period ending on the 25th day after the hereinafter defined End of the Underwriting Period, the Issuer (i) shall not supplement or amend the Official Statement or cause the Official Statement to be supplemented or amended without the prior written consent of the Underwriter and (ii) shall notify the Underwriter promptly if any event shall occur, or information comes to the attention of the Issuer, that is reasonably likely to cause the Official Statement (whether or not previously supplemented or amended) to contain any untrue statement of a material fact or to omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. If, in the opinion of the Underwriter, such event requires the preparation and distribution of a supplement or amendment to the Official Statement, the Issuer shall prepare and furnish to the Underwriter, at the Issuer’s expense, such number of copies of the supplement or amendment to the Official Statement, in form and substance mutually agreed upon by the Issuer and the Underwriter, as the Underwriter may reasonably request.

(d) For purposes of this Agreement, the “End of the Underwriting Period” is used as defined in Rule 15c2-12 and shall occur on the later of (A) the Closing Date or (B) when the Underwriter no longer retains an unsold balance of the Bonds; unless otherwise advised in writing by the Underwriter on or prior to the Closing Date, the Issuer may assume that the End of the Underwriting Period is the Closing Date.
8. **Representations and Warranties of the Issuer.**

The Issuer hereby represents and warrants to the Underwriter that:

(a) The Issuer is duly organized and existing under the constitution and laws of the State of California (the “State”) and has full legal right, power and authority under the constitution and laws of the State to adopt the Resolution, to execute and deliver this Agreement, the Trust Agreement, the Continuing Disclosure Agreement, dated the Closing Date (the “Continuing Disclosure Agreement”), between the Issuer and U.S. Bank as trustee and dissemination agent[, the Escrow Agreement, dated as of [February] 1, 2019 (the “Escrow Agreement”), with U.S. Bank, as trustee and escrow agent[,] (collectively, the “Issuer Documents”) and the Official Statement, to issue, sell and deliver the Bonds as described herein, and to carry out and to consummate the transactions contemplated by the Resolution, the Issuer Documents” and the Official Statement.

(b) By all necessary official action of the Issuer prior to or concurrently with the acceptance hereof, the Issuer has duly authorized and approved (i) the distribution of the Preliminary Official Statement and the execution, delivery and distribution of the Official Statement for use by the Underwriter in connection with the public offering of the Bonds, (ii) the issuance and sale of the Bonds upon the terms set forth herein and as contemplated by the Resolution, the Trust Agreement and the Official Statement and (iii) the execution and delivery of, and the performance by the Issuer of the obligations on its part contained in, the Bonds and the Issuer Documents.

(c) The Bonds will be issued in conformity with the provisions of the Resolution and the Trust Agreement and will be entitled to the benefit and security of the Trust Agreement, including the pledge or application thereunder of the Farebox Revenues.

(d) This Agreement constitutes a legal, valid and binding obligation of the Issuer enforceable in accordance with its terms; the other Issuer Documents, when duly executed and delivered, will constitute the legal, valid and binding obligations of the Issuer enforceable in accordance with their respective terms; and the Bonds, when issued, authenticated and delivered in accordance with the Trust Agreement, will constitute the legal, valid and binding obligations of the Issuer enforceable in accordance with their terms; in all cases, except as the enforceability of this Agreement, the other Issuer Documents and the Bonds may be limited by application of limitations on enforceability as may result from bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors’ rights generally from time to time in effect and from the application of general principles of equity, the exercise of judicial discretion, limitations on legal remedies against public entities in the State and from public policy limitations on the exercise of any rights to indemnification and contribution (collectively, “Creditors’ Rights Laws”).

(e) As of the time of acceptance hereof and as of the time of the hereinafter defined Closing, except as otherwise disclosed in the Preliminary Official Statement and the Official Statement, the Issuer is not in breach of or default in any material respect under its joint exercise of powers agreement or its bylaws or under any applicable constitutional provision, law or administrative regulation of the State or the United States or any applicable judgment or decree.
or any loan agreement, indenture, bond, note, resolution, agreement or other instrument to which the Issuer is a party or to which the Issuer is or any of its property or assets are otherwise subject, and no event has occurred and is continuing which constitutes or with the passage of time or the giving of notice, or both, would constitute a material default or event of default by the Issuer under any of the foregoing.

(f) The adoption of the Resolution, execution and delivery of the Bonds and the Issuer Documents, and compliance with the provisions on the Issuer’s part contained therein, will not conflict with or constitute a breach of or default under any constitutional provision, law, administrative regulation, judgment, decree, loan agreement, indenture, bond, note, resolution, agreement or other instrument to which the Issuer is a party or to which the Issuer or any of its property or assets are otherwise subject, and no event has occurred and is continuing which constitutes or with the passage of time or the giving of notice, or both, would constitute a material default or event of default by the Issuer under any of the foregoing.

(g) All authorizations, approvals, consents and orders of any governmental authority, legislative body, board, agency or commission having jurisdiction which are required for the due authorization of, which would constitute a condition precedent to, or the absence of which would materially adversely affect, the issuance of the Bonds or the due performance by the Issuer of its obligations under the Issuer Documents and the Bonds have been duly obtained or will be obtained prior to the Closing, except for: (i) such authorizations, approvals, consents and orders (if any) as may be required under the Blue Sky or securities laws of any jurisdiction in connection with the offering and sale of the Bonds and (ii) authorizations, approvals, consents and orders that are required to be obtained or renewed periodically, such as budgets, licenses and permits.

(h) The Preliminary Official Statement as of its date and as of the date hereof did not and does not, and the Official Statement as of its date does not and as of the Closing Date will not, contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that, the Issuer makes no statement (i) regarding information permitted to be excluded from the Preliminary Official Statement under Rule 15c2-12 and (ii) as to information in the Preliminary Official Statement and the Official Statement under the caption “UNDERWRITING,” [information relating to the Bond Insurer] information relating to the Reserve Facility Provider and the Reserve Facility, information in “Appendix D - BOOK-ENTRY SYSTEM” and information relating to the Depository Trust Company (the “DTC”) or its book-entry only system (collectively, the “Excluded Information”).

(i) The audited financial statements of the Issuer contained in Appendix A to the Preliminary Official Statement and the Official Statement fairly present the financial position and results of operations of the Issuer as of the dates indicated and for the periods therein specified and are set forth in accordance with generally accepted accounting principles consistently applied, and, since the date thereof, and except as disclosed in the Preliminary Official Statement and the Official Statement or otherwise disclosed in writing to the Underwriter, there has not been any materially adverse change in the financial condition of the
Issuer since June 30, 2018 and there has been no occurrence, circumstance or combination thereof which is reasonably expected to result in any such materially adverse change.

(j) As of the time of acceptance hereof and the Closing, except as disclosed in the Preliminary Official Statement and the Official Statement, there is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, regulatory authority, public board or body pending with respect to which the Issuer has been served with process or, to the knowledge of the representative of the Issuer executing this Agreement, threatened against the Issuer: (i) questioning the existence of the Issuer or the titles of its authorized representatives to their respective offices, (ii) seeking to prohibit, restrain or enjoin the issuance, sale or delivery of the Bonds or the pledge or collection by the Issuer of the Farebox Revenues or the making of any other required deposits with respect to the Bonds, (iii) in any way contesting or affecting the validity or enforceability of, or the power or authority of the Issuer to, issue the Bonds, adopt the Resolution or enter into the Issuer Documents, (iv) contesting in any way the completeness or accuracy of the Preliminary Official Statement or the Official Statement, or any amendment or supplement thereto, (v) wherein an unfavorable decision, ruling or finding would materially adversely affect the financial position or condition of the Issuer or would result in any material adverse change in the ability of the Issuer to pledge or apply the Farebox Revenues or to pay debt service on the Bonds, or (vi) contesting the status of the interest on the Bonds as excludable from gross income for federal income tax purposes or as exempt from any applicable state tax.

(k) The Issuer has received all licenses, permits or other regulatory approvals required (if any) for the pledge, collection and/or application by the Issuer of the Farebox Revenues and the Issuer is not in material default, and no event has occurred which would constitute or result in a material default, under any such licenses, permits or approvals.

(l) The Issuer will undertake, pursuant to the Trust Agreement and the Continuing Disclosure Agreement, to timely post on EMMA (or otherwise file as required by the MSRB) the information required by Rule 15c2-12 and, unless otherwise described in the Preliminary Official Statement and the Official Statement, the Issuer has not failed during the previous five years to comply in all material respects with any previous undertakings in a written continuing disclosure contract or agreement under Rule 15c2-12.

(m) The Issuer has the legal authority to apply proceeds of the Bonds for the purposes contemplated by the Resolution and the Trust Agreement.

(n) Any certificate signed by an authorized representative of the Issuer and delivered to the Underwriter shall be deemed a representation and warranty by the Issuer to the Underwriter as to the statements made therein.

9. **Representations and Warranties of the Underwriter.**

The Underwriter hereby represents and warrants to the Issuer that:

(a) The Underwriter is an entity duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization.
This Agreement has been duly authorized, executed and delivered by the Underwriter and, assuming the due authorization, execution and delivery by the Issuer, is the legal, valid and binding obligation of the Underwriter enforceable in accordance with its terms, except as the enforceability of this Agreement may be limited by application of Creditors’ Rights Laws.

It is licensed by and registered with the Financial Industry Regulatory Authority as a broker-dealer and the MSRB as a municipal securities dealer.

The Underwriter is as of the date hereof, and will be, as of the Closing Date, in full compliance with the requirements of MSRB Rule G-37 (“Rule G-37”), including all reporting requirements, in so far as Rule G-37 relates to the issuance and sale of the Bonds.

10. **Covenants of the Issuer.**

The Issuer hereby covenants with the Underwriter that:

(a) Prior to the Closing Date, except as otherwise contemplated by the Official Statement, the Issuer shall not create, assume or guarantee any indebtedness payable from, or pledge or otherwise encumber, the Farebox Revenues or other assets, properties, funds or interests that will be pledged as security or be available as a source of payment for the Bonds pursuant to the Trust Agreement.

(b) The Issuer shall furnish such information, execute such instruments and take such other action in cooperation with the Underwriter as the Underwriter may reasonably request, (i) to qualify the Bonds for offer and sale under the Blue Sky or other securities laws and regulations of such states and other jurisdictions of the United States as the Underwriter may designate and (ii) to determine the eligibility of the Bonds for investment under the laws of such states and other jurisdictions, and will use its best efforts to continue such qualifications in effect so long as required for distribution of the Bonds; provided that the Issuer shall not be required to qualify as a foreign corporation in, or submit to the general jurisdiction of, any other jurisdiction or to file any general or special consent to service of process under the laws of any jurisdiction in which the Issuer is not now subject.

(c) The Issuer shall not knowingly take or omit to take any action that, under existing law, may adversely affect the exclusion from gross income for federal income tax purposes, or the exemption from any applicable state tax, of the interest on the Bonds.

11. **Closing.**

(a) At __ A.M., Pacific Time, on [February __], 2019, or at such other time or date as the Underwriter and the Issuer may mutually agree upon as the date and time of the Closing (the “Closing Date”), the Issuer shall deliver or cause to be delivered to the Underwriter (i) the Bonds in book-entry form through the Fast Automated Securities Transfer delivery system of DTC, duly executed and authenticated; and (ii) the documents, certificates and opinions hereinafter mentioned in Section 12 hereof at the offices of Bond Counsel in San Francisco, California or at such other place as shall be mutually agreed upon by the Issuer and the Underwriter. The Underwriter will accept such delivery and pay the Purchase Price of the Bonds.
as set forth in Section 3 hereof in immediately available funds. This payment and delivery, together with the delivery of the aforementioned documents, is herein called the "Closing." The Bonds shall be delivered in definitive form, duly executed by the Issuer and authenticated in the manner set forth in the Trust Agreement. The Bonds shall be made available to the Underwriter for purposes of inspection at least one business day prior to the Closing Date.

(b) The Bonds will be delivered as fully-registered bonds, bearing CUSIP numbers, with a single bond for each maturity of each series of the Bonds (or, if so provided in Schedule I hereto, for each separate interest rate within a maturity), and registered in the name of Cede & Co., as nominee of DTC, which will act as securities depository for the Bonds.

12. **Closing Conditions.**

The Underwriter has entered into this Agreement in reliance upon the representations, warranties, covenants and agreements of the Issuer contained herein and upon the accuracy of the statements to be contained in the documents and instruments to be delivered at the Closing. Accordingly, the Underwriter’s obligations under this Agreement to purchase, accept delivery of and pay for the Bonds are subject, at the option of the Underwriter, to the performance by the Issuer of its obligations required to be performed under this Agreement at or prior to the Closing and shall also be subject to the following additional conditions:

(a) The Underwriter shall receive on the Closing Date, in form and substance satisfactory to Orrick, Herrington & Sutcliffe LLP, as bond counsel (“Bond Counsel”) and to the Underwriter, each of the following items:

(i) The approving opinion of Bond Counsel, addressed to the Issuer dated the Closing Date, and in substantially the form included as Appendix F to the Official Statement.

(ii) The supplemental opinion of Bond Counsel, addressed to the Underwriter, dated the Closing Date, and in substantially the form attached hereto as Exhibit A.

(iii) The opinion of Hanson Bridgett LLP as counsel to the Issuer (“Issuer’s Counsel”) addressed to the Underwriter and the Issuer, dated the Closing Date, and in substantially the form attached as Exhibit B hereto.

(iv) The opinion of counsel to U.S. Bank, addressed to the Underwriter and the Issuer, dated the Closing Date, addressing the matters set forth below:

(A) U.S. Bank is a national banking association duly organized, validly existing and in good standing under the laws of the United States of America and is authorized to exercise trust powers;

(B) U.S. Bank had all requisite power, authority and legal right to execute and deliver the Existing Trust Agreement and has all requisite power, authority and legal right to execute and deliver the Fourth Supplemental Trust Agreement[; the Escrow Agreement] and the Continuing Disclosure Agreement (hereinafter collectively referred to as the “Bank Documents”) and to perform its obligations under the Bank Documents;
(C) U.S. Bank has duly authorized, executed and delivered the Bank Documents. Assuming the due authorization, execution and delivery thereof by the Issuer, the Bank Documents are the legal, valid and binding agreements of U.S. Bank, enforceable in accordance with their terms against U.S. Bank;

(D) To our knowledge, no consent, approval, authorization or other action of any governmental agency or regulatory authority having jurisdiction over U.S. Bank that has not been obtained by U.S. Bank is required for the authorization, execution, delivery and performance by U.S. Bank of the Bank Documents;

(E) To our knowledge, there is no litigation pending against U.S. Bank to restrain U.S. Bank's participation in, or in any way contesting the powers of U.S. Bank with respect to, the transactions contemplated by the Bank Documents; and

(F) To our knowledge, the execution and delivery of the Bank Documents by U.S. Bank and compliance with the provisions of the Bank Documents by U.S. Bank will not violate any provisions of any law or regulation governing U.S. Bank or any order of any governmental authority having jurisdiction over U.S. Bank or any agreement or other instrument to which U.S. Bank is party or by which U.S. Bank is bound.

(v) The opinion of Nixon Peabody LLP, counsel to the Underwriter ("Underwriter's Counsel"), addressed to the Underwriter, dated the Closing Date, to the effect that: (A) the Bonds are exempt from registration under the Securities Act of 1933, as amended (the "Securities Act"), and the Trust Agreement is exempt from qualification under the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act") and (B) the Continuing Disclosure Agreement meets the requirements of Rule 15c2-12. In addition, such counsel shall state in its letter containing the foregoing opinion or in a separate letter addressed to the Underwriter that, without having undertaken to determine independently, or to assume responsibility for, the accuracy, completeness or fairness thereof, and based solely on their participation in meetings and telephone conferences at which representatives of the Issuer, PFM Financial Advisors LLC and Ross Financial (the "Municipal Advisors"), Bond Counsel, the Underwriter and others were at various times present, nothing has come to the attention of such counsel that would lead such counsel to believe that the information and statements in the Preliminary Official Statement, as of its date and as of the date of this Agreement, and in the Official Statement, as of its date and as of the date of such letter, contained or contains any untrue statement of a material fact or omitted or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that, no view need be expressed as to the Preliminary Official Statement, information permitted by Rule 15c2-12 to be omitted, and as to the Preliminary Official Statement and the Official Statement, the financial statements of the Issuer, any other financial, forecast, technical or statistical data, and any information in the Official Statement respecting [the Bond Insurer, the Policy,] the Reserve Facility Provider, the Reserve Facility or DTC or as to the Excluded Information.
(vi) A certificate dated the Closing Date of an authorized representative of the Issuer to the effect that:

(A) the representations and warranties of the Issuer contained in this Agreement are true and correct in all material respects on and as of the Closing Date with the same effect as if made on the Closing Date;

(B) the Issuer has complied with all of the agreements and satisfied all of the conditions on its part to be performed or satisfied at or prior to the Closing;

(C) no event affecting the Issuer has occurred since the date of the Official Statement which has not been disclosed therein or in any supplement or amendment thereto which event should be disclosed in the Official Statement in order to make the statements therein, excluding the Excluded Information, in the light of the circumstances under which they were made, not misleading in any material respect; and

(D) there is no action, suit, proceeding or investigation before or by any court or public board or body pending or threatened against the Issuer to restrain or enjoin the issuance, execution or delivery of the Bonds or in any manner questioning the proceedings or authority for the issuance of the Bonds or affecting directly or indirectly the validity of the Bonds or of any provisions made or authorized for their payment or contesting the existence of the Issuer or the title of any of its authorized representatives to their respective offices.

(vii) Evidence that the Bonds have received ratings of ___, ___, and ___ by ___, ___, and ___, respectively, which are in effect as of the Closing Date.

(viii) A certificate of an officer of U.S. Bank, acceptable to the Underwriter, dated the Closing Date, to the effect that the Bank Documents have been duly authorized, executed and delivered by U.S. Bank and the Bonds have been authenticated in accordance with the Trust Agreement by a duly authorized officer or signatory of U.S. Bank; and an incumbency certificate of U.S. Bank, in form and content acceptable to the Underwriter and Bond Counsel, dated the Closing Date, with respect to the officers or other signatories of U.S. Bank who have authenticated the Bonds and executed and delivered the Bank Documents.

(ix) A tax certificate executed by a duly authorized representative of the Issuer, in form and substance satisfactory to Bond Counsel.

(x) An Information Return for Tax-Exempt Bond Issues (Internal Revenue Service Form 8038-G), in a form satisfactory to Bond Counsel for filing, executed by a duly authorized representative of the Issuer.

(xi) A copy of the Blanket Letter of Representations to DTC relating to the Bonds signed by a representative of the Issuer.

(xii) [A certified copy of the Policy and any other documents executed in connection therewith; an opinion of counsel to the Bond Insurer addressed to the Issuer and
Underwriter, and/or a certificate signed by an authorized officer of, the Bond Insurer, dated the Closing Date, each in customary form, addressing, among other matters, the enforceability of the Policy and the accuracy of the information provided by the Bond Insurer for inclusion in the Official Statement.]

(xiii) An executed copy of the Reserve Facility and any other documents executed in connection therewith; a certificate of the Reserve Facility Provider, dated the Closing Date, in customary form, signed by an authorized officer of the Reserve Facility Provider, to the effect that the information provided by the Reserve Facility Provider for inclusion in the Official Statement is accurate; and an opinion of counsel to the Reserve Facility Provider, dated the Closing Date, in customary form, addressed to the Underwriter and the Issuer, addressing, among other matters, the enforceability of the Reserve Facility.

(xiv) [A report from [_____] a firm of certified public accountants, as verification agent (the “Verification Agent”), verifying the mathematical accuracy of the related schedules and computations with respect to the yield on the Bonds and the availability of sufficient funds (including investment income) for payment of the obligations to be refunded; the executed Escrow Agreement, if any; and an opinion of Bond Counsel, dated the Closing Date, in form and substance satisfactory to the Underwriter, relating to the defeasance of the obligations to be refunded.]

(xv) A copy of the joint exercise of powers agreement, entered into on October 3, 1996, by the City and County of San Francisco, the San Mateo County Transit District and the Santa Clara Valley Transportation Authority, formerly known as the Santa Clara County Transit District.

(xvi) Executed copies of the Amended and Restated Credit Agreement, dated as of ________, 2019, between the Issuer and DNT Asset Trust and the Credit Agreement, dated as of ________, 2019, between the Issuer and DNT Asset Trust.

(xvii) Such additional legal opinions, certificates, instruments and other documents as the Underwriter or Bond Counsel reasonably may request, in form and substance satisfactory to the Underwriter or Bond Counsel, as the case may be, to evidence (A) compliance by the Issuer with legal requirements reasonably relating to the transactions contemplated by the Official Statement and this Agreement, (B) the truth and completeness, as of the date thereof and as of the time of the Closing, of the statements and information contained in the Official Statement, (C) the truth and completeness, as of the time of the Closing, of the representations and warranties of the Issuer contained in this Agreement and the certificates and other documents referred to in this Agreement, and (D) the due performance or satisfaction by the Issuer at or prior to the Closing of all agreements then to be satisfied.

(b) At the time of the Closing, the representations and warranties of the Issuer contained in this Agreement shall be true, complete and correct in all material respects as if made on and as of the Closing Date; the Issuer shall have complied with all agreements and satisfied all the conditions on its part to be performed at or prior to the Closing; the Bonds shall have been duly executed and delivered and authenticated; the Official Statement shall have been executed and delivered by the Issuer at or prior to the Closing in sufficient time to permit the Underwriter
to comply with its obligations under Rule 15c2-12; the Issuer Documents and all other financing or operative documents required in connection with the issuance of the Bonds shall have been duly executed and delivered by the appropriate parties thereto; the Resolution, the Issuer Documents and such other financing or operative documents shall be in full force and effect and shall not have been amended, modified or supplemented, except as may have been agreed to in writing by the Underwriter; the [Policy and the] Reserve Facility shall have been duly executed, issued and delivered; the proceeds of the sale of the Bonds shall have been paid to the Issuer or its designee for deposit for use as described in the Official Statement, the Resolution and the Issuer Documents; and the Issuer shall have adopted and there shall be in full force and effect such resolutions as, in the opinion of Bond Counsel, shall be necessary in connection with the transactions contemplated by this Agreement and as described in the Official Statement.

13. **Termination Events.**

The Underwriter shall have the right to cancel its obligation to purchase the Bonds, by written notice to the Issuer terminating the obligation of the Underwriter to accept delivery and make any payment for the Bonds, if, between the Effective Date and the Closing Date, in the sole reasonable judgement of the Underwriter, the market price or marketability of the Bonds at the initial offering price, or the ability of the Underwriter to enforce contracts for the sale of the Bonds, shall have been materially adversely affected, by reason of any of the following (each a “Termination Event”):

(a) an amendment to the Constitution of the United States or the State of California shall have been passed or legislation shall have been introduced in or enacted by the Congress of the United States or the legislature of any state having jurisdiction of the subject matter or legislation pending in the Congress of the United States shall have been amended or legislation shall have been recommended to the Congress of the United States or to any state having jurisdiction of the subject matter or otherwise endorsed for passage (by press release or other form of official notice) by the President of the United States, the Treasury Department of the United States, the Internal Revenue Service or the Chairman or ranking minority member of the Committee on Finance of the United States Senate or the Committee on Ways and Means of the United States House of Representatives, or legislation shall have been proposed for consideration by either such Committee by any member thereof or presented as an option for consideration by either such Committee by the staff of such Committee or by the staff of the joint Committee on Taxation of the Congress of the United States, or legislation shall have been favorably reported for passage to either House of the Congress of the United States by a Committee of such House to which such legislation has been referred for consideration, with respect to federal or state taxation upon interest received or obligations of the general character of the Bonds;

(b) legislation enacted, introduced in the Congress or recommended for passage in an official notice from the President of the United States, or a decision rendered by a court established under Article III of the Constitution of the United States or by the Tax Court of the United States, or an order, ruling, regulation (final, temporary or proposed) or official statement issued or made by or on behalf of the SEC, or any other governmental agency having jurisdiction of the subject matter shall have been made or issued to the effect that obligations of the general character of the Bonds are not exempt from registration under the Securities Act or that the Trust Agreement is not exempt from qualification under the Trust Indenture Act;
(c) the declaration of war or engagement in or escalation of military hostilities by the United States or the occurrence of any other national emergency or calamity or terrorism affecting the operation of the government of, or the financial community in, the United States;

(d) the declaration of a general banking moratorium by federal, New York or California authorities or the general suspension of trading on any national securities exchange;

(e) a material disruption in securities settlement, payment or clearance services affecting the Bonds shall have occurred;

(f) the imposition by the New York Stock Exchange or other national securities exchange, or any governmental authority, of any material restrictions not now in force with respect to the Bonds or obligations of the general character of the Bonds, or the material increase of any such restrictions now in force, including those relating to the extension of credit by, or the charge to the net capital requirements of, the Underwriter;

(g) an order, decree or injunction of any court of competent jurisdiction, issued or made to the effect that the issuance, offering or sale of obligations of the general character of the Bonds, or the issuance, offering or sale of the Bonds, as contemplated hereby or by the Official Statement, is or would be in violation of the federal securities laws as amended and then in effect;

(h) the withdrawal or downgrading of any rating assigned to the Bonds by a nationally recognized securities rating agency; or

(i) any event occurring, or information becoming known which, in the reasonable judgment of the Underwriter, makes untrue in any material respect any statement or information contained in the Official Statement, or has the effect that the Official Statement contains any untrue statement of material fact or omits to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading and, in either such event, the Issuer refuses to permit the Official Statement to be supplemented to supply such statement or information or the effect of the Official Statement as so supplemented is, in the judgment of the Underwriter, to materially adversely affect the market for the Bonds or the sale, at the contemplated offering prices (or yields) of the Bonds or the ability of the Underwriter to enforce contracts for the sale of the Bonds.

Upon the occurrence of a Termination Event and the termination of this Agreement by the Underwriter, all obligations of the Issuer and the Underwriter under this Agreement shall terminate, without further liability, except that the Issuer and the Underwriter shall pay their respective expenses as set forth in Section 14 hereof

14. Payment of Expenses.

(a) The Issuer shall pay or cause to be paid, and the Underwriter shall be under no obligation to pay, the expenses and costs incident to the authorization, issuance, delivery and sale of the Bonds to the Underwriter, including but not limited to: (a) the costs of the preparation and printing, or other reproduction (for distribution on or prior to the date hereof) of this Agreement and the other Issuer Documents and the cost of preparing, issuing, and delivery of the Bonds; (b)
fees charged by any rating agency for rating the Bonds; (c) fees and disbursements of U.S. Bank incurred in connection with acting as Trustee[, as Escrow Agent] and as Dissemination Agent and fees of counsel to U.S. Bank; (d) fees and disbursements of Issuer Counsel; (e) fees and disbursements of Bond Counsel; (f) fees and disbursements of the Municipal Advisors, [the Verification Agent], and any accountants or other experts or consultants retained by the Issuer; (g) the cost of electronic distribution of the Preliminary Official Statement and any supplements and amendments thereto and the cost of printing and electronic distribution of the Official Statement and any supplements and amendments thereto, including the requisite number of copies thereof for distribution by the Underwriter; (h) [the premium for the Policy]; and (i) the premium for the Reserve Facility. The Issuer shall pay for all incidental costs (including, but not limited to transportation, lodging, meals and entertainment of Issuer personnel) paid by the Underwriter on behalf of the Issuer in connection with the marketing, issuance and delivery of the Bonds. Expenses and costs payable by the Issuer pursuant to this Agreement may be paid from Bond proceeds to the extent permitted by the Tax Certificate and the Trust Agreement.

(b) The Underwriter shall pay and the Issuer shall be under no obligation to pay expenses incurred by the Underwriter in connection with the public offering and distribution of the Bonds, including, but not limited to: (i) the costs of qualifying the Bonds for sale in the various states chosen by the Underwriter; (ii) all advertising expenses in connection with the offering of the Bonds; (iii) the fees and disbursements of Underwriter's Counsel and "blue sky" expenses, if any; and (iv) all fees of the California Debt and Investment Advisory Commission, CUSIP fees and out-of-pocket disbursements and expenses incurred by the Underwriter in connection with the offering and distribution of the Bonds, except as provided in (a) above.

15. Notices.

All notices ("Notices") provided for in this Agreement shall be in writing delivered to the applicable Notice Address set forth below (or at such other address as may have been designated by written Notice) and may be given by personal or courier delivery, registered or certified mail, facsimile transmission or electronic communication, provided that delivery by facsimile transmission or electronic communication must be confirmed by the sender.

Issuer:

Peninsula Corridor Joint Powers Board
1250 San Carlos Avenue
San Carlos, California 94070
Attention: Derek Hansel, Chief Financial Officer

Underwriter:

J.P. Morgan Securities LLC
560 Mission Street, Floor 3
San Francisco, California 94105
Attention: Michael Carlson, Managing Director
16. **Authority of Underwriter.**

The Underwriter represents and warrants to the Issuer that it is duly authorized to enter into this Agreement and to take all actions required or contemplated to be performed by the Underwriter under this Agreement.

17. **Governing Law; Venue.**

The validity, interpretation and performance of this Agreement shall be governed by the laws of the State of California. Any and all disputes or legal actions or proceedings arising out of this Agreement or any document related hereto shall be filed and maintained in a court of competent jurisdiction for matters arising in the County of San Mateo, San Mateo, California; provided that the Issuer may waive the requirement of venue. By execution of and delivery of this Agreement, the parties hereto accept and consent to the aforesaid jurisdiction.

18. **Parties in Interest; Force and Effect.**

This Agreement is made solely for the benefit of the Issuer and the Underwriter (including their successors and assigns), and no other person shall acquire or have any right hereunder or by virtue hereof. All of the representations, warranties and agreements of the Issuer contained in this Agreement shall remain operative and in full force and effect regardless of: (a) any investigations made by or on behalf of the Underwriter; or (b) delivery of and payment for the Bonds pursuant to this Agreement. The agreements contained in Section 14 and this Section 18 shall survive any termination of this Agreement.

19. **Entire Agreement.**

This Agreement, when accepted by the Issuer, shall constitute the entire agreement among the Issuer and the Underwriter with respect to the subject matter hereof and is made solely for the benefit of the Issuer and the Underwriter (including the successors or assigns of the Underwriter). No other person shall acquire or have any right hereunder by virtue hereof, except as provided herein.

20. **Section Headings.**

Section headings have been included in this Agreement as a matter of convenience of reference only and are not to be used in the interpretation of any provisions of this Agreement.

21. **Severability.**

In case any one or more of the provisions contained herein shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision hereof.

22. **Counterparts.**

This Agreement may be executed in one or more counterparts with the same force and effect as if all signatures appeared on a single instrument.
23. **Signatures.**

Upon execution by the Issuer and the Underwriter, this Agreement shall be binding upon the Issuer and the Underwriter as of the Effective Date.
Very truly yours,

J.P. MORGAN SECURITIES LLC,  
as Underwriter

By: ____________________________  
   Authorized Officer

Accepted

THE PENINSULA CORRIDOR  
JOINT POWERS BOARD

By: ____________________________  
    Derek S. Hansel  
    Chief Financial Officer
SCHEDULE I

TERMS OF THE BONDS

<table>
<thead>
<tr>
<th>Maturity Date</th>
<th>Principal Amount ($)</th>
<th>Interest Rate (%)</th>
<th>Yield (%)</th>
<th>Price (%)</th>
</tr>
</thead>
</table>

REDEMPTION PROVISIONS

Optional Redemption. The Bonds shall be subject to redemption prior to their respective stated maturities, at the option of the Issuer, from any source of available funds, as a whole or in part on any date (and if in part, in such amount and such order of maturity as the Issuer shall specify and within a maturity by lot or by such other method as the Issuer may direct and in Authorized Denominations), on or after October 1, _____ at the principal amount thereof, plus accrued interest to the date fixed for redemption, [without premium].

Mandatory Redemption. The Bonds maturing on October 1, ____, will also be subject to redemption in part, by lot, from Mandatory Sinking Account Payments on each October 1 on or after October 1, ____, at the principal amount of the Bonds to be redeemed plus accrued interest thereon to the date fixed for redemption, without premium, as follows:
<table>
<thead>
<tr>
<th>Sinking Account Payment Date</th>
<th>Sinking Account Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(October 1)</td>
<td>$</td>
</tr>
</tbody>
</table>

* Final Maturity

The Bonds maturing on October 1, _____, will also be subject to redemption in part, by lot, from Mandatory Sinking Account Payments on each October 1 on or after October 1, ___, at the principal amount of the Bonds to be redeemed plus accrued interest thereon to the date fixed for redemption, without premium, as follows:

<table>
<thead>
<tr>
<th>Sinking Account Payment Date</th>
<th>Sinking Account Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(October 1)</td>
<td>$</td>
</tr>
</tbody>
</table>

* Final Maturity
SCHEDULE II

ISSUE PRICE CERTIFICATE

PENINSULA CORRIDOR JOINT POWERS BOARD
FAREBOX REVENUE BONDS
2019 SERIES A

This certificate is furnished by, J.P. Morgan Securities LLC (the “Underwriter”) in connection with the Bond Purchase Agreement dated [______ __], 2019 (the “Purchase Agreement”), between the Underwriter and the Peninsula Corridor Joint Powers Board (the “Issuer”) for the sale of $[__________] aggregate principal amount of Peninsula Corridor Joint Powers Board Farebox Revenue Bonds 2019 Series A (the “Bonds”).

THE UNDERSIGNED HEREBY CERTIFIES AS FOLLOWS:

[1. Sale of the General Rule Maturities. As of the date of this certificate, for each Maturity of the General Rule Maturities, the first price at which at least 10% of such Maturity was sold to the Public is the respective price listed in Appendix 1.]


(a) The Underwriter offered the Hold-the-Offering-Price Maturities to the Public for purchase at the respective initial offering prices listed in Appendix 2 (the “Initial Offering Prices”) on or before the Sale Date. A copy of the pricing wire or equivalent communication for the Bonds is attached to this certificate as Appendix 3.

(b) As set forth in the Purchase Agreement, the Underwriter has agreed in writing that, (i) for each Maturity of the Hold-the-Offering-Price Maturities, it would neither offer nor sell any of the Bonds of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the “hold-the-offering-price rule”), and (ii) any selling group agreement shall contain the agreement of each dealer who is a member of the selling group, and any retail distribution agreement shall contain the agreement of each broker-dealer who is a party to the retail distribution agreement, to comply with the hold-the-offering-price rule. [Pursuant to such agreements, no Underwriter (as defined below) has offered or sold any Maturity of the Bonds at a price that is higher than the respective Initial Offering Price for that Maturity of the Bonds during the Holding Period.] [The Underwriter has not offered or sold any Maturity of the Bonds at a price that is higher than the respective Initial Offering Price for that Maturity of the Bonds during the Holding Period.]

3. Defined Terms.

(a) General Rule Maturities means those Maturities of the Bonds listed in Appendix 1 hereto as the “General Rule Maturities.”

(b) Hold-the-Offering-Price Maturities means those Maturities of the Bonds listed in Appendix 2 hereto as the “Hold-the-Offering-Price Maturities.”

Schedule II - 1
(c) **Holding Period** means, with respect to a Hold-the-Offering-Price Maturity, the period starting on the Sale Date and ending on the earlier of (i) the close of the fifth business day after the Sale Date ([______], 2019), or (ii) the date on which the Underwriter has sold at least 10% of such Hold-the-Offering-Price Maturity to the Public at prices that are no higher than the Initial Offering Price for such Hold-the-Offering-Price Maturity.

(d) **Issuer** means the Peninsula Corridor Joint Powers Board.

(e) **Maturity** means Bonds with the same credit and payment terms. Bonds with different maturity dates, or Bonds with the same maturity date but different stated interest rates, are treated as separate maturities.

(f) **Public** means any person (including an individual, trust, estate, partnership, association, company, or corporation) other than an Underwriter or a related party to an Underwriter. The term “related party” for purposes of this certificate means any two or more persons who have greater than 50 percent common ownership, directly or indirectly.

(g) **Sale Date** means the first day on which there is a binding contract in writing for the sale of a Maturity of the Bonds. The Sale Date of the Bonds is February [__], 2019.

(h) **Underwriter** means (i) any person that agrees pursuant to a written contract with the Issuer (or with the Underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Bonds to the Public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the Public).

The representations set forth in this certificate are limited to factual matters only. Nothing in this certificate represents the Underwriter’s interpretation of any laws, including specifically Sections 103 and 148 of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations thereunder. The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the Tax Certificate and with respect to compliance with the federal income tax rules affecting the Bonds, and by Orrick, Herrington & Sutcliffe LLP, as bond counsel in connection with rendering its opinion that the interest on the Bonds is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038-G, and other federal income tax advice that it may give to the Issuer from time to time relating to the Bonds. The representations set forth herein are not necessarily based on personal knowledge and, in certain cases, the undersigned is relying on representations made by the other members of the Underwriting Group.

J.P. MORGAN SECURITIES LLC

By:______________________________
    Authorized Officer
APPENDIX I TO SCHEDULE II

GENERAL RULE MATURITIES
APPENDIX 2 TO SCHEDULE II

HOLD-THE-PRICE MATURITIES
EXHIBIT A
FORM OF SUPPLEMENTAL BOND COUNSEL OPINION

[Closing Date]

J.P. Morgan Securities LLC
San Francisco, California

Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019 Series A
(Supplemental Opinion)

Ladies and Gentlemen:

This letter is addressed to you, as underwriter (the "Underwriter"), pursuant to Section 12(a)(2) of the Bond Purchase Agreement, dated __________ (the "Bond Purchase Agreement"), between you and the Peninsula Corridor Joint Powers Board (the "Issuer"), providing for the purchase of $_________ aggregate principal amount of Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019 Series A (the "Bonds"). The Bonds are being issued pursuant to a Trust Agreement, dated as of October 1, 2007, as supplemented and amended, including as supplemented and amended by a Fourth Supplemental Trust Agreement, dated as of February 1, 2019 (herein collectively referred to as the "Trust Agreement"), between the Issuer and U.S. Bank National Association, as trustee (the "Trustee"). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Trust Agreement or, if not defined in the Trust Agreement, in the Bond Purchase Agreement.

We have delivered our final legal opinion (the "Bond Opinion") as bond counsel to the Issuer concerning the validity of the Bonds and certain other matters, dated the date hereof and addressed to the Issuer. You may rely on such opinion as though the same were addressed to you.

In connection with our role as bond counsel to the Issuer, we have reviewed the Bond Purchase Agreement, the Trust Agreement, the Tax Certificate, certain portions of the preliminary official statement of the Issuer dated __________, with respect to the Bonds (the "Preliminary Official Statement") and of the official statement of the Issuer, dated __________, with respect to the Bonds (the "Official Statement"), opinions of counsel to the Issuer and the Trustee, certificates of the Issuer, the Trustee and others, and such other documents, opinions and matters to the extent we deemed necessary to provide the opinions or conclusions set forth herein.

The opinions and conclusions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions or conclusions may be affected by actions taken or omitted or events occurring after the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other
matters come to our attention after the date hereof. We have assumed the genuineness of all documents and signatures presented to us (whether as originals or as copies) and the due and legal execution and delivery thereof by, and validity against, any parties other than the Issuer. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the third paragraph hereof. We have further assumed compliance with all covenants and agreements contained in such documents. In addition, we call attention to the fact that the rights and obligations under the Bonds, the Trust Agreement, the Tax Certificate and the Bond Purchase Agreement and their enforceability may be subject to bankruptcy, insolvency, reorganization, receivership, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against public entities similar to the Issuer in the State of California. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinions with respect to the state or quality of title to or interest in any assets described in or as subject to the lien of the Trust Agreement or the enforceability of the description contained therein of, or the remedies available to enforce liens on, any such assets.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions or conclusions:

1. The Bonds are not subject to the registration requirements of the Securities Act of 1933, as amended, and the Trust Agreement is exempt from qualification pursuant to the Trust Indenture Act of 1939, as amended. No opinion is expressed with respect to the 2019 Series A Insurer or the 2019 Series A Reserve Facility.

2. The Bond Purchase Agreement has been duly executed and delivered by, and is a valid and binding agreement of, the Issuer.

3. The statements contained in the Official Statement under the captions "The 2019 Series A Bonds" (excluding any references to Cede & Co., The Depository Trust Company ("DTC") and the book-entry system), "Security and Source of Payment for the Bonds" (excluding the information set forth therein relating to the 2019 Series A Reserve Facility), "Tax Matters," Appendix C - "Definitions and Summary of the Trust Agreement" and Appendix F - "Proposed Form of Opinion of Bond Counsel," excluding any material that may be treated as included under such captions by cross-reference or reference to other documents or sources, insofar as such statements expressly summarize certain provisions of the Trust Agreement and the form and content of our Bond Opinion, are accurate in all material respects.

4. We are not passing upon and do not assume any responsibility for the accuracy (except as explicitly stated in numbered paragraph 3 above), completeness or fairness of any of the statements contained in the Preliminary Official Statement or in the Official Statement and make no representation that we have independently verified the accuracy, completeness or fairness of any such statements. We do not assume any responsibility for any
electronic version of the Preliminary Official Statement or the Official Statement, and assume that any such version is identical in all respects to the printed version. In our capacity as bond counsel to the Issuer in connection with issuance of the Bonds, we participated in conferences with your representatives, your counsel, representatives of the Issuer, its counsel, the municipal advisors to the Issuer, and others, during which the contents of the Preliminary Official Statement or the Official Statement and related matters were discussed. Based on our participation in the above-mentioned conferences (which did not extend beyond the date of the Official Statement), and in reliance thereon, on oral and written statements and representations of the Issuer and others and on the records, documents, certificates, opinions and matters herein mentioned, subject to the limitations on our role as bond counsel to the Issuer, we advise you as a matter of fact and not opinion that (a) as of ________, no facts had come to the attention of the attorneys in our firm rendering legal services with respect to the Preliminary Official Statement which caused us to believe as of that date that the Preliminary Official Statement contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, and (b) as of the date of the Official Statement and as of the date hereof, no facts had come to the attention of the attorneys in our firm rendering legal service with respect to the Official Statement which caused us to believe as of the date of the Official Statement and as of the date hereof that the Official Statement contained any untrue statement of a material fact or omitted or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that, we expressly exclude from the scope of this paragraph and express no view or opinion about (i) any difference in information contained in the Preliminary Official Statement compared to what is contained in the Official Statement, whether or not related to pricing or sale of the Bonds, and whether any such difference is material and should have been included in the Preliminary Official Statement, and (ii) with respect to both the Preliminary Official Statement and the Official Statement, any CUSIP numbers, financial, accounting, statistical or economic, engineering or demographic data or forecasts, numbers, charts, tables, graphs, estimates, projections, assumptions or expressions of opinion, any information about litigation, including the litigation involving Parsons Transportation Group and its subcontractors, any management discussion and analysis, any statements about compliance with prior continuing disclosure undertakings, Appendices A, B, D, E, G and H, or any information about book-entry, DTC, ratings, Rating Agencies, the Underwriter, underwriting, the 2019 Series A Insurer, the Policy, the 2019 Series A Reserve Provider, or the 2019 Series A Reserve Facility included or referred to therein or omitted therefrom. No responsibility is undertaken or view expressed with respect to any other disclosure document, materials or activity, or as to any information from another document or source referred to by or incorporated by reference in the Preliminary Official Statement or the Official Statement.

This letter is furnished by us as bond counsel to the Issuer. No attorney-client relationship has existed or exists between our firm and you in connection with the Bonds or by virtue of this letter. We disclaim any obligation to update this letter. This letter is delivered to you as Underwriter of the Bonds, is solely for your benefit as such Underwriter in connection with the original issuance of the Bonds on the date hereof, and is not to be used, circulated, quoted or otherwise referred to or relied upon for any other purpose or by any other person. This
letter is not intended to, and may not, be relied upon by owners of the Bonds or by any other party to whom it is not specifically addressed.

Very truly yours,

ORRICK, HERRINGTON & SUTCLIFFE LLP
EXHIBIT B

FORM OF ISSUER COUNSEL OPINION

[Closing Date]

Peninsula Corridor Joint Powers Board
1250 San Carlos Avenue
San Carlos, California 94070-1306

J.P.Morgan Securities LLC
560 Mission Street, Floor 3
San Francisco, California 94105

Re: $_________ Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019
Series A

Ladies and Gentlemen:

We have acted as counsel to the Peninsula Corridor Joint Powers Board (the "Board") in connection with the issuance of $________ aggregate principal amount of Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019 Series A (the "Bonds") pursuant to the provisions of a Trust Agreement, dated as of October 1, 2007 (the "Master Trust Agreement"), as supplemented by the First Supplemental Trust Agreement, dated as of October 1, 2007 (the "First Supplemental Trust Agreement"), the Second Supplemental Trust Agreement, dated as of September 1, 2010 (the "Second Supplemental Trust Agreement"), the Third Supplemental Trust Agreement, dated as of January 1, 2015 (the "Third Supplemental Trust Agreement"), and the Fourth Supplemental Trust Agreement, dated as of January 1, 2019 (the "Fourth Supplemental Trust Agreement"), each between the Board and U.S. Bank National Association, as trustee (the "Trustee"). The Master Trust Agreement, as supplemented and amended by the First, Second, Third, and Fourth Supplemental Trust Agreements and as it may hereinafter be further supplemented and amended from time to time pursuant to its terms, is referred to herein as the "Trust Agreement." The Bonds will be purchased by J.P Morgan Securities LLC, as underwriter (the "Underwriter"), pursuant to a Bond Purchase Agreement, dated as of January 1, 2019 (the "Bond Purchase Agreement"), between the Board and the Underwriter. Capitalized terms used and not otherwise defined herein shall have the meaning assigned to such terms in the Trust Agreement, or if not defined in the Trust Agreement, in the Bond Purchase Agreement.

We have been asked to render our opinion in connection with the Bonds to the Board and the Underwriter pursuant to Section 12((a)(iii) of the Bond Purchase Agreement. In doing so we rely, as to certain factual matters, upon a certificate dated as of the date hereof and executed by
the Chief Financial Officer of the Board. We have also obtained such other assurances and opinions as to factual matters, made such investigations of fact and law, and done such other things as we have determined necessary in order to render this opinion. In particular, we have examined originals, certified copies or copies otherwise identified to our satisfaction as true copies of the following:

1. The Trust Agreement;

2. The Bond Purchase Agreement;

3. The Joint Powers Agreement, made and entered into on October 3, 1996 (the "JPA Agreement"), among the Santa Clara County Transit District, now known as the Santa Clara Valley Transportation Authority, the San Mateo County Transit District and the City and County of San Francisco (each a "Member Agency");

4. The Escrow Agreement, dated as of January 1, 2019 (the "Escrow Agreement"), between the Board and U.S. Bank National Association, as Trustee and as escrow agent.

5. Resolution No. 2019-__ adopted by the governing body of the Board on January 10, 2019 (the "Bond Resolution");

6. Resolutions adopted by each Member Agency in connection with the Bonds;

7. The Preliminary Official Statement of the Board, dated _________ with respect to the Bonds (the "Preliminary Official Statement");

8. The Official Statement of the Board, dated _________ with respect to the Bonds (the "Official Statement");

9. The Tax Certificate, dated the date hereof (the "Tax Certificate") executed and delivered by the Board;

10. The Continuing Disclosure Agreement, dated the date hereof (the "Continuing Disclosure Agreement"), between the District and U.S. Bank National Association, as Trustee and as dissemination agent; and

11. The Closing Certificate of the Board, dated the date hereof.

In our examination of these documents we have assumed the genuineness of all documents submitted to us as originals, the genuineness of all signatures appearing on such documents (other than the signatures of the Board), and the conformity to the originals thereof of all documents submitted to us as copies of documents.

On the basis of the foregoing, and subject to the assumptions and qualifications set forth in this letter, it is our opinion that:

1. The Board is duly organized and validly existing under the Constitution and laws of the State of California and the JPA Agreement, and has all requisite power and authority thereunder:
(a) to adopt the Bond Resolution and to execute, deliver and perform its obligations under the Bonds, the Trust Agreement, the Bond Purchase Agreement, the Escrow Agreement, the Continuing Disclosure Agreement, and the Tax Certificate (hereinafter collectively referred to as the "Board Documents"); (b) to issue the Bonds; (c) to pledge the Revenues as contemplated by the Trust Agreement and the Bond Purchase Agreement; and (d) to carry out and consummate the transactions on its part contemplated by the Board Documents and the Official Statement.

2. The JPA Agreement constitutes the valid, binding and legal obligation of each of the Member Agencies enforceable in accordance with its terms, has not been modified, supplemented, or amended and remains in full force and effect on and as of the date hereof. All filings required to be made by the laws of the State of California with respect to the JPA Agreement have been made.

3. Each of the Member Agencies has taken all action required to be taken by such Member Agency under Section 6586.5 of the Government Code of the State of California and the JPA Agreement and any other applicable law that is a condition to issuance of the Bonds or is otherwise material to the validity of the Bonds.

4. The Board has taken all actions it is required to take prior to the date hereof to effectuate the transactions contemplated by the Board Documents and the Official Statement, and the Board has duly authorized the execution and delivery of, and the performance of its obligations under, the Board Documents and the Bonds.

5. The Bond Resolution was duly adopted at a meeting of the governing body of the Board which was called and held pursuant to law and with all required notice and in accordance with all applicable open meetings laws and at which a quorum was present and acting at the time of the adoption of such Bond Resolution, which Bond Resolution has not been amended, modified or rescinded since its adoption.

6. The Bonds and the other Board Documents have been duly authorized, executed and delivered by the Board and constitute the legal, valid and binding obligations of the Board enforceable in accordance with their respective terms.

7. The adoption of the Bond Resolution and the execution and delivery by the Board of the Bonds and the other Board Documents, and compliance with the provisions thereof, do not conflict with or constitute on the part of the Board a violation of any applicable California constitutional, statutory or regulatory provision, or, to our current actual knowledge, any applicable judgment or decree, and do not conflict with or constitute on the part of the Board a breach of or default under the JPA Agreement, or, to our current actual knowledge, any indenture, trust agreement, loan agreement, bond, note, or other instrument to which the Board is a party or is otherwise subject or by which it is bound.

8. Except as otherwise disclosed in the Preliminary Official Statement and the Official Statement, no litigation or proceeding has been served on the Board, is pending or, to our current actual knowledge, is threatened, challenging the creation, organization or existence of the Board or contesting the powers of the Board or its authority with respect to the Bonds, the Bond Resolution, the JPA Agreement or the other Board Documents or the pledge or collection of
Farebox Revenues or seeking to restrain or to enjoin the issuance, sale or delivery of the Bonds or any of the transactions referred to in the Board Documents or contemplated thereby or in any way contesting the validity or enforceability of the Bonds, the Bond Resolution, the JPA Agreement or the other Board Documents or contesting in any way the completeness or accuracy of the Official Statement.

9. Without having undertaken to determine independently or assuming any responsibility for the accuracy, completeness or fairness of any of the statements contained in the Preliminary Official Statement or the Official Statement, nothing has come to our attention which leads us to believe that the statements and information contained in the Preliminary Official Statement, as of the date of the Preliminary Official Statement and as of the date of the Bond Purchase Agreement, and the Official Statement, as of the date of the Official Statement and as of the date hereof, under the headings "Introduction," "Plan of Finance," "The Joint Powers Board," and "Litigation" (excluding therefrom any financial or statistical data, as to which we express no opinion), contained or contains any untrue statement of a material fact or omitted or omits to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading (provided, however, that we render no opinion with respect to the statements or information contained in the Preliminary Official Statement or the Official Statement other than those expressly referred to above).

10. No authorization, approval, consent or any other action by any person, board or body, public or private, other than such authorizations, approvals and consents which have been duly and validly obtained, which approvals that have been obtained include the approval of the governing body of the Board and the approval of each Member Agency, is required for the valid authorization, execution and delivery of, and performance by the Board of its obligations under, the Board Documents, the issuance of the Bonds and the authorization and distribution of the Preliminary Official Statement and the Official Statement.

11. To our current actual knowledge, the Board is not in breach of or default under any applicable law or administrative regulation of the State or any applicable judgment or decree or any indenture, trust agreement, loan agreement, bond, or other instrument to which the Board is a party or is otherwise subject, which breach or default would materially adversely affect the Board’s ability to enter into or perform its obligations under the Board Documents, and to our current actual knowledge, no event has occurred and is continuing which, with the passage of time or the giving of notice, or both, would constitute a default or an event of default under any such instrument and which would materially adversely affect the Board’s ability to enter into or perform its obligations under the Board Documents.

In connection with the foregoing, (a) our opinions as to the legal effect of the Board Documents and the JPA Agreement are qualified by reference to bankruptcy, insolvency or other laws affecting creditors’ rights generally, such as reorganization, arrangement, fraudulent conveyance and moratorium, and the availability of equitable remedies; (b) our opinions as to matters of law are limited solely to applicable laws of the United States and of the State of California; (c) our opinions do not include any opinion regarding the laws of any jurisdiction respecting securities regulation or usury; (d) our opinions do not include any opinion regarding indemnification, choice of law, choice of forum or waiver provisions contained in any document referenced herein; and (e) our opinions are based on the law as it currently exists on the date hereof.
As used herein, the phrase “current actual knowledge” shall mean the knowledge that those attorneys in our firm who have performed services in connection with the transaction described herein currently have or have obtained from an interview with such officers and responsible employees of the Board as we have determined are likely, in the ordinary course of their respective duties, to have knowledge of the matters set forth herein and from inspection of documents that such individuals have made available to us in response to our inquiries. We have not conducted any inspection or inquiry other than such inspections and inquiries as are prudent and customary in connection with our representation of the Board.

We are furnishing this opinion to you solely for your benefit and no other person is entitled to rely hereon. The opinions expressed herein are valid as of the date hereof, and we disclaim any responsibility to advise you of any changes of fact or law occurring after this date. This opinion is not to be used, circulated, quoted or otherwise referred to for any other purpose; provided, however, the opinion may be included in the transcript of documents prepared in connection with the delivery of the Bonds.

Very truly yours,

HANSON BRIDGETT, LLP
PENINSULA CORRIDOR JOINT POWERS BOARD
FAREBOX REVENUE BONDS, 2019 SERIES A

Due: October 1, as shown below

The Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019 Series A (the "2019 Series A Bonds") are being issued to finance the acquisition of two leased facilities housing services utilized in the operation of the Caltrain commuter rail service ("Caltrain") administrated by the Peninsula Corridor Joint Powers Board (the "JPB") and may be applied to finance certain other improvements to Caltrain, to refund on a current basis the Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2007 Series A and to repay certain indebtedness incurred to finance other improvements to Caltrain.

The 2019 Series A Bonds will be issued in book-entry form only, initially registered in the name of Cede & Co., as nominee for The Depository Trust Company ("DTC"), New York, New York. Purchasers of the 2019 Series A Bonds will not receive instruments representing their interests in the 2019 Series A Bonds purchased. Individual purchases of 2019 Series A Bonds will be made in principal amounts of $5,000 or any integral multiple thereof.

Interest on the 2019 Series A Bonds will be payable semiannually on October 1 and April 1, commencing October 1, 2019. Payments of interest on and principal of the 2019 Series A Bonds will be paid to DTC. DTC will in turn remit such interest and principal to the DTC participants which will in turn remit such interest and principal to the beneficial owners of the 2019 Series A Bonds. See "Appendix D - Book-Entry System."

The 2019 Series A Bonds are subject to optional and mandatory redemption prior to their respective stated maturities, as described herein.

The 2019 Series A Bonds are being issued pursuant to a Trust Agreement, dated as of October 1, 2007 (as supplemented and amended from time to time pursuant to its terms, the "Trust Agreement"), between the JPB and U.S. Bank National Association, as trustee. The 2019 Series A Bonds are limited obligations of the JPB, a joint exercise of powers agency, created by the City and County of San Francisco, the San Mateo County Transit District and the Santa Clara Valley Transportation Authority (each, a "Member Agency"), secured by and payable from Caltrain operating revenues, consisting primarily of passenger fares collected by the JPB from the operation of Caltrain (as more fully defined and described herein, the "Farebox Revenues"). Pursuant to the Trust Agreement, the JPB may issue additional bonds and other obligations secured by and payable from the Farebox Revenues on a parity basis with the 2019 Series A Bonds. See "Security and Source of Payment for the Bonds."

The 2019 Series A Bonds are being issued to finance the The Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2007 Series A and to repay certain indebtedness incurred to finance other improvements to Caltrain, to refund on a current basis the Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2007 Series A and to repay certain indebtedness incurred to finance other improvements to Caltrain.

The scheduled payment of principal of and interest on the 2019 Series A Bonds when due will be guaranteed under an insurance policy to be issued concurrently with the delivery of the 2019 Series A Bonds by 2019 Series A Insurer.

[2019 Series A Insurer Logo]

The 2019 Series A Bonds are limited obligations of the JPB, payable from and secured solely by the Farebox Revenues and the other assets pledged therefor as provided in the Trust Agreement. The 2019 Series A Bonds do not constitute a general obligation of the JPB or any Member Agency and do not constitute an indebtedness or loan of the credit of any Member Agency or any political subdivision thereof. Neither the faith and credit of the JPB nor the faith and credit or taxing power of any Member Agency is pledged to the payment of the principal and interest on the 2019 Series A Bonds. The JPB has no taxing power.

MATURITY SCHEDULE*

<table>
<thead>
<tr>
<th>Maturity (October 1)</th>
<th>Principal Amount</th>
<th>Interest Rate</th>
<th>Price or Yield</th>
<th>CUSIP†</th>
</tr>
</thead>
<tbody>
<tr>
<td>$_________ * Serial Bonds due October 1, _____ @ _____ %; CUSIP‡: ________</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$_________ * Serial Bonds due October 1, _____ @ _____ %; CUSIP‡: ________</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This cover page contains certain information for quick reference only. It is not a summary of this issue. Investors must read the entire Official Statement to obtain information essential to the making of an informed investment decision.

The 2019 Series A Bonds are offered when, as and if issued and received by the Underwriter, subject to the approval of validity by Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the JPB. Certain matters will be passed upon for the JPB by its counsel, Hanson Bridgett LLP, San Francisco, California and for the Underwriter by Nixon Peabody LLP. It is expected that the 2019 Series A Bonds will be available for delivery in book-entry form through the facilities of DTC on or about [Closing Date].

J.P. Morgan


* Preliminary, subject to change.
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4138-0343-7590.8
PENINSULA CORRIDOR JOINT POWERS BOARD

BOARD MEMBERS
[Note: To be Revised to Reflect January Board Organization and Appointments Prior to POS Posting.]

Representing the City and County of San Francisco
  Cheryl Brinkman, Boardmember
  Gillian Gillett, Vice Chair
  Monique Zmuda, Boardmember

Representing the San Mateo County Transit District
  , Boardmember
  Dave Pine, Boardmember
  Charles Stone, Boardmember

Representing the Santa Clara Valley Transportation Authority
  Jeannie Bruins, Chair
  Cindy Chavez, Boardmember
  Devora "Dev" Davis, Boardmember

OFFICERS

Executive Director
  Jim Hartnett

Chief Financial Officer
  Derek Hansel

Chief Operating Officer, Rail
  Michelle Bouchard

Chief Officer, Caltrain Modernization Program
  John Funghi

GENERAL COUNSEL
  Hanson Bridgett LLP
    San Francisco, California

MUNICIPAL ADVISORS
  PFM Financial Advisors LLC
    San Francisco, California
  Ross Financial
    San Francisco, California

BOND COUNSEL
  Orrick, Herrington & Sutcliffe LLP
    San Francisco, California

TRUSTEE
  U.S. Bank National Association
    San Francisco, California
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>General</td>
<td>1</td>
</tr>
<tr>
<td>Peninsula Corridor Joint Powers Board</td>
<td>2</td>
</tr>
<tr>
<td>Authorization for Issuance of the 2019 Series A Bonds</td>
<td>2</td>
</tr>
<tr>
<td>Purpose and Application of Proceeds of the 2019 Series A Bonds</td>
<td>2</td>
</tr>
<tr>
<td>Security and Source of Payment for the 2019 Series A Bonds</td>
<td>2</td>
</tr>
<tr>
<td>Bond Reserve Fund</td>
<td>3</td>
</tr>
<tr>
<td>[Bond Insurance]</td>
<td>3</td>
</tr>
<tr>
<td>Additional Bonds and Other Parity Obligations</td>
<td>3</td>
</tr>
<tr>
<td>Subordinate Obligations</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
</tr>
<tr>
<td>THE 2019 SERIES A BONDS</td>
<td>4</td>
</tr>
<tr>
<td>General Terms and Provisions</td>
<td>4</td>
</tr>
<tr>
<td>Redemption Provisions</td>
<td>5</td>
</tr>
<tr>
<td>PLAN OF FINANCE</td>
<td>7</td>
</tr>
<tr>
<td>Application of Proceeds</td>
<td>7</td>
</tr>
<tr>
<td>2019 Series A Project</td>
<td>7</td>
</tr>
<tr>
<td>Refunding</td>
<td>7</td>
</tr>
<tr>
<td>ESTIMATED SOURCES AND USES</td>
<td>8</td>
</tr>
<tr>
<td>DEBT SERVICE REQUIREMENTS</td>
<td>9</td>
</tr>
<tr>
<td>SECURITY AND SOURCE OF PAYMENT FOR THE BONDS</td>
<td>9</td>
</tr>
<tr>
<td>Pledge of Farebox Revenues</td>
<td>9</td>
</tr>
<tr>
<td>Allocation of Farebox Revenues</td>
<td>10</td>
</tr>
<tr>
<td>Bond Reserve Funds; 2019 Series A Bond Reserve Fund;[ 2019 Series A Reserve Facility]</td>
<td>11</td>
</tr>
<tr>
<td>Additional Bonds, Parity Obligations and Subordinate Obligations</td>
<td>12</td>
</tr>
<tr>
<td>[BOND INSURANCE]</td>
<td>14</td>
</tr>
<tr>
<td>THE JOINT POWERS BOARD</td>
<td>15</td>
</tr>
<tr>
<td>Background and Organization</td>
<td>15</td>
</tr>
<tr>
<td>Current Status of Joint Powers Agreement</td>
<td>15</td>
</tr>
<tr>
<td>Caltrain Commuter Rail Service</td>
<td>15</td>
</tr>
<tr>
<td>Governance</td>
<td>17</td>
</tr>
<tr>
<td>Administration and Staffing</td>
<td>18</td>
</tr>
<tr>
<td>Executive Management</td>
<td>18</td>
</tr>
<tr>
<td>Major Capital Initiatives</td>
<td>19</td>
</tr>
<tr>
<td>Other Major Initiatives</td>
<td>22</td>
</tr>
<tr>
<td>Capital Planning</td>
<td>22</td>
</tr>
<tr>
<td>FINANCIAL INFORMATION</td>
<td>24</td>
</tr>
<tr>
<td>Ridership and Passenger Fare Information</td>
<td>24</td>
</tr>
<tr>
<td>Passenger Fares</td>
<td>25</td>
</tr>
<tr>
<td>Farebox Revenues</td>
<td>27</td>
</tr>
<tr>
<td>Farebox Recovery Ratio</td>
<td>27</td>
</tr>
<tr>
<td>Debt Service Coverage</td>
<td>28</td>
</tr>
<tr>
<td>Operating Contributions and Other Operating Assistance</td>
<td>28</td>
</tr>
<tr>
<td>Financial Reporting</td>
<td>30</td>
</tr>
<tr>
<td>Revenues and Expenses for Caltrain Commuter Rail Service</td>
<td>30</td>
</tr>
<tr>
<td>Management's Discussion of Financial Results</td>
<td>32</td>
</tr>
<tr>
<td>Existing Indebtedness and Contemplated Indebtedness</td>
<td>32</td>
</tr>
<tr>
<td>Insurance</td>
<td>34</td>
</tr>
<tr>
<td>Investment Policy and Investments</td>
<td>35</td>
</tr>
<tr>
<td>Pension and Retiree Health Benefits</td>
<td>35</td>
</tr>
<tr>
<td>INVESTMENT CONSIDERATIONS</td>
<td>36</td>
</tr>
<tr>
<td>Economy</td>
<td>36</td>
</tr>
<tr>
<td>Termination of Joint Powers Agreement</td>
<td>36</td>
</tr>
<tr>
<td>Lack of Dedicated Funding</td>
<td>37</td>
</tr>
</tbody>
</table>
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in Funding Sources for Operational and Capital Needs</td>
<td>37</td>
</tr>
<tr>
<td>Bankruptcy and Related Risks</td>
<td>37</td>
</tr>
<tr>
<td>Climate Change and Sea Level Rise</td>
<td>40</td>
</tr>
<tr>
<td>Risk of Earthquake and Other Force Majeure Events; Threats and Acts of Terrorism</td>
<td>40</td>
</tr>
<tr>
<td>Cybersecurity</td>
<td>41</td>
</tr>
<tr>
<td>Reduction in Ridership</td>
<td>41</td>
</tr>
<tr>
<td>Insurance</td>
<td>41</td>
</tr>
<tr>
<td>[Bond Insurer Insolvency]</td>
<td>42</td>
</tr>
<tr>
<td>Loss of Tax Exemption</td>
<td>42</td>
</tr>
<tr>
<td>No Acceleration Upon Default</td>
<td>42</td>
</tr>
<tr>
<td>RATINGS</td>
<td>42</td>
</tr>
<tr>
<td>TAX MATTERS</td>
<td>43</td>
</tr>
<tr>
<td>CONTINUING DISCLOSURE</td>
<td>44</td>
</tr>
<tr>
<td>LITIGATION</td>
<td>45</td>
</tr>
<tr>
<td>AUDITED FINANCIAL STATEMENTS</td>
<td>46</td>
</tr>
<tr>
<td>[VERIFICATION OF MATHEMATICAL ACCURACY]</td>
<td>46</td>
</tr>
<tr>
<td>MUNICIPAL ADVISORS</td>
<td>46</td>
</tr>
<tr>
<td>LEGAL MATTERS</td>
<td>46</td>
</tr>
<tr>
<td>UNDERWRITING</td>
<td>47</td>
</tr>
<tr>
<td>OTHER MATTERS</td>
<td>47</td>
</tr>
</tbody>
</table>

Appendix A Peninsula Corridor Joint Powers Board Independent Auditor's Report Years Ended
June 30, 2018 and 2017........................................................................................................ A-1
Appendix B Economic and Demographic Data Pertaining to the Three Caltrain Counties - City and County
of San Francisco, County of San Mateo, and County of Santa Clara............................ B-1
Appendix C Definitions and Summary of the Trust Agreement........................... C-1
Appendix D Book-Entry System................................................................................. D-1
Appendix E Form of Continuing Disclosure Agreement........................................... E-1
Appendix F Proposed Form of Opinion of Bond Counsel............................................ F-1
Appendix G Peninsula Corridor Joint Powers Board Statement of Investment Policy................................................. G-1
[Appendix H Specimen Municipal Bond Insurance Policy]............................................ H-1
This Official Statement does not constitute an offer to sell the 2019 Series A Bonds in any jurisdiction to any person to whom it is unlawful to make such offer in such jurisdiction. No dealer, broker, salesman or other person has been authorized by the Peninsula Corridor Joint Powers Board JPB (the "JPB") or the underwriter identified on the cover page of this Official Statement (the "Underwriter") to give any information or to make any representation other than that contained herein and, if given or made, such other information or representation must not be relied upon as having been authorized. This Official Statement does not constitute an offer to sell or solicitation of an offer to buy, nor shall there be any offer or solicitation or sale of the 2019 Series A Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. Neither the delivery of this Official Statement nor the sale of any of the 2019 Series A Bonds implies that the information herein is correct as of any time subsequent to the date hereof. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create the implication that there has been no change in the matters described herein since the date hereof.

This Official Statement is not to be construed as a contract with the purchasers of the 2019 Series A Bonds. Statements contained in this Official Statement which involve estimates, forecasts or matters of opinion, whether or not expressly so described herein, are intended solely as such and are not to be construed as representations of facts. All summaries of statutes and documents are made subject to the provisions of such statutes and documents, respectively, and do not purport to be complete statements of any or all of such provisions.

The information set forth herein has been obtained from sources that are believed to be reliable, but it is not guaranteed as to accuracy or completeness and is not to be construed as a representation by the Underwriter. The Underwriter has provided the following sentence for inclusion in this Official Statement: The Underwriter has reviewed the information in this Official Statement in accordance with, and as part of, its responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriter does not guarantee the accuracy or completeness of such information. No representation, warranty or guarantee is made by the Municipal Advisors identified herein as to the accuracy or completeness of any information in this Official Statement, including, without limitation, the information contained in the appendices hereto, and nothing contained in this Official Statement is or shall be relied upon as a promise or representation by either of the Municipal Advisors identified in this Official Statement.

This Official Statement contains forecasts, projections and estimates that are based on current expectations or assumptions. When included in this Official Statement, the words "expects," "forecasts," "projects," "intends," "anticipates," "estimates," "assumes" and analogous expressions are intended to identify forward-looking statements which speak only as of the date of this Official Statement. Any such statements inherently are subject to a variety of risks and uncertainties which could cause actual results to differ materially from those that have been projected. Such risks and uncertainties include, among others, changes in economic conditions, federal, state and local statutory and regulatory initiatives, litigation, seismic events, and various other events, conditions and circumstances, many of which are beyond the control of the JPB. The inclusion in this Official Statement of such forecasts, projections and estimates should not be regarded as a representation by the JPB that such forecasts, projections and estimates will occur. Such forecasts, projections and estimates are not intended as representations of fact or guarantees of results. The JPB disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained herein to reflect any changes in the JPB's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

The achievement of certain results or other expectations contained in such forward looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements described to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. The JPB does not plan to issue any updates or revisions to those forward-looking statements if or when any of its expectations, or events, conditions or circumstances on which such statements are based occur.

This Official Statement is submitted in connection with the sale of securities referred to herein and may not be reproduced or be used, as a whole or in part, for any other purpose.

The JPB maintains a website and a separate website for the Caltrain Modernization Program. However, the data and information presented therein are not incorporated by reference in this Official Statement and should not be relied upon in making investment decisions with respect to the 2019 Series A Bonds.

The 2019 Series A Bonds have not been registered under the Securities Act of 1933, as amended, in reliance upon an exemption contained therein, and have not been registered or qualified under the securities laws of any state.

In connection with this offering, the Underwriter may effect transactions which stabilize or maintain the market price of such 2019 Series A Bonds at a level above that which might otherwise prevail in the open market. Such stabilizing, if commenced, may be discontinued at any time. The Underwriter may offer and sell such 2019 Series A Bonds to certain dealers, dealer banks, banks acting as agent for certain purchasers, and institutional investors at prices lower than the public offering price.
stated on the [inside] cover page of this Official Statement, and said public offering price may be changed from time to time by
the Underwriter.
OFFICIAL STATEMENT

$_________∗

Peninsula Corridor Joint Powers Board
Farebox Revenue Bonds,
2019 Series A

INTRODUCTION

General

This Official Statement, which includes the cover page and appendices hereto, sets forth certain information in connection with the offering of Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019 Series A (the "2019 Series A Bonds"). This introduction is not a summary of the Official Statement. It is only a brief description of and partial guide to, and is qualified by, more complete and detailed information contained in the entire Official Statement and the documents summarized or described herein. A full review should be made of the entire Official Statement. All capitalized terms used and not otherwise defined herein shall have the meaning assigned to such terms in Appendix C - "DEFINITIONS AND SUMMARY OF THE TRUST AGREEMENT" or in the hereinafter defined Trust Agreement.

Peninsula Corridor Joint Powers Board

The Peninsula Corridor Joint Powers Board (the "JPB") is a joint exercise of powers agency organized under Chapter 5 of Division 7 of Title 1 of the Government Code (the "JPA Act"). Since 1992, the JPB has administered operation of the commuter rail service which has served San Francisco peninsula communities for more than 150 years and is the oldest commuter service west of the Mississippi River. The commuter rail service administered by the JPB, known as Caltrain ("Caltrain"), provides commuter rail service from its northern terminus in San Francisco, extending 77 miles to its southern terminus in Gilroy, south of San José.

The JPB was created pursuant to a joint exercise of powers agreement (the "Joint Powers Agreement"), entered into by the City and County of San Francisco ("CCSF"), a city and county chartered pursuant to Article XI, Sections 3, 4, 5 and 6 of the Constitution of the State of California, the San Mateo County Transit District ("SamTrans"), a public transit district organized and existing under the provisions of the San Mateo County Transit District Act, being Part 15 of Division 10 of the Public Utilities Code of the State of California, and the Santa Clara Valley Transportation Authority, formerly known as the Santa Clara County Transit District ("VTA"), a public transit district organized and existing under the provisions of the Santa Clara Valley Transportation Authority Act, being Part 12 of Division 10 of the Public Utilities Code of the State of California. Each of CCSF, SamTrans and VTA is hereinafter referred to as a "Member Agency" and CCSF, SamTrans and VTA are hereinafter collectively referred to as the "Member Agencies." See "THE JOINT POWERS BOARD" herein.

The original term of the Joint Powers Agreement expired on October 18, 2001. Pursuant to the terms of the Joint Powers Agreement, the Joint Powers Agreement continues in full force and effect on a year-to-year basis, subject to the right of any Member Agency to withdraw pursuant to the terms of the Joint Powers Agreement upon one year's prior notice given at the end of any Fiscal Year. The Joint Powers Agreement requires that the parties must undergo mediation of the issues giving rise to the

∗ Preliminary, subject to change.
withdrawal notice, such mediation to be provided through the Metropolitan Transportation Commission, a regional transportation planning, coordinating and financing agency for the nine-county San Francisco Bay Area. If two or more Member Agencies withdraw, the Joint Powers Agreement terminates at the end of the Fiscal Year following expiration of the one-year's notice given by the second Member Agency to withdraw from the agreement. Upon termination of the Joint Powers Agreement, following discharge of all obligations due by the JPB, any property interest remaining in the JPB shall be disposed of and the proceeds or property shall be allocated in accordance with a separate agreement to be entered into between the parties. See "THE JOINT POWERS BOARD" herein.

No assurance can be given that the Joint Powers Agreement will be renewed nor can any assurance be given that two or more Member Agencies will not withdraw pursuant to the terms of the Joint Powers Agreement, thereby terminating the Joint Powers Agreement. Nor can any assurance be given that if the Joint Powers Agreement is terminated pursuant to its terms, Caltrain will continue to be operated until such time as all of the 2019 Series A Bonds have been paid.

Authorization for Issuance of the 2019 Series A Bonds

The 2019 Series A Bonds will be issued pursuant to Article 4 of the JPA Act and the Trust Agreement, dated as of October 1, 2007, as supplemented and amended, including as supplemented by the Fourth Supplemental Trust Agreement, dated as of February 1, 2019 (as so supplemented and as it may hereinafter be further supplemented and amended from time to time pursuant to its terms, the "Trust Agreement"), between the JPB and U.S. Bank National Association, as trustee (the "Trustee").

Purpose and Application of Proceeds of the 2019 Series A Bonds

Proceeds of the 2019 Series A Bonds will be used to: (i) finance costs of the acquisition of two leased facilities housing services utilized in the operation of Caltrain and, in the event that the JPB is unable to acquire one or both of the leased facilities, may be applied to finance certain other capital improvements more fully described below under the caption "PLAN OF FINANCE – 2019 Series A Project;" (ii) refund on a current basis all outstanding Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2007 Series A (the "2007 Series A Bonds"); (iii) repay certain short-term indebtedness incurred to refund and redeem all outstanding Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2015 Series A (the "2015 Series A Bonds") on an interim basis, which 2015 Series A Bonds were issued to finance certain other improvements to Caltrain; and (iv) pay costs of issuance of the 2019 Series A Bonds[ , including the premium to be paid to _________ (the "2019 Series A Insurer")] with respect to the municipal bond insurance policy being delivered in connection with the 2019 Series A Bonds and the premium to be paid] with respect to the municipal bond debt service reserve insurance policy to be held on deposit in the bond reserve fund for the 2019 Series A Bonds. See "ESTIMATED SOURCES AND USES" herein.

Security and Source of Payment for the 2019 Series A Bonds

The 2019 Series A Bonds are limited obligations of the JPB payable from amounts generated and collected by the JPB in connection with the operation of Caltrain, including all passenger fares, parking, shuttle and pass revenues and other revenues from operations (as more fully defined herein, the "Farebox Revenues"). See "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS - Pledge of Farebox Revenues," "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS – Allocation of Farebox Revenues" and Appendix A - "PENINSULA CORRIDOR JOINT POWERS BOARD INDEPENDENT AUDITOR'S REPORT YEARS ENDED JUNE 30, 2018 AND 2017" herein.
Bond Reserve Fund

[Upon issuance of the 2019 Series A Bonds, a bond reserve fund for the 2019 Series A Bonds (the "2019 Series A Bond Reserve Fund") will be established with the Trustee. The JPB is required to deposit into the 2019 Series A Bond Reserve Fund an amount equal to the Bond Reserve Requirement for the 2019 Series A Bonds (the "2019 Series A Bond Reserve Requirement"). In order to provide for such deposit, the JPB intends to deposit a municipal bond debt service reserve insurance policy (the "2019 Series A Reserve Facility") meeting the requirements of a Reserve Facility specified in the Trust Agreement in the 2019 Series A Bond Reserve Fund. See Appendix C - "DEFINITIONS AND SUMMARY OF THE TRUST AGREEMENT - Definitions" herein. The face amount of the 2019 Series A Reserve Facility, which will be issued by __________ (the "2019 Series A Reserve Facility Provider") simultaneously with the issuance of the 2019 Series A Bonds, will be an amount equal to the 2019 Series A Bond Reserve Requirement. See "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS - Bond Reserve Funds; 2019 Series A Bond Reserve Fund; 2019 Series A Reserve Facility" and Appendix C - "DEFINITIONS AND SUMMARY OF THE TRUST AGREEMENT - The Trust Agreement - Establishment, Funding and Application of Bond Reserve Funds" herein.]

Bond Insurance

[Payment of principal and interest with respect to the 2019 Series A Bonds as the same shall become due and payable will be secured by a municipal bond insurance policy issued by the 2019 Series A Insurer. See "BOND INSURANCE" and Appendix H - "SPECIMEN MUNICIPAL BOND INSURANCE POLICY" herein.]

Additional Bonds and Other Parity Obligations

Assuming application of a portion of the proceeds of the 2019 Series A Bonds to refund the 2007 Series A Bonds, upon issuance, the 2019 Series A Bonds will be the only Series of Bonds Outstanding under the Trust Agreement. Pursuant to the Trust Agreement, subsequent to the issuance of the 2019 Series A Bonds, the JPB may issue additional bonds secured by a pledge and lien on Farebox Revenues on a parity basis with the 2019 Series A Bonds. The 2019 Series A Bonds and such additional bonds are hereinafter collectively referred to as the "Bonds." Pursuant to the Trust Agreement, the JPB may also issue other debt or incur other obligations secured by a pledge and lien on Farebox Revenues on a parity basis with the Bonds (such debt and other obligations being hereinafter referred to as "Parity Obligations"). See "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS - Additional Bonds, Parity Obligations and Subordinate Obligations" herein.

Subordinate Obligations

Pursuant to the Trust Agreement, the JPB may also issue debt or incur other obligations secured by a pledge and lien on the Farebox Revenues subordinate to the pledge and lien securing Bonds and Parity Obligations (such obligations being referred to as "Subordinate Obligations"). See "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS - Additional Bonds, Parity Obligations and Subordinate Obligations" herein.

In December 2016, the JPB entered into a revolving credit facility, with an amount available to be drawn and outstanding at any one time not to exceed $150,000,000, in order to assist the JPB in meeting its cash flow needs in connection with the Peninsula Corridor Electrification Project (hereinafter referred to as the "Peninsula Corridor Electrification Project" or the "PCEP Project"). See "THE JOINT POWERS BOARD - Major Capital Initiatives - Peninsula Corridor Electrification Project" herein. The obligations of the JPB under this revolving credit facility, which was amended and restated in January
2019, to enable the JPB to access $164.5 million of federal grant funds awarded to the JPB subsequent to 2016 to finance Caltrain capacity and system improvements, are secured in part by a pledge and lien on the Farebox Revenues subordinate to the pledge and lien which will secure the 2019 Series A Bonds. The amount available to be drawn and outstanding at any one time under this revolving credit facility (as further amended and supplemented from time to time pursuant to its terms, hereinafter referred to as the "2016 Credit Facility"), may not exceed $170,000,000 outstanding at any one time. In addition, in January 2019, the JPB entered into an additional revolving credit facility (as amended and supplemented from time to time pursuant to its terms, the "Additional Credit Facility") with an amount available to be drawn and outstanding at any one time not to exceed $30,000,000 to provide funds to support installation of an advanced signal and train control system (hereinafter referred to as the "Positive Train Control System Project" or the "PTC Project") and to provide working capital for Caltrain system needs. See "THE JOINT POWERS BOARD - Major Capital Initiatives - Positive Train Control System Project" herein. The Additional Credit Facility is also secured by a pledge and lien on the Farebox Revenues subordinate to the pledge and lien which will secure the 2019 Series A Bonds and is secured on a parity with the pledge of Farebox Revenues which secures the 2016 Credit Facility. Any funds drawn by JPB pursuant to the 2016 Credit Facility and/or the Additional Credit Facility are due and payable on December 31, 2022. See "FINANCIAL INFORMATION - Existing Indebtedness and Contemplated Indebtedness" herein.

Other

Brief descriptions of the 2019 Series A Bonds, the Trust Agreement, the security and source of payment for the 2019 Series A Bonds, the Joint Powers Agreement and the JPB are presented herein. Such references and descriptions do not purport to be comprehensive or definitive. All references herein to various documents are qualified in their entirety by reference to the forms thereof, all of which are available at the offices of the JPB.

THE 2019 SERIES A BONDS

General Terms and Provisions

The 2019 Series A Bonds will be issued in fully registered form, without coupons, in the denomination of $5,000 or any integral multiple thereof (each, an "Authorized Denomination"), will be dated their date of delivery, and will bear interest from such date at the rates set forth on the [inside] cover of this Official Statement, payable on October 1 and April 1 of each year, commencing October 1, 2019 (each, an "Interest Payment Date") until maturity or redemption prior to maturity as described herein. Interest on the 2019 Series A Bonds will be calculated on the basis of a 360-day year, comprised of twelve 30-day months.

The 2019 Series A Bonds, when issued, will be registered in the name of Cede & Co., as registered owner and nominee of The Depository Trust Company, New York, New York ("DTC," and, together with any successor securities depository, the "Depository"). DTC will act as Depository for the 2019 Series A Bonds so purchased. Individual purchases will be made in book-entry form. Purchasers will not receive a bond certificate representing their beneficial ownership interest in 2019 Series A Bonds. So long as Cede & Co. is the registered owner of the 2019 Series A Bonds, as nominee of DTC, references herein to Bondholders, Holders or Owners of the 2019 Series A Bonds shall mean Cede & Co. as aforesaid, and shall not mean the Beneficial Owners of 2019 Series A Bonds. In this Official Statement, the term "Beneficial Owner of the 2019 Series A Bonds" shall mean the person for whom a participant in DTC acquires an interest in 2019 Series A Bonds.
So long as Cede & Co. is the registered owner of the 2019 Series A Bonds, principal of and interest on the 2019 Series A Bonds will be payable by wire transfer of same day funds by the Trustee to Cede & Co., as nominee for DTC. DTC is obligated, in turn, to remit such amounts to its participants for subsequent disbursement to Beneficial Owners of the 2019 Series A Bonds. See Appendix D - "BOOK-ENTRY SYSTEM" herein.

In the event the use of the book-entry system is discontinued, principal of the 2019 Series A Bonds will be payable upon surrender thereof at the designated office of the Trustee. All interest payable on the 2019 Series A Bonds will be paid by check mailed by first-class mail on each Interest Payment Date to the person in whose name each 2019 Series A Bond is registered in the registration books maintained by the Trustee as of the close of business on the fifteenth (15th) day of the calendar month immediately preceding the Interest Payment Date (each, a "Record Date"), provided that registered owners of $1,000,000 or more in aggregate principal amount of 2019 Series A Bonds may request payment by wire transfer to an account within the United States, such request to be submitted in writing and received by the Trustee on or before the applicable Record Date for such Interest Payment Date, in accordance with the provisions set forth in the Trust Agreement.

Redemption Provisions

Optional Redemption. The 2019 Series A Bonds shall be subject to redemption prior to their respective stated maturities, at the option of the JPB, from any source of available funds, as a whole or in part on any date (and if in part, in such amount and such order of maturity as the JPB shall specify and within a maturity by lot or by such other method as the JPB may direct and in Authorized Denominations), on or after October 1, ____ at the principal amount thereof, plus accrued interest to the date fixed for redemption, [without premium].

Mandatory Redemption. The 2019 Series A Bonds maturing on October 1, ___, will also be subject to redemption in part, by lot, from Mandatory Sinking Account Payments required by the Trust Agreement on each October 1 on or after October 1, ___, at the principal amount of the 2019 Series A Bonds to be redeemed plus accrued interest, if any, to the redemption date. Such Mandatory Sinking Account Payments will be sufficient to redeem (or pay at maturity) the following principal amounts of such 2019 Series A Bonds on the dates set forth below:

<table>
<thead>
<tr>
<th>Sinking Account Payment Date (October 1)</th>
<th>Sinking Account Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>

* Final Maturity

The 2019 Series A Bonds maturing on October 1, ___, will also be subject to redemption in part, by lot, from Mandatory Sinking Account Payments required by the Trust Agreement on each October 1 on or after October 1, ___, at the principal amount of the 2019 Series A Bonds to be redeemed plus accrued interest, if any, to the redemption date. Such Mandatory Sinking Account Payments will be sufficient to redeem (or pay at maturity) the following principal amounts of such 2019 Series A Bonds on the dates set forth below:

<table>
<thead>
<tr>
<th>Sinking Account Payment Date (October 1)</th>
<th>Sinking Account Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>

*
Purchase in Lieu of Mandatory Redemption. The JPB reserves the right at all times to purchase any of its 2019 Series A Bonds on the open market. In lieu of mandatory redemption, the JPB may surrender to the Trustee for cancellation 2019 Series A Bonds purchased on the open market, and such 2019 Series A Bonds shall be cancelled by the Trustee. If any 2019 Series A Bonds are so cancelled, the JPB may designate the Mandatory Sinking Account Payments or portions thereof within the 2019 Series A Bonds so purchased that are to be reduced as a result of such cancellation.

Selection of 2019 Series A Bonds for Redemption. While the 2019 Series A Bonds are in book-entry form and so long as DTC acts as Depository for the 2019 Series A Bonds, whenever provision is made for redemption of less than all of the 2019 Series A Bonds of any maturity, applicable provisions for selection of 2019 Series A Bonds to be redeemed under DTC's book-entry system shall apply. See Appendix D - "BOOK-ENTRY SYSTEM" herein. In the event that the use of the book-entry system is discontinued, whenever provision is made for redemption of less than all of the 2019 Series A Bonds of any maturity, the Trustee shall select the 2019 Series A Bonds of the such maturity to be redeemed by lot or by such other method as the JPB shall specify and in Authorized Denominations.

Notice of Redemption; Conditional Notice. The Trustee shall give notice of redemption not less than 20 days nor more than 60 days prior to the redemption date to each registered owner of a 2019 Series A Bond designated for redemption, such notice to be given by mail, email or other electronic means or overnight delivery. The Trustee shall also give written notice of redemption to the Electronic Municipal Market Access System, known as EMMA, maintained by the Municipal Securities Rulemaking Board, which is the Repository identified in the Continuing Disclosure Agreement being entered into in connection with the 2019 Series A Bonds. Neither failure by the Trustee to deliver such notice to the Repository, nor failure of any registered owner or Repository to receive such notice nor any defect therein shall affect the sufficiency of the proceedings for the redemption of any of the 2019 Series A Bonds.

With respect to any notice of optional redemption of 2019 Series A Bonds, unless, upon the giving of such notice, such 2019 Series A Bonds shall be deemed to have been paid within the meaning of the provisions of the Trust Agreement, such notice shall state that such redemption shall be conditional upon the receipt by the Trustee on or prior to the date fixed for such redemption of amounts sufficient to pay the principal of, premium, if any, and interest on, such 2019 Series A Bonds to be redeemed, and that if such amounts shall not have been so received said notice shall be of no force and effect and the JPB shall not be required to redeem such 2019 Series A Bonds. In the event that such notice of redemption contains such a condition and such amounts are not so received, the redemption shall not be made and the Trustee shall within a reasonable time thereafter give notice to the registered owners to the effect that such amounts were not so received and such redemption was not made, such notice to be given by the Trustee in the manner in which the notice of redemption was given.

Any notice given pursuant to the provisions of the Trust Agreement described herein may be rescinded by written notice given to the Trustee by the JPB and the Trustee shall give notice of such rescission as soon thereafter as practicable in the same manner, and to the same parties, as notice of such redemption was given.

For so long as the 2019 Series A Bonds are in book-entry form, all notices of redemption and all other notices described under this caption, shall be delivered to DTC, as Depository. Neither the JPB nor the Trustee can or do give any assurance that any such notice will be distributed by DTC to Beneficial
Owners or that any such notice will be distributed on a timely basis. See Appendix D - "BOOK-ENTRY SYSTEM" herein.

**Cessation of Interest.** Interest on all 2019 Series A Bonds for which notice of redemption has been given pursuant to the provisions of the Trust Agreement and for which funds have been provided to the Trustee for the payment thereof shall cease to accrue on the redemption date. Such 2019 Series A Bonds shall cease to be entitled to any lien, benefit or security under the Trust Agreement on the redemption date and the registered owners of such 2019 Series A Bonds shall have no rights in respect thereof except to receive payment from the funds provided to the Trustee therefor.

**PLAN OF FINANCE**

**Application of Proceeds**

Proceeds of the 2019 Series A Bonds will be used to: (i) finance costs of certain capital projects utilized in the operation of the Caltrain (as more fully described below, "2019 Series A Project"); (ii) refund on a current basis all outstanding 2007 Series A Bonds (as more fully described below, the "Refunding"); (iii) repay certain short-term indebtedness incurred to refund and redeem all outstanding 2015 Series A Bonds which were issued to finance certain other improvements to Caltrain; (iv) pay costs of issuance of the 2019 Series A Bonds, including the premium to be paid to 2019 Series A Insurer with respect to the municipal bond insurance policy being delivered in connection with the 2019 Series A Bonds and the premium to be paid to the 2019 Series A Reserve Facility Provider with respect to the 2019 Series A Reserve Facility to be held on deposit in the 2019 Series A Bond Reserve Fund].

**2019 Series A Project**

The JPB intends to apply a portion of the proceeds of the 2019 Series A Bonds to finance costs of the acquisition of two leased facilities housing services utilized in the operation of the Caltrain. [Note: **Detail to be added re use of leased facilities prior to posting of POS.**] In the event that the JPB is unable to acquire one or both of the leased facilities, the JPB intends to apply a portion of the proceeds of the 2019 Series A Bonds to finance a portion of the costs of certain capacity and system improvements (such improvements being hereinafter referred to as the "2018 TIRCP Grant Projects") being funded in part from a Transit and Intercity Rail Capital Program grant (the "2018 TIRCP Grant") awarded to the JPB in April 2018, including procurement of electric powered rolling stock in addition to the 96 electric powered rail cars being funded as a part of the hereinafter defined 2017 Funding Plan described below under the caption "THE JOINT POWERS BOARD - Major Capital Initiatives - Peninsula Corridor Electrification Project," platform modifications, wayside bicycle parking improvements, installation of a broadband communication system and planning funds to support development of plans and agreements to meet goals and service levels in the 2018 State Rail Plan.

**Refunding**

[In connection with the refunding of the 2007 Series A Bonds, the JPB will enter into an Escrow Agreement, dated as of February 1, 2019 (the "Escrow Agreement"), with U.S. Bank National Association, as trustee and escrow agent (the "Escrow Agent"), pursuant to which the Escrow Agent will establish an escrow fund (the "Escrow Fund") to provide for the payment of the principal of and interest on the 2007 Series A Bonds to their date of redemption. Amounts deposited in the Escrow Fund will be invested in [United States Treasury Obligations, State and Local Government Series] (the "Escrow Securities"), the principal of and interest on which, together with any cash held uninvested, will be sufficient to pay the principal of and interest on the 2007 Series A Bonds to the date of their redemption. See "VERIFICATION OF MATHEMATICAL ACCURACY" herein. Amounts deposited in the Escrow
Fund will be pledged to the payment of the 2007 Series A Bonds and will not be available for the payment of any bonds other than the 2007 Series A Bonds. [The 2007 Series A Bonds being refunded are listed below.]

Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2007 Series A
Redemption Date: [Redemption Date]

<table>
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<th>Maturity Date (October 1)</th>
<th>Principal Amount Outstanding</th>
<th>CUSIP*</th>
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<td>707120BH3</td>
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<td>2020</td>
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<tr>
<td>2023</td>
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<tr>
<td>2024</td>
<td>1,020,000</td>
<td>707120BN0</td>
</tr>
<tr>
<td>2025</td>
<td>1,065,000</td>
<td>707120BP5</td>
</tr>
<tr>
<td>2026</td>
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<td>707120BQ3</td>
</tr>
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<td>2027</td>
<td>1,165,000</td>
<td>707120BR1</td>
</tr>
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<td>2032</td>
<td>6,755,000</td>
<td>707120BS9</td>
</tr>
<tr>
<td>2037</td>
<td>8,670,000</td>
<td>707120BT7</td>
</tr>
</tbody>
</table>

**ESTIMATED SOURCES AND USES**

Estimated sources and uses of funds are set forth below:

**Sources:**
Principal Amount of 2019 Series A Bonds
[Net Original Issue Premium]
[Other Funds(1)]
Total Sources

**Uses:**
Deposit to 2019 Series A Project Fund
[Deposit to Escrow Fund]
Repayment of Existing Indebtedness(2)
Costs of Issuance(3)
Total Uses

(1) [Note: Footnote may be needed to cover amounts held by the trustee]

(2) For a description of the Existing Indebtedness being repaid, see "INTRODUCTION-Purpose and Application of Proceeds of the 2019 Series A Bonds" and "PLAN OF FINANCE" herein.

(3) Costs of Issuance include underwriter's discount, [the premium for the municipal bond insurance policy,] [the premium for the 2019 Series A Reserve Facility to be held on deposit in the 2019 Series A Bond Reserve Fund], legal fees, municipal advisor fees and

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expenses, rating agency fees, [verification agent fees] and other miscellaneous expenses. For a description of the underwriter's discount, see "UNDERWRITING" herein.

DEBT SERVICE REQUIREMENTS

The following table sets forth principal and interest payments with respect to the 2019 Series A Bonds.

<table>
<thead>
<tr>
<th>Fiscal Year Ending June 30</th>
<th>Principal</th>
<th>Interest</th>
<th>Annual Debt Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECURITY AND SOURCE OF PAYMENT FOR THE BONDS

Pledge of Farebox Revenues

The Bonds, including the 2019 Series A Bonds, are limited obligations of the JPB and are payable from and secured solely by Farebox Revenues and all amounts held by the Trustee in any fund or account established under the Trust Agreement (excluding amounts on deposit in any Project Fund, any Purchase Fund and the Rebate Fund). Farebox Revenues means the amounts generated and collected by the JPB in connection with the operation of Caltrain, including passenger fares, parking, shuttle and pass revenues and other revenues from operations. For a discussion of the Farebox Revenues, see "FINANCIAL INFORMATION – Revenues and Expenses for Caltrain Commuter Rail Service" herein.

As long as any Bonds are Outstanding or any Parity Obligations remain unpaid, the JPB covenants and agrees that, on or before the first Business Day of each month, the JPB will transfer to the Trustee such amount of Farebox Revenues as is required for the Trustee to make the transfers and deposits required to be made by the Trustee during such month pursuant to the provisions of the Trust Agreement described below under the caption "Allocation of Farebox Revenues." The Trustee is directed to deposit all Farebox Revenues received from the JPB in the Revenue Fund established under the Trust Agreement when and as received by the Trustee. All moneys at any time held in the Revenue Fund established under the Trust Agreement shall be held in trust for the benefit of the registered owners of the Bonds and Parity Obligations and shall be disbursed, allocated and applied solely for the uses and purposes set forth in the Trust Agreement. See Appendix C - "DEFINITIONS AND SUMMARY OF THE TRUST AGREEMENT - The Trust Agreement - Pledge of Farebox Revenues; Revenue Fund; Allocation of Farebox Revenues" herein.
The Trust Agreement provides that the pledge of Farebox Revenues and the amounts on deposit in the funds and accounts referred to above for the payment of the Bonds and any Parity Obligations constitutes a first lien on the Farebox Revenues and the amounts on deposit in such funds and accounts.

The Bonds are limited obligations of the JPB, payable from and secured solely by the Farebox Revenues and other funds pledged therefor as provided in the Trust Agreement. The Bonds do not constitute a general obligation of the JPB or any Member Agency and do not constitute an indebtedness or loan of the credit of any Member Agency or any political subdivision thereof. Neither the faith and credit of the JPB nor the faith and credit or taxing power of any Member Agency is pledged to the payment of the principal of and interest on the Bonds. The JPB has no taxing power.

No assurance can be given that the Joint Powers Agreement will be renewed nor can any assurance be given that two or more Member Agencies will not withdraw pursuant to the terms of the Joint Powers Agreement, thereby terminating the Joint Powers Agreement. Nor can any assurance be given that if the Joint Powers Agreement is terminated pursuant to its terms, Caltrain will continue to be operated until such time as all of the 2019 Series A Bonds have been paid.

Allocation of Farebox Revenues

Pursuant to the provisions of the Trust Agreement, the Trustee is directed to deposit all Farebox Revenues received from the JPB in the Revenue Fund. So long as any Bonds are Outstanding, the Trustee will set aside in each month following receipt of the Farebox Revenues the moneys in the Revenue Fund in the following respective funds in the following amounts, in the following order of priority, the requirements of each such fund at the time of deposit to be satisfied before any deposit is made to any fund subsequent in priority; provided that on a parity with such deposits the Trustee may set aside or transfer amounts with respect to outstanding Parity Obligations as provided in the proceedings for such Parity Obligations delivered to the Trustee pursuant to the Trust Agreement (which deposits shall be proportionate in the event such amounts are insufficient to provide for all deposits required as of any date to be made with respect to the Bonds and such Parity Obligations):

Interest Fund. The Trustee will set aside in the Interest Fund as soon as practicable in each month an amount equal to: (i) at least one-sixth of the aggregate half-yearly amount of interest becoming due and payable on Outstanding Current Interest Bonds and Outstanding Combination Bonds during the next ensuing six months, until the requisite half-yearly amount of interest on all such Outstanding Bonds is on deposit in such fund; and (ii) the aggregate amount of interest to accrue during that month on Outstanding Variable Rate Indebtedness, calculated, if the actual rate is not known, at the interest rate specified by the JPB, or if the JPB shall not have specified an interest rate, at the maximum interest rate borne by such Variable Rate Indebtedness during the month prior to the month of deposit plus one hundred (100) basis points, in each case subject to such adjustments as are provided pursuant to the provisions of the Trust Agreement.

Principal Fund; Sinking Accounts. The Trustee will deposit in the Principal Fund as soon as practicable in each month an amount equal to at least (a) one-sixth of the aggregate semiannual amount of Bond Obligation becoming due and payable on the Outstanding Serial Bonds of all Series having semiannual maturity dates within the next six months, plus (b) one-twelfth of the aggregate yearly amount of Bond Obligation becoming due and payable on the Outstanding Serial Bonds of all Series having annual maturity dates within the next twelve months, plus (c) one-sixth of the aggregate of the Mandatory Sinking Account Payments to be paid during the next six-month period into the respective Sinking Accounts for the Term Bonds of all Series for which Sinking Accounts have been created and for which semiannual mandatory redemption is required from said Sinking Accounts, plus (d) one-twelfth of the
aggregate of the Mandatory Sinking Account Payments to be paid during the next twelve-month period into the respective Sinking Accounts for the Term Bonds of all Series for which Sinking Accounts shall have been created and for which annual mandatory redemption is required from such Sinking Accounts; provided that if the JPB certifies to the Trustee that any principal payments are expected to be refunded on or prior to their respective due dates or paid from amounts on deposit in a Bond Reserve Fund that would be in excess of the applicable Bond Reserve Requirement upon such payment, no amounts need be set aside towards such principal to be so refunded or paid.

**Bond Reserve Funds.** Upon the occurrence of any deficiency in the 2019 Series A Bond Reserve Fund or any Bond Reserve Fund established in connection with any other Series of Bonds, the Trustee shall make such deposit to the 2019 Series A Bond Reserve Fund or such other Bond Reserve Fund as is required pursuant to the provisions of the Trust Agreement. See ["Bond Reserve Funds; 2019 Series A Bond Reserve Fund; 2019 Series A Reserve Facility"] below and Appendix C - "DEFINITIONS AND SUMMARY OF THE TRUST AGREEMENT - The Trust Agreement – Establishment, Funding and Application of Bond Reserve Funds" herein.

**Subordinate Obligations Fund.** In the event the JPB issues or incurs Subordinate Obligations, the JPB may direct the Trustee to establish a Subordinate Obligations Fund. Upon the establishment of a Subordinate Obligations Fund at the direction of the JPB, after the transfers to the Interest Fund, the Principal Fund and Bond Reserve Funds described above have been made, the Trustee shall deposit in the Subordinate Obligations Fund in each month such amount as the JPB shall specify in writing is necessary to pay principal of and interest due and payable during the following month with respect to Subordinate Obligations then outstanding. The JPB did not direct the Trustee to establish a Subordinate Obligations Fund in connection with the 2016 Credit Facility or in connection with the Additional Credit Facility.

**Fees and Expenses Fund.** Upon the written direction of the JPB, the Trustee shall establish, maintain and hold in trust a separate fund designated as the "Fees and Expenses Fund." Upon establishment of a Fees and Expenses Fund at the direction of the JPB, after the transfers to the Interest Fund, the Principal Fund and Bond Reserve Funds and, as applicable the Subordinate Obligations Fund, described above have been made, the Trustee shall deposit as soon as practicable in each month in the Fees and Expenses Fund (i) amounts necessary for payment of fees, expenses and similar charges owing in such month or the following month by the JPB in connection with the Bonds or any Parity Obligations (excluding termination payments on Interest Rate Swap Agreements) and (ii) amounts necessary for payment of fees, expenses and similar charges owing in such month or the following month by the JPB in connection with Subordinate Obligations. Upon the establishment of a Fees and Expenses Fund at the direction of the JPB, the JPB shall inform the Trustee of such amounts, in writing, on or prior to the first Business Day of each month.

For a more complete discussion of the allocation of Farebox Revenues, see Appendix C – "DEFINITIONS AND SUMMARY OF THE TRUST AGREEMENT - The Trust Agreement - Pledge of Farebox Revenues; Revenue Fund; Allocation of Farebox Revenues" herein.

**Transfer to JPB.** Except as otherwise provided in a Supplemental Trust Agreement, any Farebox Revenues remaining in the Revenue Fund after the transfers described above have been made shall be transferred to the JPB. The JPB may use and apply the Farebox Revenues when received by it for any lawful purpose of the JPB.

**Bond Reserve Funds; [2019 Series A Bond Reserve Fund;] [2019 Series A Reserve Facility]**

**Bond Reserve Funds.** The JPB may in its sole discretion at the time of issuance of any Series of Bonds or at any time thereafter by Supplemental Trust Agreement provide for the establishment of a
Bond Reserve Fund as additional security for a Series of Bonds. Any Bond Reserve Fund so established by the JPB will be available to secure one or more Series of Bonds as the JPB determines and specifies in the Supplemental Trust Agreement establishing such Bond Reserve Fund. Any Bond Reserve Fund established by the JPB will be held by the Trustee and will comply with the provisions set forth in the Trust Agreement.

In lieu of depositing cash to satisfy a portion or all of the Bond Reserve Requirement applicable to one or more Series of Bonds or in replacement of funds then on deposit in any Bond Reserve Fund (which will be transferred by the Trustee to the JPB), the JPB may obtain a Reserve Facility to satisfy a portion or all of such Bond Reserve Requirement.

See Appendix C - "DEFINITIONS AND SUMMARY OF THE TRUST AGREEMENT - The Trust Agreement – Establishment, Funding and Application of Bond Reserve Funds" herein.

[2019 Series A Bond Reserve Fund]. As additional security for the 2019 Series A Bonds, the JPB has determined to establish the 2019 Series A Bond Reserve Fund, which will be available for payment of principal of and interest on the 2019 Series A Bonds to the extent other moneys are not available therefor. Concurrently with the issuance of the 2019 Series A Bonds, the 2019 Series A Bond Reserve Fund will be established and maintained with the Trustee in an amount equal to the 2019 Series A Bond Reserve Requirement. As defined in the Trust Agreement, the 2019 Series A Bond Reserve Requirement, means, as of any date of calculation, including, but not limited to, a date of calculation requested by the JPB, [an amount equal to the least of (i) ten percent (10%) of the original principal amount of the 2019 Series A Bonds (or if the amount of original issue discount or original issue premium applicable to the 2019 Series A Bonds exceeds two percent (2%), ten percent (10%) of the issue price of the 2019 Series A Bonds), (ii) one hundred twenty-five percent (125%) of average Annual Debt Service on the 2019 Series A Bonds, and (iii) Maximum Annual Debt Service on the 2019 Series A Bonds]. Upon issuance of the 2019 Series A Bonds, the 2019 Series A Bond Reserve Requirement will be $__________.

[2019 Series A Reserve Facility]. [In order to satisfy the 2019 Series A Bond Reserve Requirement, the JPB intends to purchase the 2019 Series A Reserve Facility from 2019 Series A Reserve Facility Provider. Concurrently with the issuance of the 2019 Series A Bonds, 2019 Series A Reserve Facility Provider will issue the 2019 Series A Reserve Facility for credit to the 2019 Series A Bond Reserve Fund. In accordance with the provisions of the Trust Agreement, the 2019 Series A Reserve Facility shall be issued by an insurance company or mutual insurance corporation whose unsecured debt obligations (or obligations secured by such insurance company's or mutual insurance corporation's insurance policies) are, at the time of delivery of the 2019 Series A Reserve Facility, rated at least "AA" or its equivalent by at least one Rating Agency.]

[Copy to come concerning provisions of 2019 Series A Reserve Facility upon selection of 2019 Series A Reserve Facility Provider]

Additional Bonds, Parity Obligations and Subordinate Obligations

Additional Bonds. Subsequent to the issuance of the 2019 Series A Bonds, the JPB may, by Supplemental Trust Agreement, issue one or more additional Series of Bonds, including Bonds issued to refund any Bonds then Outstanding (such Bonds being hereinafter referred to as "Refunding Bonds") payable from Farebox Revenues on a parity with the 2019 Series A Bonds, upon compliance by the JPB with the provisions set forth in the Trust Agreement and subject to certain specific conditions precedent to such issuance set forth in the Trust Agreement.
Conditions precedent to the issuance of an additional Series of Bonds, include, but are not limited to, the following:

(a) No Event of Default shall have occurred and then be continuing.

(b) If a Bond Reserve Fund is required in connection with the issuance of an additional Series of Bonds, the Supplemental Trust Agreement providing for the issuance of such additional Series of Bonds shall require either (i) the establishment of a Bond Reserve Fund to provide additional security for such Series of Bonds or (ii) that the balance on deposit in an existing Bond Reserve Fund be increased, forthwith upon the receipt of the proceeds of the sale of such Series, to an amount at least equal to the Bond Reserve Requirement with respect to such Series of Bonds and all other Bonds secured by such Bond Reserve Fund to be considered Outstanding upon the issuance of such additional Series of Bonds and the Supplemental Trust Agreement providing for the issuance of such additional Series of Bonds shall require deposit of the amount necessary. Said deposit shall be made as provided in the Supplemental Trust Agreement providing for the issuance of such additional Series of Bonds and may be made from the proceeds of the sale of such Series of Bonds or from other funds of the JPB or from both such sources or may be made in the form of a Reserve Facility as provided in the Trust Agreement. See Appendix C - "DEFINITIONS AND SUMMARY OF THE TRUST AGREEMENT - The Trust Agreement – Establishment, Funding and Application of Bond Reserve Funds" herein.

(c) The aggregate principal amount of Bonds issued shall not exceed any limitation imposed by law or by any Supplemental Trust Agreement.

(d) The JPB shall have obtained and placed on file with the Trustee a Certificate of the JPB certifying that the lesser of (i) the amount of Farebox Revenues received for a period of twelve (12) consecutive months (selected by the JPB) during the eighteen (18) months immediately preceding the date on which such additional Series of Bonds will become Outstanding or (ii) the estimated Farebox Revenues for the Fiscal Year in which such additional Series of Bonds are to be issued, shall have been or will be, as applicable, at least equal to 4.0 times the amount of Maximum Annual Debt Service on all Series of Bonds and Parity Obligations then outstanding and the additional Series of Bonds then proposed to be issued; provided, however, that for purposes of calculation of Maximum Annual Debt Service, Interest Rate Swaps which constitute Parity Obligations shall not be included in such calculation, and the JPB may authorize and issue Refunding Bonds without compliance with the provisions of the Trust Agreement described in this subparagraph (d) provided that Maximum Annual Debt Service on all Bonds Outstanding and all Parity Obligations outstanding following the issuance of such Refunding Bonds is less than or equal to Maximum Annual Debt Service on all Bonds Outstanding and all Parity Obligations outstanding prior to the issuance of such Refunding Bonds.

In the event additional assets or revenues are included within the definition of "Farebox Revenues" by a Supplemental Trust Agreement, such additional assets or revenues shall be included in the calculations required pursuant to the provisions of the Trust Agreement described in subparagraph (d) above as if such additional assets or revenues had always been included in Farebox Revenues.

Parity Obligations. In addition to additional Bonds, the JPB may also issue or incur other obligations, including Interest Rate Swap Agreements (but excluding termination payments on Interest Rate Swap Agreements which shall be secured by a lien and charge on Farebox Revenues subordinate to the lien and charge on Farebox Revenues which secures Subordinate Obligations), having an equal lien and charge upon the Farebox Revenues and therefore payable on a parity with the Bonds (whether or not
any Bonds are Outstanding), provided that certain conditions precedent to the issuance or incurrence of such Parity Obligations, as set forth in the Trust Agreement, are satisfied.

Conditions precedent to the issuance or incurrence of Parity Obligations include, but are not limited to, the following:

(a) No Event of Default shall have occurred and then be continuing.

(b) Such Parity Obligations are being issued or incurred either (i) for purposes of refunding in compliance with the requirements for the issuance of Refunding Bonds described above or (ii) the JPB shall have placed on file with the Trustee a Certificate of the JPB, upon which the Trustee may conclusively rely certifying (on the basis of calculations made no later than the date of sale or incurrence of such Parity Obligations, as applicable) that the requirements described above in subparagraph (d) under the caption "Additional Bonds" relating to the issuance of an additional Series of Bonds have been satisfied with respect to such Parity Obligations, which Certificate shall also set forth the computations upon which such Certificate is based.

Notwithstanding the foregoing or any other provision of the Trust Agreement to the contrary, the execution and delivery by the JPB of an Interest Rate Swap Agreement shall not be subject to compliance with the coverage test described above in subparagraph (d) under the caption "Additional Bonds."

**Subordinate Obligations.** The JPB may also issue obligations payable as to principal, premium, interest and reserve fund requirements, if any, from Farebox Revenues, after the prior payment of all amounts then required to be paid from Farebox Revenues for principal, premium, interest and reserve fund requirements, if any, for all Bonds Outstanding and all Parity Obligations outstanding as the same shall become due and payable at the times and in the manner as required by the Trust Agreement and in the instrument or instruments pursuant to which any Parity Obligations were issued or incurred.

The JPB may also secure termination payments, fees and expenses on Interest Rate Swap Agreements and fees and expenses on other obligations with a lien and charge on the Farebox Revenues, which lien and charge on the Farebox Revenues shall be subordinate to the lien and charge upon the Farebox Revenues which secures the Bonds, Parity Obligations and the payment of principal and interest on Subordinate Obligations.

The obligations of the JPB under the 2016 Credit Facility and the Additional Credit Facility constitute Subordinate Obligations. See "FINANCIAL INFORMATION - Existing Indebtedness and Contemplated Indebtedness" herein.


**[BOND INSURANCE]**

[The following information has been furnished by 2019 Series A Insurer for use in this Official Statement. No representation is made herein as to the accuracy, completeness or adequacy of such information or as to the absence of material adverse changes in such information or in the financial condition of 2019 Series A Insurer subsequent to the date hereof, or that the information contained and incorporated herein by reference is correct. Reference is made to Appendix H for a specimen of the municipal bond insurance policy.]
[Bond Insurance Policy]

[Concurrently with the issuance of the 2019 Series A Bonds, the 2019 Series A Insurer will issue its municipal bond insurance policy for the 2019 Series A Bonds (the "Policy"). The Policy guarantees the scheduled payment of principal of and interest on the 2019 Series A Bonds when due as set forth in the form of the Policy included as Appendix H to this Official Statement.]

[Copy to come concerning provisions of municipal bond insurance policy upon selection of 2019 Series A Insurer]

THE JOINT POWERS BOARD

Background and Organization

The Peninsula Corridor Joint Powers Board originated in a joint powers entity formed in 1988 by a joint powers agreement among CCSF, SamTrans and VTA for the purpose of conducting planning studies related to the transfer of responsibility for the administration of Caltrain from the State of California to the county level. Under a 1980 purchase-of-service agreement between the California Department of Transportation and Southern Pacific Transportation Company ("SPT"), State and local agencies subsidized the Caltrain commuter rail service which was operated by SPT. Based upon the planning studies conducted by the joint powers entity and its negotiation of an agreement to purchase the rail corridor right-of-way ("ROW") between San Francisco and San José and perpetual trackage rights between San José and Gilroy from SPT, the three parties to the joint powers agreement amended and restated the then-existing joint powers agreement in 1991 to form the Peninsula Corridor Joint Powers Board. The 1991 joint powers agreement provided for an expansion of powers to transform the existing joint powers entity from a planning entity to an operating entity and provided for the allocation among the parties of the administrative, capital and operating expenses attendant to ownership of the ROW and operation of Caltrain. The 1991 joint powers agreement was further amended in 1994 and was restated in its entirety in 1996 to modify the basis for allocation of administrative and capital costs and to make certain other changes. The joint powers agreement as restated in 1996 is herein referred to as the "Joint Powers Agreement."

Current Status of Joint Powers Agreement

The original term of the Joint Powers Agreement expired on October 18, 2001. Pursuant to the terms of the Joint Powers Agreement, the Joint Powers Agreement continues in full force and effect on a year-to-year basis, subject to the right of any Member Agency to withdraw pursuant to the terms of the Joint Powers Agreement upon one year's prior notice given at the end of any Fiscal Year. The Joint Powers Agreement requires that the parties must undergo mediation of the issues giving rise to the withdrawal notice, such mediation to be provided through the Metropolitan Transportation Commission (the "MTC"), a regional transportation planning, coordinating and financing agency for the nine-county San Francisco Bay Area. If two or more Member Agencies withdraw, the Joint Powers Agreement terminates at the end of the Fiscal Year following expiration of the one-year's notice given by the second Member Agency to withdraw from the agreement. Upon termination of the Joint Powers Agreement, following discharge of all obligations due by the JPB, including the 2019 Series A Bonds, the 2016 Credit Facility and the Additional Credit Facility, any property interest remaining in the JPB shall be disposed of and the proceeds or property shall be allocated in accordance with a separate agreement to be entered into between the parties.

No assurance can be given that the Joint Powers Agreement will be renewed nor can any assurance be given that two or more Member Agencies will not withdraw pursuant to the terms of
the Joint Powers Agreement, thereby terminating the Joint Powers Agreement. Nor can any assurance be given that if the Joint Powers Agreement is terminated pursuant to its terms, Caltrain will continue to be operated until such time as all of the 2019 Series A Bonds have been paid.

Caltrain Commuter Rail Service

The Caltrain commuter rail service runs from San Francisco 77 miles south to the City of Gilroy, serving 32 stations. Spanning the City and County of San Francisco, the County of San Mateo and the County of Santa Clara (herein referred to as the "Caltrain Counties"), Caltrain connects the three counties and acts as a vital link for 20 cities located within the three counties and multiple transit systems, including the transit systems operated by the San Francisco Municipal Transportation Agency, SamTrans, VTA, the Alameda-Contra Costa Transit District and the San Francisco Bay Area Rapid Transit District. Weekday service is provided between San Francisco and the City of Gilroy. Weekend service is provided between San Francisco and San José.

Currently, Caltrain operates 92 weekday trains. Three types of weekday service are provided between San Francisco and San José: (i) express service (referred to as the "Baby Bullet express service"); (ii) limited-stop service; and (iii) local-stop service. Travel time between San Francisco and San José is 65 minutes for Baby Bullet express service, 85 minutes for limited-stop service and 95 minutes for local-stop service. Weekday service is provided to City of Gilroy northbound during the morning peak and southbound during the evening peak. On weekends, Caltrain serves 24 stations between San Francisco and San José Diridon Station, which is connected to the Tamien station via shuttle bus service, operating 28 trains on Saturdays and 24 trains on Sundays. Local-stop service is provided every ninety (90) minutes and Baby Bullet express service is provided in each direction twice a day, at mid-day and in the evening. See the Caltrain map on the [inside cover] page of this Official Statement. As more fully described below under the caption "Major Capital Initiatives - Peninsula Corridor Electrification Project," electrification of the rail corridor between San Francisco and San José is currently underway. Work is being performed during the day and at night. Service schedules and levels of service have been and will continue to be adjusted to create work windows for the completion of the Peninsula Corridor Electrification Project. Most recently, the JPB announced a temporary weekend suspension of train service to the San Francisco station located at 22nd Street and to the San Francisco terminus station located at 4th and King Street. During the temporary suspension, which commenced October 6, 2018 and is scheduled to end in late Spring 2019, a bus bridge connection has been set up between the Bayshore Caltrain station, located on the border of San Francisco and Brisbane, California, and the two San Francisco Caltrain stations identified above.

In addition to its regularly scheduled service, Caltrain operates additional service to accommodate events at AT&T Park in San Francisco, located two blocks from the San Francisco terminus of Caltrain, Levi's Stadium in Santa Clara and SAP Center in San José. Extra trains are operated for special events, such as the California - Stanford University "Big Game" when held at Stanford Stadium. Regular trains make special stops at Stanford Stadium for football games and other major sporting events. Additional special trains are operated on a charter basis for events, such as the annual Martin Luther King, Jr. Birthday celebration held in San Francisco in January and the Gilroy Garlic Festival held in Gilroy in July.

Operation of Caltrain is currently provided pursuant to an agreement between the JPB and TransitAmerica Services, Inc. ("TASI") pursuant to which TASI is responsible for providing Caltrain rail operations, maintenance and support services. Services are provided in the following areas: Administrative/Safety, Operations and Dispatch, Maintenance of Equipment, Track, Communications and Signals, Stations, Constructions Support and State of Good Repair. The agreement (herein referred to as the "TASI Operating Agreement") was approved by the governing board of the JPB on September 1,
2011, provided for a base term expiring June 30, 2017 and included five one-year options. Pursuant to the TASI Operating Agreement, TASI began operating Caltrain effective May 26, 2012. On February 2, 2017, the governing board of the JPB approved the exercise of all five one-year options. Subsequently, the JPB and TASI executed an amendment to the TASI Operating Agreement which extended the term of the TASI Operating Agreement through June 30, 2022.

All personnel who operate the Caltrain commuter rail service are employees of TASI. Currently, there are 11 collective bargaining agreements in place between TASI and its employees. Pursuant to the federal Railway Labor Act, employees of TASI have a right to strike conditioned upon exhaustion of a specified dispute resolution process, which includes mediation. The JPB has never experienced a strike on Caltrain during the term of the TASI Operating Agreement nor during the term of its contract with the prior operator of the Caltrain commuter rail service, which was in effect from the time the JPB assumed responsibility for administration of Caltrain until the TASI began operating Caltrain pursuant to the TASI Operating Agreement.

**Governance**

The governing board of the JPB consists of nine members, each member serving at the pleasure of the party appointing such member, selected as follows:

**Representing the City and County of San Francisco**

1. An appointment of the Mayor of CCSF;
2. An appointment of the Board of Supervisors of CCSF;
3. An appointment of the San Francisco Municipal Transportation Agency (the "SFMTA"), formerly known as the San Francisco Public Transportation Commission;

**Representing the San Mateo County Transit District**

4. Member of SamTrans Board of Directors (the "SamTrans Board") designated by the SamTrans Board;
5. Member of SamTrans Board appointed by the San Mateo County Board of Supervisors;
6. Member of SamTrans Board appointed by the Cities Selection Committee of the Council of Mayors of San Mateo County;

**Representing the Santa Clara Valley Transportation Authority**

7. Member of VTA Board of Directors (the "VTA Board") representing the City of San José or the County of Santa Clara, as appointed by the VTA Board;
8. Member of VTA Board representing the County of Santa Clara or a city in Santa Clara County other than the City of San José, as appointed by the VTA Board;
9. The County of Santa Clara's representative to the MTC, or if this person declines to serve, then the MTC appointee of the Cities Selection Committee, or if this person also declines to serve, then a member of the VTA Board, as appointed by the VTA Board.

The current members of the governing board of the JPB are as follows:
Representing the City and County of San Francisco

Cheryl Brinkman was appointed to the governing board of the JPB in July 2017. Ms. Brinkman currently serves as Chairman of the SFMTA.

Gillian Gillett was appointed to the governing board of the JPB in June 2017. Ms. Gillett currently serves as Vice-Chair of the governing board of the JPB.

Monique Zmuda was appointed to the governing board of the JPB in April 2017.

Representing the San Mateo County Transit District

__________________ [Note: Successor to Jeff Gee will be named subsequent to the January 10, Board Meeting. Information concerning the appointee will be inserted upon receipt from JPB.]

Dave Pine was appointed to the governing board of the JPB in January 2017. Mr. Pine is a President of the San Mateo County Board of Supervisors.

Charles Stone was appointed to the governing board of the JPB in January 2018. Mr. Stone is a member of the City Council of the City of Belmont.

Representing the Santa Clara Valley Transportation Authority

Jeannie Bruins was appointed to the governing board of the JPB in February 2017. Ms. Bruins currently serves as the Chair of the governing board of the JPB. She is an ex-officio member of the Board of Directors of VTA.

Cindy Chavez was appointed to the governing board of the JPB in January 2018. Ms. Chavez is a member of the Santa Clara County Board of Supervisors.

Devora "Dev" Davis was appointed to the governing board of the JPB in March 2017. Ms. Davis is a member of the City Council of the City of San José.

Administration and Staffing

Pursuant to the Joint Powers Agreement, SamTrans has been appointed as managing agency (the "Managing Agency") for the duration of the term of the Joint Powers Agreement, provided that the governing board of the JPB may replace SamTrans upon one year's prior written notice given at the end of any Fiscal Year after SamTrans has been fully repaid monies advanced by SamTrans to cover the ROW purchase price. Among other responsibilities, the Managing Agency is required to administer the contract for the operation of Caltrain, maintain and manage the ROW and other system assets unless otherwise delegated by the governing board of the JPB to another Member Agency, implement capital programs, seek, obtain and administer grants, prepare and submit financial reports, recommend changes in fare structure and scheduling and levels of Caltrain service, and prepare capital and operating budgets. Employees of SamTrans, acting in its capacity as Managing Agency, function as JPB staff. The number of full-time equivalents charged to the JPB for the Fiscal Year ended June 30, 2018 was 133.92. Personnel costs of the JPB represent the allocated costs of SamTrans employees addressing JPB functions. For the Fiscal Year ended June 30, 2017, and June 30, 2018, respectively, the allocated costs were approximately $13,560,800 and approximately $13,910,813, respectively. See the table entitled "Peninsula Corridor Joint Powers Board Statement of Revenues, Expenses and Changes in New Position"
under the caption "FINANCIAL INFORMATION - Revenues and Expenses for Caltrain Commuter Rail Service" herein.

Pursuant to the Joint Powers Agreement, the General Manager/Chief Executive Officer of the Managing Agency serves as the Executive Director of the JPB. The Chief Financial Officer of the Managing Agency serves as Chief Financial Officer of the JPB.

Executive Management

Jim Hartnett, Executive Director, became Executive Director of the JPB effective March 30, 2015 concurrent with his appointment as General Manager/Chief Executive Officer of SamTrans. Mr. Hartnett also serves as Executive Director of San Mateo County Transportation Authority (the "SMCTA"). Mr. Hartnett is an attorney who has practiced law since 1978, specializing in the areas of business law, real estate law, civil litigation, probate and trust litigation, and dispute resolution. Mr. Hartnett has served on the governing board of the California High-Speed Rail Authority, serving as Vice Chair at the time of his appointment as Executive Director of the JPB, and is past Chair of the governing board of the JPB, the SamTrans Board and the Dumbarton Rail Policy Committee. He has also served four terms as a member of the City Council of the City of Redwood City, serving as both Mayor and Vice-Mayor, and has served on numerous other boards and committees both within and outside San Mateo County.

Derek Hansel, Chief Financial Officer, became the Chief Financial Officer of the JPB effective June 26, 2017 concurrent with his appointment as Chief Financial Officer of SamTrans. Mr. Hansel also serves as Chief Financial Officer of the SMCTA. Prior to his appointment as Chief Financial Officer, Mr. Hansel served as Assistant Director of Finance for the City of San José from January 2015 to June 2017. Prior to his appointment as Assistant Director of Finance for the City of San José, Mr. Hansel served as Executive Director of the New Jersey Educational Facilities Authority from April 2012 to December 2014 and as Assistant Chief Financial Officer of the Pennsylvania Turnpike Commission from October 2009 to April 2012.

Michelle Bouchard, Chief Operating Officer, Rail, became Chief Operating Officer, Rail, in September 2015. Prior to September 2015, Ms. Bouchard was the Group Manager leading the operations and maintenance aspects of eBART and Oakland Airport Connector projects for the San Francisco Bay Area Rapid Transit District system ("BART"). Before joining BART, Ms. Bouchard worked in Rail Transportation at the JPB for fourteen years, serving as Director, Rail Transportation for five years before joining BART.

John Funghi, Chief Officer, Caltrain Modernization Program, became Chief Officer for the Caltrain Modernization Program effective March 26, 2018. From 2006 to March 2018, Mr. Funghi served as Program Director for delivery of the Central Subway project in downtown San Francisco. From 1999 to 2006, Mr. Funghi served in a number of other positions at the SFMTA.
Major Capital Initiatives

Caltrain Modernization Program. During the 1990s, the JPB began to plan for upgrading the Caltrain rail corridor. The JPB developed the Caltrain Modernization Program (the "CalMod Program") to provide a blueprint for implementing its plan. The CalMod Program, which is being implemented in phases, is designed to electrify and upgrade the performance, operating efficiency, capacity, safety and reliability of the Caltrain commuter rail service through the delivery of several projects, including the Peninsula Corridor Electrification Project and the Positive Train Control System Project, both of which are currently underway. In particular, completion of these two projects will enable the JPB to increase capacity due to (i) the more rapid acceleration and deceleration of the electric powered rail cars, which comprise the rolling stock component of the Peninsula Corridor Electrification Project, and (ii) minimization of separation between trains based on recognition of specific train types resulting from installation of the Positive Train Control System Project.

Peninsula Corridor Electrification Project. The PCEP Project, which will provide for electrification of the existing Caltrain rail corridor from San Francisco to San José, is comprised of an infrastructure component and a rolling stock component. The infrastructure component includes installation of an overhead contact system over the rail system to provide power to the electric powered rolling stock. The rolling stock component includes the design and procurement of a fleet of 96 electric powered rail cars. Work is being performed during the day and at night. To limit the impact to regular train service, night work is scheduled to occur between 8:00 p.m. and 6:00 a.m. when there are fewer regular service trains. As indicated above under the caption "Caltrain Commuter Rail Service," schedules and levels of service have been and will continue to be adjusted to create work windows during the construction period. Completion is expected by 2022.

Funding is being provided pursuant to a funding plan developed by the JPB and finalized in the 2017 (the "2017 Funding Plan"). Budgeted cost for the 2017 Funding Plan is approximately $1.98 billion. Monthly reports relating to the PCEP Project are included as an agenda item for each regularly scheduled meeting of the governing board of the JPB and are available on the JPB website at http://www.caltrain.com/about/bod.html. However, the data and information presented on such website are not incorporated by reference in this Official Statement and should not be relied upon in making investment decisions with respect to the 2019 Series A Bonds.

Funding sources for the 2017 Funding Plan include federal, state, local and regional funds. All references to the state as a funding source under this caption refer to the State of California.

- Approximately 49% of budgeted costs are expected to come from federal funding sources. Federal funding sources include a Federal Transit Administration ("FTA") Core Capacity Grant (the "2017 Core Capacity Grant") and FTA Section 5307 Urbanized Area Formula Funds.
- Approximately 38% of budgeted costs are expected to come from state funding sources. State funding sources include: (i) proceeds of general obligation bonds authorized by California voters in November 2008 to fund projects for the proposed high speed rail system between San Francisco and Los Angeles ("Proposition 1A Funds"); (ii) Cap and Trade Program funds funded from proceeds of auctions conducted by the California Air Resources Board ("Cap and Trade Program Funds"); (iii) Transit and Intercity Rail Capital Program funds provided from grants from the Greenhouse Gas Reduction Fund established pursuant to California State Senate Bill 862 ("SB 862") adopted in 2014; and (iv) proceeds of general obligation bonds authorized by California voters in November 2006 to fund infrastructure improvements ("Proposition 1B Funds").
• Approximately 10% of budgeted costs are expected to come from local funding sources. Local funding sources include funds provided by the Member Agencies and funds from the Low Carbon Transit Operations Program established pursuant to SB 862.

• Approximately 3% of budgeted costs are expected to come from regional funding sources. Regional funding sources include: (i) bridge toll revenues collected on three bridges spanning San Francisco Bay which are owned by the State of California, the San Francisco-Oakland Bay Bridge, the San Mateo-Hayward Bridge and the Dumbarton Bridge authorized pursuant to ballot measures approved by voters in the nine-county San Francisco Bay Area in 1988 and in 2004 ("Regional Bridge Toll Measure Funds"); and (ii) grant funding allocated by the Carl Moyer Memorial Air Quality Standards Attainment Program established pursuant to Section 44280 of the California Health and Safety Code ("Carl Moyer Funds").

In addition, the 2017 Funding Plan includes a contingency budget, which totals $315.5 million. As of September 30, 2018, executed change orders and new contracts had reduced the contingency to $253.5 million, a decrease of $62 million. A pending need for $16.6 million will reduce the contingency balance to $236.9 million. Currently, the contingency balance associated with the contingency hold point specified in the contingency draw down schedule for the PCEP Project is $204 million.

Positive Train Control System Project. The Positive Train Control System Project consists of the installation of a safety system that satisfies all safety improvements mandated by the Rail Safety Improvement Act of 2008, as amended, which required completion of such safety systems by December 31, 2018. The JPB initiated development of specifications for the PTC Project in January 2008 and selected the initial contractor for the PTC Project in June 2011. Pursuant to the contract between the JPB and the initial contractor, installation was expected to be completed and the PTC Project was expected to be fully operational in October 2015. Due to delays and performance failures, the JPB terminated its contract with the initial contractor in February 2017. Termination of the initial contract for the PTC Project resulted in litigation which is ongoing. See "LITIGATION" herein. Subsequently, in March 2018, the JPB selected another contractor to complete the PTC Project. Work is currently underway. In accordance with the federal regulations requiring installation of such safety systems, the JPB satisfied all statutory requirements to permit the JPB to request an alternative schedule, which request (hereinafter referred to as the "Extension Request") was submitted by the JPB on December 14, 2018. Satisfaction of the requirements to submit an alternative schedule and submission of the Extension Request enables the JPB to establish a new baseline schedule for completion of its PTC Project by December 2020. The JPB expects to receive approval of the Extension Request within ninety (90) days of the date of submission of the Extension Request. [Note: Prior to POS Posting, JPB will be requested to provide an update as to status of approval of Extension Request.]

Budgeted cost for completion of the PTC Project is approximately $89.4 million. To date, the JPB has secured funding for approximately $85.2 million of such current budgeted cost and continues to explore opportunities to fund the remaining budgeted cost of approximately $4.2 million, all or a portion of which may be funded by a draw on the Additional Credit Facility. See "FINANCIAL INFORMATION - Existing Indebtedness and Contemplated Indebtedness" herein. Monthly reports relating to the PTC Project are included as an agenda item for each regularly scheduled meeting of the governing board of the JPB and are available on the JPB website at http:www.caltrain.com/about/bod.html. As indicated above, the data and information presented on such website are not incorporated by reference in this Official Statement and should not be relied upon in making investment decisions with respect to the 2019 Series A Bonds.

Identified funding sources for completion of the PTC Project include grants provided by federal, state and local sources. All references to the state as a funding source under this caption refer to the State of California.
• Federal sources include FTA funds and Federal Railroad Administration funds, including Consolidated Rail Infrastructure and Safety Improvements funds.

• State sources include Proposition 1A funds, Proposition 1B funds and funds provided pursuant to California State Senate Bill 1, a transportation funding package which includes funding for projects to improve commuter rail service, reduce air pollution and ease traffic congestion.

• Local funding sources are funds provided by the Member Agencies.

The following table presents information concerning identified funding sources for the Positive Train Control System Project as of the date set forth below.

<table>
<thead>
<tr>
<th>Positive Train Control System Project</th>
<th>Summary of Identified Funding Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>As of [December 20, 2018]</td>
<td></td>
</tr>
</tbody>
</table>

[Note: Request that data be updated through December 31, 2018. Will be checking back with JPB for more current data prior to printing.]

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Identified Funding Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Funding Sources</td>
<td>$49,118</td>
</tr>
<tr>
<td>State Funding Sources</td>
<td>26,194</td>
</tr>
<tr>
<td>Local Funds</td>
<td>9,851</td>
</tr>
<tr>
<td>Total Identified Funding Sources:</td>
<td>$85,163</td>
</tr>
</tbody>
</table>

Source: Peninsula Corridor Joint Powers Board.

Other Major Initiatives

Long-Term Business Plan. In 2017, the JPB initiated a planning process, which the JPB currently anticipates completing in 2019. The goal of the planning process is to articulate a vision to guide the future for the Caltrain system, including development of a long-term business strategy to support the future envisioned. The planning process will include long-range demand modeling, service and infrastructure planning, organizational analysis and an assessment of Caltrain's interface with the communities which Caltrain traverses.

Sales Tax Initiative. In order to provide a dedicated local funding source for Caltrain, the JPB secured an amendment of the California Revenue and Taxation Code (the "Revenue and Taxation Code") which took effect January 1, 2018. The amendment, which added Section 7286.65 to the Revenue and Taxation Code, authorizes the JPB to levy a retail transactions and use tax (herein referred to as the "sales tax"), at a rate not to exceed 0.125 percent, within the three Caltrain Counties upon compliance with the requirements set forth in Section 7286.65 of the Revenue and Taxation Code. Such requirements include approval of the ballot measure proposing the sales tax (i) by the Board of Supervisors of each of the three Caltrain Counties, such approval to be consistent with each County's applicable procedures, (ii) by a majority vote of the governing body of SFMTA, SamTrans, and VTA, and (iii) by two-thirds of all of the voters voting on the ballot measure. If the ballot measure is approved and the sales tax is levied, proceeds of the sales tax may be used to provide funding for operating and capital purposes. The JPB is currently considering the timing of proceeding to secure the required approvals and is contemplating putting the ballot measure on the ballot in 2020. If the ballot measure is approved and the sales tax is levied, proceeds of the sales tax will not be pledged to secure the 2019 Series A Bonds, obligations under the 2016 Credit Facility, or obligations under the Additional Credit Facility.
Capital Planning

**Capital Planning Process.** As part of its capital planning process and in order to comply with requirements imposed by various federal, state, regional and local sources of funding for capital improvement projects, the JPB develops various planning documents from time to time. Such planning documents include strategic plans (each, a "Strategic Plan") and short-range transit plans (each, an "SRTP"). Each Strategic Plan and each SRTP is updated on a periodic basis.

**Strategic Plans.** The current strategic plan was adopted by the governing board of the JPB on September 4, 2014, was designated as the Caltrain Strategic Plan FY2015-2024 and is herein referred to as the "Existing Strategic Plan." The Existing Strategic Plan identified as its common vision "to provide a safe, reliable, sustainable modern rail system that meets the growing mobility needs of the San Francisco Bay Area region." The Existing Strategic Plan was designed to frame key policy, service and investment decisions over the Fiscal Year 2015-2024 time period. The JPB currently anticipates revising the Existing Strategic Plan after completion of the planning initiative described above under the caption "Other Major Initiatives - Long-Term Business Plan."

**Short Range Transit Plans.** An SRTP is prepared to support and supplement the Strategic Plan to which the SRTP relates and to satisfy the planning requirement imposed by the MTC, acting in its capacity as regional planning agency. The purpose of each SRTP is to develop a financially feasible operating and capital plan and to identify any major issues and challenges which the JPB will need to address during the planning period covered by the SRTP. The Existing SRTP, was adopted by the governing board of the JPB on October 1, 2015 and relates to the Fiscal Year 2015-2024 time period. The JPB currently anticipates revising the Existing SRTP after completion of the planning initiative described above under the caption "Other Major Initiatives - Long-Term Business Plan."

**Capital Improvement Programs.** Included in each SRTP is a capital improvement program (each, a "CIP") which outlines the capital improvements required to support the service and operating assumptions included in the SRTP. The CIP included in the Existing SRTP (herein referred to as the "Existing CIP") includes approximately $3 billion of projects focused on: (i) maintaining assets in a state of good repair; (ii) implementing operational enhancements; and (iii) modernizing the Caltrain system. Projects within the 10-year Existing CIP are grouped into four key program areas: (i) support and contingency, which includes costs associated with planning, programming and development activities related to capital projects and an annual set-aside for unforeseen and emergency capital expenditures; (ii) state of good repair; (iii) Caltrain modernization; and (iv) reliability and enhancements. Projects identified under the state of good repair program area include rehabilitation and maintenance activities required to maintain existing and planned structures, facilities and rolling stock. Projects identified under operational enhancements program area include capital projects designed to improve Caltrain system performance. Projects identified under the modernization program area include certain of the projects described above under the caption "Major Capital Initiatives - Peninsula Corridor Electrification Project" and "Major Capital Initiatives - Positive Train Control System Project."

**Capital Improvement Funding; Funding Shortfalls.** The Existing SRTP assumed that funding would be provided from sources expected to be available and/or committed over the FY2015-2024 time period based on fund programming policies in effect as of the date of adoption of the Existing SRTP, October 1, 2015. Funding sources for the CIP included in the Existing SRTP include federal, state and local funding sources. All references to the state as a funding source under this caption refer to the State of California.
• Federal funding sources include: (i) FTA Section 5307 urbanized area formula funds and Section 5337 state of good repair grants; (ii) Congestion Mitigation and Air Quality Improvement Program funds; (iii) Surface Transportation Program funds; and (iv) FTA Core Capacity Program funds.

• State funding sources include: (i) Proposition 1B Funds; (ii) Proposition 1A Funds; (iii) State Transportation Improvement Program funds; (iv) Regional Transportation Improvement Program funds; (v) Cap and Trade Program Funds; and (vi) funds provided by the California Public Utilities Commission for at-grade crossing improvements and rail grade separation projects.

• Local funding sources include: (i) funds provided by the Member Agencies; (ii) funds provided by the SMCTA, consisting of sales tax revenues collected within the County of San Mateo pursuant to Measure A; (iii) Regional Bridge Toll Measure Funds; and (iv) Carl Moyer Funds.

All projects identified in the Existing CIP are subject to identification of funding. As of October 1, 2015, funding was not identified for all projects identified in the Existing CIP and, as of the date hereof, funding has not been identified for all projects identified in the Existing CIP. See Appendix A – "PENINSULA CORRIDOR JOINT POWERS BOARD INDEPENDENT AUDITOR'S REPORT YEARS ENDED JUNE 30, 2018 and 2017 - "Management's Discussion and Analysis - Overview of the Financial Statements - Capital Program" and Note 8 thereto. The JPB continues to work to identify additional funding sources to implement the Existing CIP included in the Existing SRTP. Except as otherwise described herein under the caption "FINANCIAL INFORMATION - Existing Indebtedness and Contemplated Indebtedness" the JPB does not anticipate the issuance of additional Bonds to fund any portion of the Existing CIP.

FINANCIAL INFORMATION

Ridership and Passenger Fare Information

The amount of passenger fares collected by the JPB is determined primarily by ridership levels and the amount of fares charged. The table set forth below presents information concerning total passengers, number of weekday trains, average weekday ridership, average weekday passenger miles, total train revenue miles and total passenger fares for Fiscal Years ending June 30, 2008 through June 30, 2018. All numbers have been rounded.

Peninsula Corridor Joint Powers Board
Ridership and Passenger Fare Information

Fiscal Years Ending June 30, 2008 - June 30, 2018

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Total Passengers</th>
<th>Number of Weekday Trains(1)</th>
<th>Average Weekday Ridership</th>
<th>Average Weekday Passenger Miles</th>
<th>Total Train Revenue Miles(3)</th>
<th>Total Passenger Fares</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>10,914,621</td>
<td>98</td>
<td>36,421</td>
<td>905,807</td>
<td>1,403,673</td>
<td>$38,398,608</td>
</tr>
<tr>
<td>2009</td>
<td>11,359,225</td>
<td>98</td>
<td>37,989</td>
<td>986,370</td>
<td>1,414,274</td>
<td>$43,271,656</td>
</tr>
<tr>
<td>2010</td>
<td>10,611,734</td>
<td>90(2)</td>
<td>35,061</td>
<td>972,090</td>
<td>1,333,080</td>
<td>$42,732,343</td>
</tr>
<tr>
<td>2011</td>
<td>12,574,233</td>
<td>86(2)</td>
<td>41,448</td>
<td>955,680</td>
<td>1,298,421</td>
<td>$49,025,572</td>
</tr>
<tr>
<td>2012</td>
<td>12,999,293</td>
<td>92</td>
<td>43,430</td>
<td>935,680</td>
<td>1,285,357</td>
<td>$59,891,344</td>
</tr>
<tr>
<td>2013</td>
<td>16,427,450</td>
<td>92</td>
<td>54,934</td>
<td>1,203,276</td>
<td>1,340,632</td>
<td>$68,767,170</td>
</tr>
<tr>
<td>2014</td>
<td>17,759,504</td>
<td>92</td>
<td>59,340</td>
<td>1,289,840</td>
<td>1,356,758</td>
<td>$74,846,067</td>
</tr>
</tbody>
</table>
2015  18,995,161  92  63,852  1,594,429  1,362,079  $83,351,480
2016  18,355,641  92  62,444  1,653,782  1,380,022  $86,959,371
2017  18,648,850  92  64,248(4)  1,388,058  1,354,608  $92,428,889
2018  18,504,880  92  64,022  1,388,058  1,354,608  $97,050,195

(1) Number of trains scheduled to be operated based on public timetable in effect at the end of each Fiscal Year.
(2) Reduction in the number of weekday trains resulted from the need to manage a budget deficit resulting from the recessionary environment.
(3) Represents the total number of miles that Caltrain trains traveled in revenue service or are projected to travel in revenue service in the Fiscal Year indicated.
(4) Methodology utilized in annual count to determine Average Weekday Ridership was changed in Fiscal Year 2017. Prior to Fiscal Year 2017, all annual counts counted all weekday trains five times each, a total of 460 weekday trains. Commencing with the count for Fiscal Year 2017, all annual counts counted all weekday trains twice on two of the three mid-weekdays, a total of 184 weekday trains. Change in methodology was made to capture maximum load for planning purposes and as a result of rising costs to conduct the annual survey in the competitive job market in the San Francisco Bay Area. Review of prior annual count data by JPB confirmed that the change in methodology did not result in overestimating the average weekday passenger volume.

Sources: (i) Federal Transit Administration National Transit Data Base - Total Passengers, Average Weekday Ridership, Average Weekday Passenger Miles and Total Train Revenue Miles and (ii) Peninsula Corridor Joint Powers Board - all other data.

**Passenger Fares**

Similar to commuter rail fare structures around the country, Caltrain fares are based on zones. Fares are generally priced with a base fare that allows travel within a single zone and an increment for each additional zone traveled through. Passengers are charged based on the number of zones they will be traveling through, with the amount of the fare increasing with the number of zones that are crossed. In order to generate revenue to support annual operating budgets, including operating reserves, fares are reviewed and revised on a periodic basis.

Passenger fares are established by the governing board of the JPB. Prior to adopting fare adjustments, the governing board of the JPB seeks comment on the proposed changes and conducts a public hearing. Since the JPB assumed responsibility for administration of the Caltrain commuter rail service in July 1992, passenger fares were raised annually through Fiscal Year 1998 and were raised again in Fiscal Year 2002. In Fiscal Year 2003, a proof-of-payment system was implemented and fares and zones were restructured to coincide with distance traveled. These changes increased fares for some passengers and decreased fares for others. Subsequent to this restructuring, fares were increased in Fiscal Years 2005 through 2007.

Fare increases imposed across all fare categories during the period which commenced in July 1992 when the JPB assumed responsibility for administration of the Caltrain commuter rail service and ended June 30, 2007, are set forth in the table below.

<table>
<thead>
<tr>
<th>Date</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1993</td>
<td>10.0% across all fare categories</td>
</tr>
<tr>
<td>July 1995</td>
<td>5.0% across all fare categories</td>
</tr>
<tr>
<td>July 1996</td>
<td>5.0% across all fare categories</td>
</tr>
<tr>
<td>July 1997</td>
<td>5.0% across all fare categories</td>
</tr>
</tbody>
</table>
Subsequent to June 30, 2007, the JPB from time to time increased base fares, increased zone fares and increased prices for various of its ticket types. Fares were adjusted pursuant to governing board resolutions adopted in October 2008, July 2009, October 2010, April 2011, March 2012, July 2014, December 2015 and August 2017, The schedule of fares currently in effect, which was adopted by the governing board of the JPB on August 3, 2017, is set forth below.

Caltrain has six zones. Fares generally vary by the number of zones the passenger will be traveling within. Ticket types include one-way tickets, day passes and monthly passes. In addition, zone upgrades are available. One-way tickets and day passes can be purchased on the Caltrain Mobile app or at station ticket machines. Monthly passes are available on the Clipper Card® regional fare payment system. Zone upgrades may be purchased at station ticket machines. Full fares apply to all customers who are 19 years of age or older except those customers who qualify for an eligible discount. Those customers who qualify for an eligible discount include: (i) those who are 65 years of age or older; (ii) those who hold a valid form of identification designating recognition of a disability, such as a Regional Transit Connection Discount Card or registration for a permanent disabled California license plate or parking placard issued by the California Department of Motor Vehicles; (iii) those who have a Medicare card; and (iv) customers who are 18 years of age or younger. The fare for those who qualify for an eligible discount ticket is approximately 50% of the full-fare price for each ticket type. In addition, pursuant to the Caltrain Go Pass Program, companies, educational institutions and residential complexes may purchase annual unlimited-ride passes for all eligible employees, students, or residents, as applicable. The price of a single annual Go Pass for the calendar year ending December 31, 2018 reflects a 90% discount compared to one year's worth of 3-zone monthly passes. Pursuant to the schedule of fares adopted by the governing board of the JPB on August 3, 2017, the price of a single annual Go Pass increased for the calendar year which commenced January 1, 2019. This increase reduced the discount to from 90% to 88% compared to one year's worth of 3-zone monthly passes.

The following table presents information concerning the full fare schedule currently in effect, which was adopted on August 3, 2017.

<table>
<thead>
<tr>
<th>Ticket Type</th>
<th>How to Buy</th>
<th>Travel Within</th>
<th>1 Zone</th>
<th>2 Zones</th>
<th>3 Zones</th>
<th>4 Zones</th>
<th>5 Zones</th>
<th>6 Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Way</td>
<td>Ticket Machine</td>
<td>$3.75</td>
<td>$6.00</td>
<td>$8.25</td>
<td>$10.50</td>
<td>$12.75</td>
<td>$15.00</td>
<td></td>
</tr>
<tr>
<td>One Way</td>
<td>Clipper Card</td>
<td>$3.20</td>
<td>$5.45</td>
<td>$7.70</td>
<td>$9.95</td>
<td>$12.20</td>
<td>$14.45</td>
<td></td>
</tr>
<tr>
<td>Day Pass</td>
<td>Ticket Machine</td>
<td>$7.50</td>
<td>$12.00</td>
<td>$16.50</td>
<td>$21.00</td>
<td>$25.50</td>
<td>$30.00</td>
<td></td>
</tr>
<tr>
<td>Monthly Pass</td>
<td>Clipper Card</td>
<td>$96.00</td>
<td>$163.50</td>
<td>$231.00</td>
<td>$298.50</td>
<td>$366.00</td>
<td>$433.50</td>
<td></td>
</tr>
<tr>
<td>Zone Upgrade</td>
<td>Ticket Machine</td>
<td>$2.25</td>
<td>$2.25</td>
<td>$2.25</td>
<td>$2.25</td>
<td>$2.25</td>
<td>$2.25</td>
<td></td>
</tr>
</tbody>
</table>

Source: Peninsula Corridor Joint Powers Board.
A comprehensive fare study was completed in October 2018 which resulted in the development of a fare policy (the "Fare Policy") comprised of a framework of high-level goals intended to guide fare-related decisions. The Fare Policy, adopted by the governing board of the JPB on December 6, 2018, is expected to be reviewed and updated as needed, including to provide for alignment with the business plan being developed, described above under the caption "Other Major Initiatives - Long-Term Business Plan," and commencement of electrified service, described above under the caption "Major Capital Initiatives - Peninsula Corridor Electrification Project." The four goals identified in the Fare Policy to guide fare-related decisions in the future are: (i) financial sustainability; (ii) equity; (iii) customer experience; and (iv) ridership.
Farebox Revenues

As defined in the Trust Agreement, Farebox Revenues are comprised of the amounts generated and collected by the JPB in connection with the operation of Caltrain, including all passenger fares, parking, shuttle and pass revenues and other revenues from operations, which consist of revenues from special train charters. The following table presents information concerning passenger fares, parking shuttle and pass revenues and other revenues from operations for the five Fiscal Years ended June 30, 2018. All numbers have been rounded.

Peninsula Corridor Joint Powers Board
Farebox Revenues
Fiscal Years Ended June 30, 2014 - June 30, 2018

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Passenger Fares</th>
<th>Parking, Shuttle and Pass Revenues</th>
<th>Other Revenues</th>
<th>Total Farebox Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$74,846,067</td>
<td>$5,858,647</td>
<td>$1,440,098</td>
<td>$82,144,812</td>
</tr>
<tr>
<td>2015</td>
<td>$83,351,480</td>
<td>$5,990,289</td>
<td>$1,421,407</td>
<td>$90,763,176</td>
</tr>
<tr>
<td>2016</td>
<td>$86,959,371</td>
<td>$7,226,245</td>
<td>$1,247,057</td>
<td>$95,432,673</td>
</tr>
<tr>
<td>2017</td>
<td>$92,428,889</td>
<td>$7,910,679</td>
<td>$1,690,875</td>
<td>$102,030,443</td>
</tr>
<tr>
<td>2018</td>
<td>$97,050,194</td>
<td>$7,789,967</td>
<td>$2,195,582</td>
<td>$107,035,743</td>
</tr>
</tbody>
</table>

Source: Peninsula Corridor Joint Powers Board.

Farebox Recovery Ratio

The following table presents information concerning passenger fares, operating expenses and the farebox recovery ratio for the five Fiscal Years ended June 30, 2018. All numbers have been rounded.

Peninsula Corridor Joint Powers Board
Passenger Fares, Operating Expenses and Farebox Recovery Ratio
Fiscal Years Ended June 30, 2014 - June 30, 2018

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Passenger Fares</th>
<th>Operating Expenses (1)</th>
<th>Farebox Recovery Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$ 74,846,067</td>
<td>$115,760,642</td>
<td>64.66%</td>
</tr>
<tr>
<td>2015</td>
<td>$ 83,351,480</td>
<td>$120,110,481</td>
<td>69.40%</td>
</tr>
<tr>
<td>2016</td>
<td>$ 86,959,371</td>
<td>$117,843,600</td>
<td>73.79%</td>
</tr>
<tr>
<td>2017</td>
<td>$ 92,428,889</td>
<td>$132,633,515</td>
<td>69.69%</td>
</tr>
<tr>
<td>2018</td>
<td>$ 97,050,194</td>
<td>$132,924,995</td>
<td>73.01%</td>
</tr>
</tbody>
</table>

(1) Operating Expenses increased in Fiscal Year 2015 due to increases in contract services, insurance and wages and benefits. Operating Expenses decreased in Fiscal Year 2016 due to decreases in insurance and fuel expenses. Operating Expenses increased in Fiscal Year 2017 due to increases in contract services and insurance expenses.

Source: Peninsula Corridor Joint Powers Board.

Based on the FY 2019 Operating Budget and the FY 2019 Capital Budget, each adopted by the governing board of the JPB on June 7, 2018, for the Fiscal Year ending June 30, 2019, the JPB projects passenger fares of $107,795,329 and operating expenses of $150,216,146 producing a farebox recovery ratio of 71.76%. Operating expenses are projected to increase based on increases in insurance due to
unusually low expense in the Fiscal Year ended June 30, 2018, operator expense, fuel, wages and benefits.

**Debt Service Coverage**

**Historical Debt Service Coverage.** The following table sets forth historical debt service coverage for the five Fiscal Years ended June 30, 2018. All numbers have been rounded.

**Peninsula Corridor Joint Powers Board**  
**Historical Debt Service Coverage**

**Fiscal Year Ended June 30, 2014 - June 30, 2018**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Farebox Revenues(1)</th>
<th>Annual Debt Service</th>
<th>Annual Debt Service Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$ 82,144,812</td>
<td>$1,102,875</td>
<td>74.5x</td>
</tr>
<tr>
<td>2015</td>
<td>$ 90,763,176</td>
<td>$1,147,694</td>
<td>79.1x</td>
</tr>
<tr>
<td>2016</td>
<td>$ 95,432,673</td>
<td>$1,282,186</td>
<td>74.4x</td>
</tr>
<tr>
<td>2017</td>
<td>$102,030,443</td>
<td>$1,291,800</td>
<td>79.0x</td>
</tr>
<tr>
<td>2018</td>
<td>$107,035,743</td>
<td>$1,495,938</td>
<td>71.6x</td>
</tr>
</tbody>
</table>

(1) Farebox Revenues as defined in the Trust Agreement includes all passenger fares, parking, shuttle and pass revenues and other revenues from operations.

Source: Peninsula Corridor Joint Powers Board.

**Pro Forma Debt Service Coverage.** The table below sets forth pro forma debt service coverage assuming (i) no increase in Farebox Revenues from the amount of Farebox Revenues collected by the JPB in the Fiscal Year ended June 30, 2018 and (ii) Maximum Annual Debt Service on the 2019 Series A Bonds as shown above under the caption "DEBT SERVICE REQUIREMENTS" herein.

**Peninsula Corridor Joint Powers Board**  
**Pro Forma Debt Service Coverage**

<table>
<thead>
<tr>
<th>Farebox Revenues</th>
<th>$__________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Annual Debt Service on the 2019 Series A Bonds</td>
<td>$__________</td>
</tr>
<tr>
<td>Pro Forma Debt Service Coverage</td>
<td>__________ x</td>
</tr>
</tbody>
</table>

Source: Peninsula Corridor Joint Powers Board and the underwriter.

**Operating Contributions and Other Operating Assistance**

In addition to Farebox Revenues, the JPB receives operating contributions provided by the Member Agencies and operating assistance from State and local sources. Neither such operating contributions nor such operating assistance constitute Farebox Revenues. For a discussion of Member Agency contributions and other operating assistance, see Appendix A – "PENINSULA CORRIDOR JOINT POWERS BOARD INDEPENDENT AUDITORS REPORT YEARS ENDED JUNE 30, 2018 AND 2017 - Note 7 - Operating Assistance."

**Member Agency Operating Contributions.** Each of the Member Agencies provides operating contributions to the JPB, which are intended to make up the amount necessary to cover the shortfall between total JPB operating expenses and the total of Farebox Revenues and all other revenue sources.
Pursuant to the Joint Powers Agreement, each Member Agency agrees to share in the operating costs associated with the Caltrain services.

The following table presents information concerning Member Agency operating contributions for the five Fiscal Years ended June 30, 2018. All numbers have been rounded.

Peninsula Corridor Joint Powers Board
Member Agency Operating Contributions
Fiscal Year Ended June 30, 2014 - June 30, 2018

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>CCSF</th>
<th>SamTrans</th>
<th>VTA</th>
<th>Total Member Agency Operating Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$4,501,955</td>
<td>$5,441,298</td>
<td>$7,292,408</td>
<td>$17,235,661</td>
</tr>
<tr>
<td>2015</td>
<td>$5,203,876</td>
<td>$6,289,677</td>
<td>$8,429,402</td>
<td>$19,922,954</td>
</tr>
<tr>
<td>2016</td>
<td>$5,233,692</td>
<td>$6,080,000</td>
<td>$8,413,758</td>
<td>$19,727,450</td>
</tr>
<tr>
<td>2017</td>
<td>$5,578,014</td>
<td>$6,480,000</td>
<td>$8,390,000</td>
<td>$20,448,014</td>
</tr>
<tr>
<td>2018</td>
<td>$5,310,959</td>
<td>$6,169,761</td>
<td>$8,967,294</td>
<td>$20,448,014</td>
</tr>
</tbody>
</table>

Source: Peninsula Corridor Joint Powers Board.

Based on the FY 2019 Operating Budget and the FY 2019 Capital Budget, each adopted by the governing board of the JPB on June 7, 2018, for the Fiscal Year ending June 30, 2019, the JPB projects a total operating contribution of $25,448,014 from the Member Agencies comprised of: (i) an operating contribution of $7,023,652 from CCSF; (ii) an operating contribution of $7,634,404 from SamTrans; and (iii) an operating contribution of $10,789,958 from VTA.

Other Operating Assistance. In addition to the operating contributions provided by the Member Agencies identified in the table above, the JPB receives operating assistance from state and local sources. All references to the state as a funding source under this caption refer to the State of California. State funding for operating assistance is provided through the State Transit Assistance Program, which is funded from a portion of the proceeds of a California statewide sales tax on diesel fuel allocated to the State Transit Assistance Program through the State budget process. Local funding for operating assistance is provided from funding provided by the Bay Area Air Quality Management District from the Transportation Fund for Clean Air, which is funded from revenues collected from a surcharge on vehicles registered in the San Francisco Bay Area and [additional funding provided by the Member Agencies]. The following table presents information concerning such other operating assistance for the five Fiscal Years ended June 30, 2018. All numbers have been rounded.
Peninsula Corridor Joint Powers Board
Other Operating Assistance
Fiscal Year Ended June 30, 2014 - June 30, 2018

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>State</th>
<th>Local</th>
<th>Total Other Operating Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$6,287,914</td>
<td>$5,998,765</td>
<td>$12,286,679</td>
</tr>
<tr>
<td>2015</td>
<td>$6,558,608</td>
<td>$1,096,726</td>
<td>$7,655,334</td>
</tr>
<tr>
<td>2016</td>
<td>$4,525,550</td>
<td>$825,371</td>
<td>$5,350,921</td>
</tr>
<tr>
<td>2017</td>
<td>$4,324,362</td>
<td>$716,722</td>
<td>$5,041,084</td>
</tr>
<tr>
<td>2018</td>
<td>$4,265,650</td>
<td>$632,025</td>
<td>$4,897,675</td>
</tr>
</tbody>
</table>

Source: Peninsula Corridor Joint Powers Board.

Based on the FY 2019 Operating Budget and the FY 2019 Capital Budget, each adopted by the governing board of the JPB on June 7, 2018, for the Fiscal Year ending June 30, 2019, the JPB projects receiving other operating assistance in the amount $4,237,807, comprised of (i) state operating assistance in the amount of $3,700,607 and (ii) local operating assistance in the amount of $537,200.

Financial Reporting

Basis of Accounting. The JPB accounts for its transactions in a single enterprise fund and maintains its records using the economic resources measurement focus and the accrual basis of accounting. Under this method, revenues are recorded when earned and expenses are recorded when the related liability is incurred, regardless of the timing of related cash flows. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met. Pursuant to Governmental Accounting Standards Board ("GASB") Statement No. 20, Accounting and Financial Reporting for Proprietary Funds and Other Governmental Entities That Use Proprietary Fund Accounting, the JPB has elected to apply all applicable GASB pronouncements, as well as any applicable pronouncements of the Financial Accounting Standards Board, the Accounting Principles Board, or any Accounting Research Bulletins issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements.

Significant Accounting Policies. For a discussion of the significant accounting policies of the JPB, see Appendix A - "PENINSULA CORRIDOR JOINT POWERS BOARD INDEPENDENT AUDITORS REPORT YEARS ENDED JUNE 30, 2018 AND 2017 - Note 2 - Summary of Significant Accounting Policies."

Revenues and Expenses for Caltrain Commuter Rail Service

The table on the following page presents information concerning operating revenues, which comprise Farebox Revenues as such term is defined in the Trust Agreement, operating expenses, nonoperating revenues and changes in net position for each of the past five Fiscal Years ended June 30, 2018. All numbers have been rounded.
Peninsula Corridor Joint Powers Board  
Statement of Revenues, Expenses and Changes in Net Position  
Fiscal Year Ended June 30,

<table>
<thead>
<tr>
<th>Operating Revenues(^{(1)})</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger Fares</td>
<td>$74,846,067</td>
<td>$83,351,480</td>
<td>$86,959,371</td>
<td>$92,428,889</td>
<td>$97,050,194</td>
</tr>
<tr>
<td>Parking, Shuttle and Pass Revenues</td>
<td>5,858,647</td>
<td>5,990,289</td>
<td>7,226,245</td>
<td>7,910,679</td>
<td>7,789,967</td>
</tr>
<tr>
<td>Other Revenue</td>
<td>1,440,098</td>
<td>1,421,407</td>
<td>1,247,057</td>
<td>1,690,875</td>
<td>2,195,582</td>
</tr>
<tr>
<td><strong>Total Operating Revenues</strong></td>
<td>82,144,812</td>
<td>90,763,176</td>
<td>95,432,673</td>
<td>102,030,443</td>
<td>107,035,743</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operating Expenses</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Services(^{(3)})</td>
<td>75,238,492</td>
<td>78,239,837</td>
<td>82,941,883</td>
<td>89,637,862</td>
<td>92,897,791</td>
</tr>
<tr>
<td>Insurance</td>
<td>3,873,985</td>
<td>6,593,219</td>
<td>35,066</td>
<td>7,105,001</td>
<td>1,187,905</td>
</tr>
<tr>
<td>Fuel</td>
<td>14,796,612</td>
<td>12,117,619</td>
<td>8,311,751</td>
<td>8,613,116</td>
<td>10,321,844</td>
</tr>
<tr>
<td>Parking, Shuttle and Pass Expenses</td>
<td>5,475,597</td>
<td>5,315,716</td>
<td>6,104,368</td>
<td>5,629,486</td>
<td>5,915,897</td>
</tr>
<tr>
<td>Professional Services</td>
<td>1,322,407</td>
<td>1,254,807</td>
<td>1,617,726</td>
<td>1,514,052</td>
<td>2,177,630</td>
</tr>
<tr>
<td>Wages and Benefits(^{(4)})</td>
<td>10,668,320</td>
<td>11,501,015</td>
<td>12,942,580</td>
<td>13,560,800</td>
<td>13,910,813</td>
</tr>
<tr>
<td>Utilities and Supplies</td>
<td>1,524,305</td>
<td>2,068,116</td>
<td>2,171,610</td>
<td>2,178,999</td>
<td>2,177,732</td>
</tr>
<tr>
<td>Maintenance Services</td>
<td>1,007,144</td>
<td>1,038,900</td>
<td>1,054,342</td>
<td>1,508,497</td>
<td>1,667,732</td>
</tr>
<tr>
<td>Temporary Services, Rent and Other</td>
<td>1,853,780</td>
<td>1,981,252</td>
<td>2,664,274</td>
<td>2,885,702</td>
<td>2,782,384</td>
</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
<td>115,760,642</td>
<td>120,110,481</td>
<td>117,843,600</td>
<td>132,633,515</td>
<td>132,924,995</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Depreciation and Amortization</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation and Amortization</td>
<td>73,451,520</td>
<td>75,300,031</td>
<td>93,539,578</td>
<td>83,921,928</td>
<td>100,096,767</td>
</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
<td>189,212,162</td>
<td>195,410,512</td>
<td>211,383,178</td>
<td>216,555,443</td>
<td>233,021,762</td>
</tr>
</tbody>
</table>

| Operating Loss                | (107,067,350) | (104,647,336) | (115,950,505) | (114,525,000) | (125,986,019) |

| Nonoperating Revenues (Expenses) |        |        |        |        |        |
| State and Local Operating Assistance\(^{(5)}\) | 29,522,340 | 27,578,288 | 25,078,370 | 25,489,098 | 25,345,689 |
| Rental Income                  | 1,728,248 | 1,763,815 | 1,780,892 | 1,860,920 | 2,070,135 |
| Investment Income              | 205,540 | 241,768 | 110,425 | 27,589 | 92,644 |
| Interest Expense               | (1,120,333) | (1,193,422) | (1,300,861) | (1,301,952) | (1,500,521) |
| Other Income                   | 4,044,271 | 1,006,528 | 612,552 | 2,413,453 | 1,197,911 |
| **Total Nonoperating Revenues, Net** | 34,380,066 | 29,396,977 | 26,281,378 | 28,489,100 | 27,205,858 |

| Loss Before Capital Contributions | (72,687,284) | (75,250,359) | (89,669,127) | (86,035,892) | (98,780,161) |
| Capital Contributions\(^{(6)}\) | 111,349,160 | 115,224,861 | 131,328,850 | 246,767,149 | 321,302,870 |
| **Change in Net Position**      | $38,661,876 | $39,974,502 | $41,659,723 | $160,731,257 | $222,522,709 |

(1) Operating Revenues comprise Farebox Revenues as such term is defined in the Trust Agreement.
(2) Consists of revenues from special train charters.
(3) Represents expenses for services provided by TASI pursuant to the TASI Operating Agreement. See "THE JOINT POWERS BOARD - Caltrain Commuter Rail Service" herein.
(4) Allocated costs of SamTrans employees addressing JPB functions; allocated costs include wages, pension benefits, other post-employment benefits, fringe benefits and overhead expenses.
(5) Includes Member Agency operating contributions. See the table entitled "Peninsula Corridor Joint Powers Board Member Agency Operating Contributions" under the caption "FINANCIAL INFORMATION - Operating Contributions and Other Operating Assistance - Member Agency Operating Contributions."
(6) Consists of grants from federal, state and local governments for the acquisition and improvement of capital assets.

Source: Peninsula Corridor Joint Powers Board.

4138-0343-7590.8
Management's Discussion of Financial Results

Revenue Highlights. Operating revenues increased to $107.0 million for the Fiscal Year ended June 30, 2018, a $5.0 million or 4.9% increase from the Fiscal Year ended June 30, 2017 and increased to $102.0 million in the Fiscal Year ended June 30, 2017, a $6.6 million or 6.9% increase from the Fiscal Year ended June 30, 2016. Increases for both fiscal years were due to increases in passenger fares and ridership.

Non-operating revenues decreased by $1.1 million or 3.6% to $28.7 million at June 30, 2018 compared to June 30, 2017 and increased by $2.2 million or 8.0% in the Fiscal Year ended June 30, 2017 compared with the Fiscal Year ended June 30, 2016. The decrease in the Fiscal Year ended June 30, 2018 was due to decrease in shared track maintenance revenues. The increase in the Fiscal Year ended June 30, 2017 was due to increase in State Transit Assistance Program funds. The decrease in the Fiscal Year ended June 30, 2016 was due to decreases in federal, state and local operating assistance.

Expense Highlights. Total operating expenses of $132.9 million in the Fiscal Year ended June 30, 2018 were $0.3 million or 0.2% slightly higher than in the Fiscal Year ended June 30, 2017, and in the Fiscal Year ended June 30, 2017, $14.8 million or 12.6% higher than in the Fiscal Year ended June 30, 2016. The reason of the increase in the Fiscal Year ended June 30, 2017 is mostly due to increases in contract services and insurance expenses by $6.7 million and $7.1 million, respectively. Depreciation and amortization for the Fiscal Year ended June 30, 2018 was $100.1 million, a $16.2 million or 19.3% increase over the Fiscal Year ended June 30, 2017. In the Fiscal Year ended June 30, 2017, depreciation and amortization was $83.9 million, a $9.6 million or 10.3% increase over the Fiscal Year ended June 30, 2016. The increase in depreciation and amortization in the Fiscal Year ended June 30, 2018 was due to more capital assets acquired and placed in service. The increase in depreciation and amortization in the Fiscal Year ended June 30, 2017 was due to an adjustment on the useful life of rail vehicles resulting in an additional recognition of depreciation expenses retroactively in the Fiscal Year ended June 30, 2016.

For additional information concerning the Fiscal Years ended June 30, 2018 and 2017, see Appendix A - PENINSULA CORRIDOR JOINT POWERS BOARD INDEPENDENT AUDITORS REPORT YEARS ENDED JUNE 30, 2018 AND 2017 – "Management's Discussion and Analysis."

Existing Indebtedness and Contemplated Indebtedness

Long-Term Indebtedness. The 2007 Series A Bonds being refunded currently comprise the only outstanding long-term indebtedness secured by a senior lien on the Farebox Revenues. Assuming issuance of the 2019 Series A Bonds and application of a portion of the proceeds thereof to refund the 2007 Series A Bonds, the 2019 Series A Bonds will be the only long-term indebtedness secured by a senior lien on Farebox Revenues on the date of issuance of the 2019 Series A Bonds.

2016 Credit Facility and Additional Credit Facility. In December 2016, the JPB secured the 2016 Credit Facility to assist the JPB in meeting its cash flow needs in connection with the PCEP Project. The amount outstanding under the 2016 Credit Facility may not exceed $170 million at any one time. For additional information concerning the 2016 Credit Facility, see Appendix A – "PENINSULA CORRIDOR JOINT POWERS BOARD INDEPENDENT AUDITORS REPORT YEARS ENDED JUNE 30, 2018 AND 2017 - Note 15 - Revolving Credit Facility." Funds drawn will be applied to fund cash flow mismatch with respect to the PCEP Project and the 2018 TIRCP Grant Projects and/or to enable the JPB to access the 2018 TIRCP Grant awarded to the JPB to fund a portion of the 2018 TIRCP Grant Projects. Funds drawn by the JPB pursuant to the 2016 Credit Facility constitute loans made to the JPB by the provider of the 2016 Credit Facility. Such loans are secured by funds received by the JPB from funding sources identified in the 2017 Funding Plan and from the 2018 TIRCP Grant to reimburse the
JPB for its prior payment of PCEP Project expenditures and 2018 TIRCP Grant Projects expenditures and by a pledge of Farebox Revenues subordinate to the pledge which will secure the 2019 Series A Bonds, any other Bonds issued pursuant to the Trust Agreement and any Parity Obligations.

In January 2019, the JPB secured the Additional Credit Facility to provide interim funding for a portion of the PTC Project, including cash flow mismatch, and to provide for working capital needs for the Caltrain system. The amount outstanding under the Additional Credit Facility may not exceed $30 million at any one time. Funds drawn by the JPB pursuant to the Additional Credit Facility constitute loans made to the JPB by the provider of the Additional Credit Facility. Such loans are secured by a pledge of Farebox Revenues on a parity with the pledge of Farebox Revenues which secures the 2016 Credit Facility and subordinate to the pledge which will secure the 2019 Series A Bonds, any other Bonds issued pursuant to the Trust Agreement and any Parity Obligations.

Any funds drawn by JPB pursuant to the 2016 Credit Facility and/or the Additional Credit Facility are due and payable on December 31, 2022. In the event any funds drawn under the 2016 Credit Facility and/or the Additional Credit Facility have not been repaid prior to December 31, 2022, the JPB may issue additional Bonds or incur other debt in order to refinance any obligations incurred and outstanding under the 2016 Credit Facility and/or the Additional Credit Facility. See "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS - Additional Bonds, Parity Obligations and Subordinate Obligations" herein for a discussion of the requirements which apply to the issuance of additional Bonds and any other debt proposed to be secured by a pledge of Farebox Revenues. At the present time, the JPB anticipates that the amount of debt, if any, to be issued to refinance any obligations incurred and outstanding under the 2016 Credit Facility and/or the Additional Credit Facility will not exceed $30 million.

**Leveraged Lease Transactions.** In February 2002, the JPB entered into a leasing transaction (the "2002 Lease Transaction") with Banc of America Leasing & Capital, LLC, as equity investor (the "Equity Investor"), and several other transaction parties with respect to 38 Nippon Sharyo trailer cars, 14 Nippon Sharyo cab cars, and 13 GM F4OPH-2 locomotives (collectively, the "Equipment"). The JPB leased the Equipment under a head lease agreement to a trust (the "Trust") formed by the Equity Investor and simultaneously leased the Equipment back from the Trust under a sublease agreement (the "Sublease"). The 2002 Lease Transaction terminated and restructured a portion of a leasing transaction entered into by the JPB in 1996 (the "1996 Lease Transaction") that had not been previously terminated. The JPB received net proceeds from the 2002 Lease Transaction in the amount of $2,392,510, which represents the difference between the appraised value of the Equipment and termination costs associated with the remaining portion of the 1996 Lease Transaction, certain payment undertaking fees paid to the payment undertakers in consideration for their entering into the payment undertaking agreements described below and other transaction expenses. Title to the Equipment remains on the books of the JPB at its original cost and is being depreciated over the original useful life determined at the date of acquisition. The net proceeds received by the JPB from the 2002 Lease Transaction were recorded as Lease-Leaseback income for the Fiscal Year ended June 30, 2002.

Under the Sublease, the JPB is required to make periodic rental payments to the Trust. The JPB has an option (the "Purchase Option") to purchase the Equipment from the Trust for an agreed-upon purchase price at the expiration of the term of the Sublease in January 2026. The periodic rental payments to be made under the Sublease and the agreed-upon purchase price for the Equipment, if the JPB exercises the Purchase Option, are required to be paid on behalf of the JPB by certain payment undertakers (the "Payment Undertakers") pursuant to payment undertaking agreements (the "Payment Undertaking Agreements") entered into by the JPB at the inception of the 2002 Lease Transaction.
In addition, at the inception of the 2002 Lease Transaction, Assured Guaranty Municipal Corp. (formerly known as Financial Security Assurance Inc.) (the "Surety Provider") issued a financial guaranty insurance policy (the "Surety Policy") that guarantees the payment by the JPB of certain of its obligations under the 2002 Lease Transaction. Under the 2002 Lease Transaction, the JPB is required to replace the Payment Undertaking Agreements and the Surety Policy with acceptable replacement credit support if the credit ratings of the Payment Undertakers or the Surety Provider, as applicable, fall below certain thresholds. Failure to replace the Payment Undertaking Agreements or the Surety Policy, as applicable, with acceptable replacement credit support within specified time frames constitutes a default under the 2002 Lease Transaction which, if uncured, could permit the Equity Investor to terminate the 2002 Lease Transaction at a cost to the JPB calculated in accordance with certain schedules to the Sublease. As of January 1, 2019, the termination cost, as calculated by the JPB in accordance with such schedules, is approximately $27.5 million.

In November 2008, the Surety Provider's credit rating assigned by Moody's Investors Service, Inc. was downgraded below the minimum threshold required under the 2002 Lease Transaction, which triggered the requirement under the 2002 Lease Transaction that JPB replace the Surety Policy with acceptable replacement credit support. In January 2009, the Equity Investor agreed to extend the date by which the JPB was required to replace the Surety Policy with acceptable replacement credit support and waived any default that may have occurred under the 2002 Lease Transaction as a result of the JPB's failure to replace the Surety Policy with acceptable replacement credit support on or before the original deadline required under the 2002 Lease Transaction. Since that time, through numerous extension letters delivered by the Equity Investor to the JPB, the most recent of which was received by the JPB on December 19, 2018, the Equity Investor has continued to extend the date by which the JPB will be required to replace the Surety Policy with acceptable replacement credit support and has continued to waive any default that may have occurred as a result of the JPB's failure to replace the Surety Policy with acceptable replacement credit support on or before the previously extended deadlines.

All rental payments with respect to Sublease been made in full and on a timely basis.

For additional information concerning the Leveraged Lease Transactions, see Appendix A – "PENINSULA CORRIDOR JOINT POWERS BOARD INDEPENDENT AUDITORS REPORT YEARS ENDED JUNE 30, 2018 AND 2017 - Note 13 - Leasing Transactions."

Insurance

The JPB is self-insured for a portion of its public liability and damage to property. All rolling stock is insured at full replacement value. Total insurable values covering all rolling stock, real and personal property, tunnels, bridges and stations exceeds $1 billion. The JPB carries a $400,000,000 loss limit per occurrence. Terrorism coverage is included. Flood and earthquake coverage is excluded. No flood insurance has been purchased because the only property located within any known flood zone consists of four parcels which are vacant. Earthquake coverage continues to be cost prohibitive and the JPB has not purchased any earthquake coverage. Settlements have not exceeded coverages in any of the past three (3) Fiscal Years.

As of June 30, 2018, coverage provided by self-insurance and excess coverage (purchased by or for the JPB) is summarized as follows:
<table>
<thead>
<tr>
<th>Type of Coverage</th>
<th>Self-Insured Retention</th>
<th>Excess Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railroad Liability and Property of Others</td>
<td>$2,000,000 Self-Insured Retention</td>
<td>$300,000,000 per Occurrence/Annual Aggregate (200,000,000 carried by JPB and 100,000,000 carried by the Caltrain operator, TASI)</td>
</tr>
<tr>
<td>Real and Personal Property</td>
<td>$100,000 Maximum Self-Insured Retention</td>
<td>$400,000,000 2-Year Policy Loss Limit</td>
</tr>
<tr>
<td>Public Officials Liability</td>
<td>$75,000 Self-Insured Retention</td>
<td>$15,000,000 Aggregate</td>
</tr>
<tr>
<td>Special Events Liability</td>
<td>$25,000 per Occurrence</td>
<td>$2,000,000 per Occurrence/4,000,000 Aggregate</td>
</tr>
<tr>
<td>Environmental Liability</td>
<td>$50,000 Self-Insured Retention</td>
<td>$10,000,000 2-Year Policy Aggregate</td>
</tr>
</tbody>
</table>

For additional information concerning current insurance coverage, see Appendix A - "PENINSULA CORRIDOR JOINT POWERS BOARD INDEPENDENT AUDITORS REPORT YEARS ENDED JUNE 30, 2018 AND 2017 - Note 10 - Insurance Programs."

**Investment Policy and Investments**

The governing board of the JPB originally adopted a Statement of Investment Policy (as amended and reaffirmed from time to time, the "Investment Policy") in August 1999. The Investment Policy, which was most recently amended and reaffirmed by action of the governing board of the JPB on September 7, 2017, provides guidelines for the prudent investment and cash management of the funds under the purview of the JPB. The goal of the Investment Policy is to establish investment objectives in accordance with the provisions of California Government Code Section 53600 et seq. and investment guidelines to ensure that funds under the purview of the Investment Policy are prudently invested to preserve capital, provide necessary liquidity, and achieve a market-average rate of return over an economic cycle consistent with the JPB's goals of preserving principal and minimizing the risk of diminishing principal. The Investment Policy designates the Executive Director of the JPB or a designee of the Executive Director to serve as the JPB's trustee for purposes of placing investments pursuant to the Investment Policy.

See Appendix G - "PENINSULA CORRIDOR JOINT POWERS BOARD STATEMENT OF INVESTMENT POLICY" herein. See also Appendix A - "PENINSULA CORRIDOR JOINT POWERS BOARD INDEPENDENT AUDITORS REPORT YEARS ENDED JUNE 30, 2018 AND 2017 - Note 3 - Cash and Investments."

All amounts held on deposit by the Trustee in the funds and accounts established under the Trust Agreement will be invested as directed by the JPB in Investment Securities. See Appendix C - "DEFINITIONS AND SUMMARY OF THE TRUST AGREEMENT - The Trust Agreement - Investment in Funds and Accounts" herein.

**Pension and Retiree Healthcare Benefits**

As indicated above, SamTrans is Managing Agency for the JPB. All functions of the JPB are performed by SamTrans employees who function as JPB staff. JPB personnel costs represent an allocation of the cost of SamTrans employees. Employees who operate the Caltrain commuter rail service pursuant to the TASI Operating Agreement are not employees of SamTrans and are not eligible to
participate in pension and post-retirement healthcare benefits provided to SamTrans employees. Pension and post-retirement healthcare benefits are provided to SamTrans employees through the California Public Employees Retirement System. A portion of the costs of such pension and post-retirement health care benefits are allocated to the JPB.

[Note: Data presenting amount invoiced by SamTrans and paid to SamTrans by JPB for each of the five Fiscal Years ended June 30, 2018 to be inserted.]

INVESTMENT CONSIDERATIONS

Purchase of the 2019 Series A Bonds involves certain investment risks. In order to identify risk factors and make an informed investment decision, potential investors should be thoroughly familiar with this entire Official Statement (including the Appendices hereto) and the legal documents described herein in making a judgment as to whether the 2019 Series A Bonds are an appropriate investment. Potential investors are advised to consider the following factors, along with all other information contained or incorporated by reference in this Official Statement, in evaluating whether to purchase the 2019 Series A Bonds. The factors listed below, among others, could adversely affect the level of Farebox Revenues and the ability of the JPB to pay principal of and interest on the 2019 Series A Bonds. This discussion of risk factors is not, and is not intended to be, comprehensive or exhaustive, and the order of presentation does not necessarily reflect the relative importance of the various risks.

Economy

The 2019 Series A Bonds are secured by a pledge of Farebox Revenues, which consist primarily of Caltrain passenger fares. The level of Farebox Revenues collected at any time is dependent, in part, upon the level of economic activity in the geographic areas served by Caltrain, the City and County of San Francisco, the County of San Mateo, and the County of Santa Clara. As a result, any substantial deterioration in the level of economic activity within these geographic areas could have a material adverse impact upon the level of Farebox Revenues and therefore upon the ability of the JPB to pay principal of and interest on the 2019 Series A Bonds.

See Appendix B - "ECONOMIC AND DEMOGRAPHIC DATA PERTAINING TO THE CALTRAIN COUNTIES" for information relating to current economic conditions within the City and County of San Francisco, the County of San Mateo, and the County of Santa Clara.

Termination of Joint Powers Agreement

The original term of the Joint Powers Agreement expired on October 18, 2001. Pursuant to the terms of the Joint Powers Agreement, the Joint Powers Agreement continues in full force and effect on a year-to-year basis, subject to the right of any Member Agency to withdraw pursuant to the terms of the Joint Powers Agreement upon one year's prior notice given at the end of any Fiscal Year. Upon termination of the Joint Powers Agreement, following discharge of all obligations due by the JPB, any property interest remaining in the JPB shall be disposed of and the proceeds or property shall be allocated in accordance with a separate agreement to be entered into between the parties. See "THE JOINT POWERS BOARD – Current Status of Joint Powers Agreement" herein.

No assurance can be given that the Joint Powers Agreement will be renewed nor can any assurance be given that two or more Member Agencies will not withdraw pursuant to the terms of the Joint Powers Agreement, thereby terminating the Joint Powers Agreement. Nor can any assurance be given that if the Joint Powers Agreement is terminated pursuant to its terms, Caltrain will continue to be operated until such time as all of the 2019 Series A Bonds have been paid.
Lack of Dedicated Funding

As is the case for most transportation service providers which are public entities, the JPB's annual operating expenses substantially exceed its annual passenger fares and other operating revenues. At the present time, the JPB does not have a separate dedicated funding source. As a result, the JPB has an ongoing structural deficit. Although the JPB has secured an amendment to the Revenue and Taxation Code, which authorizes the JPB to levy a sales tax in the three Caltrain Counties, there is no assurance that the JPB will be successful in securing the approvals required to levy the sales tax, which include approval of two-thirds of the voters in the three Caltrain Counties voting on the ballot measure proposing the sales tax. See "THE JOINT POWERS BOARD – Other Major Initiatives - Sales Tax Initiative" herein. Nor is there any assurance that the JPB will be able to secure any other dedicated funding source to support the Caltrain service.

Changes in Funding Sources for Operational and Capital Needs

In addition to contributions for operational and capital needs provided by the Member Agencies, federal, state, regional and local grant programs provide funding for JPB operational and/or capital needs. Funding pursuant to such programs is generally subject to the availability and/or appropriation of funds as well as the satisfaction of various conditions applicable to a specific program. Should the JPB fail to satisfy conditions applicable to a specific program, the granting agency may not disburse, may cease disbursing or may delay disbursing funds to the JPB, and, in some circumstances, the JPB could be obligated to return all or a portion of previously disbursed funds to the granting agency. Should the JPB for any reason be unable to obtain and apply funds from such programs on a timely basis or become obligated to reimburse any portion of such funds, including as a result of any failure to satisfy specified conditions applicable to a specific program, it could adversely affect the financial condition of the JPB and its ongoing operations.

Bankruptcy and Related Risks

JPB. Although an involuntary bankruptcy case cannot be filed against the JPB, the JPB is authorized to file a bankruptcy petition under Chapter 9 of the United States Bankruptcy Code (the "Bankruptcy Code") under certain circumstances. Should the JPB file for bankruptcy, there could be adverse effects on the holders of the 2019 Series A Bonds.

Farebox Revenues as such term is defined in the Trust Agreement include (i) passenger fares, (ii) parking, shuttle, and pass revenues, and (iii) other revenue. If the passenger fares are "special revenues" under the Bankruptcy Code, then passenger fares collected after the date of the bankruptcy filing should be subject to the lien of the Trust Agreement. "Special revenues" are defined to include receipts derived from the ownership or operation of projects or systems that are primarily used to provide transportation services. While the portion of the Farebox Revenues comprised of passenger fares appears to satisfy this definition and thus be "special revenues," no assurance can be given that a court would not hold that the passenger fares are not special revenues. As indicated above, Farebox Revenues include other fees and revenues. Such other fees and revenues may not be "special revenues."

If any or all of Farebox Revenues are determined not to be special revenues, then any such amounts collected after the commencement of a bankruptcy case will likely not be subject to the lien of the Trust Agreement. Under such circumstances, it is not clear whether the holders of the 2019 Series A Bonds would be treated as general unsecured creditors of the JPB or whether the holders of the 2019 Series A Bonds would have no further claim against any assets of the JPB (other than whatever funds are determined to be special revenues). In either case, the holders of the 2019 Series A Bonds could suffer substantial losses.
The Bankruptcy Code provides that special revenues can be applied to necessary operating expenses of the project or system, before they are applied to other obligations. This rule applies regardless of the provisions of the transaction documents. Thus, the JPB may be able to use Farebox Revenues to pay necessary operating expenses of Caltrain before making payments on the 2019 Series A Bonds, notwithstanding the provisions of the Trust Agreement. It is not clear precisely which expenses would constitute necessary operating expenses.

If the JPB is in bankruptcy, the Trustee and the holders of the 2019 Series A Bonds may be prohibited from taking any action to collect any amount from the JPB or to enforce any obligation of the JPB, unless the permission of the bankruptcy court is obtained. These restrictions may also prevent the Trustee from making payments to the holders of 2019 Series A Bonds from funds in the Trustee's possession during the pendency of the bankruptcy proceedings.

The JPB will have possession of Farebox Revenues, and will commingle such moneys with other moneys of the JPB. Once a month, the JPB will be obligated to transfer the required amount of Farebox Revenues to the Trustee. Because the Farebox Revenues have been commingled with other moneys of the JPB, the Trustee and the holders of the 2019 Series A Bonds may not have a lien on Farebox Revenues in the possession of the JPB. If JPB goes into bankruptcy, the JPB may not be required to turn over such moneys to the Trustee. If the JPB does not voluntarily turn over Farebox Revenues to the Trustee (whether before or after bankruptcy), it is not entirely clear what procedures the Trustee and the holders of the 2019 Series A Bonds would have to follow to attempt to obtain possession of such Farebox Revenues, how much time it would take for such procedures to be completed, or whether such procedures would ultimately be successful. Under such circumstances, there may be delays or reductions in payments on the 2019 Series A Bonds.

If the JPB is in bankruptcy, the JPB may be able to reject the agreement with TASI or any subsequent operator of the Caltrain service (hereinafter collectively referred to as the "Caltrain Service Operator") and enter into an agreement with a new operator, regardless of any restrictions in the transaction documents.

The JPB may be able to borrow additional money that is secured by a lien on any of its property (including the Farebox Revenues), which lien could have priority over the lien of the Trust Agreement, as long as the bankruptcy court determines that the rights of the holders of the 2019 Series A Bonds will be adequately protected. The JPB may be able to cause some of the Farebox Revenues to be released to it, free and clear of the lien of the Trust Agreement, as long as the bankruptcy court determines that the rights of the holders of the 2019 Series A Bonds will be adequately protected.

The JPB may be able, without the consent and over the objection of the holders of the 2019 Series A Bonds, to alter the priority, interest rate, principal amount, payment terms, collateral, maturity dates, payment sources, covenants (including tax-related covenants), and other terms or provisions of the Trust Agreement and the 2019 Series A Bonds, as long as the bankruptcy court determines that the alterations are fair and equitable.

There may be delays in payments on the 2019 Series A Bonds while the bankruptcy court considers any of these issues. There may be other possible effects of a bankruptcy of the JPB that could result in delays or reductions in payments on the 2019 Series A Bonds or other losses to the holders of the 2019 Series A Bonds. Regardless of any specific adverse determinations in a JPB bankruptcy proceeding, the fact of a JPB bankruptcy proceeding could have an adverse effect on the liquidity and value of the 2019 Series A Bonds.
Effect of Losses on Investments. Pending delivery of Farebox Revenues to the Trustee, the JPB may invest Farebox Revenues. Should any of these investments suffer any losses, there may be delays or reductions in payments on the 2019 Series A Bonds.

Third Parties in Possession of Funds. Caltrain passengers may utilize the Clipper Card, a reloadable smart card, for electronic fare payment. Such payments are not subject to the lien of the Trust Agreement until they become Farebox Revenues. Should any Clipper Card payment processor (hereinafter collectively referred to as the "Fare Payment Processor") go into bankruptcy, no assurance can be given that the JPB will receive timely payment of Farebox Revenues.

If the Fare Payment Processor is in bankruptcy, then the JPB may be prohibited from taking any action to enforce any obligations under the applicable documents or to collect any amount owing under the applicable documents, unless the permission of the bankruptcy court is obtained.

Should the Fare Payment Processor go into bankruptcy, the JPB, the Trustee, and the holders of the 2019 Series A Bonds likely do not have a lien on, or other interest in, the moneys held by the Fare Payment Processor and the Fare Payment Processor may not be required to turn over to the JPB or the Trustee such moneys when they become Farebox Revenues. Users of Caltrain may assert that because they have already loaded an amount on the Clipper Card, they are entitled to use Caltrain without paying a second time, regardless of whether funds are turned over to the JPB or the Trustee. Under such circumstances, there could be delays or reductions in payments on the 2019 Series A Bonds.

The holders of the 2019 Series A Bonds may be required to return to the Fare Payment Processor as preferential transfers, payments received on the 2019 Series A Bonds that are traceable to funds received from the Fare Payment Processor.

There may be delays in payments on the 2019 Series A Bonds while the bankruptcy court considers any of these issues. There may be other possible effects of a bankruptcy of the Fare Payment Processor that could result in delays or reductions in payments on the 2019 Series A Bonds or in other losses to the holders of the 2019 Series A Bonds. Regardless of any specific adverse determinations in a bankruptcy proceeding of the Fare Payment Processor, the fact of such a bankruptcy proceeding could have an adverse effect on the liquidity and value of the 2019 Series A Bonds.

Caltrain Service Operator. If the Caltrain Service Operator were to go into bankruptcy, it may stop performing its functions as operator of Caltrain, and it may be difficult to find a third party to act as successor operator. Alternatively, the Caltrain Service Operator may take the position that unless the amount of its compensation is increased or the terms of its obligations are otherwise altered, it will stop performing its functions as operator. If it would be difficult to find a third party to act as operator, the parties, as a practical matter, may have no choice but to agree to the demands of the Caltrain Service Operator. The Caltrain Service Operator may also have the power, with the approval of the bankruptcy court, to assign its rights and obligations as operator to a third party without the consent, and even over the objection, of the parties, and without complying with the requirements of the applicable documents.

If the Caltrain Service Operator is in bankruptcy, then the parties may be prohibited from taking any action to enforce any obligations of the Caltrain Service Operator under the applicable documents or to collect any amount owing by the Caltrain Service Operator under the applicable documents, unless the permission of the bankruptcy court is obtained.

If the Caltrain Service Operator is in bankruptcy, then, despite the terms of the documents, the parties may be prohibited from terminating the Caltrain Service Operator and appointing a successor operator.
The Trustee and the holders of the 2019 Series A Bonds may not have a lien on any Farebox Revenues that are in the possession of the Caltrain Service Operator at the time of the commencement of the bankruptcy proceeding. The Caltrain Service Operator may not be required to remit to the JPB or the Trustee any Farebox Revenues that are in its possession at the time it goes into bankruptcy. To the extent that the Caltrain Service Operator has commingled Farebox Revenues with its own funds, the holders of the 2019 Series A Bonds may be required to return to the Caltrain Service Operator as preferential transfers payments received on the 2019 Series A Bonds that are traceable to funds received from the Caltrain Service Operator.

There may be delays in payments on the 2019 Series A Bonds while the bankruptcy court considers any of these issues. There may be other possible effects of a bankruptcy of the Caltrain Service Operator that could result in delays or reductions in payments on the 2019 Series A Bonds or in other losses to the holders of the 2019 Series A Bonds. Regardless of any specific adverse determinations in a Caltrain Service Operator bankruptcy, the fact of a Caltrain Service Operator bankruptcy could have an adverse effect on the liquidity and value of the 2019 Series A Bonds.

Climate Change and Sea Level Rise

In May 2009, the California Climate Change Center released a final paper, for informational purposes only, which was funded by the California Energy Commission, the California Environmental Protection Agency, the MTC, the California Department of Transportation and the California Ocean Protection Council. The title of the paper is "The Impacts of Sea-Level Rise on the California Coast." The paper posits that increases in sea level will be a significant consequence of climate change over the next century. The paper evaluated the population, infrastructure, and property at risk from project sea-level rise if no actions are taken to protect the coast. The paper concluded that significant property is at risk of flooding from 100-year flood events as a result of a 1.4 meter sea level rise. The paper further estimates that the replacement value of this property totals nearly $100 billion (in 2000 dollars). Two-thirds of this at-risk property is concentrated in the San Francisco Bay Area, which includes the geographic area served by Caltrain, indicating that this region is particularly vulnerable to impacts associated with sea-level rise due to extensive development on the margins of the San Francisco Bay.

Hazards relating to climate change include sea level rise, flooding, heat wave, fire and severe storm and wind. Any such events, if unmitigated, could have major impacts to Caltrain stations, trackway and other Caltrain equipment and facilities. Service interruptions and/or a decline in economic activity resulting from climate change/sea level rise could have a material adverse impact upon the level of Farebox Revenues and therefore upon the ability of the JPB to pay principal of and interest on the 2019 Series A Bonds.

Risk of Earthquake and Other Force Majeure Events; Threats and Acts of Terrorism

Caltrain operates in a seismically active region. Active earthquake faults underlie the San Francisco Bay Area, most notably the Hayward Fault and the San Andreas Fault. On August 24, 2014, an earthquake occurred in Napa, California. The tremor's epicenter was located approximately 3.7 miles northwest of American Canyon near the West Napa Fault and registered 6.0 on the Richter scale of earthquake intensity. The Napa earthquake caused fires, damaged buildings and roads, and injured approximately 200 people. The Napa earthquake was the largest earthquake in the San Francisco Bay Area since the 1989 Loma Prieta earthquake on the San Andreas Fault, which was centered about 60 miles south of San Francisco. The Loma Prieta earthquake registered 6.9 on the Richter scale of earthquake intensity and caused fires and collapse of and structural damage to buildings, highways and bridges in the San Francisco Bay Area. In 2014, the Working Group on California Earthquake Probabilities (a collaborative effort of the U.S. Geological Survey, the California Geological Society, and
the Southern California Earthquake Center) reported that there is a 72% chance that one or more quakes of magnitude 6.7 or larger will occur in the San Francisco Bay Area by the year 2043. Though neither the Napa earthquake nor the Loma Prieta earthquake caused any significant damage to the Caltrain right-of-way, such earthquakes may be very destructive. A major earthquake could cause significant damage and service disruptions and could adversely affect economic activity in the geographic area served by Caltrain. Service interruptions and/or a decline in economic activity resulting from earthquakes could have a material adverse impact upon the level of Farebox Revenues and therefore upon the ability of the JPB to pay principal of and interest on the 2019 Series A Bonds.

Operation of Caltrain is also at risk from other events of force majeure, such as civil disturbances, acts of war or terrorism, and trespasser incidents which could interrupt Caltrain service for unknown periods of time. The JPB has undertaken security measures in an effort to reduce the likelihood of interruptions of Caltrain service due to events of force majeure. However, such measures are not guaranteed to prevent such disruptions.

Cybersecurity

The JPB relies on a complex technology environment to conduct its operations and faces multiple cybersecurity threats, including, but not limited to, hacking, phishing, viruses, malware and other attacks on its computing and other networks and systems. Cybersecurity incidents could result from unintentional events or from deliberate attacks by unauthorized entities or individuals attempting to gain access for the purposes of misappropriating assets or information or causing operational disruption and damage. To mitigate the risk of business operations impact and damage from cybersecurity incidents or cyber-attacks, the JPB invests in cybersecurity and operational safeguards, which are periodically tested. However, no assurance can be given by the JPB that such measures will ensure against cybersecurity threats and attacks. Cybersecurity breaches could damage computing and other networks and systems used in the operation of Caltrain and could damage Caltrain's finances and operations. The costs of remedying any such damage or protecting against future attacks could be substantial. Further, cybersecurity breaches could expose the JPB to material litigation and other legal risks which could cause the JPB to incur material costs related to such legal claims or proceedings.

Reduction in Ridership

Ridership may decrease in the future as a result of a number of factors. Such factors include, but are not limited to, expansion of other transit systems which operate within the area served by Caltrain, including BART and VTA, and service improvements made by other transit systems which operate within the area served by Caltrain, such as the managed lanes designed to ease traffic congestion and decrease travel time being implemented by SamTrans. In addition, ridership may decrease as a result of the continued development of alternatives to the use of public transit systems such as the private shuttle buses provided by employers to transport their employees between their residences and their offices and the expansion of ride hailing services, such as Lyft and Uber. Any substantial reduction in ridership could have a material adverse impact upon the level of passenger fares which are the major source of Farebox Revenues from which principal of and interest on the 2019 Series A Bonds are paid.

Insurance

The JPB covenants in the Trust Agreement to maintain insurance or self-insurance against such risks as are usually insured against by other providers of commuter rail services, subject to compliance with certain requirements set forth in the Trust Agreement. Such insurance or self-insurance shall be in an adequate amount as to the risk insured against as determined by the JPB. A significant risk event affecting the JPB, its assets or operations could materially adversely affect the financial condition of the
JPB and its ongoing operations. See "FINANCIAL INFORMATION - Insurance" herein and Appendix A – "PENINSULA CORRIDOR JOINT POWERS BOARD INDEPENDENT AUDITORS REPORT YEARS ENDED JUNE 30, 2018 AND 2017 - Note 10 - Insurance Programs."

[Bond Insurer Insolvency]

[Should the 2019 Series A Insurer encounter financial difficulties, there could be adverse effects on the holders of the 2019 Series A Bonds. The applicable regulators can order an insurance company to stop paying claims, or to pay claims only with the permission of the regulators, even before the insurance company becomes the subject of a formal insolvency proceeding. An insolvent financial guaranty insurer may be able to retain its rights to control remedies and direct a bond trustee, and its rights to consent to amendments of the documents, even though it is insolvent or not paying claims as required by the financial guaranty policy. An insolvent financial guaranty insurer may also be able to require an issuer to reimburse the insurer before paying amounts due on bonds, regardless of what the documents provide. There may be other possible effects of the financial distress of the 2019 Series A Insurer that could result in delays or reductions in payments on the 2019 Series A Bonds, or result in losses to the holders of the 2019 Series A Bonds. Regardless of any specific adverse determinations, the fact of the financial distress of the 2019 Series A Insurer could have an adverse effect on the liquidity and value of the 2019 Series A Bonds.]

Loss of Tax Exemption

As discussed under "TAX MATTERS" herein, interest on the 2019 Series A Bonds could become includable in federal gross income, possibly from the date of issuance of the 2019 Series A Bonds, as a result of acts or omissions of the JPB subsequent to the issuance of the 2019 Series A Bonds. Should interest become includable in federal gross income, the 2019 Series A Bonds are not subject to redemption by reason thereof and will remain Outstanding until maturity or earlier redemption.

No Acceleration Upon Default

The payment of the principal of and interest on the Bonds may not be accelerated upon any Event of Default under the Trust Agreement. In the event of default by the JPB, each Holder will have the right to exercise the rights set forth in the Trust Agreement, subject to the limitations set forth therein. Neither the Trustee nor the Holders have any rights to exercise any remedies against any assets of the JPB other than the Farebox Revenues and other assets pledged pursuant to the Trust Agreement, subject to the terms of the Trust Agreement.

RATINGS

Kroll Bond Rating Agency, Inc. ("Kroll"), Moody's Investors Service, Inc. ("Moody's") and S&P Global Ratings, a division of Standard & Poor's Financial Services LLC (S&P) are expected to assign ratings of ___ , ___ and ___ respectively, to the 2019 Series A Bonds[, in each case based upon the understanding that the municipal bond insurance policy will be issued by 2019 Series A Insurer] simultaneously with the delivery of the 2019 Series A Bonds. [In addition, the 2019 Series A Bonds have been assigned underlying ratings of "__" by Kroll, "__" by Moody's and "__" by S&P, respectively].

A rating reflects only the views of the rating agency assigning such rating and is not a recommendation to buy, sell or hold 2019 Series A Bonds. An explanation of the significance of a rating may be obtained from the rating agency assigning such rating. Certain information and materials were provided by the JPB to each of the above-identified rating agencies to be considered in evaluating the 2019 Series A Bonds. Generally, a rating agency bases its rating on such information and materials and
on investigations, studies and assumptions of its own. There is no assurance that any rating will be retained for any given period of time or that the same will not be revised downward or withdrawn entirely by the rating agency assigning such rating if in its judgment, circumstances so warrant. The JPB undertakes no responsibility to oppose any such revision or withdrawal. Any such downward revision or withdrawal of any rating may have an adverse effect on the marketability or market price of the 2019 Series A Bonds.

TAX MATTERS

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the JPB, based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2019 Series A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the "Code") and is exempt from State of California personal income taxes. Bond Counsel is of the further opinion that interest on the 2019 Series A Bonds is not a specific preference item for purposes of the federal alternative minimum tax. A complete copy of the proposed form of opinion of Bond Counsel is set forth in Appendix F hereto.

To the extent the issue price of any maturity of the 2019 Series A Bonds is less than the amount to be paid at maturity of such 2019 Series A Bonds (excluding amounts stated to be interest and payable at least annually over the term of such 2019 Series A Bonds), the difference constitutes "original issue discount," the accrual of which, to the extent properly allocable to each Beneficial Owner thereof, is treated as interest on the 2019 Series A Bonds which is excluded from gross income for federal income tax purposes and State of California personal income taxes. For this purpose, the issue price of a particular maturity of the 2019 Series A Bonds is the first price at which a substantial amount of such maturity of the 2019 Series A Bonds is sold to the public (excluding bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The original issue discount with respect to any maturity of the 2019 Series A Bonds accrues daily over the term to maturity of such 2019 Series A Bonds on the basis of a constant interest rate compounded semiannually (with straight-line interpolations between compounding dates). The accruing original issue discount is added to the adjusted basis of such 2019 Series A Bonds to determine taxable gain or loss upon disposition (including sale, redemption, or payment on maturity) of such 2019 Series A Bonds. Beneficial Owners of the 2019 Series A Bonds should consult their own tax advisors with respect to the tax consequences of ownership of 2019 Series A Bonds with original issue discount, including the treatment of purchasers who do not purchase such 2019 Series A Bonds in the original offering to the public at the first price at which a substantial amount of such 2019 Series A Bonds is sold to the public.

Any 2019 Series A Bonds purchased, whether at original issuance or otherwise, for an amount greater than their principal amount payable at maturity (or, in some cases, at their earlier call date) ("Premium Bonds") will be treated as having amortizable bond premium. No deduction is allowable for the amortizable bond premium in the case of 2019 Series A Bonds, like the Premium Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, the amount of tax exempt interest received, and a Beneficial Owner's basis in a Premium Bond, will be reduced by the amount of amortizable bond premium properly allocable to such Beneficial Owner. Beneficial Owners of Premium Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the 2019 Series A Bonds. The JPB has made certain representations and has covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the 2019 Series A Bonds will not be
included in federal gross income. Inaccuracy of these representations or failure to comply with these covenants may result in interest on the 2019 Series A Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the 2019 Series A Bonds. The opinion of Bond Counsel assumes the accuracy of these representations and compliance with these covenants. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken) or events occurring (or not occurring) or any other matters coming to Bond Counsel's attention after the date of issuance of the 2019 Series A Bonds may adversely affect the value of, or the tax status of interest on, the 2019 Series A Bonds. Accordingly, the opinion of Bond Counsel is not intended to, and may not, be relied upon in connection with any such actions, events or matters.

Although Bond Counsel is of the opinion that interest on the 2019 Series A Bonds is excluded from gross income for federal income tax purposes and is exempt from State of California personal income taxes, the ownership or disposition of, or the accrual or receipt of amounts treated as interest on, the 2019 Series A Bonds may otherwise affect a Beneficial Owner's federal, state or local tax liability. The nature and extent of these other tax consequences depends upon the particular tax status of the Beneficial Owner or the Beneficial Owner's other items of income or deduction. Bond Counsel expresses no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the 2019 Series A Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent Beneficial Owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such future legislation, clarification of the Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the 2019 Series A Bonds. Prospective purchasers of the 2019 Series A Bonds should consult their own tax advisers regarding any pending or proposed federal or state tax legislation, regulations or litigation, as to which Bond Counsel expresses no opinion.

The opinion of Bond Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Bond Counsel's judgment as to the proper treatment of the 2019 Series A Bonds for federal income tax purposes. It is not binding on the Internal Revenue Service ("IRS") or the courts. Furthermore, Bond Counsel cannot give and has not given any opinion or assurance about the future activities of the JPB, or about the effect of future changes in the Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the IRS. The JPB has covenanted, however, to comply with the requirements of the Code.

Bond Counsel's engagement with respect to the 2019 Series A Bonds ends with the issuance of the 2019 Series A Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the JPB or the Beneficial Owners regarding the tax-exempt status of the 2019 Series A Bonds in the event of an audit examination by the IRS. Under current procedures, parties other than the JPB and its appointed counsel, including the Beneficial Owners, would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of tax-exempt bonds is difficult, obtaining an independent review of IRS positions with which the JPB legitimately disagrees may not be practicable. Any action of the IRS, including but not limited to selection of the 2019 Series A Bonds for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues may affect the market price for, or the marketability of, the 2019 Series A Bonds, and may cause the JPB or the Beneficial Owners to incur significant expense.
CONTINUING DISCLOSURE

Pursuant to the Trust Agreement, the JPB will covenant for the benefit of the Holders and Beneficial Owners of the 2019 Series A Bonds to provide certain financial information and operating data relating to the JPB (each, an "Annual Report") by not later than eight months following the end of the JPB's Fiscal Year (presently June 30), commencing with the Annual Report for the Fiscal Year ending June 30, 2019, and to provide notices of the occurrence of certain enumerated events. Each Annual Report will be filed by U.S. Bank National Association acting as dissemination agent (the "Dissemination Agent") on behalf of the JPB with the Municipal Securities Rulemaking Board (the "MSRB"). Notices of enumerated events, if any, will be filed by the Dissemination Agent on behalf of the JPB with the MSRB. A copy of the proposed form of Continuing Disclosure Agreement to be entered into between the JPB and the Dissemination Agent is set forth in Appendix E - "FORM OF CONTINUING DISCLOSURE AGREEMENT" hereto. The covenants of the JPB described under this caption have been made in order to assist J.P. Morgan Securities LLC, the underwriter of the 2019 Series A Bonds (the "Underwriter"), in complying with Securities and Exchange Commission Rule 15c2-12(b)(5). A diligence review in advance of preparation of this Official Statement identified one event notice relating to the lowering of the rating assigned to the 2007 Series A Bonds by S&P from "A" to "A -" that was not filed in a timely manner. The ratings report lowering the rating was dated May 10, 2016. The JPB filed the event notice relating to the change in rating on August 1, 2016.

LITIGATION

No litigation is pending, or to the best knowledge of the JPB, threatened, against the JPB concerning the validity of the 2019 Series A Bonds. The JPB is not aware of any litigation pending or threatened against the JPB questioning the existence of the JPB or contesting the JPB's ability to issue the 2019 Series A Bonds or to receive the amounts pledged pursuant to the Trust Agreement.

The JPB is subject to a number of lawsuits in the normal course of its business. In the opinion of general counsel to the JPB, other than the litigation described below, there are no claims or actions, threatened or pending which, if determined adversely to the JPB, either individually or in the aggregate, could have a material adverse effect on the financial condition of the JPB and thereby the ability of the JPB to pay principal of and interest on the 2019 Series A Bonds.

To comply with federal safety requirements mandating the development and implementation of positive train control, the JPB conducted a nationwide competitive procurement for a systems integrator to design, deliver, test, and install a positive train control system. Upon completion of the procurement process, on October 6, 2011, the JPB awarded a contract to Parsons Transportation Group ("Parsons"), which required placement of the positive train control system into Caltrain revenue service no later than October 31, 2015. As indicated in the discussion of the PTC Project set forth above under the caption "THE JOINT POWERS BOARD - Major Capital Initiatives - Positive Train Control System Project," due to delays and performance failures which the JPB was unable to resolve with Parsons, the JPB terminated its contract with Parsons in February 2017. Litigation ensued.

The JPB and Parsons have each sued each other in separate actions in the Superior Court of California, County of San Mateo. The JPB has alleged causes of action against Parsons for breach of contract, professional negligence and negligent misrepresentation. In addition, the JPB has alleged causes of action against Parsons' sureties for breach of performance bond. Parsons, in turn, has alleged causes of action against the JPB for breach of contract, wrongful termination, breach of covenant of good faith and fair dealing, unjust enrichment/quantum meruit, and violation of prompt payment statutes. Both the JPB and Parsons have requested declaratory relief.
The JPB action and the Parsons action have been consolidated. In addition, the parties have stipulated to further consolidation with a separate action between Parsons and one of its subcontractors. The JPB is vigorously pursuing its claims and defending against Parsons' claims in the discovery/pretrial phase of the litigation, which is currently underway. On December 20, 2018, the litigation was designated as complex and was assigned to the complex judge in the County of San Mateo. As of the date of this Official Statement, no trial date has been set. Trial dates are typically set at case management conferences ("CMCs"). As of the date of this Official Statement, no case management conference has been scheduled by the complex judge. It is impossible for the JPB to predict when a trial date might be set.

The JPB currently estimates its damages at approximately $113 million, which includes, but is not limited to, (i) costs incurred to determine a reprocurement strategy, to negotiate contracts to complete the PTC Project and to correct errors in fiber installation and (ii) JPB project team cost through completion of the PTC Project. Parsons alleges damages of approximately $59 million against the JPB. Parsons' claimed damages include payments allegedly due for contract work, payments for additional work not authorized by contract, and payments for costs associated with an alleged extended contract period of performance.

It is impossible at this time for the JPB to predict the outcome of any trial. The JPB will continue to vigorously pursue its claims and defend against Parsons' claims.

**AUDITED FINANCIAL STATEMENTS**

The financial statements of the JPB for the Fiscal Years ended June 30, 2018 and 2017, included in Appendix A to this Official Statement, have been audited by Vavrinek, Trine, Day & Co., LLP, independent auditors, as stated in their report herein. See Appendix A - "PENINSULA CORRIDOR JOINT POWERS BOARD INDEPENDENT AUDITOR'S REPORT YEARS ENDED JUNE 30, 2018 AND 2017." Vavrinek, Trine, Day & Co., LLP was not requested to consent to the inclusion of their report in Appendix A, nor has Vavrinek, Trine, Day & Co., LLP undertaken to update their report or to take any action intended or likely to elicit information concerning the accuracy, completeness or fairness of the statements made in this Official Statement, and no opinion is expressed by Vavrinek, Trine, Day & Co., LLP with respect to any event subsequent to the date of their report.

**[VERIFICATION OF MATHEMATICAL ACCURACY]**

[The arithmetical accuracy of certain computations included in the schedules provided on behalf of the JPB relating to: (a) the adequacy of forecasted receipts of principal and interest on the Escrow Securities and cash held in the Escrow Fund to pay, when due, the scheduled payments of principal and interest with respect to the 2007 Series A Bonds on and prior to their redemption date or maturity dates, as applicable; and (b) the yields on the Escrow Securities and the 2019 Series A Bonds will be examined by _____________ (the "Verification Agent"). Such examination will be based solely upon the assumptions and the information supplied to the Verification Agent on behalf of the JPB. The Verification Agent will restrict its procedures to examining the arithmetical accuracy of certain computations and will not make any study or evaluation of the assumptions and information upon which the computations are based, and accordingly, will not express an opinion on the data used, the reasonableness of the assumptions, or the achievability of the forecasted outcome.]

**MUNICIPAL ADVISORS**

The JPB has retained PFM Financial Advisors LLC, San Francisco, California, and Ross Financial, San Francisco, California, to serve as municipal advisors (the "Municipal Advisors") with
respect to the issuance of the 2019 Series A Bonds. Compensation of the Municipal Advisors is contingent upon the issuance of the 2019 Series A Bonds.

LEGAL MATTERS

The validity of the 2019 Series A Bonds and certain other legal matters are subject to the approving opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the JPB. A complete copy of the proposed form of the opinion to be delivered by Bond Counsel is attached hereto as Appendix F. Bond Counsel undertakes no responsibility for the accuracy, completeness or fairness of this Official Statement. Approval of certain other legal matters will be passed upon for the JPB by its general counsel, Hanson Bridgett LLP, and for the Underwriter, by its counsel, Nixon Peabody LLP.

UNDERWRITING

The 2019 Series A Bonds are being purchased by the Underwriter pursuant to a bond purchase agreement, to be dated the date of sale of the 2019 Series A Bonds (the "Bond Purchase Agreement"). The Bond Purchase Agreement provides that the Underwriter will purchase all the 2019 Series A Bonds if any are purchased at a purchase price of $________ (representing the principal amount of the 2019 Series A Bonds, less an underwriter's discount of $________, plus [a net original issue premium] of $________). The obligation of the Underwriter to purchase the 2019 Series A Bonds is subject to certain terms and conditions set forth in the Bond Purchase Agreement.

The Underwriter has entered into negotiated dealer agreements (each, a "Dealer Agreement") with each of Charles Schwab & Co., Inc. ("CS&Co.") and LPL Financial LLC ("LPL") for the retail distribution of certain securities offerings at the original issue prices. Pursuant to each Dealer Agreement, each of CS&Co. and LPL will purchase 2019 Series A Bonds from the Underwriter at the original issue price less a negotiated portion of the selling concession applicable to any 2019 Series A Bonds that such firm sells.

The Underwriter is initially offering the 2019 Series A Bonds to the public at the public offering yields indicated on the [inside] cover of this Official Statement but the Underwriter may offer and sell the 2019 Series A Bonds to certain dealers, institutional investors and others (including sales for deposit into investment trusts, certain of which may be sponsored or managed by the Underwriter) at yields higher than the public offering yields stated on the [inside] cover of this Official Statement and the public offering yields may be changed from time to time by the Underwriter.

OTHER MATTERS

This Official Statement is not to be construed as a contract or agreement between the JPB and the purchasers, Holders or Beneficial Owners of any of the 2019 Series A Bonds. Any statements made in this Official Statement involving matters of opinion, whether or not expressly so stated, are intended merely as an opinion and not as representations of fact. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the JPB since the date hereof.

Additional information may be obtained upon request from the office of the JPB at 1250 San Carlos Avenue, San Carlos, California 94070-2400, Attention: Chief Financial Officer, (650) 508-6466.
The execution and delivery of this Official Statement have been duly authorized by the JPB.

PENINSULA CORRIDOR JOINT POWERS BOARD

By:______________________________

Executive Director
APPENDIX A

PENINSULA CORRIDOR JOINT POWERS BOARD INDEPENDENT AUDITOR'S REPORT
YEARS ENDED JUNE 30, 2018 AND 2017
APPENDIX B

ECONOMIC AND DEMOGRAPHIC DATA PERTAINING TO THE THREE CALTRAIN COUNTIES

CITY AND COUNTY OF SAN FRANCISCO,
COUNTY OF SAN MATEO
AND
COUNTY OF SANTA CLARA
APPENDIX C

DEFINITIONS AND SUMMARY OF THE TRUST AGREEMENT
APPENDIX D

BOOK-ENTRY SYSTEM
BOOK-ENTRY SYSTEM

The Depository Trust Company ("DTC"), New York, New York, will act as securities depository for the Peninsula Corridor Joint Powers Board Farebox Revenue Bonds, 2019 Series A Bonds (the "2019 Series A Bonds"). The 2019 Series A Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully registered bond certificate will be issued for each maturity of 2019 Series A Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC. Capitalized terms used herein and not otherwise defined herein shall have the meanings set forth in the front portion of this Official Statement or in Appendix C - "Definitions and Summary of the Trust Agreement."

The following information has been obtained from DTC, and neither the Peninsula Corridor Joint Powers Board (the "JPB") nor J.P. Morgan Securities LLC (the "Underwriter") makes any representation as to its accuracy or completeness. For further information, beneficial owners should contact DTC in New York, New York.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments from over 100 countries that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of the 2019 Series A Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2019 Series A Bonds on DTC's records. The ownership interest of each actual purchaser of each 2019 Series A Bond (each a "Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners, are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the 2019 Series A Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the 2019 Series A Bonds, except in the event that use of the book-entry system for the 2019 Series A Bonds is discontinued.

To facilitate subsequent transfers, all 2019 Series A Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may
be requested by an authorized representative of DTC. The deposit of the 2019 Series A Bonds with DTC and their registration in the name of Cede & Co. or such other name as may be requested by an authorized representative of DTC. The deposit of 2019 Series A Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the 2019 Series A Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such 2019 Series A Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of 2019 Series A Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the 2019 Series A Bonds, such as redemptions, defaults and proposed amendments to the bond documents. For example, Beneficial Owners of 2019 Series A Bonds may wish to ascertain that the nominee holding 2019 Series A Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the 2019 Series A Bonds within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to 2019 Series A Bonds unless authorized by a Direct Participant in accordance with DTC's MMI procedures. Under its usual procedures, DTC mails an Omnibus Proxy (the "Omnibus Proxy") to the JPB and the Trustee as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the 2019 Series A Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payments on the 2019 Series A Bonds and redemption proceeds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from the Trustee, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Trustee or the JPB, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal, premium, if any, and interest, including upon redemption, to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as securities depository with respect to the 2019 Series A Bonds at any time by giving reasonable notice to the JPB or the Trustee. Under such circumstances in the event that a successor securities depository is not obtained, bond certificates are required to be printed and delivered in accordance with the provisions set forth in the Trust Agreement.
The JPB may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, bond certificates will be printed and delivered in accordance with the provisions of the Trust Agreement.
APPENDIX E

FORM OF CONTINUING DISCLOSURE AGREEMENT
APPENDIX F

PROPOSED FORM OF OPINION OF BOND COUNSEL
[APPENDIX H]

[SPECIMEN MUNICIPAL BOND INSURANCE POLICY]
APPENDIX B

ECONOMIC AND DEMOGRAPHIC DATA
PERTAINING TO THE THREE CALTRAIN COUNTIES

CITY AND COUNTY OF SAN FRANCISCO,
COUNTY OF SAN MATEO
AND
COUNTY OF SANTA CLARA
ECONOMIC AND DEMOGRAPHIC DATA PERTAINING TO THE THREE CALTRAIN COUNTIES

The information set forth in this Appendix B is provided as general information and has been obtained from sources that the Peninsula Corridor Joint Powers Board believes to be reliable. The Peninsula Corridor Joint Powers Board makes no representations as to the accuracy or completeness of the information included in this Appendix B and will not undertake to update any information set forth in this Appendix B.

General

The San Francisco Bay Area encompasses the nine counties which border San Francisco Bay. The Caltrain commuter rail service provided by the Peninsula Corridor Joint Powers Board (the "JPB") operates in the City and County of San Francisco, the County of San Mateo and the County of Santa Clara (each, a "Caltrain County," and hereinafter collectively referred to as the "Caltrain Counties"). The City and County of San Francisco occupies approximately 47 square miles, the County of San Mateo occupies approximately 531 square miles and the County of Santa Clara occupies approximately 1,316 square miles. All capitalized terms used and not otherwise defined in this Appendix B shall have the meanings set forth in the front portion of this Official Statement.

The City and County of San Francisco occupies the tip of a peninsula (the "San Francisco Peninsula") situated between the Pacific Ocean and San Francisco Bay (the "Bay") and is separated from Marin County and other northerly California counties by the Golden Gate, which forms the entrance to the Bay and is spanned by the Golden Gate Bridge. The County of San Mateo is located directly south of the City and County of San Francisco on the San Francisco Peninsula. The County of Santa Clara is located east of the County of San Mateo and the County of Santa Cruz and is bordered by the County of Alameda and a portion of the Bay on the north, the County of Stanislaus and the County of Merced on the east, and the County of San Benito on the south.

City and County of San Francisco. The City and County of San Francisco represents approximately 24.5% of the total population of the three Caltrain Counties as of July 1, 2017. The population of the City and County of San Francisco increased approximately 8.7% between 2010 and 2017.

County of San Mateo. The County of San Mateo ("San Mateo County") comprises approximately 21.5% of the population of the three Caltrain Counties as of July 1, 2017. The population of San Mateo County increased approximately 7.2% between 2010 and 2017.

County of Santa Clara. The County of Santa Clara ("Santa Clara County") comprises approximately 54.0% of the population of the three Caltrain Counties as of as of July 1, 2017. The population of Santa Clara County increased approximately 8.9% between 2010 and 2017. Santa Clara County is the largest Caltrain County and is the sixth largest county in the State of California.
**Historical Population and Employment**

*Historical Population.* The table below shows population for the three Caltrain Counties for the calendar years 2010 and 2013 through 2017.* Between 2010 and 2017, population in the three Caltrain Counties increased by approximately 8.4%

<table>
<thead>
<tr>
<th>City and County of San Francisco</th>
<th>2010</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017*</th>
<th>Percent Change 2010-2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>809,753</td>
<td>844,066</td>
<td>854,421</td>
<td>864,783</td>
<td>872,463</td>
<td>880,418</td>
<td>8.7%</td>
</tr>
<tr>
<td>San Mateo County</td>
<td>720,695</td>
<td>749,165</td>
<td>756,866</td>
<td>764,711</td>
<td>768,507</td>
<td>772,900</td>
<td>7.2%</td>
</tr>
<tr>
<td>Santa Clara County</td>
<td>1,790,185</td>
<td>1,866,836</td>
<td>1,892,692</td>
<td>1,918,777</td>
<td>1,932,827</td>
<td>1,945,465</td>
<td>8.9%</td>
</tr>
<tr>
<td>Total Three Caltrain Counties</td>
<td>3,320,633</td>
<td>3,460,067</td>
<td>3,503,979</td>
<td>3,548,271</td>
<td>3,573,797</td>
<td>3,598,783</td>
<td>8.4%</td>
</tr>
</tbody>
</table>

*Most current data available.
Sources: U.S. Census Bureau for calendar year [2010] and State of California Department of Finance for calendar years [2013 through 2017].
Employment. The table below sets forth information regarding the size of the labor force, employment and unemployment rates for the three Caltrain Counties, the State of California and the United States for calendar years 2013 through 2017.*

<table>
<thead>
<tr>
<th>LABOR FORCE - EMPLOYMENT/UNEMPLOYMENT</th>
<th>ANNUAL AVERAGES 2013-2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013</td>
</tr>
<tr>
<td><strong>City and County of San Francisco</strong></td>
<td></td>
</tr>
<tr>
<td>Labor Force</td>
<td>516,300</td>
</tr>
<tr>
<td>Employment</td>
<td>488,121</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>5.5%</td>
</tr>
<tr>
<td><strong>San Mateo County</strong></td>
<td></td>
</tr>
<tr>
<td>Labor Force</td>
<td>418,085</td>
</tr>
<tr>
<td>Employment</td>
<td>396,092</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>5.3%</td>
</tr>
<tr>
<td><strong>Santa Clara County</strong></td>
<td></td>
</tr>
<tr>
<td>Labor Force</td>
<td>971,862</td>
</tr>
<tr>
<td>Employment</td>
<td>909,039</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>6.5%</td>
</tr>
<tr>
<td><strong>State of California</strong></td>
<td></td>
</tr>
<tr>
<td>Labor Force</td>
<td>18,625,000</td>
</tr>
<tr>
<td>Employment</td>
<td>16,958,400</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>8.9%</td>
</tr>
<tr>
<td><strong>United States</strong></td>
<td></td>
</tr>
<tr>
<td>Labor Force</td>
<td>155,389,000</td>
</tr>
<tr>
<td>Employment</td>
<td>143,929,000</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>7.4%</td>
</tr>
</tbody>
</table>

*Most current data available.

Sources: State of California data: California Employment Development Department, Labor Market Information Division.
The table below shows nonagricultural employment for the three Caltrain Counties by industry sector for calendar year 2017.*

### ANNUAL AVERAGE NONAGRICULTURAL EMPLOYMENT BY INDUSTRY SECTOR

#### CALENDAR YEAR 2017*

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>City and County of San Francisco</th>
<th>San Mateo County</th>
<th>Santa Clara County</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining, Logging and Construction</td>
<td>20,600</td>
<td>18,900</td>
<td>200</td>
<td>39,700</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>12,900</td>
<td>26,300</td>
<td>48,300</td>
<td>87,500</td>
</tr>
<tr>
<td>Trade, Transportation and Utilities</td>
<td>82,800</td>
<td>77,100</td>
<td>163,400</td>
<td>323,300</td>
</tr>
<tr>
<td>Information</td>
<td>41,500</td>
<td>34,900</td>
<td>135,100</td>
<td>211,500</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>56,300</td>
<td>22,700</td>
<td>85,000</td>
<td>164,000</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>194,900</td>
<td>81,300</td>
<td>35,800</td>
<td>312,000</td>
</tr>
<tr>
<td>Educational and Health Services</td>
<td>89,100</td>
<td>47,200</td>
<td>226,400</td>
<td>362,700</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>96,800</td>
<td>43,800</td>
<td>167,400</td>
<td>308,000</td>
</tr>
<tr>
<td>Other Services</td>
<td>27,300</td>
<td>13,500</td>
<td>100,800</td>
<td>141,600</td>
</tr>
<tr>
<td>Government</td>
<td>96,500</td>
<td>33,000</td>
<td>28,200</td>
<td>157,700</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>718,700</td>
<td>398,700</td>
<td>990,600</td>
<td>2,108,000</td>
</tr>
</tbody>
</table>

* Most current data available.
Source: California Employment Development Department.
**Major Employers.** The three tables below set forth the major employers in the City and County of San Francisco, San Mateo County and Santa Clara County. The data set forth below for San Mateo County includes data for the City of Palo Alto. The data for set forth below for Santa Clara County includes data for certain cities located outside of Santa Clara County and for San Benito, Santa Cruz, and Monterey counties.

### MAJOR EMPLOYERS

<table>
<thead>
<tr>
<th>City and County of San Francisco</th>
<th>Industry</th>
<th>Number of Employees*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wells Fargo &amp; Co</td>
<td>Financial Services</td>
<td>8,195</td>
</tr>
<tr>
<td>Salesforce</td>
<td>Customer Success Platform</td>
<td>6,600</td>
</tr>
<tr>
<td>California Pacific Medical Center, Pacific Campus</td>
<td>Hospital</td>
<td>6,000</td>
</tr>
<tr>
<td>PG&amp;E Corporation</td>
<td>Utility</td>
<td>4,325</td>
</tr>
<tr>
<td>Gap Inc.</td>
<td>Clothing and Accessories Retailer</td>
<td>4,268</td>
</tr>
<tr>
<td>Kaiser Permanente</td>
<td>Hospitals and Health Care Facilities</td>
<td>4,100</td>
</tr>
<tr>
<td>Uber Technologies, Inc.</td>
<td>Ridesharing App Company</td>
<td>3,650</td>
</tr>
<tr>
<td>Academy of Art University</td>
<td>Art/Design University</td>
<td>2,402</td>
</tr>
<tr>
<td>William-Sonoma Inc.</td>
<td>Retail</td>
<td>2,204</td>
</tr>
</tbody>
</table>

* Most current data available.


### San Mateo County

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number of Employees*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanford University</td>
<td>13,634</td>
</tr>
<tr>
<td>United Airlines</td>
<td>10,500</td>
</tr>
<tr>
<td>Genentech Inc.</td>
<td>10,000</td>
</tr>
<tr>
<td>Oracle Corporation</td>
<td>6,750</td>
</tr>
<tr>
<td>Facebook Inc.</td>
<td>6,068</td>
</tr>
<tr>
<td>Stanford Health Care</td>
<td>5,900</td>
</tr>
<tr>
<td>County of San Mateo</td>
<td>5,500</td>
</tr>
<tr>
<td>VMware Inc.</td>
<td>3,891</td>
</tr>
<tr>
<td>Lucile Packard Children’s Hospital at Stanford.</td>
<td>3,771</td>
</tr>
<tr>
<td>Visa Inc.</td>
<td>3,500</td>
</tr>
</tbody>
</table>

* Most current data available.

**Includes San Mateo County and City of Palo Alto.

## MAJOR EMPLOYERS

<table>
<thead>
<tr>
<th>Santa Clara County</th>
<th>Industry</th>
<th>Number of Employees*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple Inc.</td>
<td>Technology</td>
<td>25,000</td>
</tr>
<tr>
<td>Alphabet Inc./Google Inc.</td>
<td>Internet Services and Products</td>
<td>20,000</td>
</tr>
<tr>
<td>County of Santa Clara</td>
<td>County Government</td>
<td>18,244</td>
</tr>
<tr>
<td>Stanford University</td>
<td>Education</td>
<td>16,919</td>
</tr>
<tr>
<td>Cisco Systems, Inc.</td>
<td>Computer Network Equipment</td>
<td>15,700</td>
</tr>
<tr>
<td>Kaiser Permanente Northern California</td>
<td>Health Care</td>
<td>12,500</td>
</tr>
<tr>
<td>Stanford Health Care</td>
<td>Health Care</td>
<td>10,034</td>
</tr>
<tr>
<td>Tesla Motors Inc.</td>
<td>Car Manufacturing</td>
<td>10,000</td>
</tr>
<tr>
<td>Facebook Inc.</td>
<td>Social Networking Website</td>
<td>9,385</td>
</tr>
<tr>
<td>Intel Corporation</td>
<td>Electronic Components and Accessories</td>
<td>8,500</td>
</tr>
</tbody>
</table>

*Most current data available.

**In addition to Santa Clara County, includes: (i) Fremont, Newark and Union City in Alameda County; (ii) Atherton, Belmont, East Palo Alto, Foster City, Menlo Park, Portola Valley, Redwood City, San Carlos, San Mateo and Woodside in San Mateo County; and (iii) San Benito, Santa Cruz and Monterey Counties.

Personal Income

The table below presents the most current information available for personal income and per capita income for the three Caltrain Counties, the State of California and the United States. The information presented is for the calendar years 2012 through 2016.

### PERSONAL INCOME

City and County of San Francisco, San Mateo County, Santa Clara County, State of California and United States

Calendar Years 2012 through 2016

<table>
<thead>
<tr>
<th>Year and Area</th>
<th>Personal Income (Millions of Dollars)(^{(1)})</th>
<th>Per Capita Personal Income (Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2012</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City and County of San Francisco</td>
<td>$73,115</td>
<td>$88,216</td>
</tr>
<tr>
<td>San Mateo County</td>
<td>64,765</td>
<td>87,523</td>
</tr>
<tr>
<td>Santa Clara County</td>
<td>134,046</td>
<td>72,891</td>
</tr>
<tr>
<td>State of California</td>
<td>1,838,567</td>
<td>48,369</td>
</tr>
<tr>
<td>United States</td>
<td>13,904,485</td>
<td>44,282</td>
</tr>
<tr>
<td><strong>2013</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City and County of San Francisco</td>
<td>$74,677</td>
<td>$88,977</td>
</tr>
<tr>
<td>San Mateo County</td>
<td>65,193</td>
<td>87,045</td>
</tr>
<tr>
<td>Santa Clara County</td>
<td>135,182</td>
<td>72,407</td>
</tr>
<tr>
<td>State of California</td>
<td>1,861,957</td>
<td>48,570</td>
</tr>
<tr>
<td>United States</td>
<td>14,068,960</td>
<td>44,493</td>
</tr>
<tr>
<td><strong>2014</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City and County of San Francisco</td>
<td>$83,322</td>
<td>$97,978</td>
</tr>
<tr>
<td>San Mateo County</td>
<td>70,202</td>
<td>92,759</td>
</tr>
<tr>
<td>Santa Clara County</td>
<td>148,059</td>
<td>78,345</td>
</tr>
<tr>
<td>State of California</td>
<td>1,986,026</td>
<td>51,344</td>
</tr>
<tr>
<td>United States</td>
<td>14,811,388</td>
<td>46,494</td>
</tr>
<tr>
<td><strong>2015</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City and County of San Francisco</td>
<td>$91,370</td>
<td>$105,997</td>
</tr>
<tr>
<td>San Mateo County</td>
<td>77,284</td>
<td>101,264</td>
</tr>
<tr>
<td>Santa Clara County</td>
<td>163,035</td>
<td>85,354</td>
</tr>
<tr>
<td>State of California</td>
<td>1,838,567</td>
<td>54,718</td>
</tr>
<tr>
<td>United States</td>
<td>15,547,661</td>
<td>48,451</td>
</tr>
<tr>
<td><strong>2016</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City and County of San Francisco</td>
<td>$96,161</td>
<td>$110,418</td>
</tr>
<tr>
<td>San Mateo County</td>
<td>80,855</td>
<td>105,721</td>
</tr>
<tr>
<td>Santa Clara County</td>
<td>170,673</td>
<td>88,920</td>
</tr>
<tr>
<td>State of California</td>
<td>2,212,691</td>
<td>56,374</td>
</tr>
<tr>
<td>United States</td>
<td>15,912,777</td>
<td>49,246</td>
</tr>
</tbody>
</table>

\(^{(1)}\) Numbers reflect rounding.
Taxable Sales

The table below sets forth historical taxable sales for the three Caltrain Counties and the State of California for calendar years 2012 through 2016.*

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>City and County</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of San Francisco</td>
<td>$15,954</td>
<td>$17,094</td>
<td>$18,470</td>
<td>$18,871,834</td>
<td>$19,397,303</td>
</tr>
<tr>
<td>San Mateo County</td>
<td>13,907</td>
<td>14,612</td>
<td>15,298</td>
<td>15,478,010</td>
<td>15,658,573</td>
</tr>
<tr>
<td>Santa Clara County</td>
<td>36,220</td>
<td>37,622</td>
<td>39,629</td>
<td>41,232,759</td>
<td>41,831,669</td>
</tr>
<tr>
<td>**Total Caltrain</td>
<td>$66,081</td>
<td>$69,327</td>
<td>$73,397</td>
<td>$75,581,603</td>
<td>$76,887,545</td>
</tr>
<tr>
<td>Counties**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Statewide</strong></td>
<td>$558,387</td>
<td>$586,840</td>
<td>$615,822</td>
<td>$633,883,794</td>
<td>$649,079,371</td>
</tr>
</tbody>
</table>

*Most current data available.
**Totals may not add due to rounding.
Source: State of California, Board of Equalization.
**Construction Activity**

The three tables below set forth information regarding building permits and valuations for the three Caltrain Counties for the calendar years 2013 through 2017. Totals may not add due to independent rounding.

**BUILDING PERMITS AND VALUATIONS**

**Calendar Years 2013 through 2017**

(Dollars in Thousands)

<table>
<thead>
<tr>
<th>City and County of San Francisco**</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017*</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Single-dwelling</td>
<td>$ 29,581</td>
<td>$ 22,267</td>
<td>$ 39,455</td>
<td>$ 73,735</td>
<td>$ 24,912</td>
</tr>
<tr>
<td>New Multi-dwelling</td>
<td>1,142,564</td>
<td>1,166,615</td>
<td>1,043,440</td>
<td>1,086,523</td>
<td>1,695,078</td>
</tr>
<tr>
<td>Additions, alterations</td>
<td>305,584</td>
<td>399,523</td>
<td>896,882</td>
<td>976,307</td>
<td>835,963</td>
</tr>
<tr>
<td>Total Residential</td>
<td>$1,477,729</td>
<td>$1,188,882</td>
<td>$1,979,777</td>
<td>$2,136,564</td>
<td>$2,555,954</td>
</tr>
<tr>
<td>New Commercial</td>
<td>$ 834,528</td>
<td>$ 543,332</td>
<td>$ 845,312</td>
<td>$ 589,777</td>
<td>$1,112,074</td>
</tr>
<tr>
<td>New Industrial</td>
<td>215</td>
<td>600</td>
<td>-</td>
<td>4,360</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>138,296</td>
<td>20,555</td>
<td>56,575</td>
<td>62,408</td>
<td>25,104</td>
</tr>
<tr>
<td>Additions, alterations</td>
<td>919,755</td>
<td>1,019,411</td>
<td>1,355,219</td>
<td>869,093</td>
<td>858,281</td>
</tr>
<tr>
<td>Total Nonresidential</td>
<td>$1,892,794</td>
<td>$1,583,897</td>
<td>$2,257,106</td>
<td>$1,525,638</td>
<td>$1,995,459</td>
</tr>
<tr>
<td>Total Valuation</td>
<td>$3,370,524</td>
<td>$2,772,780</td>
<td>$4,236,882</td>
<td>$3,662,202</td>
<td>$4,551,412</td>
</tr>
</tbody>
</table>

| Single Family Units              | 69 | 35 | 66 | 127 | 46 |
| Multi-Family Units               | 5,208 | 3,035 | 3,604 | 4,080 | 4,211 |
| Total Units                      | 5,277 | 3,070 | 3,670 | 4,207 | 4,257 |

*Most current data available.

**Totals may not add due to independent rounding.

Source: Construction Industry Research Board.

---

<table>
<thead>
<tr>
<th>San Mateo County**</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017*</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Single-dwelling</td>
<td>$ 292,893</td>
<td>$ 289,903</td>
<td>$ 374,276</td>
<td>$ 367,334</td>
<td>$ 338,186</td>
</tr>
<tr>
<td>New Multi-dwelling</td>
<td>151,020</td>
<td>168,859</td>
<td>259,181</td>
<td>252,560</td>
<td>210,997</td>
</tr>
<tr>
<td>Additions, alterations</td>
<td>299,831</td>
<td>348,231</td>
<td>408,011</td>
<td>395,241</td>
<td>503,351</td>
</tr>
<tr>
<td>Total Residential</td>
<td>$ 743,743</td>
<td>$ 806,994</td>
<td>$1,041,468</td>
<td>$1,015,135</td>
<td>$1,052,535</td>
</tr>
<tr>
<td>New Commercial</td>
<td>$ 116,683</td>
<td>$ 432,585</td>
<td>$ 427,064</td>
<td>$ 683,630</td>
<td>$1,063,427</td>
</tr>
<tr>
<td>New Industrial</td>
<td>15,724</td>
<td>9,600</td>
<td>-</td>
<td>4,955</td>
<td>500</td>
</tr>
<tr>
<td>Other</td>
<td>88,752</td>
<td>84,241</td>
<td>94,032</td>
<td>195,895</td>
<td>279,184</td>
</tr>
<tr>
<td>Additions, alterations</td>
<td>263,461</td>
<td>490,365</td>
<td>489,390</td>
<td>728,965</td>
<td>1,047,886</td>
</tr>
<tr>
<td>Total Nonresidential</td>
<td>$ 484,620</td>
<td>$1,016,791</td>
<td>$1,010,485</td>
<td>$1,613,446</td>
<td>$2,390,996</td>
</tr>
<tr>
<td>Total Valuation</td>
<td>$1,228,364</td>
<td>$1,823,785</td>
<td>$2,051,953</td>
<td>$2,628,581</td>
<td>$3,443,531</td>
</tr>
</tbody>
</table>

| Single-Unit Permit     | 350 | 315 | 521 | 458 | 411 |
| Multi-Unit Permit      | 840 | 1,302 | 1,386 | 1,319 | 1,169 |
| Total Permits          | 1,190 | 1,617 | 1,907 | 1,777 | 1,580 |

*Most current data available.

**Totals may not add due to independent rounding.

Source: Construction Industry Research Board.
## BUILDING PERMITS AND VALUATIONS
### Calendar Years 2013 through 2017
(Dollars in Thousands)

**Santa Clara County**

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017*</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Single-dwelling</td>
<td>$694,885</td>
<td>$594,473</td>
<td>$653,970</td>
<td>$660,302</td>
<td>$732,652</td>
</tr>
<tr>
<td>New Multi-dwelling</td>
<td>941,420</td>
<td>1,196,128</td>
<td>706,781</td>
<td>564,761</td>
<td>1,027,652</td>
</tr>
<tr>
<td>Additions, alterations</td>
<td>423,740</td>
<td>439,747</td>
<td>505,845</td>
<td>484,820</td>
<td>547,992</td>
</tr>
<tr>
<td>Total Residential</td>
<td>$2,060,045</td>
<td>$2,230,348</td>
<td>$1,866,596</td>
<td>$1,709,883</td>
<td>$2,308,296</td>
</tr>
<tr>
<td>New Commercial</td>
<td>$72,222</td>
<td>$898,271</td>
<td>$1,428,420</td>
<td>$2,120,531</td>
<td>$1,150,170</td>
</tr>
<tr>
<td>New Industrial</td>
<td>895,620</td>
<td>10,172</td>
<td>100,301</td>
<td>$44,269</td>
<td>118,567</td>
</tr>
<tr>
<td>Other</td>
<td>1,921,705</td>
<td>212,756</td>
<td>364,033</td>
<td>460,496</td>
<td>303,729</td>
</tr>
<tr>
<td>Additions, alterations</td>
<td>1,293,656</td>
<td>1,534,213</td>
<td>1,697,046</td>
<td>2,072,863</td>
<td>1,786,850</td>
</tr>
<tr>
<td>Total Nonresidential</td>
<td>$4,183,203</td>
<td>$2,655,413</td>
<td>$3,589,801</td>
<td>$4,698,159</td>
<td>$3,359,316</td>
</tr>
<tr>
<td>Total Valuation</td>
<td>$6,243,248</td>
<td>$4,885,760</td>
<td>$5,456,397</td>
<td>$6,408,042</td>
<td>$5,667,612</td>
</tr>
</tbody>
</table>

*Most current data available.

**Totals may not add due to independent rounding.

Source: Construction Industry Research Board.
AGENDA ITEM #11
JANUARY 10, 2019

PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: Joint Powers Board

THROUGH: Jim Hartnett
             Executive Director

FROM: Derek Hansel                        Michelle Bouchard
      Chief Financial Officer          Chief Operating Officer, Rail

SUBJECT: AWARD OF CONTRACTS FOR ON-CALL PROGRAM MANAGEMENT OVERSIGHT SERVICES

ACTION
Staff Coordinating Council recommends the Board:

1. Award contracts to Cooper Pugeda Management, Inc. of San Francisco, California and Jacobs Project Management Company of Oakland, California for an aggregate total not-to-exceed amount of $34,660,000 to provide on-call Program Management Oversight services (PMO Services) for a five-year term at the negotiated rates specified in each contract.

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

SIGNIFICANCE
To meet an on-going need, the Peninsula Corridor Joint Powers Board (JPB) contracts with consultants to provide PMO Services in support of capital projects. Approval of the above actions will benefit the JPB by having two qualified firms available for successful completion of current and future capital projects.

Award of these contracts will not obligate the JPB to purchase any specific level of service from either of the selected firms. Work will be performed under Work Directives (WDs) issued to each firm on an on-call and project-by-project basis.

BUDGET IMPACT
Each WD will contain a defined scope of services, with a discrete schedule and budget. WDs will be funded from approved capital and/or operating budgets using a variety of funding mechanisms and sources and may include Federal, State, and local revenues and grants.
BACKGROUND

The JPB has an ongoing need for PMO Services, primarily consisting of program and project management, document control, records management, cost estimating and scheduling and support services to support implementation of various capital projects.

A Request for Proposals (RFP) was issued with the San Mateo County Transit District and advertised in a newspaper of general circulation, and on the agency’s procurement website. Four firms submitted proposals:

1. Cooper Pugeda Management, Inc., San Francisco, California
3. Jacobs Project Management Company, Oakland, California
4. Salimi Construction Management, LLC, San Francisco, California

In accordance with federal and state law governing the procurement of architectural and engineering services, proposals were evaluated, scored and ranked solely based on qualifications. Staff only negotiated price with the highest ranked firms. An Evaluation Committee (Committee), composed of qualified staff from Capital Program Delivery and Rail Engineering Support departments, reviewed, scored and ranked proposals in accordance with the following weighted criteria:

- Qualifications and Experience of Key Personnel 30%
- Qualifications and Experience of Firm 25%
- Project Understanding and Management Plan 25%
- Quality Control Plan 20%
- Small Business Enterprise Preference 5%

After initial review and screening of the technical proposals, two of the four firms were found to be in the competitive range. Both firms are qualified and established consultants that have successful experience working for the JPB. The Committee, therefore, determined oral interviews would not be necessary. Staff successfully negotiated contract terms and conditions, including price, with each of the highest ranked firms and determined the prices to be fair, reasonable, and consistent with those currently paid by the JPB, and other public agencies in the Bay Area, for similar services.

Staff assessed Small Business Enterprise (SBE) preference points to all four firms for their proposed utilization of SBEs. Cooper Pugeda Management, Inc., which is a Disadvantaged Business Enterprise (DBE), commits to DBE participation for 50% of the contract value. Cooper Pugeda also commits to utilizing SBEs for 55% of the total contract value. Jacobs Project Management Company commits to utilizing SBEs for 25% of the total contract value, including utilizing DBE subconsultants for 18% of the total contract value.

The two firms possess the requisite experience and qualifications required for successful performance of the scope of services defined in the solicitation documents. PMO Services are currently provided by Jacobs Engineering Group, Inc. The contract expires in March 2019.

Procurement Administrator II: Angela Gardner 650.508.7788
Project Manager: Robert Cheung, Manager, Project Controls 650.622.8019
RESOLUTION NO. 2019-

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

* * *

AWARDING CONTRACTS TO COOPER PUGEDA MANAGEMENT, INC. AND
JACOBS PROJECT MANAGEMENT COMPANY FOR PROVISION OF
ON-CALL PROGRAM MANAGEMENT OVERSIGHT SERVICES FOR AN AGGREGATE
NOT-TO-EXCEED AMOUNT OF $34,660,000 FOR A FIVE-YEAR TERM

WHEREAS, the Peninsula Corridor Joint Powers Board (JPB) issued a Request for Proposals (RFP) for on-call program management oversight services; and

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

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

WHEREAS, the Committee completed its evaluation process, including negotiation of cost with the highest-ranked proposers, and determined that Cooper Pugeda Management, Inc. of San Francisco, California and Jacobs Project Management Company of Oakland, California possess the necessary qualifications and requisite experience to successfully perform the scope of services defined in the solicitation documents, and have agreed to perform the specified services at fair and reasonable prices; and

WHEREAS, staff and legal counsel have reviewed the proposals found to be in the competitive range and have determined that the proposals comply with the requirements of the solicitation documents; and
WHEREAS, Staff Coordinating Council recommends, and the Executive Director concurs, that the Board of Directors award contracts to Cooper Pugeda Management, Inc., and Jacobs Project Management Company for on-call program management oversight services for an aggregate not-to-exceed amount of $34,660,000 for a five-year term.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Peninsula Corridor Joint Powers Board hereby awards contracts for on-call program management oversight services to Cooper Pugeda Management, Inc. and Jacobs Project Management Company for a five-year term for an aggregate not-to-exceed amount of $34,660,000; and

BE IT FURTHER RESOLVED the Executive Director, or his designee, is authorized to execute contracts with Cooper Pugeda Management, Inc. and Jacobs Project Management Company in full conformity with all of the terms and conditions of the RFP and negotiated agreements, and in a form approved by legal counsel.

Regularly passed and adopted this 10th day of January, 2019 by the following vote:

AYES:

NOES:

ABSENT:

______________________________
Chair, Peninsula Corridor Joint Powers Board

ATTEST:

______________________________
J PB Secretary
AGENDA ITEM #12
JANUARY 10, 2019

PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

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

SUBJECT: UPDATE ON PLANS AND POLICIES INFLUENCING THE USE OF JPB PROPERTY

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 four interrelated planning and policy efforts that will collectively inform and guide the future use of JPB property. At the January meeting, staff will be seeking input from the Board of Directors on several policy issues related to use of JPB property, including potential development projects, to inform ongoing work on the four projects in winter 2019.

These four projects include the Caltrain Business Plan, the Caltrain Rail Corridor Use Policy (RCUP), the Caltrain Station Management Toolbox (Toolbox), and the Caltrain Transit-Oriented Development (TOD) Policy. The last update on the RCUP, Toolbox, and TOD Policy was provided to the Board in June 2018, and the latest update on the overall Business Plan effort was provided to the Board in December 2018.

BUDGET IMPACT
There is no impact on the budget.

ADDITIONAL INFORMATION
Caltrain staff is engaged in a number of interrelated projects that will collectively inform and guide the future use of JPB property. Currently underway and summarized below, the projects include the Caltrain Business Plan, the RCUP, the Toolbox, and the TOD Policy. The attached memo provides the Board with additional information about the projects and how they work together to address a number of critical policy questions associated with the use of JPB property, including for potential development projects.
Given the strong interest from the Board in discussing the relationship between the agency’s plans for the future and the use of JPB property, including for TOD projects, staff plan to discuss these issues at the Board meeting in January 2019. The presentation includes a summary of the information contained in the attached memo. Following the presentation, staff intends to lead a workshop-style discussion with the Board about policy issues related to use of JPB property. It is hoped that this “listening session” will provide the Board and the public with an opportunity to share comments, ask questions, and provide feedback to staff on these policy issues, which will then be incorporated as staff continues to work on these planning and policy efforts.

The four individual projects currently underway include:

- **Caltrain Business Plan:** this effort will establish a long-term vision for the Caltrain rail service for the next 20 to 30 years. It will assess the benefits, impacts, and costs of different service visions, building the case for investment and a plan for implementation. The Business Plan will include future service levels and patterns; conceptual infrastructure needs; costs for operations, maintenance, and capital projects; and ridership, mobility, and revenue outcomes. It will also consider the railroad’s interactions, benefits, and impacts with surrounding communities. Lastly, it will assess the organizational structure of the agency, including its governance and delivery approaches, as well as funding mechanisms to support future service.

- **Rail Corridor Use Policy:** this effort will develop a policy framework around the use of JPB-owned property to align with the service vision and the conceptual infrastructure needs developed in the Caltrain Business Plan. It will inventory land owned by the JPB and will develop decision frameworks related to the near- and long-term use of JPB property, including evaluation of potential conflicts between land development opportunities and future transit uses.

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

- **Transit-Oriented Development Policy:** this effort will establish goals for transit-oriented development (TOD) on Caltrain property, which will align with the conceptual infrastructure needs developed as part of the Business Plan. It will set forth policies to guide: the disposition of real estate assets; business objectives associated with joint development decisions (including the balance between affordable housing and revenue); engagement with local planning efforts; and other actions to promote the successful execution of TOD on JPB-owned property, as well as on property around transit facilities owned by third parties.
Together, these efforts will provide a cohesive and “living” framework of policy direction and decision-making tools related to the use of JPB property assets, including for access improvements and development projects. The RCUP, Toolbox, and TOD Policy efforts are complementary to the Caltrain Business Plan and are being undertaken in close coordination with the Business Plan process. To that end, the ultimate timing and finalization of these efforts may adjust to ensure that they are fully synchronized with the Business Plan. The diagram below shows the relationship between these four efforts.
Use of JPB Property Assets
Four Interrelated Policies, Plans, and Tools to Guide Use of JPB Property

Caltrain Business Plan
“How should Caltrain grow?”
Key outcomes:
- Long-range vision for Caltrain’s rail service, including:
  - Train service patterns
  - Infrastructure needs
  - Costs
  - Outcomes
- Business case for the vision
- Implementation plan for achieving the vision

Capital infrastructure requirements for the Business Plan service vision will be incorporated into the RCUP.

Rail Corridor Use Policy
“How could the JPB’s land be used?”
“How could JPB property be used for non-railroad uses, such as development projects?”
Key outcomes:
- Map and inventory of the JPB’s real estate assets and potential capital projects
- Policy document to guide the processing, review, and approval of proposed uses on JPB land
- Methodology to balance the railroad’s needs with revenue opportunities on limited JPB land

Station Management Toolbox
“What are potential outcomes and tradeoffs associated with development and access improvements at stations?”
Key outcomes:
- Performance goals and metrics for stations
- Data-driven tool to test and evaluate access and development options at Caltrain stations
- Quantitative analysis to support decision-making and managing of stations

Toolbox analysis will inform TOD Policy development, including tradeoff analysis (affordability vs. revenue, parking vs. TOD, etc.).

Transit-Oriented Development Policy
“How should the JPB develop land that is available for non-railroad uses?”
Key outcomes:
- Goals for TOD on JPB property, aligning with the Business Plan’s determination of capital infrastructure requirements
- Refined list of potential opportunity sites for TOD projects, based on RCUP findings
- Business objectives associated with joint development
- Policies for engaging with local planning efforts and promoting TOD in station areas

Data from the RCUP will be incorporated into the Toolbox.

The TOD Policy will provide policy guidance to inform how Caltrain implements and adapts its Business Plan over time.

TOD Policy goals and policies will inform future Toolbox performance measures and targets.
**NEXT STEPS:**

As discussed above, the RCUP, Toolbox, and TOD Policy are being closely coordinated with the Caltrain Business Plan. They form part of a larger suite of planning and policy tools that will support comprehensive and informed decision-making around JPB property interests. The ongoing work and refinement of these efforts is being synchronized with the work of the Caltrain Business Plan, and additional updates to the Board and the public are anticipated in conjunction with the Business Plan process in 2019.

Prepared by: Melissa Jones, Principal Planner, Caltrain Planning 650.295.6852
Attachment A – Staff Update on Plans and Policies Influencing the Use of JPB Property

The Board of Directors of the Peninsula Corridor Joint Powers Board (JPB) has expressed a strong interest in the relationship between the agency’s plans for the future and other uses of JPB’s real property (property), with a focus on transit-oriented development (TOD). There are a number of significant policy questions associated with these issues, and Caltrain staff are currently working on several planning and policy analyses to help address these questions. This memo is intended to provide greater level of information about these projects, and it explores how they will work together to address the numerous policy questions associated with the use of JPB property for both future transit infrastructure and potential TOD projects.

This memo is broken into four sections:

1. An overview of the current uses of JPB property, including railroad and non-railroad uses.
2. In the context of potential future changes to the Caltrain system, an overview of policy considerations and questions related to future use of JPB property.
3. A summary description of the planning and policy projects that are underway to help address the policy questions.
4. An extensive table that maps the policy questions related to these projects, providing information about how the project(s) will help address those questions.

Current Use of JPB Property

The JPB acquired the Caltrain right-of-way from the Southern Pacific Transportation Company in December 1991. Operating the Caltrain commuter rail service along the corridor remains the principal responsibility and focus of the JPB today. The agency’s official vision is to “provide a safe, reliable, sustainable modern rail system that meets the growing mobility needs of the San Francisco Bay Area region.” Paramount

The use of JPB property along the rail corridor is principally dedicated to serving the agency’s mission as a rail service provider. These current and potential future uses of JPB property that support the rail service are broadly referred to as “railroad uses.” Railroad uses of JPB property include accommodation of a broad array of infrastructure, equipment, and facilities that are necessary for delivering rail service, including but not limited to tracks, stations, access facilities, grade separations, signals, communications facilities, fiber, and maintenance facilities. Additionally, some portions of the right-of-way are used for storage of material and equipment necessary to operate Caltrain.

Separate from the use of JPB property to support rail service delivery, there are two general categories of “non-railroad uses” that are located on JPB property, which are described below.

1. Public-serving uses that are used or proposed by third parties. When the JPB acquired the property, it was encumbered by numerous third-party facilities, including utilities (underground or overhead crossings), sewers and storm drains, streets, communication facilities (cell phone utilities, radio towers, or fiber optic lines), and other similar uses. Pursuant to JPB Resolution 2010-45, which established policies and a process for handling requests for new public-serving uses, such uses may be approved only if it is determined that the proposed use is “compatible with current, and anticipated future, engineering and operating requirements and future potential [JPB] uses of the property.” Such uses are typically allowed only if the third party agrees to relocate their facility at no cost to JPB as required to accommodate JPB’s future projects. There
are also other major public infrastructure projects, such as other transit facilities, that seek to use JPB property. Due to their scope, these projects are addressed on an individual basis.

2. Commercial uses that are proposed by third parties. The concentration of employment and housing in the communities along the Caltrain corridor has led to a consistently strong interest in and market for use of JPB property by third party commercial entities. As the JPB lacks a dedicated source of funding and faces budget uncertainties each year, third party commercial use of JPB property presents an opportunity to deliver much-needed and dependable revenue to the agency. To date, the agency has allowed new third party, short-term commercial uses, but has required that the lease be terminated when the property is needed to support Caltrain’s needs. These uses have typically included automobile sales lots, parking, material storage, and other shorter-term commercial uses.

It is important to note that longer-term, third party commercial uses of JPB property (including TOD projects) could occupy the land in such a way that could preclude future potential railroad uses on the land and the delivery of potential future capital projects to support rail service. Thus, there is an inherent tension between the preservation of agency land for potential future railroad use and the use of agency land for more permanent non-railroad uses and projects. At one station (Hayward Park), a long-term TOD lease has been pursued after analysis showed that the developed property would not preclude potential future railroad infrastructure in the area. There are very few other areas along the right-of-way that can accommodate both long term developmental and capital infrastructure improvements.

**Policy Considerations for Future Use of JPB Property**

There are a number significant efforts that are planned or currently underway that will result in substantial changes for the JPB, its future delivery of rail service, and the future use of its property. This includes the electrification of the railroad through the Peninsula Corridor Electrification Project, the delivery of new electric trains, the completion of the Positive Train Control project, and the potential for grade separation projects throughout the corridor. The Peninsula Corridor will change again when blended service with the California High Speed Rail Authority is introduced in the late 2020s and as Caltrain considers and implements its own potential changes to the corridor’s rail infrastructure.

In light of these planned and anticipated changes to the corridor, a number of important policy questions arise related to the future use of JPB property, such as:

- What are the key outcomes the JPB would like to achieve through the use of its land, including in relation to the Business Plan’s service and business vision?
- What property is needed for railroad uses and what could be made available for non-railroad uses?
- At stations, how can the JPB assess potential changes to the use of limited station property, such as access improvements and TOD projects?
- What are the key goals the JPB would like to achieve through TOD projects on its property?

The answers to these and other related policy questions, which are fully listed in a table at the end of this memo, will provide critical guidance to inform the future use of JPB property.

**How these Policy Questions are Being Addressed**

Caltrain staff have embarked on a number of interrelated planning and policy analyses that will collectively help address these property use questions for the agency. These policies, plans, and tools include the Caltrain Business Plan, the Caltrain Rail Corridor Use Policy (RCUP), the Caltrain Station...
Management Toolbox (Toolbox), and the Caltrain Transit-Oriented Development Policy (TOD Policy). Each of these efforts is currently underway and summarized below.

1. **The Caltrain Business Plan** is a substantial planning effort that will address the future potential of the railroad over the next 20-30 years and will help answer the key question of “How should Caltrain grow?” It will assess the benefits, impacts, and costs of different rail service visions, building the case for investment in the Caltrain corridor and creating a plan for implementation.

   This significant work effort will result in the Board’s adoption of a service vision for the railroad. The Business Plan will provide a detailed picture of how the railroad could grow over the next 20-30 years to achieve the adopted service vision. This will include identifying conceptual future infrastructure needs, including potential project footprints and timing of project delivery, to support the service vision.

   The Business Plan will also provide clarity and direction on the overall business and financial trajectory of the Caltrain system. This will include analysis and policy direction regarding the relative importance of non-rail revenue streams, like property development, in supporting the financial sustainability of the Caltrain system over time. In analyzing these issues, the Business Plan will also consider specific organizational and funding approaches related to the delivery of infrastructure and joint development projects on the Caltrain corridor.

2. **The Caltrain Rail Corridor Use Policy** is being developed to provide a Board-adopted policy framework around the use of JPB property to support the achievement of the vision in the Caltrain Business Plan. The RCUP will include an administrative policy framework and a series of maps to facilitate decision-making regarding use of space on the JPB’s limited property along the rail corridor.

   The RCUP will provide an inventory of JPB-owned property along the corridor, which will be identified spatially on a series of maps. Relative to JPB property, the maps will overlay the conceptual spatial requirements of potential capital projects that may be needed to support the railroad and the achievement of the Business Plan’s service vision. Through these maps, the RCUP will provide clarity on which specific areas of JPB property may be needed for future railroad use and which areas could allow non-railroad uses, such as development projects.

   In addition to the maps, the RCUP will include a policy document to integrate the established administrative process for the review and approval of proposed uses and projects on JPB property, ranging from the granting of routine utility easements to the approval of large-scale development projects, with the agency's plans for future use of the JPB property. This policy document will create decision frameworks to help the agency analyze tradeoffs between preserving JPB property for potential future railroad uses, including potential capital projects, and allowing non-railroad uses on JPB property, including those that could generate revenue for the agency.

   Ultimately, the RCUP will provide the JPB with a methodology to efficiently and effectively evaluate proposed uses and projects on JPB property. It will facilitate difficult decision-making about how limited corridor space should be used to deliver future rail service and create financial benefits to the agency.

3. **The Caltrain Station Management Toolbox** is a project to develop a quantitative tool to help JPB staff test and evaluate potential changes and investments at and around Caltrain stations. This internally-facing, quantitative tool will provide JPB staff with an understanding of current and future uses of land and facilities at and around Caltrain stations. It will also provide JPB staff with a
methodology to quickly and transparently model potential changes at stations, including the balance between potential TOD projects and access improvements. The Toolbox will be driven by data and analysis that is context-specific for each station, and performance will be assessed at the station and system-wide levels.

The Toolbox will provide analytical support to the agency’s station planning processes and will help the agency adopt an asset management approach to decisions impacting its facilities. By incorporating the Toolbox’s data-driven approach to testing and analyzing potential station changes into the agency’s decision-making processes, staff can ensure that planning for Caltrain stations is sensitive and responsive to the unique context and stakeholder considerations at each station. Additionally, the Toolbox will enable JPB staff to more effectively coordinate with and support its partners, cities, and community stakeholder groups in the planning of station improvements, access amenities, the development of station area plans, and the processing of development projects in the vicinity of Caltrain stations.

4. **The Caltrain Transit-Oriented Development Policy** will result in a Board-adopted policy that will establish goals for TOD on JPB property. The TOD Policy will be informed by and be responsive to the Business Plan, RCUP, and Toolbox efforts described above in its setting of policies regarding development projects on JPB property. This will include policies related to the disposition of the JPB’s real estate assets; business objectives associated with joint development decisions (including the balance between affordable housing and revenue); and other actions to promote the successful execution of TOD on JPB-owned property. The TOD policy will be developed in a way that is consistent with and supports the larger financial and organizational goals and opportunities identified and developed through the Caltrain Business Plan.

In addition to guidance around TOD projects on JPB property, the TOD Policy will also provide clear guidance on the agency’s engagement with local planning efforts, such as processes to develop station area plans. The TOD Policy will also provide guidance on other actions the agency could take to benefit Caltrain by promoting development on property owned by third parties around the agency’s transit facilities.

**Detailed List of Policy Questions and How They Are Being Addressed**

Collectively, these four interrelated planning and policy efforts will provide information to help answer a number of important policy questions related to the use of JPB land. While partially described above, a more detailed list of the policy questions associated with the future use of JPB land is presented below. The table shows which policy and planning efforts will address each policy question, and the notes describe how the question will be addressed in the policy, plan, or tool, including an explanation, where necessary, of how multiple efforts work together to address the question. The bold “X” in the table indicates that the project is the primary initiative that will be addressing the policy question, while a normal “X” indicates that the project is a supportive initiative in addressing the policy question.
<table>
<thead>
<tr>
<th>Policy Question</th>
<th>Answer will be addressed in:</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the key outcomes the JPB would like to achieve through the use of its land, and how are these outcomes informed by the overall service and business vision for the organization being developed through the Caltrain Business Plan?</td>
<td>Business Plan</td>
<td>X</td>
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<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>What are the agency’s future property needs to support railroad uses that will deliver the Caltrain Business Plan vision?</td>
<td>Business Plan</td>
<td>X</td>
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<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Policy Question</td>
<td>Business Plan</td>
<td>RCUP</td>
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<tr>
<td>To what extent should Caltrain explore opportunities for the co-mingling and joint delivery of rail- and non-rail uses (e.g. integration of commercial development with infrastructure delivery)?</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>What types of non-railroad uses and entities could be allowed on JPB property and support achievement of the agency’s key outcomes?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Which specific JPB property holdings could be available for non-railroad uses, such as transit-oriented development projects?</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>What is the agency’s process for reviewing and approving proposed non-railroad uses on JPB property?</td>
<td></td>
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<tr>
<td>What are the key outcomes that the JPB would like to achieve with the use of land at its stations?</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Policy Question</td>
<td>Answer will be addressed in:</td>
<td>Notes</td>
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<tr>
<td>With limited property at Caltrain stations, how can the agency assess tradeoffs</td>
<td>Business Plan</td>
<td>The Toolbox will be a quantitative tool that JPB staff can use to test potential changes at stations related to access improvements and TOD projects; the performance of potential changes will be assessed at both the station and system-wide levels.</td>
</tr>
<tr>
<td>tradeoffs associated with competing development and multimodal access</td>
<td>RCUP</td>
<td>The RCUP will specify how the Toolbox analysis is incorporated in the decision-making process for proposed uses at stations.</td>
</tr>
<tr>
<td>improvements on station land?</td>
<td>Toolbox</td>
<td></td>
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<td>How can the agency work with its partners to plan for and fund the capital</td>
<td></td>
<td>As part of establishing a plan for achieving the long-term service vision for the railroad, the Business Plan will provide guidance on the general types of improvements needed at stations, as well as aggregate estimated costs.</td>
</tr>
<tr>
<td>and ongoing operational costs of improved stations and access amenities?</td>
<td>Toolbox</td>
<td>The TOD Policy will establish Caltrain’s role(s) in others’ station area planning efforts and development projects near stations, which could involve planning for and advocating for funding for station improvements.</td>
</tr>
<tr>
<td>Under which circumstances should the agency consider a joint development</td>
<td>Toolbox</td>
<td>The TOD Policy will provide policy guidance on the potential disposition of the JPB’s real estate assets.</td>
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<tr>
<td>project on its property using a) long-term land leases and b) selling its land?</td>
<td></td>
<td></td>
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<tr>
<td>What are the key outcomes the JPB would like to achieve with the use of its</td>
<td></td>
<td>The TOD Policy will provide policy guidance on the key outcomes that the JPB would like to achieve with TOD projects on its property.</td>
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<td>land for transit-oriented development projects?</td>
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<tr>
<td>Policy Question</td>
<td>Business Plan</td>
<td>RCUP</td>
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<td>--------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>What are the JPB’s business objectives for development projects on its land and how do they align with the key outcomes for TOD projects?</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>What is the JPB’s role in the planning processes for other non-JPB development projects and station area plans near the Caltrain corridor?</td>
<td></td>
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</tbody>
</table>

Notes:
1. The bold X indicates that the project is the primary initiative that will be addressing the policy question, while a normal X indicates that the project is a supportive initiative in addressing the policy question.
Overview

• Background and context on use of JPB property
• Update on four interrelated planning and policy efforts to guide future use of JPB property
• Discuss TOD policy content, solicit feedback from Board about goals, scope of TOD activities, and key trade-offs
• Recommended next steps
Background and Context on Use of JPB Property
Why Do We Need Four Efforts to Guide Future Use of JPB Property?

Caltrain’s property holdings are unique

- Old system that started serving Peninsula in 1863
- Caltrain has a dynamic corridor
- Public agency purchased an existing system
  - ROW purchased by JPB in 1991
  - In 1980s, Southern Pacific already separated development parcels from ROW for Catellus
    » Example: Catellus retained underlying fee in SF Yard
  - The amount of property purchased by the JPB was whittled down to correspond to available funds
Why Do We Need Four Efforts to Guide Future Use of JPB Property?

Caltrain’s property holdings are unique

- Stations were granted to the JPB by State in 1995
- The JPB’s property holdings are more limited than other transit agencies, such as BART, which was built starting in the 1970s and through early 2000s.
  - BART’s focus on car parking allowed them to purchase substantially more land around stations
Example of Millbrae Station: BART vs. Caltrain Station Property Holdings
Current Use of JPB Property

- Use of JPB property is principally dedicated to serving the agency’s mission as a rail service provider

- “Railroad Uses” – use of property to support delivery of rail service
  - Infrastructure, equipment, and facilities necessary for delivering rail service, such as tracks, stations, access facilities, grade separations, signals, etc.
  - Railroad uses are not static: the railroad is continuing to grow and the extent of its future capital and land needs are not yet fully known
Current Use of JPB Property

• “Non-railroad uses” – ancillary uses of property that do not directly support delivery of rail service, but could provide source of revenue

• Two categories of non-railroad uses:
  - Public-serving uses proposed by third parties, such as utilities, streets, etc.
  - Commercial uses proposed by third parties, such as car sales lots, parking, storage, etc. as well as TOD projects
Current Use of JPB Property

- Non-railroad uses allowed on JPB property **only if compatible** with current and potential future agency needs and railroad uses of the property
  - Generally, leases required to be terminated if/when the property is needed for railroad uses
- Tension between preserving land for potential future railroad use and using land for longer-term non-railroad uses
  - One TOD project (Hayward Park) pursued after determination that it would not preclude future railroad uses
Future Use of JPB Property

- Many changes coming to Caltrain corridor in the future, which will affect future rail service and future use of JPB property:
  - Electrification of corridor
  - Expanded fleet and maintenance needs
  - Potential grade separation projects
  - Blended service with High Speed Rail
  - Other potential Caltrain infrastructure projects related to Business Plan Implementation
Belmont Station: Example of Balancing Tradeoffs with Future Use of JPB Property
Update on Planning and Policy Efforts to Inform and Guide Use of JPB Property
Purpose of the Four Efforts

• Provide a cohesive and “living” framework of policy direction and decision-making tools related to the use of JPB property assets

• All four efforts work together with one another

• The four policy and planning analyses include:
  - Caltrain Business Plan
  - Rail Corridor Use Policy
  - Station Management Toolbox
  - Transit-Oriented Development Policy
Use of JPB Property Assets

Purpose of and relationships between the four efforts
(see handout)
Caltrain Business Plan

• “How should Caltrain grow?”

• Key outcomes:
  - Long-range vision for Caltrain’s rail service, including:
    • Train service patterns
    • Conceptual infrastructure needs
    • Costs and outcomes of service delivery
  - Business case and strategy
  - Implementation plan
Rail Corridor Use Policy (RCUP)

- “How could the JPB’s land be used and who could use it?”
- “What property could be available for non-railroad uses, such as TOD projects?”
- Key outcomes:
  - Map and inventory of JPB real estate assets and potential capital projects
  - Policy document to guide review process for proposed uses on JPB property
  - Methodology to balance railroad needs with potential revenue opportunities
Station Management Toolbox

• “What are potential outcomes and tradeoffs associated with development and access improvements at stations?”
- Example: evaluating effects of a TOD project on a current Caltrain station parking lot

• Key outcomes:
- Performance goals and metrics for stations
- Data-driven tool to test and evaluate access and development options at stations
- Quantitative analysis to support decision-making and managing of stations
Transit-Oriented Development Policy (TOD Policy)

• “How should the JPB develop land that is available for non-railroad uses?”

• Key outcomes:
  - Goals for TOD on JPB property
  - Refined list of potential opportunity sites for TOD projects
  - Business objectives associated with joint development
  - Policies for engaging with local planning efforts and promoting TOD in station areas
Relationships between the Efforts

• **Business Plan:**
  - Capital infrastructure requirements for the Business Plan’s service vision will be incorporated into the **RCUP**
  - The Business Plan will help define roles of value capture and joint development in Caltrain’s business model, which will inform the **TOD Policy**’s approach
Relationships between the Efforts

- **Rail Corridor Use Policy:**
  - Data from the RCUP will inform TOD Policy development, including inventory of potential opportunity sites.
  - Data, including potential opportunity sites, from the RCUP will be incorporated into the Toolbox.
Relationships between the Efforts

• **Station Management Toolbox:**
  - Toolbox analysis will inform development of the **TOD Policy**, including tradeoff analysis (parking vs. TOD, balance of access improvements, etc.)
  - Toolbox performance can inform the **Business Plan**’s implementation plan
Relationships between the Efforts

**TOD Policy:**

- The TOD Policy will provide policy guidance to inform how Caltrain implements and adapts its Business Plan over time.
- The TOD Policy’s goals and policies will inform future Toolbox performance measures and targets.
A Note on the Terminals

- North and South Terminals are unique and have their own planning processes that are separate from these four efforts
  - Diridon (South Terminal) – JPB staff actively engaging in Diridon Integrated Station Concept planning process with VTA, HSR, and City of SJ
  - San Francisco (North Terminal) – JPB staff actively engaging with TJPA, City of SF to determine future planning process
- Update on Terminal projects coming to Board in February 2019
What’s Next for these Efforts

• The RCUP, Toolbox, and TOD Policy are being closely coordinated with the Business Plan process
  - Work is underway and will continue
  - Anticipated completion by end of 2019
  - Timing and finalization of these three efforts may adjust to ensure they are synchronized with the Business Plan
Discussion about Issues Related to the Use of JPB Property and TOD
Purpose of the TOD Policy

• Express Agency’s goals and business objectives for joint development on its property

• Outline process and requirements for property disposition

• Identify Agency’s role(s) in promoting TOD in station areas

• Describe other objectives and roles for Agency in encouraging TOD along Caltrain corridor
Potential Overarching TOD Goals

- Promote transit ridership
- Enhance financial sustainability of the Agency
- Provide affordable housing and other community benefits
- Collaborate with partners to encourage TOD and sustainable land use patterns
Discussion: Potential TOD Policy Goals

• The following slides illustrate potential Agency roles in encouraging TOD, organized by the four broad TOD Policy goals:
  - Promote transit ridership
  - Enhance financial sustainability
  - Provide affordable housing and community benefits
  - Collaborate with partners to encourage quality TOD and sustainable land use patterns

• Roles are organized across three areas:
  - Joint development projects on Agency Land
  - Station areas, outside of Agency Land
  - Beyond
Goal: Promote Transit Ridership

Joint Development
• Maximize density on Agency-owned properties
• Include transit-supportive uses
• Limit parking for private development and encourage walking, biking and other modes

Station Areas
• Advocate for transit-supportive uses and higher densities
• Support access improvements
• Coordinate with local property owners on TDM programs

Beyond
• Advocate for State policies to support transit, TOD and increased densities
Goal: Financial Sustainability

Joint Development
• Maximize revenues from joint development
• Limit land value write-downs for affordable housing or other community benefits
• Sell property (one-time payment) or long-term lease of property (series of increasing payments over time)
• Require limited replacement transit parking at stations

Station Areas
• Advocate for use of value capture for transit and other improvements

Beyond
• Advocate for state policies to support value capture and promote more dense development
Goal: Affordability & Community Benefits

Joint Development
• Prioritize housing over other land uses
• Require affordable housing beyond local policies
  - Site-specific and/or portfolio-wide affordability goals
• Allow land write downs
• Labor requirements
  - Prevailing wage
  - Encourage Project Labor Agreements

Station Areas
• Advocate for affordable housing in station areas

Beyond
• Advocate for State policies and funding to support affordable TOD
Goal: Collaborate with Partners to Encourage Quality TOD and Sustainable Land Uses

Joint Development
- Require high standards for urban design
- Integrate development with surrounding neighborhood
- Incorporate cities in developer solicitation/selection process
- Engage local communities in entitlement process

Station Areas
- Participate in partners’ station area planning efforts
- Work with partners to promote best practices in TOD
  - Reduced parking, mix of uses, higher densities
- Develop a checklist for “good TOD” projects

Beyond
- Work with partners to coordinate investments, advocate for funding for TOD infrastructure and access improvements
Questions for Board

• Are any goals or roles missing?
• Other comments?
Recommended Next Steps
Recommended Next Steps

• Continue to advance RCUP, Toolbox, and TOD Policy in close coordination with Business Plan process and findings
  - TOD Policy to develop guidelines for disposition process, business terms based on Board input
• RCUP, Toolbox, and TOD Policy progress update and opportunity for additional feedback in winter/spring 2019
• Business Plan service vision in spring 2019
• All four efforts on track for completion by end of 2019
TO: Joint Powers Board

THROUGH: Jim Hartnett
            Executive Director

FROM: Michelle Bouchard
            Chief Operating Officer, Rail

SUBJECT: CALTRAIN FY2019 1st QUARTER RAIL OPERATIONS PERFORMANCE

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

SIGNIFICANCE
The presentation of Caltrain FY2019 1st Quarter Rail Operations Performance summarizes On-Time Performance, Minutes of Delays, Maintenance of Equipment and Fare Enforcement.

BUDGET IMPACT
There is no impact on the budget.

BACKGROUND
The Rail Operations quarterly report is prepared to provide funding partners, stakeholders, and general public an overview of Caltrain railroad operations performance in the reporting quarter. This provides the following information:
  • On-time performance
  • Major causes and significance of delays
  • Fare enforcement

Prepared by: Joe Navarro, Deputy Chief 650.508.7792
              Yu Hanakura, Senior Planner 650.508.7700
Presentation Outline

- On-Time Performance
- Delays
  - Major causes
  - Significance
  - Correlation between mechanical delays and Maintenance of Equipment (M of E)
- Fare Enforcement
- Ridership
On-Time Performance (OTP)

- On-Time = train arrives no later than 5’ 59” from the scheduled arrival time at end-line locations (SF, SJ, Tamien, and Gilroy)
- Goal: 95% of trains on-time at end-line locations
- OTP Tracked daily and monthly
Monthly OTP Summary

<table>
<thead>
<tr>
<th>Month</th>
<th># of Trains Scheduled</th>
<th># of Trains On-Time (At End-Line)</th>
<th>On-Time Performance</th>
<th>OTP Goal</th>
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<td>95%</td>
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<td>2110</td>
<td>93.5%</td>
<td>95%</td>
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<td>Nov-2017</td>
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<td>1999</td>
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<td>95%</td>
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<td>1994</td>
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<td>96.2%</td>
<td>95%</td>
</tr>
<tr>
<td>Feb-2018</td>
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<td>93.7%</td>
<td>95%</td>
</tr>
<tr>
<td>Mar-2018</td>
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<td>2164</td>
<td>2004</td>
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<td>95%</td>
</tr>
<tr>
<td>May-2018</td>
<td>2256</td>
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<td>94.5%</td>
<td>95%</td>
</tr>
<tr>
<td>Jun-2018</td>
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<td>91.9%</td>
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<tr>
<td>Sep-2018</td>
<td>2032</td>
<td>1882</td>
<td>92.6%</td>
<td>95%</td>
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</table>

OTP Percentage

- 0% to 50.0%
- 55.0% to 60.0%
- 65.0% to 70.0%
- 75.0% to 80.0%
- 85.0% to 90.0%
- 95.0% to 100.0%
5 Main Categories of Delays

• On-Board/Passenger
• Major Incidents
• Maintenance of Infrastructure
• Maintenance of Equipment (M of E)
• Capital Projects
# 5 Main Categories of Delays

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<tr>
<th>Category/Type</th>
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<td>• Bicycles</td>
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<td>• PNAs</td>
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<td></td>
<td>• Large crowds, slow loading, and luggage</td>
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<td><strong>Major Incidents</strong></td>
<td>• Fatality</td>
</tr>
<tr>
<td></td>
<td>• Trespasser Strike</td>
</tr>
<tr>
<td></td>
<td>• Vehicle Strike</td>
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<td>• Vehicle on Track</td>
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<td>• Crossings and signals (C &amp; S)</td>
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<td></td>
<td>• Track</td>
</tr>
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<td>• Door Failure</td>
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<tr>
<td></td>
<td>• Engine Failure</td>
</tr>
<tr>
<td></td>
<td>• Brake Issue</td>
</tr>
<tr>
<td></td>
<td>• Wheel Chair Lift</td>
</tr>
<tr>
<td></td>
<td>• Air Issue</td>
</tr>
<tr>
<td></td>
<td>• Head end power issue</td>
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<td><strong>Capital Projects</strong></td>
<td>• Single track</td>
</tr>
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<td>• Slow orders</td>
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On-Board Passenger Delay Minutes

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<tr>
<th>Month</th>
<th>Large crowds/Slow loading/Luggage</th>
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<th>Bicycle</th>
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<tr>
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<td>2367</td>
<td>1111</td>
<td>1714</td>
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<td>Nov-2017</td>
<td>2119</td>
<td>895</td>
<td>1631</td>
</tr>
<tr>
<td>Dec-2017</td>
<td>2119</td>
<td>781</td>
<td>1585</td>
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<tr>
<td>Jan-2018</td>
<td>2609</td>
<td>840</td>
<td>1871</td>
</tr>
<tr>
<td>Feb-2018</td>
<td>2768</td>
<td>977</td>
<td>1992</td>
</tr>
<tr>
<td>Mar-2018</td>
<td>2890</td>
<td>1030</td>
<td>2183</td>
</tr>
<tr>
<td>Apr-2018</td>
<td>2814</td>
<td>1137</td>
<td>2110</td>
</tr>
<tr>
<td>May-2018</td>
<td>2874</td>
<td>1137</td>
<td>2269</td>
</tr>
<tr>
<td>Jun-2018</td>
<td>3275</td>
<td>1118</td>
<td>2220</td>
</tr>
<tr>
<td>Jul-2018</td>
<td>3032</td>
<td>1003</td>
<td>2043</td>
</tr>
<tr>
<td>Aug-2018</td>
<td>3366</td>
<td>808</td>
<td>2017</td>
</tr>
<tr>
<td>Sep-2018</td>
<td>2830</td>
<td>795</td>
<td>1821</td>
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# Major Incident Delay Minutes

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<tr>
<th>Month</th>
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<th>Fatality</th>
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<td>0</td>
<td>10</td>
<td>0</td>
<td>960</td>
</tr>
<tr>
<td>Oct-2017</td>
<td>6</td>
<td>279</td>
<td>0</td>
<td>764</td>
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<tr>
<td>Nov-2017</td>
<td>251</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>Dec-2017</td>
<td>215</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
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<td>Jan-2018</td>
<td>12</td>
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<td>7</td>
<td>859</td>
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<td>225</td>
</tr>
<tr>
<td>Mar-2018</td>
<td>13</td>
<td>66</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Apr-2018</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>May-2018</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Jun-2018</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>Jul-2018</td>
<td>54</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Aug-2018</td>
<td>58</td>
<td>435</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Sep-2018</td>
<td>155</td>
<td>0</td>
<td>0</td>
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Maintenance of Infrastructure

Delay Minutes

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<tr>
<th>Month</th>
<th>Track</th>
<th>Crossings &amp; Signals (C&amp;S)</th>
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<tbody>
<tr>
<td>Sep-2017</td>
<td>0</td>
<td>73</td>
</tr>
<tr>
<td>Oct-2017</td>
<td>43</td>
<td>118</td>
</tr>
<tr>
<td>Nov-2017</td>
<td>10</td>
<td>246</td>
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<tr>
<td>Dec-2017</td>
<td>4</td>
<td>120</td>
</tr>
<tr>
<td>Jan-2018</td>
<td>8</td>
<td>75</td>
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<tr>
<td>Feb-2018</td>
<td>11</td>
<td>311</td>
</tr>
<tr>
<td>Mar-2018</td>
<td>8</td>
<td>73</td>
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<tr>
<td>Apr-2018</td>
<td>17</td>
<td>143</td>
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<tr>
<td>May-2018</td>
<td>26</td>
<td>144</td>
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<tr>
<td>Jun-2018</td>
<td>16</td>
<td>103</td>
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<tr>
<td>Jul-2018</td>
<td>38</td>
<td>125</td>
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<td>2</td>
<td>188</td>
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<tr>
<td>Sep-2018</td>
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M of E – Mean Distance Between Failure (MDBF)

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<tr>
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<td>22</td>
<td>27</td>
<td>18</td>
<td>24</td>
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<td>14</td>
<td>20</td>
<td>25</td>
<td>7</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Locomotives # of Service Failure</td>
<td>17</td>
<td>12</td>
<td>10</td>
<td>14</td>
<td>14</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>13</td>
<td>20</td>
<td>15</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Locomotives MDBF</td>
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<td>9210</td>
<td>10359</td>
<td>7427</td>
<td>7903</td>
<td>16288</td>
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<td>7070</td>
<td>8508</td>
<td>5319</td>
<td>7138</td>
<td>10375</td>
<td>12420</td>
</tr>
<tr>
<td>Coaches &amp; Cabs MDBF</td>
<td>25826</td>
<td>15630</td>
<td>25795</td>
<td>21131</td>
<td>33792</td>
<td>22412</td>
<td>35908</td>
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<td>30403</td>
<td>23325</td>
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Capital Projects Delay Minutes

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<tbody>
<tr>
<td>Sep-2017</td>
<td>232</td>
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<tr>
<td>Oct-2017</td>
<td>230</td>
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<tr>
<td>Nov-2017</td>
<td>407</td>
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<td>Dec-2017</td>
<td>707</td>
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<td>726</td>
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<td>Apr-2018</td>
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<td>May-2018</td>
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<td>Jun-2018</td>
<td>1010</td>
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<tr>
<td>Jul-2018</td>
<td>908</td>
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<tr>
<td>Aug-2018</td>
<td>909</td>
</tr>
<tr>
<td>Sep-2018</td>
<td>788</td>
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Fare Enforcement

• Implemented in end of July 2018
• Total Notice of Violations for Fare Evasion given for Q1FY18/19: 1905
  – Closed: 1410
  – Open: 495
  – Delinquent: 397
• Total Appeals: 333
  – Appeals granted: 166
Fare Enforcement

(NO DATA: PROGRAM IMPLEMENTED IN JUL 2018)

<table>
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<td>131</td>
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## Average Weekday Ridership

### Average Weekday Ridership (FY17/18)

<table>
<thead>
<tr>
<th>Month</th>
<th>Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct</td>
<td>58,814</td>
</tr>
<tr>
<td>Nov</td>
<td>57,046</td>
</tr>
<tr>
<td>Dec</td>
<td>52,404</td>
</tr>
<tr>
<td>Jan</td>
<td>55,271</td>
</tr>
<tr>
<td>Feb</td>
<td>57,618</td>
</tr>
<tr>
<td>Mar</td>
<td>58,991</td>
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<tr>
<td>Apr</td>
<td>60,099</td>
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<tr>
<td>May</td>
<td>61,142</td>
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<tr>
<td>Jun</td>
<td>62,057</td>
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<td>Jul</td>
<td>63,074</td>
</tr>
<tr>
<td>Aug</td>
<td>61,903</td>
</tr>
<tr>
<td>Sep</td>
<td>61,372</td>
</tr>
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</table>

### Average Weekday Ridership (FY18/19)

<table>
<thead>
<tr>
<th>Month</th>
<th>Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct</td>
<td>61,834</td>
</tr>
<tr>
<td>Nov</td>
<td>61,735</td>
</tr>
<tr>
<td>Dec</td>
<td>55,574</td>
</tr>
<tr>
<td>Jan</td>
<td>57,018</td>
</tr>
<tr>
<td>Feb</td>
<td>59,657</td>
</tr>
<tr>
<td>Mar</td>
<td>59,364</td>
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<tr>
<td>Apr</td>
<td>62,192</td>
</tr>
<tr>
<td>May</td>
<td>62,823</td>
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<tr>
<td>Jun</td>
<td>65,324</td>
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<tr>
<td>Jul</td>
<td>64,435</td>
</tr>
<tr>
<td>Aug</td>
<td>63,340</td>
</tr>
<tr>
<td>Sep</td>
<td>64,405</td>
</tr>
</tbody>
</table>
Questions
TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Carter Mau
Deputy General Manager/CEO

SUBJECT: SAFETY AND SECURITY QUARTERLY PERFORMANCE REPORTS

ACTION
Staff Coordinating Council recommends the Board receive the quarterly Safety and Security performance reports. No action required.

SIGNIFICANCE
Staff will provide quarterly performance updates on Safety and Security which encompasses services provided by the San Mateo County Sheriff’s Office. Key performance indicators will give the board an overview of significant reportable events.

BUDGET IMPACT
There is no fiscal impact.

BACKGROUND
The Safety and Security quarterly performance reports will give stakeholders an overview of key performance indicators from the previous quarter. The safety section will encompass employee, contractor, and passenger safety along with customer safety concerns. The transit Police Bureau will present details on law enforcement services including calls for service, response times, trespasser incidents, grade crossing accidents, community education, and quality of life issues.

Prepared by:
Jenny Le, Management Analyst, Transit Police Bureau 650.622.8050
Alex Ocegueda, District Temporary Employee 650.622.6216
Bill Grizard, Director Safety and Security 650.622.7856
Victoria O’Brien, Lieutenant, Transit Police Bureau 650.622.8045
Quarterly Safety and Security Performance Review
First Quarter
FY 2019 July – September 2018

Board of Directors
January 10, 2019
Agenda Item 13 (b)
Safety

*There are currently 505 contracted TASI Employees.

Employee Reportable Injuries (TASI)

<table>
<thead>
<tr>
<th>Total Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1FY17</td>
</tr>
<tr>
<td>Q2FY17</td>
</tr>
<tr>
<td>Q3FY17</td>
</tr>
<tr>
<td>Q4FY17</td>
</tr>
<tr>
<td>Q1FY18</td>
</tr>
<tr>
<td>Q2FY18</td>
</tr>
<tr>
<td>Q3FY18</td>
</tr>
<tr>
<td>Q4FY18</td>
</tr>
<tr>
<td>Q1FY19</td>
</tr>
</tbody>
</table>
## Safety

### Passenger Injuries

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Non-Reportable</th>
<th>FRA Reportable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1FY17</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Q2FY17</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Q3FY17</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Q4FY17</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Q1FY18</td>
<td>1</td>
<td>0</td>
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<tr>
<td>Q2FY18</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Q3FY18</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Q4FY18</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Q1FY19</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>
Safety violations applicable to all projects and activities.
Safety

- Contractor Injuries (Peninsula Corridor Elec. Project).
  - Zero reportable Injuries for Q1FY17 and Q1FY18.
  - One reportable injury for the reporting quarter (Q1FY19).
- Roadway Worker Protection Training (RWP).

<table>
<thead>
<tr>
<th>Q1FY19</th>
<th>Number of Training Sessions (RWP)</th>
<th>Registered</th>
<th>No Show</th>
<th>Pass</th>
<th>Fail</th>
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<tbody>
<tr>
<td>July</td>
<td>15</td>
<td>140</td>
<td>31</td>
<td>100</td>
<td>39</td>
</tr>
<tr>
<td>August</td>
<td>12</td>
<td>111</td>
<td>28</td>
<td>74</td>
<td>38</td>
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<tr>
<td>September</td>
<td>13</td>
<td>181</td>
<td>46</td>
<td>121</td>
<td>55</td>
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<tr>
<td>Grand Total</td>
<td>40</td>
<td>432</td>
<td>105</td>
<td>295</td>
<td>132</td>
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</table>
Safety

*Additional safety complaints processed through Transit Police.

Customer Safety Complaints

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Vandalism</th>
<th>Sharps</th>
<th>Quality of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1FY17</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Q2FY17</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
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<td>4</td>
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<td>5</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Q1FY18</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Q2FY18</td>
<td>8</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Q3FY18</td>
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<td>2</td>
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<td>Q4FY18</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Q1FY19</td>
<td>3</td>
<td>8</td>
<td>3</td>
</tr>
</tbody>
</table>
Transit Police Bureau

• Contracted Law Enforcement Services - San Mateo County Sheriff’s Office
  • 20 hour contract
  • 77 Miles of Track
  • 32 Stations
  • 2 Teams
    – 1 Sergeant (1000-2200 hrs.)
    – 2 Deputies (0500-1700 hrs.)
    – 2 Deputies (1300-0100 hrs.)
Total Calls for Service for Q1:
- 2806
- 10% Increase from Q1FY18
Transit Police Response Times

- Decreased by 2 Minutes 51 Seconds Q1FY18

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Average Response Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1FY17</td>
<td>22 Minutes 33 Seconds</td>
</tr>
<tr>
<td>Q1FY18</td>
<td>25 Minutes 24 Seconds</td>
</tr>
<tr>
<td>Q1FY19</td>
<td>23 Minutes 5 Seconds</td>
</tr>
</tbody>
</table>

*Does not reflect local agency response or Priority 1 calls*
Transit Police Visibility Statistics

- Station Checks
  - 10% Increase from Q1FY18
- Subject Stops
  - 24% Decrease from Q1FY18
- Dispersals
  - 13% Increase from Q1FY18
Behavioral Health Interventions

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY17</td>
<td>3</td>
</tr>
<tr>
<td>FY18</td>
<td>13</td>
</tr>
<tr>
<td>FY19</td>
<td>10</td>
</tr>
</tbody>
</table>

**Q1 Total Number of Life Endangering Interventions**

- **July**
  - Q1FY17: 1
  - Q1FY18: 3
  - Q1FY19: 6

- **August**
  - Q1FY17: 1
  - Q1FY18: 4
  - Q1FY19: 2

- **September**
  - Q1FY17: 1
  - Q1FY18: 6
  - Q1FY19: 2
## Collisions/Strikes

<table>
<thead>
<tr>
<th></th>
<th>Q1 FY17</th>
<th>Q1 FY18</th>
<th>Q1 FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trespasser Strike - Non-Fatal</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Trespasser Strike - Fatality</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Vehicle Strikes - Non-Fatal</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vehicle Strikes - Fatality</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Vehicle Strikes - Occupied</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Vehicle Strikes - Unoccupied</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Railway Safety: Education, Enforcement & Training

• Education:
  - Operation Clear Track, Redwood City
  - 14 High Intensity Strategic Enforcement Citations
  - 45 Informational Pedestrian Stops

• Enforcement:
  - 116 Citations: High Intensity Strategic Enforcement
  - 15 Citations: Trespassing
  - 9 Trespassing Arrests

• Trainings:
  - July 19, Yearly Emergency Exercise
  - K-9 EOD Training
Quality of Life: Transit Police Special Enforcement Team

• City and County of San Francisco
  - San Francisco Homeless Outreach Team
    ✓ Tunnel 1 Encampment, San Francisco
    ✓ Tunnel 3 Encampment, San Francisco

• County of San Mateo
  - Redwood City Project SAFE
    ✓ 30 Truants Contacted
    ✓ Sheriff’s Office Psychiatric Emergency Response Team

• County of Santa Clara
  - HomeFirst, Homelessness Response Team
Enforcement

<table>
<thead>
<tr>
<th>Q1 Type of Citation</th>
<th>Q1FY17</th>
<th>Q1FY18</th>
<th>Q1FY19</th>
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<tbody>
<tr>
<td>PARKING</td>
<td>1753</td>
<td>1070</td>
<td>1621</td>
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<tr>
<td>INFRACTION - TRAFFIC</td>
<td>135</td>
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<tr>
<td>INFRACTION - OTHER</td>
<td>29</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>TRESPASSING</td>
<td>34</td>
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<td>15</td>
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<tr>
<td>HISEP</td>
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<td>118</td>
<td>116</td>
</tr>
</tbody>
</table>
Arrests

- Adult - Felony: Q1FY17 - 4, Q1FY18 - 6, Q1FY19 - 6
- Adult - Misdemeanor: Q1FY17 - 39, Q1FY18 - 27, Q1FY19 - 52
- Juvenile: Q1FY17 - 2, Q1FY18 - 4, Q1FY19 - 1
JPB BOARD MEETING
January 10, 2019

Correspondence Packet as of January 3, 2019
Thanks for your quick response. I completely agree with your comment about how great Caltrain is with incorporating bike commuters - it really helps extend the last mile at both ends. However, maybe I missed it, but I don't see anything in the email or in the bike security task force presentation about improving security for bikes on the electric trains. Removing all seats next to bikes is a bad idea. Using cameras to spot bikes being stolen does nothing to stop the theft of bikes. It is much better to have riders sit near bikes.

After watching some near thefts (prevented by observant bike riders) and being on the train when a bike was stolen, I will either lock my bike onto the rack or sit on the floor with the bikes if there are no seats with the bikes.

I like the idea of improving bike safety at Caltrain stations - there are times I could leave my bike at Diridon, but will never leave my bike locked on an open rack all day. Please get the bikelink lockers at every station and rip out all the 'reserved' white bike lockers. That way people needing to store a bike can store it safely. The SF and PA bike shops/storage is interesting, but not useful when I’m staying late for dinner at those locations. Since there are no bikelink locker options at PA, I end up driving on those days I meet friends at PA for dinner.

The common thread between on-board bikes and station parking is the safety of the bikes (not stolen).

I talk proudly with friends and co-workers about my relationship as a biker on Caltrain for 20+ years. Please make sure bikers can continue to use Caltrain (wo having their bikes stolen) on the new trains.

Thank you,
Alan Williams
Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification Project there will be a 17% increase in onboard bike capacity.

Recently, Caltrain was awarded State Transit and Intercity Rail Capital Program (TIRCP) funds, however the grant award was approximately a 1/3 of the money requested. Caltrain cannot purchase as many additional electric train vehicles as originally planned at this time. Nevertheless, this additional funding will help bring more relief to an already overburdened system. There will be future discussions about how to best utilize space in the additional vehicles that will be purchased with the TIRCP money.

As our riders know, Caltrain is extremely busy during commute times, with some of the trains at 140% capacity. Future ridership growth projections show demand continuing to grow and Caltrain is working to identify opportunities and strategies to meet the needs of the corridor with the development of a Business Plan.

While in the past Caltrain was able to remove excess seats to provide more onboard space for bikes, the landscape has drastically changed with ridership nearly doubling since the beginning of this decade. Space at the stations is more abundant than onboard, and there is now a greater ability to serve people with bikes at stations. The current bike parking options leave a lot to be desired but huge advances in bike sharing, electronic lockers, and controlled access bike parking facilities can provide great options for many people who want to use a bike and Caltrain. Caltrain has designated more than $3.5M to make vast bike parking improvements at the stations; and recently, a full-time station access planner was hired to implement Caltrain’s Bike Parking Management Plan and improve bike access.

In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan to have additional public meetings regarding bike security in the future.

Again, we thank you for taking the time to send us your thoughts and for your continued engagement. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
I've written quite a while back about the issues with the electric car designs with no seats next to bikes.

This is a no-brainer. Having people sitting near bikes will not prevent all bike theft, but I can guarantee you that bike thefts will GREATLY increase if there are no seats next to the bikes.

Additional things that will will happen if you don't put seats near bikes:

- people will lock their bikes to racks and slow down the boarding/off loading of bikes

- people will just sit on the floor blocking easy boarding/off loading of bikes (reminds me of the baseball trains)

Bike thieves will walk in one car door, walk along the bikes and when they get near the other open door, they will grab an unlocked bike and get off before anyone can stop them. Sure - you'll have a nice picture of someone with a hoodie on - but the bike is gone, and there are no useful pictures.

Please stop with the debate, you have a design today that works. With all the publicity this has generated, there are people that would blame Caltrain for future bike thefts since Caltrain knew better, but proceeded to do the wrong thing.

With more trains/hour and adding in HSR, staying on time is a critical
must-have requirement for Caltrain. Please properly plan for this.

Caltrain has a great reputation with bike commuters on the volume of bikes it moves. Please don't make the wrong decision here which will negatively impact bikers and your ability to keep trains on time.

I love Caltrain - it provides a great service. I've been riding bikes on Caltrain for 20 years now. Please continue increasing #bikes/train set and keeping our bikes safe.

Regards,

Alan Williams

--

Alan Williams
Dear Katie,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

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**From:** Katie Dlesk [mailto:]
**Sent:** Wednesday, November 28, 2018 7:37 PM
**To:** Board (@caltrain.com)
**Cc:** CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
**Subject:** Thank You and a Suggestion for New Electric Cars!

Dear Board of Caltrain -

First of all, thank you for your work and service. The Caltrain saves me daily from a commuting nightmare, and I am so grateful that this alternative to driving exists. I am also excited by the prospect of more rail cars to run longer electric trains in the future!

I take my bike on my commute whenever I ride the train. On both ends, my home and work are just far enough from the stations that biking is a necessity. I really appreciate the current bike cars, because they allow me to keep an eye on my bike. I would also strongly urge you to consider adding more bike space - basically every evening on the popular trains, there are cyclists who are bumped to the next train, and with expanded service, it will just continue to happen.

I love the Caltrain (really, I do), and want to see it improve for bikers and for everyone! Thanks for listening!

- Katie Dlesk, SF Resident,
Dear Jeff,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

---

From: Jeff Mahe [mailto:
Sent: Tuesday, November 27, 2018 3:48 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com];
bikesonboard@sonic.net; Jeff Mahe
Subject: Support biker riders on Caltrain!!!

Attention: Caltrain Board Members

I've been using Caltrain every day to get to work for the past 6 years. I work in San Jose and catch the train at Tamien station and ride to Redwood City. I take my bike along with me to get from home to the train and from the train to work.

I understand Caltrain is purchasing more electric train rail cars. It would be ideal for bike riders that the new cars include a bike layout to include seats for bike riders. Other then locking up bikes on the train or having a conductor monitor bikes, only other bike riders riding in the cars would deter bike thieves from stealing bikes. The analogy of leaving your bike unlocked and unsupervised would be to park your car without locking the doors. Car thieves normally do not steal cars where people congregate and the same goes with bikes on the train. Having multiple video cameras in the bike cars and exits and showing them in the nearby rail cars on monitors may deter thieves. We have a system that works right now where bike riders can sit and monitor their bikes. I understand we need to add more passengers on the train, but I believe you will create a bigger problem where frustrated bike riders will decide to drive their cars and therefore cause more congestion to the overall traffic, which defeats the purpose of trying to use public transportation to reduce traffic congestion.

Please consider this request and understand the impact to the overall bike riders using Caltrain.

Regards,
Jeff Mahe
Dear Bryan,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification Project there will be a 17% increase in onboard bike capacity.

Recently, Caltrain was awarded State Transit and Intercity Rail Capital Program (TIRCP) funds, however the grant award was approximately a 1/3 of the money requested. Caltrain cannot purchase as many additional electric train vehicles as originally planned at this time. Nevertheless, this additional funding will help bring more relief to an already overburdened system. There will be future discussions about how to best utilize space in the additional vehicles that will be purchased with the TIRCP money.

As our riders know, Caltrain is extremely busy during commute times, with some of the trains at 140% capacity. Future ridership growth projections show demand continuing to grow and Caltrain is working to identify opportunities and strategies to meet the needs of the corridor with the development of a Business Plan.

While in the past Caltrain was able to remove excess seats to provide more onboard space for bikes, the landscape has drastically changed with ridership nearly doubling since the beginning of this decade. Space at the stations is more abundant than onboard, and there is now a greater ability to serve people with bikes at stations. The current bike parking options leave a lot to be desired but huge advances in bike sharing, electronic lockers, and controlled access bike parking facilities can provide great options for many people who want to use a bike and Caltrain. Caltrain has designated more than $3.5M to make vast bike parking improvements at the stations; and recently, a full-time station access planner was hired to implement Caltrain’s Bike Parking Management Plan and improve bike access.

In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan to have additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Bryan Parry [mailto:]
Sent: Tuesday, December 04, 2018 7:26 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Seats on bike cars

Hi Caltrain,

I very much appreciate your proposed plan to buy more electric rail cars for the trains, but ask that you do the design so that there are fixed seats in the bike cars. This does a lot to deter bike theft and is essential for commuters like me. I live far enough from the Caltrain station so that I need to bike everyday and then again at the other end it is necessary.

Thank you so much!
Bryan
Dear Ted,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

-----Original Message-----
From: Ted [mailto:]
Sent: Tuesday, November 27, 2018 6:07 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com];
bikesonboard@sonic.net
Subject: Seats and CalTrain electrification

Hello:

Thank you for embracing electric trains for the Peninsula. Cycling will remain/increase as a paired option for Commuters in the future, and for those of us without cars, bike security is a priority.

Please consider designs for new train cars that provide some fixed seating near bikes.

Thank you for your attention to this matter.

Regards, Dr. Ted K. Raab
Dear Caleb,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Caleb Stewart [mailto:]
Sent: Tuesday, November 27, 2018 7:59 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Safe bikes and room on electrified Caltrain

Hello,

I'm writing as a bicyclist on the Caltrain, and have recently learned that the proposed electrified rail cars do not have planned seats within view of the bicyclists. As a normal paranoid-of-bike-theft person who has had 4 locked bikes stolen (fortunately none on caltrain), I never leave my bike out of sight, nor do most of the other bikers who I commute daily from San Mateo to SF with. This typically leaves all the bikers jostling with non-bikers for the overhead seats on the old cars, or standing room only. Occasionally I'm lucky enough to grab a top seat and look down on my bike. Occasionally the bike car is full and I am bumped (I have emailed Caltrain before about this issue). With all this in mind, I urge you to reconsider the bike car layout and install plenty of seats within bicycle view, and provide plenty of room for bikes.

Sincerely,

A bicyclist currently standing near his bike on Caltrain, Caleb Stewart
Dear Alex,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

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From: Alex Herzick [mailto:]
Sent: Tuesday, November 27, 2018 9:50 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Railcar Design and Capacity for Bikes (and Scooters)

Dear Caltrain Board-

Thank you for planning to buy more rail cars to run longer electric trains. The new rail cars provide an opportunity to redesign bike-car layout to put seats within view of bikes. I understand Caltrain's current plan is no fixed seats within view of bikes- this is not good as it slows exit flow at each stop and as importantly makes bikes ripe for theft. What is the advantage to not having fixed seats within view of the bikes? I would have to drive if I could not bring my bike on Caltrain from Menlo Park to Union Square in SF. Traffic, gas and parking costs, would be untenable. Bike cars are maxed out today. Also it is important to note how many scooters are now getting on the trains. Both electric and foot powered scooters are getting on the bike cars taking capacity where folding bikes go and also in the normal bike racks. We need at least 96 bike spaces per train plus capacity for 20 scooters to meet demand in 2022. Please take these issues into account during planning. Thank you.

Best Regards,
Alex Herzick
Hi Lori,

I appreciate all Caltrain has done to enable bikes on board, so I don't want to sound like I am ungrateful. I do think however that the achievements highlighted in your response are indicative of a team that isn't aiming high enough.

The Bay Area is a key economy driver around the world, with some of the most forward thinking, intelligent minds on the planet. The weather here is some of the best in the world for cycling, with so many days of moderate temperatures and clear skies. As such, comparing the accomplishments of Caltrain to those of the nation is just not holding yourself to the standards you are capable of. I believe you should be able to be proud when comparing yourselves on the international stage. This region can produce an agency that can be leaders helping the rest of the world find the path toward sustainable, human friendly transit. The United States has an abysmal record in this area, and using the rest of the nation as your watermark is selling yourself short.

I sincerely hope your organization strives to be world class, because I personally believe you have all the ingredients to make it happen.

Aim high,
Drew

On Fri, Nov 30, 2018 at 7:06 PM Caltrain, Bac (@caltrain.com) <BAC@caltrain.com> wrote:

Dear Drew,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.
Recently, Caltrain was awarded State Transit and Intercity Rail Capital Program (TIRCP) funds, however the grant award was approximately 1/3 of the money requested. Caltrain cannot purchase as many additional electric train vehicles as originally planned at this time. Nevertheless, this additional funding will help bring more relief to an already overburdened system. There will be future discussions about how to best utilize space in the additional vehicles that will be purchased with the TIRCP money.

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In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan additional public meetings regarding bike security in the future.

Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Drew Skau [mailto:]
Sent: Tuesday, November 27, 2018 7:07 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary (@caltrain.com); bikesonboard@sonic.net
Subject: Rail Car Purchase
Hello Caltrainers,

I really appreciate being able to bring my bicycle on Caltrain. Without that, I would have to drive over 60 miles each way every day, increasing congestion and carbon emissions. Bicycles and other personal transit vehicles on Caltrain are a critical part of helping people to reduce their carbon footprint and take care of the planet we all share.

Thank you for planning to extend the length and capacity of trains with the electrification project. I believe these new cars provide an opportunity for a redesign of car layouts to enable cyclists and other active commuters to monitor their vehicles and deter theft. More cars with vehicle space will also reduce delays by reducing choke points at which cyclists and active commuters have to board.

This is also an opportunity to plan for the future. As more people begin to commute responsibly, there will be an increased number of riders bringing bicycles, scooters, and skateboards on Caltrain. Current estimates suggest each train will need 96 bike spaces to meet demand in 2022 when electrified service begins, but I would like to see Caltrain reaching well beyond that number to prepare for the future. Let's stop building infrastructure for the past and start building a future we can all be proud of and excited for!

Peace,

Drew
Dear Martin,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification Project there will be a 17% increase in onboard bike capacity.

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While in the past Caltrain was able to remove excess seats to provide more onboard space for bikes, the landscape has drastically changed with ridership nearly doubling since the beginning of this decade. Space at the stations is more abundant than onboard, and there is now a greater ability to serve people with bikes at stations. The current bike parking options leave a lot to be desired but huge advances in bike sharing, electronic lockers, and controlled access bike parking facilities can provide great options for many people who want to use a bike and Caltrain. Caltrain has designated more than $3.5M to make vast bike parking improvements at the stations; and recently, a full-time station access planner was hired to implement Caltrain’s Bike Parking Management Plan and improve bike access.

In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan to have additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Martin MacKerel [mailto:]
Sent: Wednesday, December 05, 2018 2:18 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; Bikes on Board
Subject: please put seats by bikes

Hello. I live in San Francisco and occasionally ride Caltrain to go to meetings in the South Bay. Being able to bring my bike on Caltrain is essential for increasing the area that I can easily access. On-time service is important for to get to meetings on time. This means not just that the train gets to its destination on time, but also that I and my bike are able to get on the right train.

Thank you for electrifying Caltrain, for adding new rail cars, and for increasing the number of bike spaces per train.

However, these new rail cars should have seats in view of the bikes. This is the simplest and easiest way to deter bicycle theft, and to reduce congestion in the bike cars.

Thanks,
Martin
----- Forwarded Message -----

From: "Jeff Aboud" <jaboud@in-focusmarketing.com>
To: "BAC@caltrain.com" <BAC@caltrain.com>
Cc: "Jeff Aboud" <jaboud@in-focusmarketing.com>
Sent: Mon, Dec 3, 2018 at 17:44
Subject: RE: Please Keep Seats in Bike Cars!

You don't seem to understand. I have a ride on EACH end, so bike lockers won't do me any good - I have to have my bike with me to reap the value. And I'm sorry, but having a publicly-accessible car with only bikes and no owners around, bikes WILL be stolen EVERY DAY. So if I can't sit with my bike, I'll stop riding Caltrain. I can't risk my bike being stolen just to have a better commute!

Think of it this way. If I could dramatically improve YOUR commute, but you had to leave your computer unattended in a separate place to do it, would you? I sincerely doubt it. Nobody would!

I understand that bicyclists have requested that bike capacity be increased, but not at the expense of being able to sit with them! Every single bicyclist I've spoken with on the train regarding this matter wholeheartedly agrees; so just using this unscientific pole, I know you will lose riders if you proceed with this plan.

Please, PLEASE reconsider!

Jeff

On Mon, Dec 3, 2018 at 13:52, Caltrain, Bac (@caltrain.com) <BAC@caltrain.com> wrote:

Dear Jeff,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

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Dear Caltrain Board,

Like most daily riders, I’m excited about the new electric cars that are coming. However, I’ve heard that the new design doesn’t currently include seating in bike cars. I ask that you please reconsider this plan – to account for the needs of your passengers with bikes, and not remove all seats in bike cars on electric trains. I ride from San Jose (Diridon) to San Francisco (4th & King) just about every weekday, and I rely on the ability to have my bike on the train due to a two-mile commute on each end.

If I can’t put my bike on the train, I won’t be able to take the train, plain and simple. And if I can’t sit near my bike to ensure its security, I won’t take my bike on the train. If bicyclists can’t sit with their bikes, it’s an open invitation for thieves to take whatever
bikes they want, whenever they want – and I simply can’t afford to lose mine.

If you remove the seating from bike cars, nearly all bicyclists, like me, will stop riding Caltrain. This will adversely affect traffic on our roads and our community in general, as well as Caltrain’s revenue. So I ask you again to please reconsider; so many of your riders depend on it!

Sincerely,

Jeff Aboud
Dear Donna,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Donna Weber [mailto:
Sent: Tuesday, November 27, 2018 5:18 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com];
bikesonboard@onic.net
Subject: Please ensure there are 96 bike spaces per train

I’ve been bike commuting on Caltrain for nearly 11 years. It’s key to my work success. I can’t express you how much ridership and the use of bike cars has grown in the last 11 years. What used to be a small intimate group of riders is now uncomfortably packed bike cars where riders are unable to get in and out at their stops.

I’d like to thank Caltrain for planning to buy more rail cars to run longer electric train because these new real cars provide an opportunity to redesign the bike-car layout to put seats within view of bikes (Caltrain's current plan is no fixed seats within view of bikes).

Seats within within view of bikes deter bicycle theft and help keep trains on time by reducing congestion in bike cars.

I don’t know how I would commute if I didn’t ride Caltrain with your bike. It’s an integral part of my life.

Since bike cars are maxed out today, we need to ensure there are 96 bike spaces per train to meet demand in 2022, when electrified service will begin.

Thank you,

Donna
Dear Lydia,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Lydia W. Lee [mailto:]
Sent: Monday, December 03, 2018 9:39 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com];
bikesonboard@sonic.net
Subject: Please design bike cars with bikes in view of seats

Dear Caltrain board,

I'm really looking forward to electrification and an expansion of the train service.

Please consider the particular issues of bicycle commuters, who rely on their bikes as a primary form of transportation, by making sure they can see their bikes from their seats. The easiest and most cost-effective way to deter bike thieves is to have "eyes on the ground."

Yes, in the future, there may be a high-tech solution of tracking bicycles that will prevent bicycle thefts without physical locks so that boarding and leaving can happen quickly. But without such technology, it is imperative that the most basic form of theft deterrence is in place.

Thanks for your consideration,

Lydia Lee
Menlo Park
Dear Alli,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

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From: Alli Rico [mailto:]
Sent: Monday, December 03, 2018 3:52 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: New Bike Cars on Electrified Caltrain

Hello Caltrain and Calmod!

I'm very excited for the electrification of the Caltrain system and for the new cars coming to the system. Thank you so much for all of your hard work making these critical system modifications happen!

The new cars provide an excellent opportunity to redesign the bike car layouts to have seats within view of the bikes. As a cyclist who commutes between San Jose and Palo Alto, I appreciate the current cars giving me the opportunity to keep an eye on my bike while also providing a place to sit.

As I understand it, the current plans for the new cars have no fixed seats within view of the bikes. I don't think this is safe! Providing seats within view of the bikes helps deter bike theft from Caltrain, and will keep trains running on time by reducing the amount of congestion we currently see on a daily basis in the bike cars.

This congestion is also caused by the sheer amount of bikes on the trains every day during commute hours - we are maxed out! The opportunity to redesign the bike car layouts should also mean we increase spaces to 96 per car, so Caltrain can meet demand in 2022 when electrified service begins.

If I didn't ride Caltrain with my bike, I would still be riding Caltrain, but I would be driving to San Jose Diridon - only 1.5 miles, which adds to the congestion of downtown San Jose, and increases pollutants in the air. I would then need to take a shuttle from the Palo Alto train station to my office. It isn't an idea scenario for me as the shuttle adds about 20 minutes to my commute time!

Thank you again for all the work you've done to push for updates to the Caltrain system - I can't wait to ride the electrified rails in 2022!
Cheers,

Alli Rico
Dear Steve,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Steve Hoeschele [mailto:shoes@stanford.edu]
Sent: Tuesday, November 27, 2018 10:58 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: New bike cars

Thank you for planning to buy more rail cars to run longer electric trains. Please include seats within view of bikes to help deter bicycle theft and help keep trains on time.

I'm also asking Caltrain to consider the design flaw of current bike cars, in which the bike car has a smaller egress space (between the vertical bar at the exit) next to the bicycle section. This puts the wide open egress space immediately next to the seating section, which means individuals without bikes have to wait until those with bikes pass through. This creates a small traffic jam and slows down the whole car's boarding and exiting process.

Bike cars are often maxed out, and we need 96 bike spaces per train to meet demand in the years to come.

Thanks,
Steve Hoeschele
Dear Suzie,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

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**From:** Suzie Scales [mailto:scales.suzie@gene.com]  
**Sent:** Tuesday, December 04, 2018 6:14 PM  
**To:** Board (@caltrain.com)  
**Cc:** CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net  
**Subject:** New bike car design

Dear Caltrain,

Thank you sooooo much for increasing the number of cars on the new trains to enhance pedestrian and bike capacity! I am committed to using Caltrain because it’s green, relieves traffic on 101, allows me to work en route and provides daily exercise by biking there. I rely on bike space on Caltrain to get to work every day due to a 1-2 mile ride at each end (will be 1.5-2 miles each end when Hillsdale station moves North) and the utility of my bike to hasten travel between buildings at work. While it is sometimes possible to wait for another train when I get bumped, often I have to resort to driving to make my first meeting on time, obviating all the benefits described above. We therefore definitely need the proposed increased bike capacity (96 slots per train), especially with more apartments being built in the vicinity.

I heard that the new bike cars would not all have seats for cyclists to keep an eye on their bikes to ensure they are not nicked. I use my bike saddle to prop up my laptop when there are no seats, so have not had the misfortune of having my bike stolen, but do know people who have. It is therefore essential that sufficient seats and standing space be available in each bike car. Personally I think it would be better to keep dedicated bike cars like we have now, enforcing bikes boarding first to minimize delays and discourage pedestrians from taking up cyclists’ valuable seats. Scattering bike racks along the length of the train would a) make it harder to know where to board, leading to unnecessary bumps; and b) increase the chances of having to rearrange the stack, since with fewer stacks per car it is less likely we’d find one going to/past our destination. Also better signage or stronger enforcement of preventing non-cyclists from taking up cyclists’ seats at peak times would be helpful, as would having disabled people in a dedicated compartment since the wheelchair lift is too narrow to board a bike easily.

Thank you very much again for increasing bike capacity and I do hope you will consider consolidating bikes and cyclist-only seats into dedicated carriages to maximize train use and decrease cars on the roads and Caltrain parking lots.

Sincerely  
Suzie Scales, San Mateo
Dear Alistair,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Alistair Barr [mailto:]
Sent: Tuesday, November 27, 2018 7:05 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: More bikes on electric trains

Thank you for buying more rail cars to run longer electric trains. It will be a great investment with strong returns in ridership and health for the community.

It's crucial that there are enough bike cars to support the number of current -- but most importantly FUTURE -- bike riders. Bike cars are maxed out today and we need 96 bike spaces per train to meet demand in 2022, when electrified service will begin.

Bike owners are some of the most loyal Caltrain customers. They put up with cattle-style conditions during rush hours and still keep paying and riding. These people likely cannot or won't drive to work, so they won't dump Caltrain when unavoidable delays happen.

Keeping these customers happy is wise, but what is Caltrain missing out on by not accommodating more bikes? There are many many more bike owners who would ride Caltrain if bike capacity was increased and the experience improved.

Making it easier to bring your bike on Caltrain expands the service's area of potential customers because people can get to stations from further away on a bike - without stressing local traffic and parking.

I have been riding Caltrain for a decade with a bike. If I didn't ride Caltrain this way, it would take me more than two hours to get to work, not 1.

These new rail cars also provide an opportunity to redesign bike-car layout to put seats within view of bikes. This will deter bicycle theft and help keep trains on time by reducing congestion in bike cars. At the moment, riders have to funnel into the bike car while other bike owners are trying to exit. This slows the process considerably.

Best wishes,
Alistair Barr

Read my book Travel Bug: https://www.amazon.com/gp/aw/d/B01IYNNRNG?pc_redir=T1
Dear Andy,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Andy Michelle Meislin [mailto:ameislin@stanford.edu]
Sent: Tuesday, November 27, 2018 12:48 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: More Bike Storage

Hi,

I commute to Stanford every day with my bike on Caltrain, and there are already times during commute time that there isn't enough bike storage on the trains. I would be very grateful if the new Caltrain cars increase bike storage, and allow for bikers to sit near their bikes. I've had friends that have had their bikes stolen off the train, and even with the amount of seating in the current cars sometimes I can't get a seat with my bike in-view. Extra bike storage space is necessary to allow people to commute to and from the train station, since many riders live too far away to walk to the station (myself included). We need to be making it easier for people to get around without their cars, not harder!

I hope you consider expanding the bike storage on Caltrain and allow for all of us bikers to sit within view of our bikes!

Thank you,
Andy Meislin
Dear Michael,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Michael Leung [mailto:] On Behalf Of Michael Leung
Sent: Tuesday, November 27, 2018 10:36 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: More bike space on new Caltrain cars

To whom it may concern,

I'm writing to express my dissatisfaction in the new electric bike-car layout.

I'm a Stanford graduate student, and as a daily commuter, I depend on Caltrain and my bike as an integral portion of my commute from San Francisco (22nd) to Palo Alto. I and hundreds of others depend on our bicycles for the "last-mile" commute rapidly, reliably, and inexpensively.

With the new bike car layout, where the bikes are not in my view, I would not feel comfortable taking my bike on Caltrain and would revert to driving to commute to work. Traffic is already bad as it is; we need more people to turn to public transit, not less.

Our trains are already at bike capacity today. Morning SB trains (#330 and #232) are usually at or over capacity, with cyclists denied boarding occasionally.

I urge you to reconsider the electric train car design, and do add more space for bikes. I love riding on the Caltrain, but with the proposed changes, I would not be able to continue riding with Caltrain.

Thanks,

Michael

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Michael C. Leung | 650-898-9163 | mcleung@stanford.edu
Dear Neil,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Neil Shah [mailto:]
Sent: Monday, December 03, 2018 9:33 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com];
bikesonboard@sonic.net
Subject: More bike cars needed

- Thank Caltrain for planning to buy more rail cars to run longer electric trains.
- I live in San Carlos and commute to the city everyday with my bike.
- The new rail cars provides an opportunity to redesign bike-car layout to put seats within view of bikes.
- seats within view of bikes will deter bicycle theft and help keep trains on time by reducing congestion in bike cars.
- If no bikes on Caltrain I wouldn't be able to live in Bay area
- bike cars are maxed out today, we need 96 bike spaces per train to meet demand in 2022.

Thank you

Neil Shah
SAN CARLOS resident
Dear Janice,

Thank you for your feedback. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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While in the past Caltrain was able to remove excess seats to provide more onboard space for bikes, the landscape has drastically changed with ridership nearly doubling since the beginning of this decade. Space at the stations is more abundant than onboard, and there is now a greater ability to serve people with bikes at stations. The current bike parking options leave a lot to be desired but huge advances in bike sharing, electronic lockers, and controlled access bike parking facilities can provide great options for many people who want to use a bike and Caltrain. Caltrain has designated more than $3.5M to make vast bike parking improvements at the stations; and recently, a full-time station access planner was hired to implement Caltrain’s Bike Parking Management Plan and improve bike access.

In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan to have additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Janice Li [mailto:janice@sfbike.org]
Sent: Wednesday, December 05, 2018 3:29 PM
To: Board (@caltrain.com)
Cc: Gillett, Gillian [gillett@graffio.net]; Brinkman, Cheryl [cheryl.brinkman@gmail.com]; Low, Lori; Fromson, Casey
Subject: Letter to Caltrain Board re: TIRCP

To Chair Bruins,

Please see the attached PDF of a letter address to the Caltrain Board from the San Francisco Bicycle Coalition regarding the TIRCP grant.

Please do not hesitate to reach out if you'd like to discuss further.

Best,
Janice

cc:
Director Cheryl Brinkman
Director Gillian Gillett

--
Janice Li
(415) 431-2453 x302
Advocacy Director
Pronouns: she, her

San Francisco Bicycle Coalition
Promoting the Bicycle for Everyday Transportation
1720 Market St.
San Francisco, CA 94102

©️ 2023
Please see letter attached. Thank you.

--
Emma Shlaes  
Director of Policy and Advocacy  
Silicon Valley Bicycle Coalition  
96 N. Third Street, Suite 375  
San Jose, CA 95112  
Office: 408-287-7259 Ext. 228  
Cell: 650-703-1191  
http://bikesiliconvalley.org
November 30, 2018

Peninsula Corridor Joint Powers Board of Directors

Dear Honorable Chair Bruins and the Board of Directors:

On behalf of Silicon Valley Bicycle Coalition (SVBC), a nonprofit creating a healthy community, environment, and economy through bicycling, I am writing to urge Caltrain to address the ongoing concern of on-board bike security and make determinations about the design of the additional cars purchased through TIRCP.

SVBC thanks Caltrain Board and staff for being a consistent partner towards sustainable transportation and we hope to continue this collaborative relationship. Caltrain allows people biking to extend their reach and bikes allow people to get to and from stations where they’d otherwise have no alternative options. We have worked together over the years, along with San Francisco Bicycle Coalition, to expand on-board bike capacity, research more secure bike parking options, support additional funding for Caltrain electrification, and publicize surveys and service notices. In 2015, we collectively set an 8:1 ratio of seats to bikes on the electrified train cars. We also worked together in 2017 to land on a bike rack design for the new cars. Because of decisions made earlier in the process however, the current electric multiple units (EMUs) bike car design has almost no seats in view of bikes, increasing the opportunity for people to steal bikes when the bikes’ owners are out of sight.

Bike security, on and off board, is the number one concern of SVBC and our members, as this will determine the comfort and convenience of being able to bike to and from Caltrain. Since the EMU car design was finalized, there has been a concern throughout the bike community about bike security. There are already a number of bikes stolen on and off board per year. We and our members fear that the lack of seats near bikes will encourage more theft. We appreciate that Caltrain staff has taken on an internal effort to streamline the reporting process and we feel more needs to be done to prevent bikes being stolen in the first place.

SVBC is thrilled that California voters soundly defeated Proposition 6 in the November election and supported the need for massive transportation investments across the state. In particular, we are happy that the Transit and Intercity Rail Capital Program (TIRCP) funds of $164.5 million that were awarded to Caltrain Electrification will remain in place. We recognize and support that funding will go toward additional EMUs for longer trains, wifi capability on board, and improved bike parking at stations.

With thousands of people who bring their bikes onboard every day, Caltrain could use the opportunity provided by the purchase of additional EMU cars to reconfigure train layout to address bike theft. Additionally, longer train sets mean more capacity and Caltrain must stick to the Board’s commitment of an 8:1 ratio of seats to bikes. We think this new funding could be a perfect opportunity to redesign the bike cars to address the security concerns of your passengers while maintaining the ratio of on-board bike capacity.

We urge the Peninsula Corridor Joint Powers Board to acknowledge this issue by directing staff to develop a design that addresses the security issue directly
and ensure that EMU cars provide fixed seats in view of bikes or an equally secure solution. We share this perspective with San Francisco Bicycle Coalition and the Caltrain Bicycle Advisory Committee, which have each submitted letters on these topics. We urge the Board to develop a transparent process for determining the best and safest EMU car design as the TIRCP funds are secured. We look forward to continuing to be involved in this process. If you have questions, please contact Emma Shlaes, Director of Policy and Advocacy at emma@bikesiliconvalley.org.

Thank you,

Shiloh Ballard
President & Executive Director
Dear Shiloh,

Thank you for your feedback. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification Project there will be a 17% increase in onboard bike capacity.

Recently, Caltrain was awarded State Transit and Intercity Rail Capital Program (TIRCP) funds, however the grant award was approximately a 1/3 of the money requested. Caltrain cannot purchase as many additional electric train vehicles as originally planned at this time. Nevertheless, this additional funding will help bring more relief to an already overburdened system. There will be future discussions about how to best utilize space in the additional vehicles that will be purchased with the TIRCP money.

As our riders know, Caltrain is extremely busy during commute times, with some of the trains at 140% capacity. Future ridership growth projections show demand continuing to grow and Caltrain is working to identify opportunities and strategies to meet the needs of the corridor with the development of a Business Plan.

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In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan to have additional public meetings regarding bike security in the future.

Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and
Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Emma Shlaes <emma@bikesiliconvalley.org>
Date: November 30, 2018 at 1:18:11 PM PST
Subject: Letter regarding bike security
To: board@caltrain.com
Cc: Shiloh Ballard <shiloh@bikesiliconvalley.org>, Casey Fromson <fromsonc@samtrans.com>, Lori Low <LowL@samtrans.com>

Please see letter attached. Thank you.

--
Emma Shlaes
Director of Policy and Advocacy
Silicon Valley Bicycle Coalition
96 N. Third Street, Suite 375
San Jose, CA 95112
Office: 408-287-7259 Ext. 228
Cell: 650-703-1191
http://bikesiliconvalley.org
PENINSULA CORRIDOR JOINT POWERS BOARD

PROJECT 16R19

SCHEDULE OF EXPENSES OF
TRANSPORTATION FUND
FOR CLEAN AIR PROGRAM
REGIONAL FUND PROJECT
WITH INDEPENDENT AUDITOR’S REPORTS

JUNE 30, 2017
Table of Contents

Financial Section:

<table>
<thead>
<tr>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Auditor's Report</td>
<td>1</td>
</tr>
<tr>
<td>Schedule of Expenses of Project</td>
<td>3</td>
</tr>
<tr>
<td>Notes to Schedule of Expenses of Project</td>
<td>4</td>
</tr>
<tr>
<td>Independent Auditor's Report on Compliance and Internal Control</td>
<td>7</td>
</tr>
</tbody>
</table>

Over Compliance in Accordance with the Requirements of Section 44241 of the California Health and Safety Code
Independent Auditor's Report

Board of Directors
Peninsula Corridor Joint Powers Board
San Carlos, California

Board of Directors
Bay Area Air Quality Management District
San Francisco, California

We have audited the accompanying Schedule of Expenses of Project (Schedule) of the Peninsula Corridor Joint Powers Board's (JPB) Transportation Fund for Clean Air (TFCA) Program Regional Fund Project for the project period ended June 30, 2017, and the related notes to the Schedule, as listed in the table of contents.

Management’s Responsibility for the Schedule

Management is responsible for the preparation and fair presentation of the Schedule in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of Schedule that is free from material misstatement, whether due to fraud or error.

Auditor’s Responsibility

Our responsibility is to express an opinion on the Schedule based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Schedule is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Schedule. The procedures selected depend on the auditor’s judgment, including the assessment of the risks of material misstatement of the Schedule, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to JPB's preparation and fair presentation of the Schedule in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of JPB's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the Schedule.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.
Opinion

In our opinion, the Schedule referred to above present fairly, in all material respects, the respective financial position of JPB’s TFCA Program Regional Fund Project for the project period ended June 30, 2017 in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 2, the Schedule presents the financial activity and balances of JPB’s TFCA funding, and do not purport to, and do not, present fairly the financial position of JPB’s as of June 30, 2017 in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Los Angeles, California
November 16, 2018
<table>
<thead>
<tr>
<th>Project Description</th>
<th>TFCA Project Number</th>
<th>TFCA Project Allocation</th>
<th>Final Project Expenses through 6/30/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caltrain Shuttle Program</td>
<td>16R19</td>
<td>$753,700</td>
<td>$188,425</td>
</tr>
</tbody>
</table>

See accompanying notes to schedule of expenses of project.
NOTE 1 – TRANSPORTATION FUND FOR CLEAN AIR ACT PROGRAM BACKGROUND

Health and Safety Code Section 44223 and 44225 authorize a surcharge on the motor vehicle registration fee (surcharge) to be used by the Bay Area Air Quality Management District (Air District) and local governments specifically for programs to reduce air pollution from motor vehicles. The Department of Motor Vehicles collects the surcharge and allocates the amounts to the Air District. The Air District administers these funds through the Transportation Fund for Clean Air (TFCA) Program. Under the TFCA Program, money is allocated to two funds: (1) 60% is placed in the Regional Fund and allocated to agencies on a competitive basis by the Air District and (2) 40% is placed in the Program Manager Fund and allocated to designated agencies. Allowable projects under Health and Safety Code Section 44241 include the following:

- The implementation of ridesharing programs.
- The purchase or lease of clean fuel buses for school districts and transit operators.
- The provision of local feeder bus or shuttle service to rail and ferry stations and to airports.
- Implementation and maintenance of local arterial traffic management, including, but not limited to, signal timing, transit signal preemption, bus stop relocation and “smart streets.”
- Implementation of rail-bus integration and regional transit information systems.
- Implementation of demonstration projects in telecommuting and in congestion pricing of highways, bridges, and public transit.
- Implementation of vehicle-based projects to reduce mobile source emissions, including, but not limited to, engine repowers, engine retrofits, fleet modernization, alternative fuels, and advanced technology demonstrations.
- Implementation of a smoking vehicles program.
- Implementation of an automobile buy-back scrappage program operated by a governmental agency.
- Implementation of bicycle facility improvement projects that are included in an adopted countywide bicycle plan or congestion management program.
- The design and construction by local public agencies of physical improvements that support development projects that achieve motor vehicle emission reductions. The projects and the physical improvements shall be identified in an approved area-specific plan, redevelopment plan, general plan, or other similar plan.

NOTE 2 – BASIS OF PRESENTATION

The accompanying Schedule of Expenses of Project (Schedule) has been prepared in conformity with U.S. generally accepted accounting principles. The Schedule was prepared using the economic resources measurement focus and accrual basis of accounting. Expenses are recorded when the liability is incurred, regardless of the timing of related cash flows. Expenses as noted in the Schedule represent only the amount funded by the Air District. Expenses of matching and other funding sources are not reported on the Schedule.

Financial Reporting Entity: The audited Schedule represents only the TFCA Program Regional Funds allocated to the Peninsula Corridor Joint Powers Board (JPB) for certain project and is not intended to present fairly the financial position and results of operations of JPB as a whole.
NOTE 2 – BASIS OF PRESENTATION (continued)

**Project:** The project included in the accompanying Schedule are funded through the Regional Fund and were completed between July 1, 2016 and June 30, 2017. For the purpose of this audit, the Air District considers a project to be completed when the Air District accepts and approves the project sponsor’s final invoice, which documents the project sponsor’s expense of all eligible project funds and the completion of all initial project milestones (e.g. having procured and/or placed all project-related vehicles, equipment, and infrastructure into service). Project may have started several years earlier and may continue to operate after audit.

**Project Allocation:** The Air District entered into a Funding Agreement with JPB which established the maximum allocation of funding to the project, along with JPB’s matching requirement to receive the maximum allocation.

**Final Project Expenses:** The amounts included within the accompanying Schedule represent actual expenses paid by JPB for the year ended June 30, 2017.
Report on Compliance and Internal Control Over Compliance in Accordance with the Requirements of Section 44241 of the California Health and Safety Code

Board of Directors
Peninsula Corridor Joint Powers Board
San Carlos, California

Board of Directors
Bay Area Air Quality Management District
San Francisco, California

Report on Compliance with Section 44241 of the California Health and Safety Code

We have audited the Peninsula Corridor Joint Powers Board’s (JPB) compliance with the requirements of Section 44241 of the California Health and Safety Code (HSC) for the year ended June 30, 2017.

Management’s Responsibility

Management is responsible for compliance with the requirements of Section 44241 of the HSC that are applicable to JPB’s Transportation Fund for Clean Air (TFCA) Program Regional Fund project reported in the Schedule of Expenditures of Project (Schedule).

Auditor’s Responsibility

Our responsibility is to express an opinion on compliance for JPB’s compliance with the requirements of Section 44241 of the HSC based on our audits.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States; and Section 44241 of the HSC. Those standards and Section 44241 of the HSC require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on the project reported in the Schedule occurred. An audit includes examining, on a test basis, evidence about JPB’s compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance with those requirements. However, our audits do not provide a legal determination on JPB’s compliance with those requirements.
Opinion

In our opinion, JPB complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on its project reported on the Schedule for the year ended June 30, 2017.

Report on Internal Control over Compliance

Management of JPB is responsible for establishing and maintaining effective internal control over compliance with requirements referred to above. In planning and performing our audit of compliance, we considered JPB’s internal control over compliance with requirements that could have a direct and material effect on the project(s) reported on the Schedule to determine the auditing procedures that are appropriate in circumstances for the purpose of expressing our opinion on compliance and to test and report on internal control over compliance in accordance with Section 44241 of the HSC, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of JPB’s internal control over compliance.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity’s Schedule will not be prevented or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control and internal control over compliance was for the limited purpose described in the first paragraphs of this section and was not designed to identify all deficiencies in internal control and internal control over compliance that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control or internal control over compliance that we consider to be material weaknesses. However, a material weakness may exist that has not been identified.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control over compliance, compliance and the results of that testing based on the requirements of Section 44241 of the HSC. Accordingly, this communication is not suitable for any other purpose.

Los Angeles, California
November 16, 2018
Dear Lori,

Thank you for your response. To be clear, we are asking for a rearrangement of seats and bike racks in EMU trains, not seat removal.

Sincerely,
BIKES ONboard Team

On 2018-11-30 17:15, Caltrain, Bac (@caltrain.com) wrote:

Dear BIKES ONboard,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

Recently, Caltrain was awarded State Transit and Intercity Rail Capital Program (TIRCP) funds, however the grant award was approximately a 1/3 of the money requested. Caltrain cannot purchase as many additional electric train vehicles as originally planned at this time. Nevertheless, this additional funding will help bring more relief to an already overburdened system. There will be future discussions about how to best utilize space in the additional vehicles that will be purchased with the TIRCP money.

As our riders know, Caltrain is extremely busy during commute times, with some of the trains at 140% capacity. Future ridership growth projections show demand continuing to grow and Caltrain is working to identify opportunities and strategies to meet the needs of the corridor with the development of a Business Plan.

While in the past Caltrain was able to remove excess seats to provide more onboard space for bikes, the landscape has drastically changed with ridership nearly doubling since the beginning of this decade. Space at the stations is more abundant than onboard, and there is now a greater ability to serve people with bikes at stations. The current bike parking options leave a lot to be desired but huge advances in bike sharing, electronic lockers, and controlled access bike parking facilities can provide great options for many people who want to use a bike and Caltrain. Caltrain has designated more than $3.5M to make vast bike parking improvements at the stations; and recently, a full-time station access planner was hired to implement Caltrain's Bike Parking Management Plan and improve
In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan additional public meetings regarding bike security in the future.

Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori

From: Bikes on Board [mailto:bikesonboard@sonic.net]
Sent: Thursday, November 29, 2018 10:32 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: In support of purchasing more rail cars only if seats are within view of bikes

Dear Chair Bruins and Members of the Joint Powers Board,

A thousand people have signed a petition for more capacity on electrified Caltrain and seats within view of bikes to deter bicycle theft (see attached file).

We strongly support the purchase of more rail cars enabled by the TIRCP grant, but only on the condition that the purchase is coupled with redesigned car layout to put seats within view of bikes.

We recommend at least half as many seats as bike spaces, the same as in bike cars today. There is already a problem with bike theft from Caltrain and we certainly don't want to make it worse with fewer seats within view of bikes compared with today.

Thank you for your attention toward keeping passengers' property secure.

Respectfully,
BIKES ONboard team

P.S. Please confirm receipt of this email. In the past, emails with attachments to Caltrain have disappeared with no failure notice to the sender.

-------------

Petition Text:

I support more capacity on electrified Caltrain and seats within view of bikes to deter bicycle theft.

Caltrain plans to electrify its line and run six-car electric trains, which have fewer seats and less bike capacity than
today's diesel trains and no dedicated seats within view of bikes. I urge Caltrain to run eight-car (instead of six-car) electric trains with seats within view of bikes. Eight-car trains with 96 bike spaces per train satisfy the board-mandated 8:1 ratio of seats-to-bike-spaces and provide more capacity for all Caltrain passengers.
Dear Ed,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

Recently, Caltrain was awarded State Transit and Intercity Rail Capital Program (TIRCP) funds, however the grant award was approximately a 1/3 of the money requested. Caltrain cannot purchase as many additional electric train vehicles as originally planned at this time. Nevertheless, this additional funding will help bring more relief to an already overburdened system. There will be future discussions about how to best utilize space in the additional vehicles that will be purchased with the TIRCP money.

As our riders know, Caltrain is extremely busy during commute times, with some of the trains at 140% capacity. Future ridership growth projections show demand continuing to grow and Caltrain is working to identify opportunities and strategies to meet the needs of the corridor with the development of a Business Plan.

While in the past Caltrain was able to remove excess seats to provide more onboard space for bikes, the landscape has drastically changed with ridership nearly doubling since the beginning of this decade. Space at the stations is more abundant than onboard, and there is now a greater ability to serve people with bikes at stations. The current bike parking options leave a lot to be desired but huge advances in bike sharing, electronic lockers, and controlled access bike parking facilities can provide great options for many people who want to use a bike and Caltrain. Caltrain has designated more than $3.5M to make vast bike parking improvements at the stations; and recently, a full-time station access planner was hired to implement Caltrain’s Bike Parking Management Plan and improve bike access.

In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Ed Ruder [mailto:ed@ruders.org]
Sent: Tuesday, November 27, 2018 10:50 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: I'm a bicycle commuter on Caltrain

TWIMC:

- I commute between San Jose Diridon and San Francisco 4th and Townsend stations 4 out of 5 weekdays, and have been for almost 7 years.
- I ride my bike between my home and Diridon station (~ 2 miles), and between 4th and Townsend and my office on Market & 11th (~ 2 miles), taking my bike on a bike car.
- My work life is scheduled around the express trains.
- I have been looking forward to the new electrified Caltrain line for many years.
- I appreciate the work that Caltrain has been doing to lengthen the electric trains to accommodate more daily riders--I think it's a great commute option that is bound to get more popular with better trains.
- I think using the bike car is also an excellent option that will become more popular if the accommodations for cyclists are good.
- Unfortunately, the bike car designs that Caltrain has considered to date all have the same flaw--an almost complete lack of seats near the bikes. This is a fatal flaw, as it leaves bikes exposed to easy theft, which will be rampant unless the design is changed.
- There simply are not reasonable alternatives for my daily commute to bringing my bike on Caltrain.

- As it is, my commute is 90 minutes, each way.
- Any combination of bike parking/bike rentals/scooter rentals/etc. would increase the cost and/or the time of my commute, such that I wouldn't be able to use Caltrain at all.
- I would probably need to commute by car, adding to the congestion on our deadlocked freeways.
- Likely, this would not be feasible for me, long term, and I will need to look for a different job.

Please reconsider other designs for the Caltrain bike cars that provide fixed seating near the bikes. This will greatly reduce theft, decrease congestion on bike cars, and increase the utility of Caltrain as a commute option.

Sincerely,

Ed Ruder
I support seats in view of bikes on the new Caltrain bike cars
Dear Warren,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori

-----Original Message-----
From: Warren Chan [mailto:]
Sent: Monday, November 26, 2018 8:57 PM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); janice@sfbike.org
Subject: I support seats in view of bikes on the new Caltrain bike cars

To the Board of Caltrain:

I am so excited that Prop 6 has failed and Caltrain now has the opportunity and funds to move to enhance service through electrification and new cars.

I urge the Caltrain Board to address the issue of bike thief on trains by including fixed seating in view of bicycles as it exists now in the older cars. Bike thief is a known problem and it would be negligent to ignore this problem when designing and ordering new equipment.

Sincerely,
Warren Chan
Dear Steven,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

Recently, Caltrain was awarded State Transit and Intercity Rail Capital Program (TIRCP) funds, however the grant award was approximately a 1/3 of the money requested. Caltrain cannot purchase as many additional electric train vehicles as originally planned at this time. Nevertheless, this additional funding will help bring more relief to an already overburdened system. There will be future discussions about how to best utilize space in the additional vehicles that will be purchased with the TIRCP money.

As our riders know, Caltrain is extremely busy during commute times, with some of the trains at 140% capacity. Future ridership growth projections show demand continuing to grow and Caltrain is working to identify opportunities and strategies to meet the needs of the corridor with the development of a Business Plan.

While in the past Caltrain was able to remove excess seats to provide more onboard space for bikes, the landscape has drastically changed with ridership nearly doubling since the beginning of this decade. Space at the stations is more abundant than onboard, and there is now a greater ability to serve people with bikes at stations. The current bike parking options leave a lot to be desired but huge advances in bike sharing, electronic lockers, and controlled access bike parking facilities can provide great options for many people who want to use a bike and Caltrain. Caltrain has designated more than $3.5M to make vast bike parking improvements at the stations; and recently, a full-time station access planner was hired to implement Caltrain’s Bike Parking Management Plan and improve bike access.

In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,

Lori Low

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From: Steven Kasapi [mailto:] On Behalf Of Steven Kasapi Sent: Monday, November 26, 2018 9:17 PM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); janice@sfbike.org
Subject: I support seats in view of bikes on the new Caltrain bike cars

Hi,

I’m a regular commuter on Caltrain and think bicycle cars which don’t enable bike owners to keep an eye on their bikes is a mistake. Please ensure that the new electrified trains allow riders to keep an eye on their bikes.

All the best,

- Steven
Dear Sandee,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,

Lori Low

-----Original Message-----
From: sandee hall [mailto:]
Sent: Tuesday, November 27, 2018 7:17 AM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); janice@sfbike.org
Subject: I support seats in view of bikes on the new Caltrain bike cars

Dear Sir or Madam,

PLEASE revisit the new train car designs to accommodate seating within view of our bicycles, so our bicycles can arrive safely at our destinations alongside us. With these new train enhancements, we should have the ability to adequately protect our property and have peace of mind while commuting.

A smart bicycle infrastructure is incredibly important to our future as this becomes a more popular and green way of living!

Thank you,

Sandee Hall

Typos courtesy of my iPhone.
As a frequent Caltrain ride who makes use of the bike car for commuting with my bike, the inclusion of seats within view of my bike is essential for my continued use of Caltrain for my commute. Please consider adding seats within view of the bikes stored in the car.

Thank you, and best,
Luke

Sent from my iPhone
Hi,
Adding my voice regarding the need to allow us caltrain bike commuters to keep an eye on our bikes.

Bike theft is a huge problem in the bay area, ranging from people jacking lights and other accessories to stealing the whole bike.

The thieves are very smart and determined and will surely find ways to outsmart camera security.

Don't over complicate the situation. Just let us riders watch our own bikes, and then if something happens to them, we have only ourselves to blame.

Thanks!
Andrew Lieberman
South San Francisco
Commuters with bicycles are more and more numerous each year on caltrain as people realize the enormous value of commuting via train and commuting from home/work to/from caltrain via bicycle. This has compounding effects on our communities by reducing pollution and traffic congestion.

Please give cyclists due consideration during planning of the new train cars.
As a CalTrain rider and bike commuter, I hope you decide to adopt bike cars with seating that allows riders to watch their bikes. I would feel completely uncomfortable riding in a car without visibility. I would resort to locking my bike to itself, which would clog traffic and ease of use within the car, or decide to find alternate modes of traveling from the south bay to north bay.

Thank you for your time,

Liz Bloomfield
It is unconscionable that a bike car would be designed without security for the very bikes it will carry. I would not put my bike onto a car if I cannot keep an eye on it. There is too much temptation for an unsecured bike to be stolen in the Bay Area. This has been proven time and time again.

Please add seating within view of the bike area to the new bike cars.

Regards,
Craig Mautner
Dear Elizabeth,

Thank you for your email. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification Project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Elizabeth Amherdt [mailto:]
Sent: Wednesday, December 05, 2018 9:57 AM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); janice@sfbike.org
Subject: I support seats in view of bikes on the new Caltrain bike cars
Dear Craig,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

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From: Craig Mautner [mailto:craig.mautner@alumni.ucsd.edu]
Sent: Wednesday, December 05, 2018 7:20 AM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); janice@sfbike.org
Subject: I support seats in view of bikes on the new Caltrain bike cars

It is unconscionable that a bike car would be designed without security for the very bikes it will carry. I would not put my bike onto a car if I cannot keep an eye on it. There is too much temptation for an unsecured bike to be stolen in the Bay Area. This has been proven time and time again.

Please add seating within view of the bike area to the new bike cars.

Regards,
Craig Mautner
From: Caltrain, Bac (@caltrain.com)
To: "Liz Bloomfield", Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); janice@sfbike.org
Subject: RE: I support seats in view of bikes on the new Caltrain bike cars
Date: Friday, December 07, 2018 9:26:36 AM

Dear Liz,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification Project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

-----Original Message-----
From: Liz Bloomfield [mailto:]
Sent: Tuesday, December 04, 2018 10:37 PM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); janice@sfbike.org
Subject: I support seats in view of bikes on the new Caltrain bike cars
As a CalTrain rider and bike commuter, I hope you decide to adopt bike cars with seating that allows riders to watch their bikes. I would feel completely uncomfortable riding in a car without visibility. I would resort to locking my bike to itself, which would clog traffic and ease of use within the car, or decide to find alternate modes of traveling from the south bay to north bay.

Thank you for your time,

Liz Bloomfield
Dear Reed,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification Project there will be a **17% increase in onboard bike capacity**.

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Best,
Lori Low

From: Reed Sandberg [mailto:
Sent: Tuesday, December 04, 2018 8:41 PM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); janice@sfbike.org
Subject: I support seats in view of bikes on the new caltrain bike cars

Commuters with bicycles are more and more numerous each year on caltrain as people realize the enormous value of commuting via train and commuting from home/work to/from caltrain via bicycle. This has compounding effects on our communities by reducing pollution and traffic congestion.

Please give cyclists due consideration during planning of the new train cars.
Dear Andrew,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Andrew Lieberman [mailto:alieberman@scu.edu]
Sent: Tuesday, December 04, 2018 6:19 PM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); janice@sfbike.org
Subject: I support seats in view of bikes on the new Caltrain bike cars

Hi,
Adding my voice regarding the need to allow us caltrain bike commuters to keep an eye on our bikes.

Bike theft is a huge problem in the bay area, ranging from people jacking lights and other accessories to stealing the whole bike.

The thieves are very smart and determined and will surely find ways to outsmart camera security.

Don't over complicate the situation. Just let us riders watch our own bikes, and then if something happens to them, we have only ourselves to blame.

Thanks!
Andrew Lieberman
South San Francisco
Dear Elizabeth,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Elizabeth Chur [mailto:]
Sent: Tuesday, December 04, 2018 6:07 PM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); janice@sfbike.org
Subject: I support seats in view of bikes on the new Caltrain bike cars

To Whom It May Concern:

I live in San Francisco, and recently started consulting at Stanford University. Whenever I can, I ride my bike to CalTrain and take my bike aboard instead of driving. I choose to do this even though sometimes it takes twice as long as driving, because I want to minimize my carbon footprint and also because I can work or relax on my train ride.

It is essential to make sure that the new electrified train cars have enough seats with a view of the parked bikes in order to prevent theft. This was one of my biggest concerns with riding CalTrain. Because we are specifically prohibited from locking our bikes to the racks, it is even more important to be able to keep an eye on my bike. In addition, sometimes people who aren’t bike riders choose to sit in the bike car. For this reason, the number of seats should be at least equal to the bike rack capacity, if not more.

I feel good about riding CalTrain, and helping to protect the environment while also letting someone else do the driving. However, it is very important that we have sufficient seats in view of the bikes on the new Caltrain bike cars. Can you imagine how expensive a commute this would become if my bike were stolen even once a year off the train? Having seats with views of the bikes serves as a deterrent for would-be thieves, since they know that the owners are likely watching over their property. Please ensure that this continues to be the case.

Thank you for your consideration.

With best wishes,

Elizabeth Chur
Dear Luke,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

-----Original Message-----
From: Luke Bornheimer [mailto:luke.bornheimer@gmail.com]
Sent: Tuesday, December 04, 2018 5:35 PM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); janice@sfbike.org
Subject: I support seats in view of bikes on the new Caltrain bike cars

As a frequent Caltrain ride who makes use of the bike car for commuting with my bike, the inclusion of seats within view of my bike is essential for my continued use of Caltrain for my commute. Please consider adding seats within view of the bikes stored in the car.

Thank you, and best,
Luke

Sent from my iPhone
Dear Brad,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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While in the past Caltrain was able to remove excess seats to provide more onboard space for bikes, the landscape has drastically changed with ridership nearly doubling since the beginning of this decade. Space at the stations is more abundant than onboard, and there is now a greater ability to serve people with bikes at stations. The current bike parking options leave a lot to be desired but huge advances in bike sharing, electronic lockers, and controlled access bike parking facilities can provide great options for many people who want to use a bike and Caltrain. Caltrain has designated more than $3.5M to make vast bike parking improvements at the stations; and recently, a full-time station access planner was hired to implement [Caltrain’s Bike Parking Management Plan](#) and improve bike access.

In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan to have additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

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From: Brad Zuchero [mailto:brad.zuchero@gmail.com]
Sent: Tuesday, December 04, 2018 5:33 PM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); janice@sfbike.org
Subject: I support seats in view of bikes on the new Caltrain bike cars

Dear Caltrain Board,

I have been commuting by Caltrain and bicycle every weekday since 2010, traveling between San Mateo and Palo Alto, bringing my bike on the train. I’ve even seen a bike being stolen from a galley train on one occasion and managed to chase down the thief and return the bike to its owner. So I know first hand that thefts happen even now, and I can tell you that I would not feel comfortable bringing my bike onto a car where I couldn’t see my bike. I support the SF Bike Coalition’s recommendation to re-design the new electric cars to allow bicyclists to sit in view of their bikes. I trust there is a solution that would not reduce the number of bikes allowed per train, as bikes on Caltrain keep increasing.

Thanks for your attention.

Brad

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Brad Zuchero, PhD
Assistant Professor of Neurosurgery
Stanford University School of Medicine
zucherolab.stanford.edu
Dear Sara,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification Project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

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From: Sara Jeevanjee [mailto:]
Sent: Wednesday, December 05, 2018 3:53 PM
To: Board (@caltrain.com)
Cc: Janice Li; Caltrain, Bac (@caltrain.com)
Subject: I support seats in view of bikes in new CalTrain cars

Hi

I am a loyal and regular Caltrain and bicycle commuter and rely on sitting in the bike cars (whenever possible) so that I can ensure that one of my most treasured possessions- my bicycle- is not stolen during my train ride. So, I was alarmed to learn that the design of the new electric cars does not include the feature of seats in the bicycle cars. Despite having seats in our current bike cars, cyclists on Caltrain still experience theft of their beloved bicycles. What will happen when there are no eyes in the bike car? I can only imagine that theft will worsen.

I appreciate the efforts Caltrain has taken to make bike commuting safe and comfortable. This enables me to use Caltrain for my commute from San Francisco to San Jose, which would not be doable without the bicycle infrastructure of Caltrain. Please ensure that the security of our bicycles on Caltrain is ensured by incorporating seats in view of bikes to the electric car design so that I can continue my commute without worries about the safety of my trusty steed!

Thank you,
Sara Jeevanjee
Dear Preston,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

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From: Preston Rhea [mailto:]
Sent: Tuesday, November 27, 2018 11:41 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Help Prevent Bike Theft on Electric Caltrain!

Hello all,

As a biker and a rider on Caltrain, thank you for planning to buy more rail cars to run longer electric trains. We need more clean, fast, and reliable transit in the Bay Area!

The new rail cars provide an opportunity to redesign the bike-car layout to put seats within view of bikes. Caltrain's current plan is no fixed seats within view of bikes.

Seats within view of bikes will deter bicycle theft and help keep trains on time by reducing congestion in bike lanes.

If I didn't ride Caltrain with my bike, I would have to pay lots of money to take TNC or taxi rides, or experience longer waits on local transit - the bike is crucial, and I can't afford to have it stolen!

We need 96 bike spaces per train to meet demand in 2022, when electrified service will begin.

So please - design the new electric Caltrain cars to accommodate plenty of bikes and seating for riders to protect their bikes!

Thank you for all you do,

Preston Rhea
Dear John,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

-----Original Message-----
From: John Schlag [mailto:jschlag.me@gmail.com]
Sent: Tuesday, November 27, 2018 10:28 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Format of new electric train cars

Briefly put: more bike space, and more seating within view of it, please!

-john schlag
Dear Andrew,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: andrew [mailto:andrew@aehrlch.com]
Sent: Monday, December 03, 2018 10:58 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: For Caltrain, for bikes

Hello,

I am a big caltrain user and a big cycler. When I ride caltrain, I always take a seat where I can see my bike. As you know, theft is a huge problem in all bay area cities. When you plan the future of the train, please make sure that I can feel safe and secure using your system, whether this means a way to lock (without a cable) or a seat where I can keep an eye on things.

Andrew Ehrlich
andrew@aehrlch.com
Dear Mark,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Mark Sheinbaum [mailto:]
Sent: Tuesday, November 27, 2018 10:15 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Electrification and bikes

• Thanks Caltrain for planning to buy more rail cars to run longer electric trains.
• New rail cars provide an opportunity to redesign bike-car layout to put seats within view of bikes.
• Seats within view of bikes will deter bicycle theft or damage, and help keep trains on time by reducing congestion in bike cars.
• If Caltrain was unavailable, I would have to drive to work.
• Bike cars are maxed out today and we need 96 bike spaces per train to meet demand in 2022, when electrified service will begin.

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Sent from my Gmail account,
Dear Sir / Madam,

As a daily biker and Caltrain commuter, I am excited about the electrification of Caltrain and the opportunities it provides for improving bikers experience. In particular, the current trains, especially in the peak hours, are maxed out in terms of available bike spots, piling up bikes creates hazards and inconvenience for the passengers, so having more bike spaces in the new electric cars would be great. Second, given how prominent bike theft is in Bay Area, it is crucial that there are seats in close proximity and direct sight over the bikes to minimize the chances of bike theft.

I appreciate your work and am looking forward to the future upcoming changes!

Best,
Gleb
Dear Demetrius,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Demetrius Marcoulides [mailto:]
Sent: Thursday, November 29, 2018 5:48 AM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); bikesonboard@sonic.net; cacsecretary [@caltrain.com]; CalMod@caltrain.com
Subject: Electric cars

Hi board -

Buy cars with seats in view of the bikes. Please review specify points below.

Thanks
Demetrius

Thank Caltrain for planning to buy more rail cars to run longer electric trains.

Explain that new rail cars provide an opportunity to redesign bike-car layout to put seats within view of bikes (Caltrain's current plan is no fixed seats within view of bikes).

Tell Caltrain that seats within view of bikes will deter bicycle theft and help keep trains on time by reducing congestion in bike cars.

Tell Caltrain that bike cars are maxed out today and we need 96 bike spaces per train to meet demand in 2022, when electrified service will begin.

--
Demetrius Marcoulides, AGNP-C
Adult Gerontological Primary Care Nurse Practitioner with Post-Master HIV & HCV Primary Care Certifications

Johns Hopkins School of Nursing
dmarcou2@jhu.edu - nursing.jhu.edu
Dear David,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: David Hsu [mailto:]
Sent: Tuesday, November 27, 2018 9:02 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Electric Caltrain Bike Car Seats

Hi,

Thank you for taking the step to electrify Caltrain. I believe that biking is a vital component of Caltrain's future, and that comes from ensuring that bike thefts are minimized in the new electric cars. Please ensure that there are seats in the new bike cars or another way to minimize theft, and ensure there are enough bike spaces in the new cars (96+).

Thanks,
David Hsu
Bikes on Caltrain

Alternative designs for seats within view of bikes

December 2018
We’re asking for a re-design of EMU bike cars to allow **seats within view of bikes**
Today’s bike cars

- Gallery bike cars: 40 seats, 28 to 32 bikes
- Bombardier bike cars: 24 seats, 12 to 15 bikes
Current bike car design for EMU trains

No fixed seats within view of bikes
<table>
<thead>
<tr>
<th>Current EMU design</th>
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<tr>
<td>Seats within view of bikes (deters bike theft)</td>
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</table>
BIKES ONboard Project

Possible alternative car designs

Current 6-car setup

Options for 7-car and 8-car EMU trains

Option 1: Swap seats and bikes in powered (E) and unpowered (D/F) cars

Option 2: Swap seats and bikes to distribute bikes to all cars (12 bikes per car)
Alternative design – Option 1

Swap seats and bikes in powered and unpowered cars
Current bike car design (85 ft. long, unpowered) – “D” car, same as “F” car

Proposed unpowered bike car design: 24 bikes in view of 16 fixed seats
Current trailer car design (82 ft. long, powered) – “E” car

Proposed powered bike car design: 20 bikes in view of 12 fixed seats
## Option 1: Car re-design summary

<table>
<thead>
<tr>
<th>Feature</th>
<th>Current EMU design</th>
<th>Distributed bike design</th>
</tr>
</thead>
<tbody>
<tr>
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<td>✅</td>
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</tr>
</tbody>
</table>
Alternative design – Option 2

Swap seats and bikes to distribute bikes to all cars
"B" car – same as "A" car (90 ft long)
BIKES ONboard Project

"D" car – same as "F" car (85 ft long)
BIKES ONboard Project

"E" car (82 ft long)
"C" car (82 ft long)
Option 2: Car re-design summary

<table>
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<td>✗</td>
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</table>
Our recommendations:

• Eight-car EMU trains with 756 seats and 96 bike spaces, meeting the 8:1 board-approved ratio

• Full transparency with public on train design blueprints

Act now, while there’s still time
Caltrain is key to the region

- Bay Area congestion on the rise, now of Americas most congested cities
- Caltrain ridership +70% since 2009
- No space to grow freeways 101 & 280: Caltrain capacity is vital for the Peninsula corridor
1 bike less = 1 car more

- Bikes on board is an economical, environmentally friendly way to resolve the first/last-mile problem
- Bike commuters’ alternative is driving

Caltrain is part of a transportation ecosystem
EMU: Harder for bikes

- Bikes grouped in two bike cars with bike riders unable to see their bikes
  - Increased thefts (cameras are not a deterrent)
  - Congestion for cyclists leading to train delays
  - How to access windows in case of emergency?
How Caltrain can win

- Find funding to launch with eight-car EMU trains
- Distribute bikes along the train
- Save money now instead of a costly train retrofit in the future
- Work collaboratively with users of the system and bike organizations to find a solution
Dear Kieran,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

Recently, Caltrain was awarded State Transit and Intercity Rail Capital Program (TIRCP) funds, however the grant award was approximately a 1/3 of the money requested. Caltrain cannot purchase as many additional electric train vehicles as originally planned at this time. Nevertheless, this additional funding will help bring more relief to an already overburdened system. There will be future discussions about how to best utilize space in the additional vehicles that will be purchased with the TIRCP money.

As our riders know, Caltrain is extremely busy during commute times, with some of the trains at 140% capacity. Future ridership growth projections show demand continuing to grow and Caltrain is working to identify opportunities and strategies to meet the needs of the corridor with the development of a Business Plan.

While in the past Caltrain was able to remove excess seats to provide more onboard space for bikes, the landscape has drastically changed with ridership nearly doubling since the beginning of this decade. Space at the stations is more abundant than onboard, and there is now a greater ability to serve people with bikes at stations. The current bike parking options leave a lot to be desired but huge advances in bike sharing, electronic lockers, and controlled access bike parking facilities can provide great options for many people who want to use a bike and Caltrain. Caltrain has designated more than $3.5M to make vast bike parking improvements at the stations; and recently, a full-time station access planner was hired to implement Caltrain’s Bike Parking Management Plan and improve bike access.

In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Kieran Culligan [mailto:]
Sent: Wednesday, November 28, 2018 12:21 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Cycling + Caltrain = decent commute options for the Bay Area

Hello,

I am very pleased to hear that Caltrain is buying more rail cars. I would encourage you to study alternative layouts that increase bike capacity while also keep seats within view of the bikes. This will reduce thefts. Right now all of us in the bike car are keeping an eye on suspicious activity. It's not just me keeping an eye on my own bike, I am doing the same for my fellow riders. It would be worrying if this is lost in the new layouts.

For me, the bike + train combo is my only option for staying sane on my commute. My alternatives are to:

1) Take a bus from Mill Valley. This requires a car or bike to get to the transit depot and typically includes car-sickness from being on the bus for hours.
2) Drive. Way too far and painful from Sausalito to Mountain View every day.

Just two days ago I witnessed a whole bunch of bikes getting bumped at Cal Ave and Palo Alto on a rainy evening - I hope we can avoid these situations in the future because it creates a huge impediment to environmentally-friendly commuting.

I appreciate your continued focus on this matter and identifying solutions for an important Caltrain ridership group: cyclists. We are using creative solutions to reduce the number of cars on the road, and we could use your help to accelerate progress!

Best,

Kieran

Kieran Culligan
Dear Connor,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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As our riders know, Caltrain is extremely busy during commute times, with some of the trains at 140% capacity. [Future ridership growth projections](#) show demand continuing to grow and Caltrain is working to identify opportunities and strategies to meet the needs of the corridor with the development of a [Business Plan](#).

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Connor Kelley [mailto:]
Sent: Monday, December 03, 2018 9:36 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Concerns about Electrified Train Bike Cars

Good morning Caltrain!

My name is Connor Kelley and I'm a daily rider of Caltrain. I wanted to start off by saying thank you for the recent move to purchase more train cars to enable running longer trains, once the modernization project is done. I think this is a great decision and will help all of the daily riders by increasing comfort and accessibility. I really do appreciate it!

One thing I am concerned about is the current design layout of the electrified bike cars. Because there are no fixed seats in view of bike storage, I'm afraid that this will lead to an increase in theft - a major concern for bike + Caltrain folks. Without fixed seats in view of bike storage, I'm much less keen on bringing my bike aboard Caltrain, which would mean increased transportation costs for me or an unreasonably long walk.

Bike cars are already incredibly crowded - ideally we would have 96 bike spaces per train to meet demand. I encourage your team to redesign the new electrified bike car trains to help satisfy this need. Thank you for your time!

Best,
Connor
Dear Virginia,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Virginia Smedberg [mailto:]
Sent: Tuesday, November 27, 2018 7:31 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Caltrains new cars

Dear Board and friends:

I am very happy Caltrain plans to buy more rail cars, to run longer electric trains. What is important now is to design those cars for best space use, especially for bike riders.

We love being able to combine our two MOST energy-efficient modes of transport - bikes and trains. However it is VERY important to us to sit within view of our bikes - and we've calculated that that will also make the loading faster and smoother. It is also very important that we know there will be enough bike spaces, because if the danger of being bumped can make me potentially late to a performance (I'm a violinist), I can't afford to risk it. Which would mean driving. Yuck.

We bikers have calculated that we need 96 bike spaces per train to meet the 2022 demand - when the electric service is planned to begin - and that that number is do-able with the right design. Right now our bike spaces are filled to the brim during commutes. So we really want you to plan ahead.

cheers - virginia smedberg
Palo Alto
Dear Sarah,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Sarah E [mailto:]
Sent: Tuesday, November 27, 2018 6:34 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Caltrain Electric Trains

Hi Caltrain,

I heard about the new electrification of Caltrain and am excited to see my daily commute become more energy efficient and speedy. I am a daily commuter with a bike and love the bike cars. I have heard that the new electric cars won't have seats in the bike cars. That's really disappointing to me because I've seen bike theft and bike gadget theft (such as lights or cameras being pulled off bikes). The thieves were only stopped because there were cyclists in the bike car, keeping watch on the bikes. Without seats, bike thieves will run rampant (not might, but will. If there's an opportunity you can bet some sorry soul will take it).

I ALWAYS watch my bike and I'm not the only one. If there are no seats in the bike car I'm apt to just stand in the aisle (which would be in the way of everyone and if multiple of us stand in the way so we can keep an eye on our bikes then there will be some serious congestion and slow down loading and unloading the bikes).

In addition, cyclists are always getting bumped off the trains. The bike cars are maxed out constantly. Please, I request that we need at least 96 bike spaces per train to meet future rider demand as well as seats in the bike cars to prevent theft and congestion.

If Caltrain becomes too congested or unsafe for cyclists to use, I won't be buying my daily ticket to ride (and I'm not alone, many of my cycling peers feel the same).

Thank you for your consideration,

Sarah
Dear Jaci,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Jaci Sanchez [mailto:]
Sent: Tuesday, November 27, 2018 4:56 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Caltrain Bike Cars

Good Afternoon Caltrain Board,

I recently learned that you are planning to buy more rail cars to run longer electric trains. I wanted to say first as a commuter- Thank You! This is improve my daily commute and I greatly appreciate it. I also wanted to mention that I am a bicyclist and I really enjoy being able to use the bike cars. Lately they have been very full, though, and often I have not been able to sit near my bike. I think it is very important to support the people who are biking to work and contributing to a cleaner environment by allowing them to feel comfortable riding the train without the risk of someone stealing their bikes. It would also deter congestion in the bike cars, which causes delays and potentially accidents. If I was not able to ride the Caltrain with my bike, I would be forced to drive my car which would cause more congestion and contribute to substantial environmental issues.

I want to stress that bike cars are maxed out today, and we really do need at least 96 bike spaces per train to meet demand in 2022, when electrified service will begin. Please consider the benefit this is for the community, the environment and Caltrain commuters!

Thank you,
Jaci Sanchez
Dear Charles,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a **17% increase in onboard bike capacity**.

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As our riders know, Caltrain is extremely busy during commute times, with some of the trains at 140% capacity. **Future ridership growth projections** show demand continuing to grow and Caltrain is working to identify opportunities and strategies to meet the needs of the corridor with the development of a Business Plan.

While in the past Caltrain was able to remove excess seats to provide more onboard space for bikes, the landscape has drastically changed with ridership nearly doubling since the beginning of this decade. Space at the stations is more abundant than onboard, and there is now a greater ability to serve people with bikes at stations. The current bike parking options leave a lot to be desired but huge advances in bike sharing, electronic lockers, and controlled access bike parking facilities can provide great options for many people who want to use a bike and Caltrain. Caltrain has designated more than $3.5M to make vast bike parking improvements at the stations; and recently, a full-time station access planner was hired to implement Caltrain’s Bike Parking Management Plan and improve bike access.

In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen [here](#). We plan additional public meetings regarding bike security in the future.
Thank you for planning on purchasing more rail cars to run longer electric trains. I hope you take the opportunity afforded by this purchase to redesign the car layout relative to bicycles so that cyclists can sit within view of their bicycles. Providing seating within view of bicycles will deter theft and reduce congestion by facilitating rapid loading and unloading without cyclists being forced to lock and unlock bikes on the train.

Bike cars are maxed out today and we need 96 bike spaces per train to meet demand in 2022 when electrified service is slated to begin.

Thank you,
--
Charles Sowers
Dear Noam,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Noam Zomerfeld [mailto:]
Sent: Monday, December 03, 2018 9:27 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Bikes on new rail cars!

Hi Caltrain!

As a previous and future bike-to-caltrain passenger, it's very important to me that bikes are safe while on the train. While I love that you are investing the future and buying more rail cars, it's CRUCIAL to have fixed seats by those bikes in order to deter bicycle thefts. If that's not the case, and our property is not safe while on your train, using caltrain to get to and from work won't be possible. All those passengers will have to use cars, and cars make all of us sad. :( 

Thank you,

- Noam Zomerfeld
Dear Madeline,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Madeline Sides [mailto:]
Sent: Tuesday, December 04, 2018 9:35 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com];
    bikesonboard@sonic.net
Subject: Bikes on New Electric Cars

Dear Caltrain Board,

Thank you for your work to improve transportation in the Bay Area. I know you are planning to buy more rail cars to run longer electric trains in the future, thank you!

As a daily bike-car user, I am writing to urge you to consider purchasing cars that have an improved bike-car layout to help bikers like me prevent bike theft and feel secure on board. For me, it is critical to be able to see my bike while I ride Caltrain. In fact, if I knew that I could not see my bike while riding Caltrain, I would not ride Caltrain with my bike.

If I didn't ride Caltrain with my bike, I would have to drive to the station or drive all the way to work, in Mountain View. I love riding my bike to Caltrain and hope that you'll consider this opportunity to improve bike-car layout in your newest cars.

Many thanks,

Madeline Sides
San Francisco Resident
Dear Vicki,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

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From: Vicki Pelton [mailto:vcp@vertical-edge.com]
Sent: Tuesday, November 27, 2018 8:30 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com];
bikesonboard@sonic.net
Subject: Bikes on electric trains

Thank you for buying more cars for the electric trains. Please ensure there are seats available in the bike cars so that owners can see their bikes.

--Vicki Pelton  vpelton@vertical-edge.com
Sent from my handheld super computer
Dear Daniel,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

Recently, Caltrain was awarded State Transit and Intercity Rail Capital Program (TIRCP) funds, however the grant award was approximately a 1/3 of the money requested. Caltrain cannot purchase as many additional electric train vehicles as originally planned at this time. Nevertheless, this additional funding will help bring more relief to an already overburdened system. There will be future discussions about how to best utilize space in the additional vehicles that will be purchased with the TIRCP money.

As our riders know, Caltrain is extremely busy during commute times, with some of the trains at 140% capacity. Future ridership growth projections show demand continuing to grow and Caltrain is working to identify opportunities and strategies to meet the needs of the corridor with the development of a Business Plan.

While in the past Caltrain was able to remove excess seats to provide more onboard space for bikes, the landscape has drastically changed with ridership nearly doubling since the beginning of this decade. Space at the stations is more abundant than onboard, and there is now a greater ability to serve people with bikes at stations. The current bike parking options leave a lot to be desired but huge advances in bike sharing, electronic lockers, and controlled access bike parking facilities can provide great options for many people who want to use a bike and Caltrain. Caltrain has designated more than $3.5M to make vast bike parking improvements at the stations; and recently, a full-time station access planner was hired to implement Caltrain’s Bike Parking Management Plan and improve bike access.

In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

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From: Daniel Trevino [mailto:]
Sent: Tuesday, November 27, 2018 11:30 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Bikes on CT

To Caltrain,

Thanks for planning to buy more rail cars to run longer electric trains. I know that the new rail cars provide an opportunity to redesign bike-car layout to put seats within view of bikes (We need seats within view of bikes will deter bicycle theft and help keep trains on time by reducing congestion in bike cars.

I've been riding for 8 years, I really need this.

Please avoid bike bumps (not being able to board) and think about bike riders.

Thanks!

Daniel Trevino
Dear Caltrain leadership,

I’m writing in support of additional bike cars with seating where cyclists can see their bikes. I’m very excited for the new electric trains and the opportunity it provides to improve train car layout. My commute is a 2.7 mile bike ride to the Redwood City station, then a mile in a San Francisco to get to UCSF Mission Bay where I’m working on my PhD in genetics. I would get on at Atherton if the station were active, but that’s another issue. The bike car makes my commute possible. Without it I would likely have to move, which would mean a worse living situation for myself and my dog. I have had to stop someone who tried to steal my bike on the train. If I hadn’t been able to sit near my bike, he would have gotten away with it, which would have been a real hardship for me as a graduate student. So, just want to lend my support to what you’re doing and encourage more and more pro-bike design where possible.

Thank you,

Kathleen Keough
Dear Kevin,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Kevin Jude [mailto:]
Sent: Tuesday, November 27, 2018 8:57 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Bikes on Caltrain

Dear board members,
I'm very excited about the prospect of Caltrain electrification - faster service with fewer emissions will be a huge win. But as a supercommuter (East Bay to Palo Alto), I need my bike for connections and first and last mile to make a transit commute bearable. I hear that the new bike cars won't have space for cyclists to sit near their bikes, which is disturbing from a security perspective.

Secure capacity for bikes is very important for multimodal commuters. I can't count on space for my bike at Millbrae, so I have to bike from Embarcadero BART to 4th St in the mornings. I'm hopeful that the electrification project will result in the secure bike capacity that Caltrain riders need for the future. Thank you for all that you do.

Best wishes
Kevin Jude
Berkeley
Dear Daniel,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Daniel Llinas [mailto:]
Sent: Tuesday, November 27, 2018 9:41 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Bikes on Caltrain

Thanks for considering adding more cars to the electric trains! I'm excited because this provides an opportunity to redesign the bike-car layout. I think it's really important for you guys to have bike cars where owners can keep an eye on their bikes. This will help deter thieves, and should also help reduce congestion on the bike cars. Bike cars are already pretty maxed out, so to meet demand in 2022, there should be about 100 spaces per train for bikes.

I ride caltrain every day with my bike to and from work. Please keep bike riders in mind as you plan!

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"I know of no more encouraging fact than the unquestioned ability of a man to elevate his life by conscious endeavor."

--Henry David Thoreau
Dear Michael,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Michael Escobar [mailto:]
Sent: Tuesday, November 27, 2018 2:27 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Bikes on Caltrain

Thank you for deciding to buy more railcars in order to run longer trains.

This purchase is an opportunity to optimize the design of the railcars. We need at least 96 bike spaces per train in order to meet demand in 2022.

The cars are already at capacity, as I know from experience. I have been a regular commuter on Caltrain since November 2016, boarding with my bike at SF 4th & King or Millbrae, and exiting at Mountain View.

Thank you,

Michael
Dear Cor,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Cor van de Water [mailto:]
Sent: Wednesday, November 28, 2018 11:46 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Bikes on Caltrain

As you are aware, there is a strong relation between ridership and bike transportation capacity onboard trains. Can you do the right thing and increase the current limited capacity? I see regularly that cars are filled to or over capacity with bikes already, which means that there is demand for more capacity already, because being bumped due to lack of capacity is already an issue - let's not turn more riders away due to insufficient capacity and negative experiences.

Thanks,
Cor van de Water,
Sunnyvale CA.
Dear Kathleen,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Kathleen Keough [mailto:]
Sent: Thursday, November 29, 2018 9:11 PM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); bikesonboard@sonic.net; cacsecretary [@caltrain.com]; CalMod@caltrain.com
Subject: Bikes on Caltrain

Dear Caltrain leadership,

I’m writing in support of additional bike cars with seating where cyclists can see their bikes. I’m very excited for the new electric trains and the opportunity it provides to improve train car layout. My commute is a 2.7 mile bike ride to the Redwood City station, then a mile in a San Francisco to get to UCSF Mission Bay where I’m working on my PhD in genetics. I would get on at Atherton if the station were active, but that’s another issue. The bike car makes my commute possible. Without it I would likely have to move, which would mean a worse living situation for myself and my dog. I have had to stop someone who tried to steal my bike on the train. If I hadn’t been able to sit near my bike, he would have gotten away with it, which would have been a real hardship for me as a graduate student. So, just want to lend my support to what you’re doing and encourage more and more pro-bike design where possible.

Thank you,

Kathleen Keough
Lori:

Thank you for your response to my email, and I would like to respond to your email:

My original comment was a request to provide seats in the bike car that provide a view of the bikes. In your fifth paragraph you mention that CalTrain used to be able to remove seats to provide space for bikes, but with increased ridership, that is no longer possible. I am not asking to remove seats, but to redesign the bike car to put fixed seats within view of the bikes. This change will actually increase the total number of seats on a train, which seems to be a desired outcome.

Thank you for your consideration in this matter,

Rick Goldman

On Mon, Dec 3, 2018 at 1:56 PM Caltrain, Bac (@caltrain.com) <BAC@caltrain.com> wrote:

Dear Rick,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification project there will be a 17% increase in onboard bike capacity.

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In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan additional public meetings regarding bike security in the future.

Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

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From: Goldman, Rick [mailto:rick.goldman@navis.com]
Sent: Monday, December 03, 2018 9:51 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Bikes on Caltrain
Caltrain Board:

Thank you for buying more rail cars to run longer electric trains. This is a great opportunity to redesign the layout of the bike cars to put seats within view of the bikes. Putting seats within view of bikes will deter bicycle thefts and help keep trains on time by reducing congestion in the bike cars.

Thank you for your consideration,

Rick Goldman
Dear Stephen,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification Project there will be a 17% increase in onboard bike capacity.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Stephen P. Lambe [mailto:]
Sent: Tuesday, December 04, 2018 12:14 PM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); bikesonboard@sonic.net; cacsecretary [@caltrain.com];
CalMod@caltrain.com
Subject: Bikes on Caltrain

Dear Caltrain board members,

I am a San Francisco resident and daily Caltrain commuter to Mountain View. I am also a bike commuter, riding on both ends of my commute.

I very much appreciate your plans to buy more cars and thus increase capacity in the system. However, this also presents an opportunity to improve the bike cars to better accommodate those of us who take bikes on board.

Specifically, it’s very important for cyclists to be able to sit within view of their bikes for theft prevention. Today, there aren’t nearly enough seats for this (not even counting when non cyclists sit in these cars). The bike cars are overcrowded and sometimes unpleasant for commuters between SF and Palo Alto where the ridership is highest. Just last night, the bike car was essentially full and 8 people were forced to stand in the middle of the aisle next to their bikes.

While I can only speak for myself, if the situation becomes more crowded and I can’t watch my bike on most every commute, I will likely drive. The connections on both ends are not convenient enough to rely on other forms of transit (SF is decent, but Mountain view is either hard or pricey).

We need 96 bike spaces per train to meet 2022 demand.

Thank you for your consideration and support of end to end non motorized transportation.

Sincerely,
Stephen Lambe
--
Stephen P. Lambe
Dear Jennifer,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Caltrain has designated more than $3.5M to make vast bike parking improvements at the stations; and recently, a full-time station access planner was hired to implement Caltrain’s Bike Parking Management Plan and improve bike access.

In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan to have additional public meetings regarding bike security in the future.

Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low
Hello,

I’m writing to thank you for planning to buy more rail cars to run longer electric trains and to ask that you please ensure that all bike cars on Caltrain have seats within view of the bikes. It’s important to minimize bike theft and congestion on bike cars by having seats within view of the bikes. If I couldn’t watch my bike, I’d have to forgo commuting with my bike on Caltrain and instead I would drive to BART or drive all the way to SF. Bike cars are currently maxed out and we need 96 bike spaces per train to meet demand in 2022, when electrified service will begin.

Thanks for your attention to this important matter!

Jennifer Smith
Dear Steven,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

Caltrain currently has one of the most extensive onboard bicycle programs among passenger railroads in the nation. In 2015, after a two-year outreach effort that included public meetings, multiple surveys, station outreach, and over 10,000 comments; and then in 2017, after 56 meetings, surveys, and station events; staff heard from the bicycle community that maximizing bicycle capacity on the electric trains was of the utmost importance. Thus, under the current Electrification Project there will be a **17% increase in onboard bike capacity**.

Recently, Caltrain was awarded State Transit and Intercity Rail Capital Program (TIRCP) funds, however the grant award was approximately a 1/3 of the money requested. Caltrain cannot purchase as many additional electric train vehicles as originally planned at this time. Nevertheless, this additional funding will help bring more relief to an already overburdened system. There will be future discussions about how to best utilize space in the additional vehicles that will be purchased with the TIRCP money.

As our riders know, Caltrain is extremely busy during commute times, with some of the trains at 140% capacity. [Future ridership growth projections](#) show demand continuing to grow and Caltrain is working to identify opportunities and strategies to meet the needs of the corridor with the development of a [Business Plan](#).

While in the past Caltrain was able to remove excess seats to provide more onboard space for bikes, the landscape has drastically changed with ridership nearly doubling since the beginning of this decade. Space at the stations is more abundant than onboard, and there is now a greater ability to serve people with bikes at stations. The current bike parking options leave a lot to be desired but huge advances in bike sharing, electronic lockers, and controlled access bike parking facilities can provide great options for many people who want to use a bike and Caltrain. Caltrain has designated more than $3.5M to make vast bike parking improvements at the stations; and recently, a full-time station access planner was hired to implement [Caltrain’s Bike Parking Management Plan](#) and improve bike access.

In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen [here](#). We plan to have additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

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From: Steven Gowin [mailto:steven.gowin@oracle.com]
Sent: Monday, December 03, 2018 2:26 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Bikes on Caltrain

This is basically boilerplate from the SF Bike Coalition, but I agree and urge you to pay attention.

- Thank you for planning to buy more rail cars to run longer electric trains.
- The new rail cars provide an opportunity to redesign bike-car layout to put seats within view of bikes. (Your current plan is no fixed seats within view of bikes.)
- Seats within view of bikes deter bicycle theft and help keep trains on time by reducing congestion in bike cars.
- I don’t use CalTrain everyday but when I don’t, I am, unfortunately on 101 for 20 miles between San Francisco and Redwood City.
- Today bike cars are maxed out. We need 96 bike spaces per train to meet demand in 2022, when electrified service will begin.

Bike commuting is more and more popular and as congestion worsens will continue to grow. Please don’t miss the opportunity to help smooth transit by addressing the concerns outlined above.

Steven Gowin
Dear Sarah,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

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From: Sarah Edwards [mailto:]
Sent: Tuesday, November 27, 2018 8:21 AM
To: Board (@caltrain.com)
Cc: Caltrain, Bac (@caltrain.com); bikesonboard@sonic.net; cacsecretary [@caltrain.com]; CalMod@caltrain.com
Subject: Bike-friendly rail cars

Hi,

I ride Caltrain with my bike every day and I’ve heard the new electrified rail cars have reduced bike capacity and also do not have seating within view of bikes.

I think it’s awesome Caltrain is electrifying and buying more cars to increase planned capacity, but I hope you consider improving the rail car design beforehand to improve the bike seating.

I never sit out of view of my bike when on Caltrain because it is so easy to steal a bike from the train. Many of my fellow commuters feel the same and so the result of the current rail car design will be congestion within the train from people standing by their bikes, which I believe they are entitled to do. Either that or people will start locking their bikes which will slow everything down when it comes to getting on and off. I would be one of those people standing near my bike.

At peak times, bike cars are already maxed out so we need a minimum of 96 bike spaces per train to meet 2022 demand. The current two-tier bike rail car design is awesome (with the single seating and luggage rack on the top deck), It’d be cool if we can see something like that.

I hope my opinion reaches you, I can’t wait to ride electric!

~Sarah Edwards
Dear Viet,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Viet Nguyen MD [mailto:vietnguyen@stanford.edu]
Sent: Tuesday, November 27, 2018 10:50 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: bike-car redesign on new rail cars

Dear Caltrain Board,

Due to a recent grant award for more rail cars, I understand there is a pending board vote 12/6.

I am writing to state that as a daily bike+train commuter, I strongly advocate for the redesign of the new bike-cars to allow for seating within view of the bikes.

Caltrain's current plan is no fixed seats within view of bikes, and I believe that is a poor design. Both the current "Gallery" and "Bombardier" cars allow for this, and it works well for (1) loading/unloading, (2) rearranging stacks when necessary, and (3) preventing bike thefts -- bikers look out for each other. The Gallery car's main advantages are higher bike capacity, and shunting of bikers to the upper floor, where they can both watch over their bike and not stand in the way of loading/unloading. The Bombardier car's main advantages are two doors for loading/unloading and increased overall seating. I have some ideas/schematics that combine the best of those two designs, if you are interested.

As I'm sure your data show, bike capacity is already maximized during peak commute hours, exactly when it's most important to give people viable non-driving options. Thank you for your ongoing commitment to modernization and increasing capacity via electrification!

Viet Nguyen, MD
Clinical Associate Professor
Neurology, Neurophysiology & Intraoperative Monitoring
Stanford University Medical Center
Dear Zoe,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: Zoe de Bretagne [mailto:]
Sent: Tuesday, December 11, 2018 9:40 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Bike-Car

Hello,
Thank you for planning to buy more rail cars to run longer electric trains. The new rail cars provide an opportunity to redesign bike-car layout to put seats within the view of bikes, which will deter bicycle theft and help keep trains on time by reducing congestion in bike cars.
Bike cars are maxed out today, and we need 96 bike spaces per train to meet demand in 2022, when electrified service will begin.
Thank you,
Zoé de Bretagne
Dear Carol,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

-----Original Message-----
From: Carol Fan [mailto:]
Sent: Tuesday, November 27, 2018 1:21 PM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com];
bikesonboard@sonic.net
Subject: Bike train planning

Hello,

I’m writing to thank you for making the Bay Area a great place to commute by bike.

I’m hoping you will make it even better with the new electric trains. We hardly have enough bike trains as it is. I hope that you will add more bike train cars especially ones that will enable more bikes to ride and also allow bikers to see their bikes considering the high level of bike theft that occurs.

I love commuting my bike and would hate to add traffic to our roads due to lack of bike trains.

Thank you again!!

Carol Fan. Riding bikes for 4 years!
Dear Susannah,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: s barsom [mailto:]
Sent: Tuesday, December 04, 2018 9:23 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Bike Cars

Dear Caltrain Officials,

I appreciate your plans to expand Caltrain ridership in the electrification process.

It is my understanding that the rail cars that you are proposing to buy will have no fixed seats within view of bicycles. This is problematic, as most cyclists prefer to stay within view of their bicycle, which may be their only mode of transportation. Owners remain within view of bicycles to prevent theft.

Another problem will be congestion, since bicyclists staying in view of their bicycles will be in the way of other cyclists trying to on- or off-load bicycles. This is already a problem; many people without bicycles occupy seats in the bicycle car, forcing cyclists to stand in the aisles.

Currently, bicycle cars are often at/beyond maximum capacity. I urge you to be sure that there is enough bicycle space for the projected need when the new trains come online.

Thank you,
Susannah Barsom
San Jose
Dear Nancy,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

-----Original Message-----
From: Nancy [mailto:nmiceli@astound.net]
Sent: Tuesday, November 27, 2018 7:34 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject: Bike car capacity
Make sure there’s room on all bike cars for riders. It’s important that riders can sit near their bikes to prevent theft and to help move the bikes around when necessary.

Sent from my iPhone
Dear Meaghan,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low
Hello Team - I’m glad to hear you plan to run higher capacity and longer rail cars with electrification. I want to Express concern that my understanding is that there is currently a plan that all the new bike Karis will not allow us to sit in view of our bicycles. I have personally witnessed bicycles being stolen off of CaltrainMe cars or attempt to be stored, I’m not sure that I could possibly leave my bicycle there but standing for 45 minutes isn’t really an option either. As it is I take a 6 AM train into the city at 4:15 PM train out of the city, pre-rush-hour, and there have been times when the bike park car has been completely full. We need more bike capacity with seating!

Thank you for your consideration.

Best regards,

Meaghan
Dear G. Salim Mohammed,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Hi everyone-

I unfortunately cannot make it to the Dec 6 meeting. But I want to appeal to the board and make my voice heard. I have been using Caltrain five days a week, every week for the last seven years to get from Lawrence to Palo Alto. I take my bike each time, rain or shine. I personally know of two and have heard of another person who has had his bike stolen from the bike cars.

As it is, everyday, we have folks use up the seats that should go to bike owners. NO ONE reads the courtesy notice. And this is NEVER enforced. As a result, there is no place for bike owners to be with the bike.

So its with dismay that I heard that we will be separated from our bikes. Have a camera on board will not stop someone from stealing his or her bike. I would like the Board to seriously reconsider the plan to separate bike owners from their bikes. We also need more bike spots not less.

Please consider the disservice you are going to cause by your new plan. I would love to hear feedback from you on my thoughts. I am pretty certain you have a host of people who are against this idea.

Best, G. Salim Mohammed.
Dear James,

Thank you for your feedback, and for making a bike and Caltrain part of your commute. Bikes are an excellent first and last mile solution, and riders who use their bikes to access Caltrain reduce pollution, relieve congestion, and help promote healthy, active transportation.

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Recently, Caltrain was awarded State Transit and Intercity Rail Capital Program (TIRCP) funds, however the grant award was approximately a 1/3 of the money requested. Caltrain cannot purchase as many additional electric train vehicles as originally planned at this time. Nevertheless, this additional funding will help bring more relief to an already overburdened system. There will be future discussions about how to best utilize space in the additional vehicles that will be purchased with the TIRCP money.

As our riders know, Caltrain is extremely busy during commute times, with some of the trains at 140% capacity. Future ridership growth projections show demand continuing to grow and Caltrain is working to identify opportunities and strategies to meet the needs of the corridor with the development of a Business Plan.

While in the past Caltrain was able to remove excess seats to provide more onboard space for bikes, the landscape has drastically changed with ridership nearly doubling since the beginning of this decade. Space at the stations is more abundant than onboard, and there is now a greater ability to serve people with bikes at stations. The current bike parking options leave a lot to be desired but huge advances in bike sharing, electronic lockers, and controlled access bike parking facilities can provide great options for many people who want to use a bike and Caltrain. Caltrain has designated more than $3.5M to make vast bike parking improvements at the stations; and recently, a full-time station access planner was hired to implement Caltrain’s Bike Parking Management Plan and improve bike access.

In addition, in January 2018, Caltrain created a bike security task force to explore and implement possible improvements to the bike program. An update on its process and progress was given to the Caltrain Bicycle Advisory Committee in September and can be seen here. We plan additional public meetings regarding bike security in the future.
Again, we thank you for taking the time to send us your thoughts. Your feedback is valuable, and Caltrain is eager to improve service for all its riders.

Best,
Lori Low

From: James Rozzelle [mailto:]
Sent: Wednesday, November 28, 2018 11:46 AM
To: Board (@caltrain.com)
Cc: CalMod@caltrain.com; Caltrain, Bac (@caltrain.com); cacsecretary [@caltrain.com]; bikesonboard@sonic.net
Subject:

Dear Caltrain Board,

My Caltrain with bike experience over the past two years--commuting with my bike from San Francisco to San Mateo--is greatly improved versus when I did this same commute in 1999-2005. I’ve not been denied service nearly as often.

Over the past year I’ve see an increase in ridership. The 8:05, 8:35 and 8:45 are frequently at capacity, unless it's raining. The four northbound afternoon trains I catch at the Hillsdale station are usually standing room only.

I’m happy to hear that capacity will increase with longer electric trains. If you look at how the above mentioned trains are utilized by bike commuters you'll see that more bike capacity is warranted. It will lead to more bike commuters. The bikers need to be able to see their bikes to deter theft. I hope that the new train layout will have sufficient seating in the bike cars.

I look forward to riding the new electric trains.

Thank you.

-james rozzelle
San Francisco
From: Elizabeth Amherdt
To: Board (@caltrain.com)
Cc: Caltrain, Bar (@caltrain.com); janice@sfbike.org
Subject: I support seats in view of bikes on the new Caltrain bike cars
Date: Wednesday, December 05, 2018 9:57:43 AM