



BOARD OF DIRECTORS 2020

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JIM HARTNETT  
EXECUTIVE DIRECTOR

# AGENDA

## PENINSULA CORRIDOR JOINT POWERS BOARD

### Work Program – Legislative – Planning (WPLP) Committee Meeting

San Mateo County Transit District Administrative Building  
Bacciocco Auditorium, 2<sup>nd</sup> Floor  
1250 San Carlos Avenue, San Carlos CA

Committee Members: Charles Stone (Chair), Cheryl Brinkman, Cindy Chavez

**February 26, 2020 – Wednesday**

**3:00 pm**

1. Call to Order/Pledge of Allegiance
2. Roll Call
3. Public Comment on Items not on the Agenda  
Comments by each individual speaker shall be limited to three (3) minutes. Items raised that require a response will be deferred for staff reply.
4. Approve Meeting Minutes of January 22, 2020 MOTION
5. Caltrain Business Plan - Update Covering January & February 2020 INFORMATIONAL
6. Senate Bill 797 Implementation INFORMATIONAL
7. Committee Member Requests
8. Date/Time of Next Regular WPLP Committee Meeting: March 25, 2020 at 3:00 pm,  
San Mateo County Transit District Administrative Building, 2<sup>nd</sup> Floor, 1250 San Carlos  
Avenue, San Carlos, CA
9. Adjourn

## **INFORMATION FOR THE PUBLIC**

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

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

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

### **Location, Date and Time of Regular Meetings**

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

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

### **Public Comment**

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

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

### **Accessible Public Meetings/Translation**

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

### **Availability of Public Records**

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

Peninsula Corridor Joint Powers Board  
Work Program – Legislative – Planning Committee (WPLP)  
1250 San Carlos Avenue, San Carlos CA

MINUTES OF JANUARY 22, 2020

**MEMBERS PRESENT:** C. Stone (Chair), C. Brinkman, C. Chavez

**MEMBERS ABSENT:** None.

**STAFF PRESENT:** J. Hartnett, J. Cassman, B. Fitzpatrick, C. Fromson, M. Jones, M. Reggiardo, S. Murphy, D. Seamans, R. Narayan, S. Wong

**1. CALL TO ORDER/PLEDGE OF ALLEGIANCE**

Chair Charles Stone called the subcommittee meeting to order at 3:03 p.m. and Director Chavez led the Pledge of Allegiance.

**2. ROLL CALL**

District Secretary Dora Seamans called the roll and confirmed a quorum. All members were present.

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

None.

**4. APPROVE MEETING MINUTES OF DECEMBER 19, 2019**

Motion/Second: Brinkman/Chavez moved approval of the December 19, 2019 minutes.

Ayes: Stone, Brinkman, Chavez

Noes: None

Absent: None

**5. UPDATE ON DECISION 3 OF THE CONCEPT LAYOUT FOR FURTHER DEVELOPMENT AS RECOMMENDED BY THE DIRIDON INTEGRATED STATION CONCEPT PLAN**

Melissa Reggiardo, Manager, Caltrain Planning, provided an update on Decision 3 to stay within the existing Caltrain corridor at Diridon. She said pending the City's discussion on Decision 3, staff will ask for JPB's concurrence at a future meeting.

Director Chavez asked about the list of priorities for Diridon station and land availability. Michelle Bouchard, Chief Operations Officer, said they have broadly identified their footprint needs.

**6. RECOMMEND ADOPTION OF THE CALTRAIN RAIL CORRIDOR USE POLICY**

Ms. Bouchard provided an update to the policy which was amended to include language on grade separations and air space, based on input provided by the Board following its January meeting. Ms. Bouchard stated the component revised was in the Use Policy lease term lengths to ensure leases return to the Board for warranted extension (over five years) and other modifications to vehicle grade separation and property conveyance policies.

Director Chavez requested a cover memo to include significant changes along with a compendium of documents and a timeline for multiple policy projects in the future. Chair Stone asked about the decision to include hotels as an allowable use. Ms. Bouchard added that Director Bruins suggested hotels as an option after museums were suggested. Executive Director Harnett stated it was an option for expanding possibilities for future use. Director Chavez added that it could provide expansion opportunities depending on future partners.

Public Comment

Drew, San Mateo, expressed concern regarding set out tracks and potential lawsuits. He commented that the mapping should include station right-of-way indicators.

Motion/Second: Chavez/Stone recommended Board approval of the amendment to the Use Policy.

Ayes: Stone, Brinkman, Chavez

Noes: None

Absent: None

**7. RECOMMEND ADOPTION OF TRANSIT-ORIENTED DEVELOPMENT POLICY**

Brian Fitzpatrick, Director of Real Estate and Property Development, provided an update; highlights included economic feasibility & impact, affordable housing, potential costs, and recommended Board adoption in February 2020.

Chair Stone inquired about establishing a portfolio-wide below market rate goal. Mr. Fitzpatrick recommend against this option as he did not want to set goals that could not be met portfolio-wide.

Public Comment

Karen Camacho, Housing Leadership Council, expressed appreciation for the added changes in policy and suggested first refusal rights and specific height requirements. Paul Krupka, San Mateo, thanked staff for their work on the TOD policy and RCUP. He mentioned Brian Fitz, Melissa Jones, and Jessica Epstein.

Jonathan Erwin Frank, East Palo Alto, suggested that projects covered by the Surplus Land Act should service as a floor in terms of affordable housing commitment of Caltrain.

Roland Lebrun, San Jose, expressed concerns regarding the management of Caltrain.

Joan Cassman, Legal Counsel, clarified that SamTrans has never said the Surplus Land Act does not apply, there has been multiple amendments, and it really is an issue of policy.

Director Brinkman asked about calculations for replacement parking. Mr. Fitzpatrick responded that it depends on the right balance of pedestrian and bike access. He said replacing parking spaces can become an encumbrance to the property.

Director Chavez said it is critical to understand what resources are available for housing and to understand preferences in relation to future partner resources.

Chair Stone inquired about the pros and cons regarding right of first refusal. Mr. Fitzpatrick responded that staff wishes to develop a policy that is flexible due to unique property characteristics.

Ms. Cassman cautioned the Committee on the prohibition of the gift of public funds. Chair Stone recommended a 30% affordability requirement; 15% very low income and 15% low income, with height minimums which would be a change in the current policy. Directors Brinkman and Chavez expressed support for the recommendation.

Motion/Second: Brinkman/Chavez recommended Board approval of the TOD policy establishing a 30% affordability requirement and height minimum.

Ayes: Stone, Brinkman, Chavez

Noes: None

Absent: None

#### **8. CALTRAIN BUSINESS PLAN - UPDATE COVERING DECEMBER 2019 AND JANUARY 2020**

Sebastian Petty, Director of Policy Development, reported on the Caltrain Business Plan; highlights included the timeline, implementation plan, overall funding strategies, 2040 service vision, Caltrain corridor growth, travel time and frequency, service patterns, and transportation management policy.

#### Public Comment

Roland Lebrun, San Jose, voiced concern about the current Business Plan and suggested including flow of traffic and platform length in the plan.

Director Chavez discussed restriction options to Gilroy.

#### **9. COMMITTEE MEMBER REQUESTS**

None.

**10. DATE/TIME OF NEXT REGULAR WPLP COMMITTEE MEETING: FEBRUARY 26, 2020 AT 3:00 PM, SAN MATEO COUNTY TRANSIT DISTRICT ADMINISTRATIVE BUILDING, 2<sup>ND</sup> FLOOR, 1250 SAN CARLOS AVENUE, SAN CARLOS, CA**

#### **11. ADJOURN**

The meeting adjourned at 5:28 p.m.

**PENINSULA CORRIDOR JOINT POWERS BOARD  
STAFF REPORT**

TO: Joint Powers Board WPLP Committee

THROUGH: Jim Hartnett  
Executive Director

FROM: Michelle Bouchard  
Chief Operating Officer, Caltrain

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

**ACTION**

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

**SIGNIFICANCE**

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

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

**BUDGET IMPACT**

There is no budget impact associated with receiving this presentation.

**BACKGROUND**

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

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

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

Prepared by: Sebastian Petty, Deputy Chief, Caltrain Planning

650.622.7831

# Caltrain Business Plan

WPLP

February 26, 2020



## Agenda for Today



### Process Overview



### Making it Happen: Delivering Improved Caltrain Service Before 2040

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



### Work in Progress & Next Steps



# Process Overview

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## What is the Caltrain Business Plan?

**What** Addresses the future potential of the railroad over the next 20-30 years. It will assess the benefits, impacts, and costs of different service visions, building the case for investment and a plan for implementation.

**Why** Allows the community and stakeholders to engage in developing a more certain, achievable, financially feasible future for the railroad based on local, regional, and statewide needs.



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# What Will the Business Plan Cover?

## Technical Tracks



### Service

- Number of trains
- Frequency of service
- Number of people riding the trains
- Infrastructure needs to support different service levels



### Business Case

- Value from investments (past, present, and future)
- Infrastructure and operating costs
- Potential sources of revenue



### Community Interface

- Benefits and impacts to surrounding communities
- Corridor management strategies and consensus building
- Equity considerations



### Organization

- Organizational structure of Caltrain including governance and delivery approaches
- Funding mechanisms to support future service



# Timeline

July 2018 – July 2019

Development and Evaluation of Growth Scenarios

October 2019

Adoption of Long-Range Service Vision

Fall 2019

Rounding Out the Vision and Implementation Planning

Winter 2019-2020

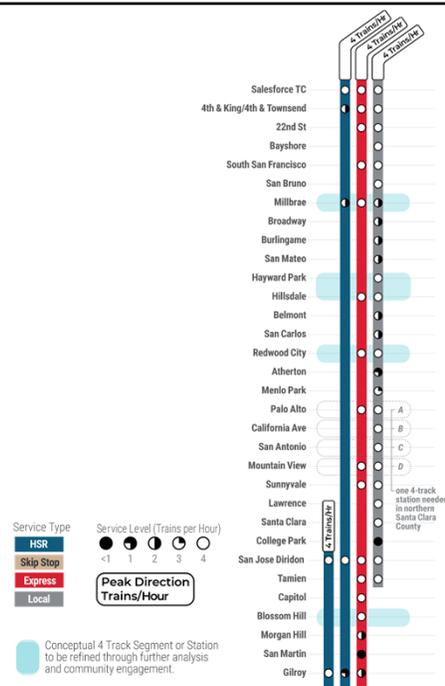
Spring 2020

Completion of Business Plan



# Caltrain's 2040 Service Vision Illustrative Service Details

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



# Caltrain's 2040 Service Vision - Investments

## CAPITAL COSTS

**\$23 BILLION**  
TOTAL CAPITAL COSTS\*

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



**\$9.4B**  
GRADE SEPARATIONS



**\$7.8B**  
TERMINAL IMPROVEMENTS



**\$3.3B**  
RAIL INFRASTRUCTURE AND SYSTEMS



**\$1.4B**  
STATION IMPROVEMENTS



**\$1.1B**  
FLEET UPGRADES

## OPERATING COSTS

**\$370 MILLION**  
2040 ANNUAL OPERATING COSTS\*

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

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



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

## Remaining Technical Analysis Making it Happen

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

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



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



**Accompanying financial projections and funding plan**



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



## Remaining Technical Analysis Rounding Out the Vision

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

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



**Analysis of connections to other systems & station access options**



**Equity analysis & focus on making Caltrain accessible to all**



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



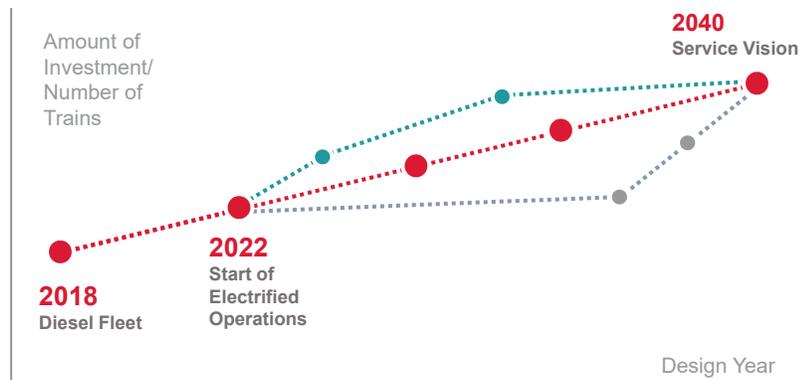
# Making it Happen: Delivering Improved Caltrain Service Before 2040

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## Getting to the 2040 Service Vision

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

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



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## Key Questions for the Next Decade

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



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## The Next Decade of Caltrain



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# Understanding Demand

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



### Latent Demand

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



### Population and Employment Growth

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



### Improved Connectivity

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



# Existing Ridership by Station

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**Highest Ridership**  
>4,000  
Daily Riders

4

**Moderate Ridership**  
2,000 – 4,000  
Daily Riders

20

**Lower Ridership**  
<2,000  
Daily Riders

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

- Millbrae
- San Mateo
- Hillsdale
- Sunnyvale

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





## Priorities for CalMod



## Priorities for CalMod

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

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

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

### Opportunities and Recommended Priorities



Increasing service at stations



Standardizing schedules and enhancing connectivity



Expanding off-peak service



Balancing capacity



# Two Illustrative Service Plans

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

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

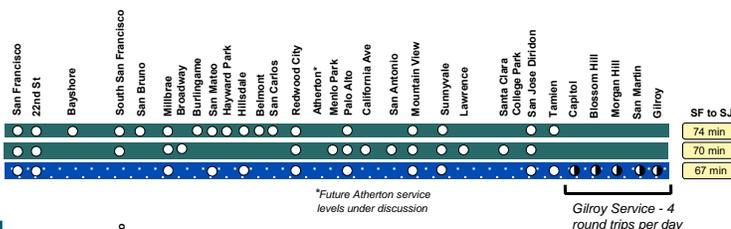
**Distributed Skip Stop** – three skip stop patterns offering similar travel times and regular wait times at major stations

Express	Diesel	EMU	Hourly stop
Zone Express			Half-hourly stop
Skip - Stop			

Runtime

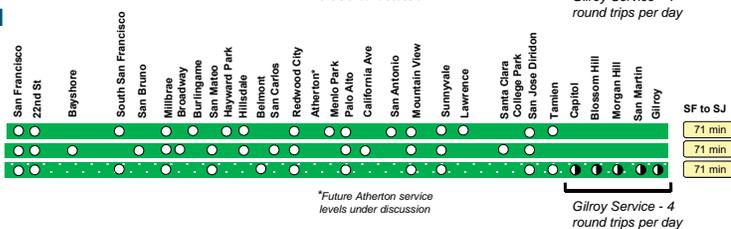
## Two Zone with Express

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



## Distributed Skip Stop

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

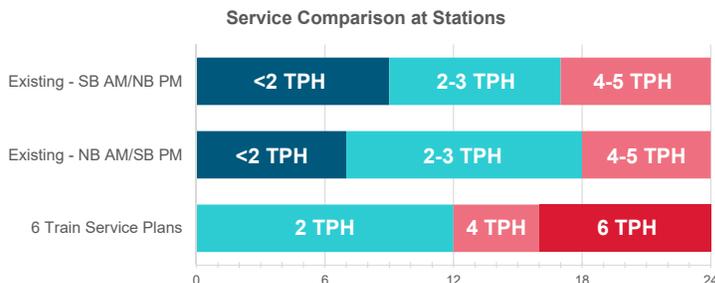


# Service Frequency Improvements

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

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

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

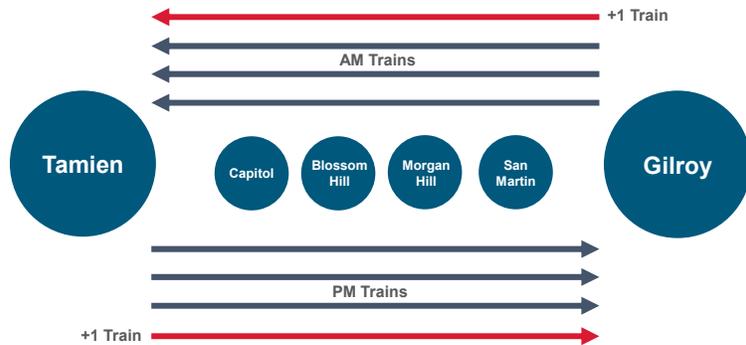


# South of Tamien Service Improvements

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

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

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



# Standardizing the Schedule and Enhancing Connectivity

## Standardized Schedule

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

## Enhancing Connectivity

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

## Example- Each Line 2x per Hour



Photo credit SPUR

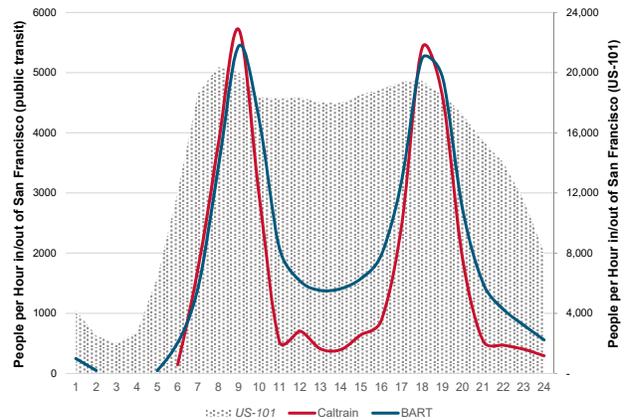
# Improving Off-Peak and Weekend Service

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

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

## Goals

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

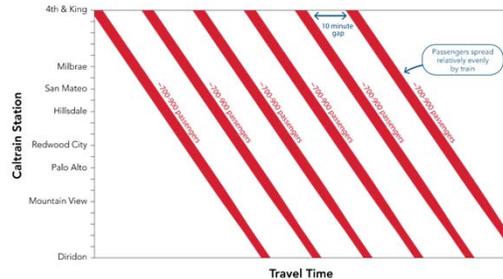
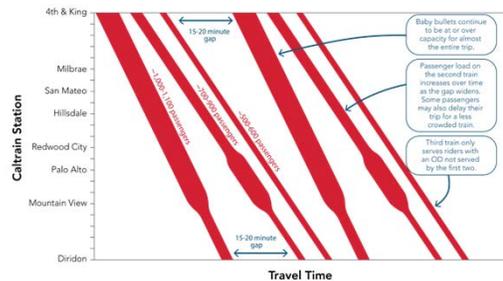


# Balancing Capacity

## An Ongoing Challenge

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

## How Service Patterns Affect Crowding





## The Next Big Step



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

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

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

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



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# Getting to 8 Trains Per Hour

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



## Grade Separations

Planning and construction of grade separations and grade crossing improvements



## Station Improvements

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



## Major Investments

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

# Getting to 8 Trains Per Hour

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



## Expanded EMU Fleet



## More Train Storage



## Holdout Rule Elimination

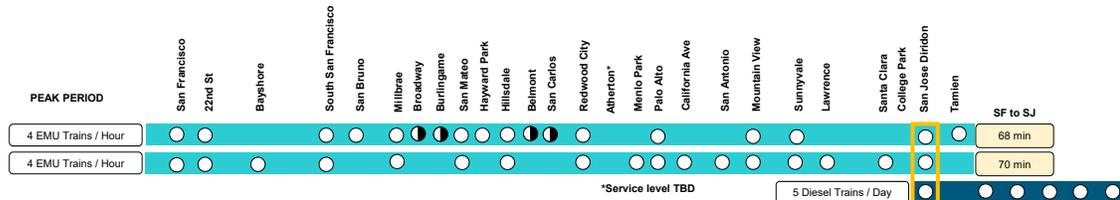


## Level Boarding



## Minor Track Work

# 8 Train Illustrative Service Plan



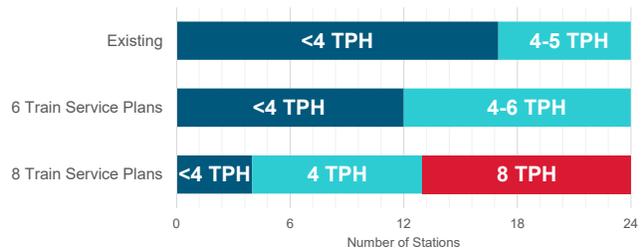
- An 8-train Caltrain service would likely look like a hybrid of the zone express and skip stop patterns with 8 trains per hour, per direction.
- There is limited flexibility in the service structure due to lack of new passing tracks and the constraints of Caltrain's existing signal system.
- An 8-train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



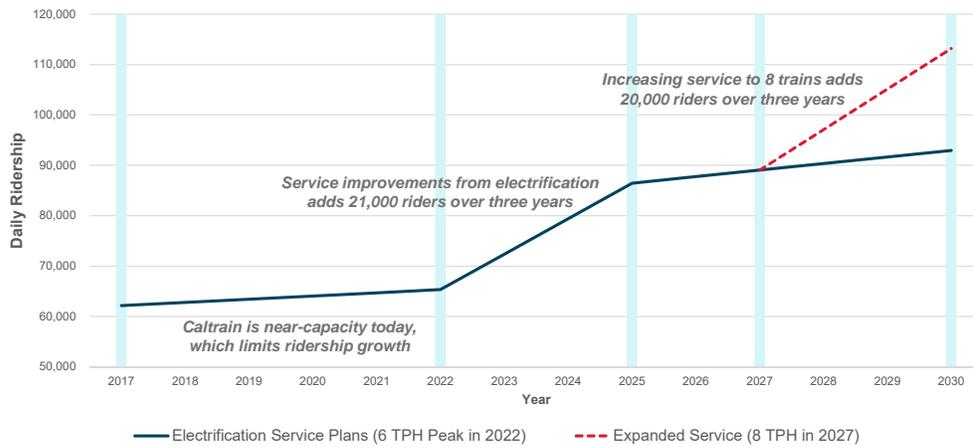
## Increasing Service at Stations

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

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



# Change in Weekday Ridership Over Time



# Investing In Improvement - Costs & Funding

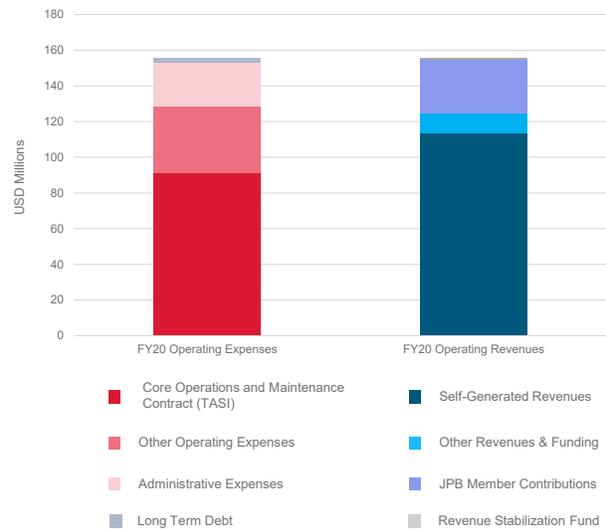


## Caltrain Today Operating Costs & Revenues

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

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

### Budgeted Operating Expenses and Revenue FY 2020



All costs shown in YOY \$

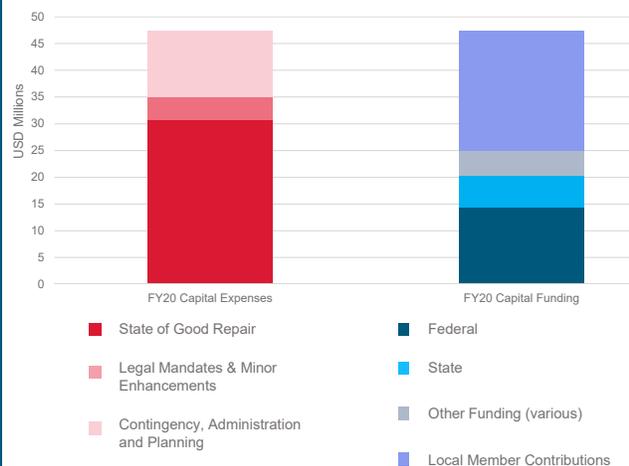


## Caltrain Today Annual Capital Costs & Funding

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

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

### Budgeted Capital Expenses and Funding FY 2020



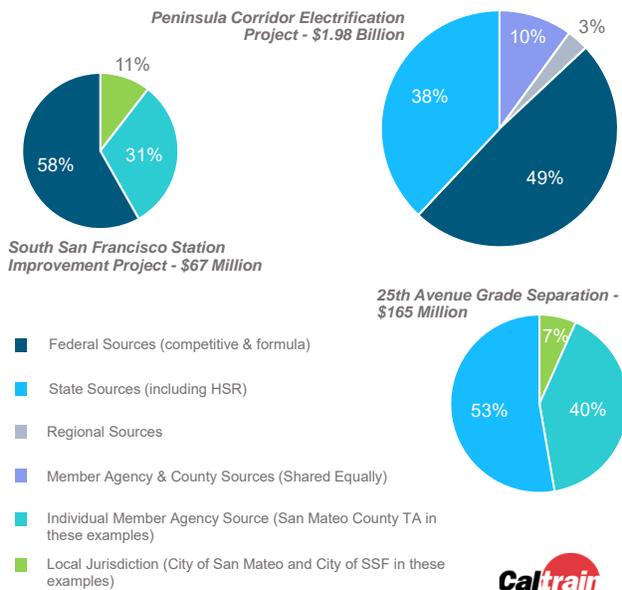
# Caltrain Today Major Capital Projects

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

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

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

## Example Funding Plans For Recent Projects



# Investing in Service

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

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

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



## Baseline CalMod

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

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



## Enhanced Growth

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

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

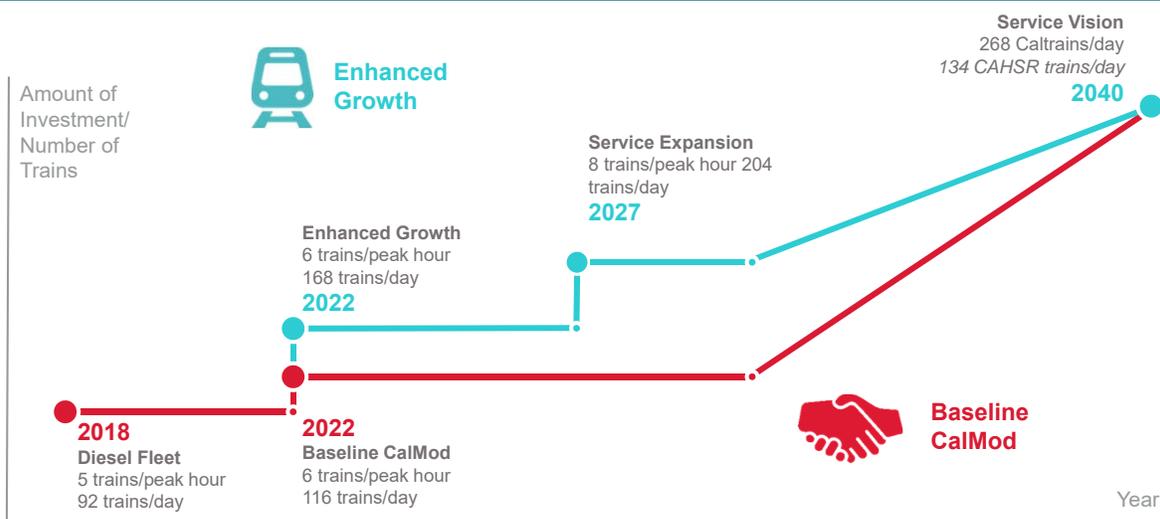
Peak periods are expanded, and off-peak service is significantly enhanced (approx. 168 trains per day growing to 204)



# Scenario Details

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

# Two “Scenarios” for Growth

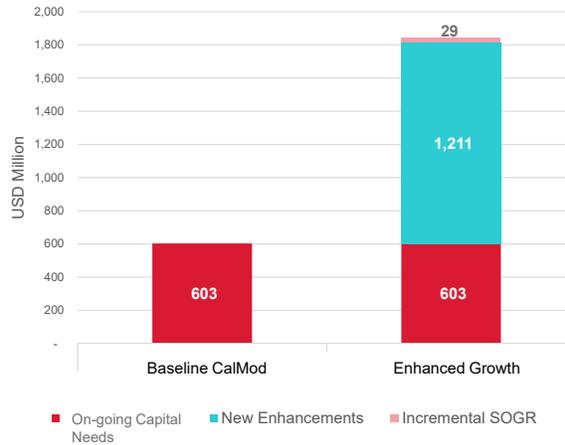


# 10-Year Total Capital Expenses by Scenario

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

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

Total 10-year Capital Expenses by Scenario



All costs shown in US\$ 2018



# 10-Year Capital Funding Gap

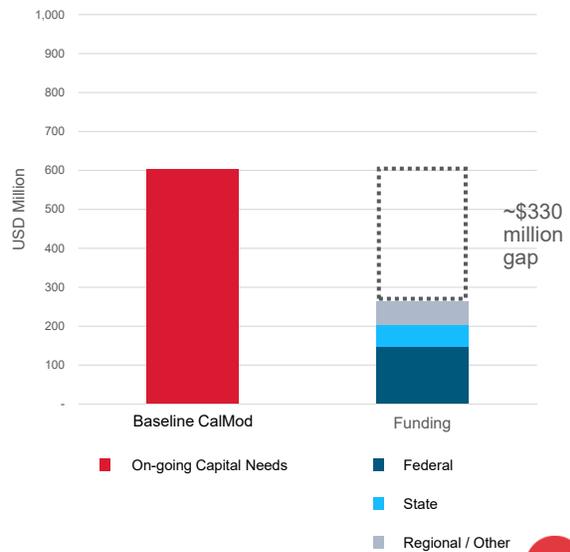
## Baseline CalMod

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

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

## Baseline CalMod

10-year Capital Gap – No JPB Contribution



All costs shown in US\$ 2018



# 10-Year Capital Funding Gap

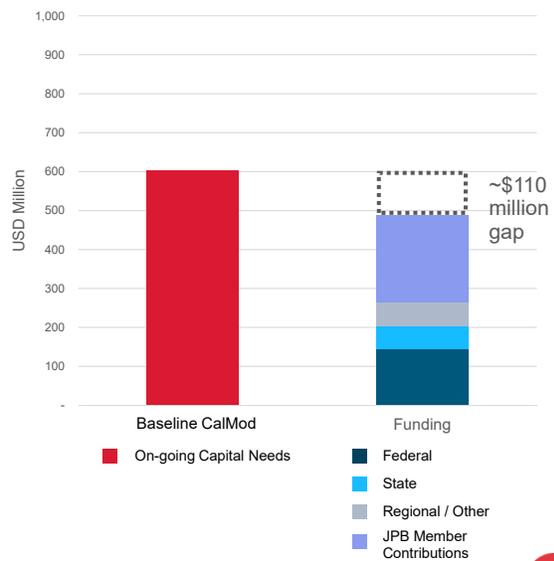
## Baseline CalMod

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

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

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

Baseline CalMod 10-year Capital Gap – With JPB Contribution



All costs shown in US\$ 2018



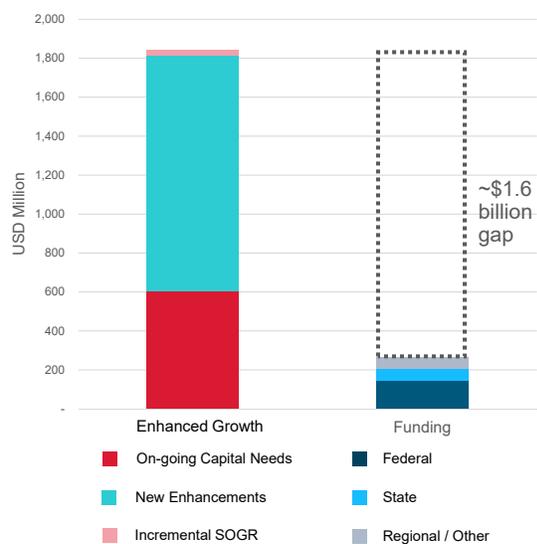
# 10-Year Capital Funding Gap

## Enhanced Growth

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

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

Enhanced Growth 10-year Capital Gap – No JPB Contribution



All costs shown in US\$ 2018



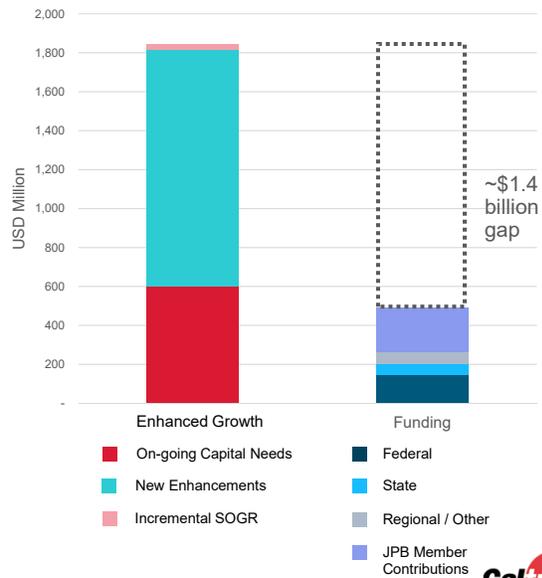
# 10-Year Capital Funding Gap

## Enhanced Growth

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

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

Enhanced Growth 10-year Capital Gap – With JPB Contribution



All costs shown in US\$ 2018

# 10-Year O&M Expenses: Methodology & Assumptions

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

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

## Assumptions and Caveats

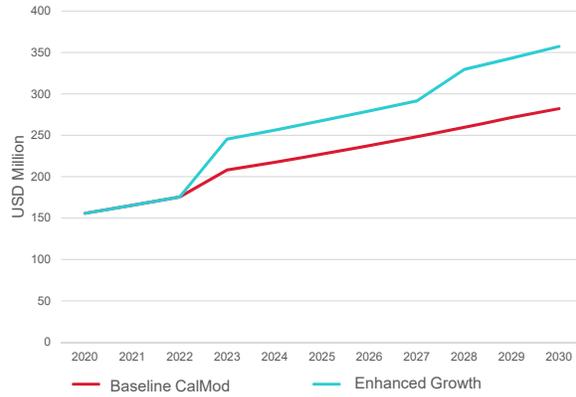
- 10 Year O&M projections are shown in year of expenditure dollars
- The projections represent Caltrain’s best available information on likely costs and revenues, but several areas of significant uncertainty remain:
  - TASI costs and operational parameters play a significant role in determining overall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

# O&M Expenses 2020-2030

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

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

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



All costs shown in YOE \$



# O&M Expenses and Revenues 2020-2030

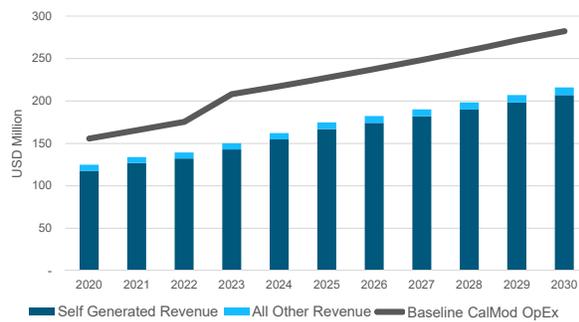
## Baseline CalMod

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

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

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

## Baseline CalMod O&M Revenues Versus Expenses No JPB Contribution



All costs shown in YOE \$



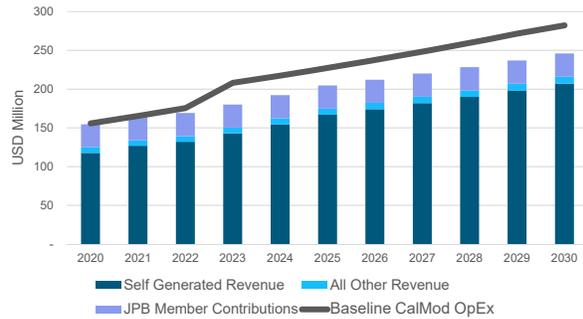
# O&M Expenses and Revenues 2020 - 2030

## Baseline CalMod

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

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

**Baseline CalMod**  
O&M Revenues Versus Expenses  
With JPB Contribution



All costs shown in YOY \$

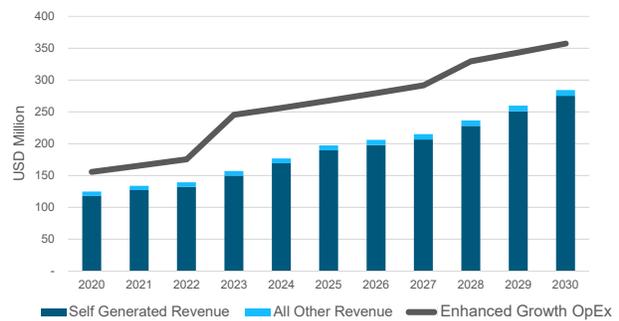
# O&M Expenses and Revenues 2020-2030

## Enhanced Growth

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

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

**Enhanced Growth**  
O&M Revenues Versus Expenses  
No JPB Contribution



All costs shown in YOY \$

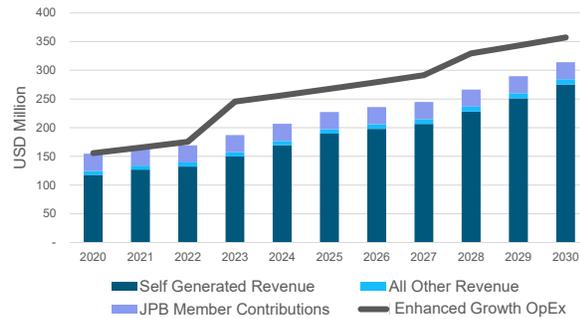
# O&M Expenses and Revenues 2020-2030

## Enhanced Growth

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

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

Enhanced Growth  
O&M Revenues Versus Expenses  
With JPB Contribution



All costs shown in YOY \$



# Options to Fill the Funding Gap

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



### Cost Sharing

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



### Self-Generated Revenue

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



### Value Capture

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



### Public Investment

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



# Options to Fill the Funding Gap

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



## Cost Sharing

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



## Self-Generated Revenue

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



## Value Capture

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



## Public Investment

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

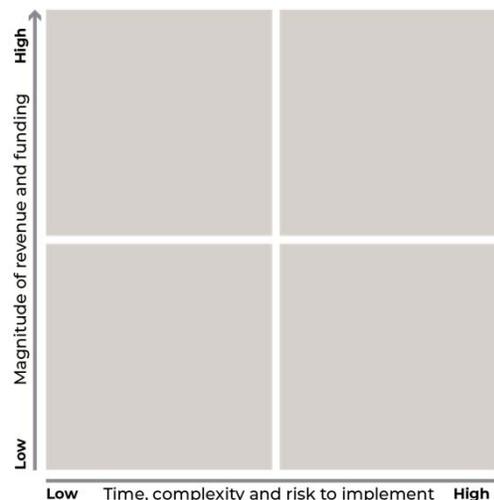


# Filling the Gap

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

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

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

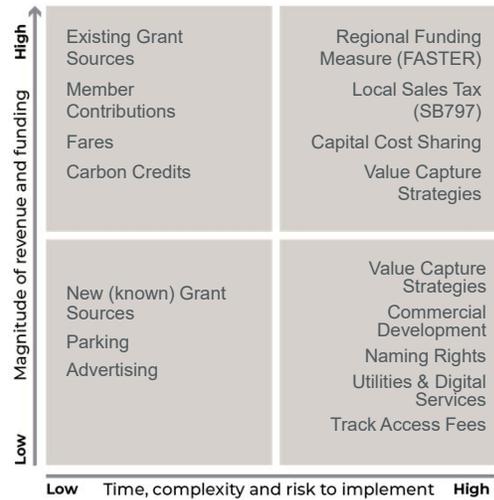


## Filling the Gap

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

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

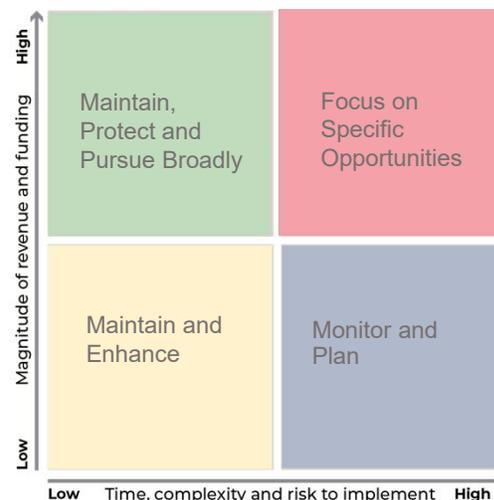
Examples of potential funding sources and revenues have been conceptually mapped to the four quadrants.



## Developing a near- and mid-Term Strategy

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

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



# Near Term Options to Fill Funding Gap

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



### Cost Sharing

- Capital cost allocation
- Track access fees



### Self-Generated Revenue

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



### Value Capture

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



### Public Investment

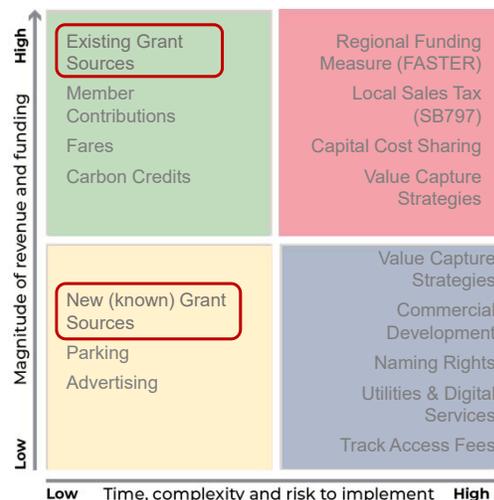
- Member contributions
- Regional measures
- Local sales taxes
- Public grants



## Filling the Capital Gap -

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

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



## Filling the Capital Gap -

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

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

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

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

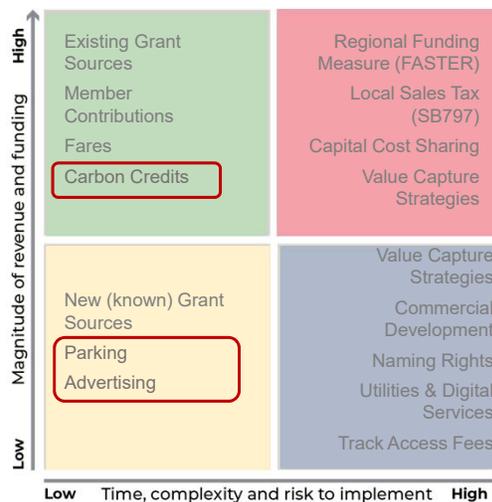
- \$1.4 billion (without Member Contributions)
- \$1.2 billion (with annual capital budget Member Contributions held constant at FY2020 levels)



## Filling the O&M Gap -

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

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



## Filling the O&M Gap -

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

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

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

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

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

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



## New Public Investment Required

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

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



# New Public Investment Required

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

Projected Expense – Baseline CalMod	Funding Gap (No JPB Member Contributions Included)	Funding Gap (JPB Member Contributions Maintained at FY20 Levels)
Ongoing OpEX	\$27 million annually (average)	\$7 million annually (average)
Ongoing Annual Capital Needs	\$40 million annually (average)	\$20 million annually (average)
New Capital Investment	N/A	N/A

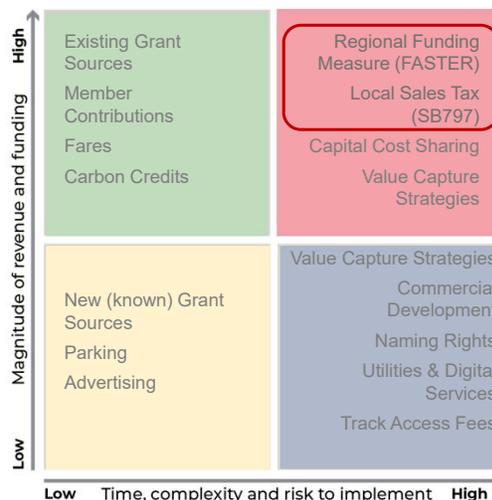


# New Public Investment Required

Caltrain needs new public funding.

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

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



# Work in Progress

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## Station Access Work Plan

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

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



### What role does Caltrain play in station access?

- Review existing programs and investments



### What is Caltrain's station access vision?

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



### How do we get there?

- Identify most pressing access needs and priorities



66

# Equity Assessment Work Plan

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



## Opportunities & Challenges

- Review of existing plans
- Stakeholder interviews
- Market assessment



## Analysis of the Service Vision

- Qualitative & quantitative evaluation of the Service Vision



## Recommendations

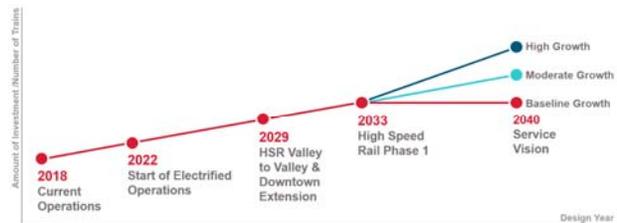
- Context-specific recommendations as outcomes from the analysis of the Service Vision and opportunities and challenges.



# Funding Strategy

Service Vision includes \$25.3 Billion in corridor investments by Caltrain, cities and partner agencies and operating costs of \$370 M/year by 2040

The funding strategy will expand on the work included in this presentation to discuss additional, longer-term sources of funding and strategies that can be brought to bear over time to achieve the 2040 Service Vision.



CALTRAIN BUSINESS PLAN  
CAPITAL INVESTMENTS: DESCRIPTION 1 OF 2

INVESTMENT CATEGORY	2022		2029		2033		2040	
	2022	2029	2029	2033	2033	2040	2040	2040
17 TRAINS	None							
	None							
18 TRAINS	None							
	None							
19 TRAINS	None							
	None							
20 TRAINS	None							
	None							



FOR MORE INFORMATION  
WWW.CALTRAIN2040.ORG  
BUSINESSPLAN@CALTRAIN.COM  
650-508-6499



PENINSULA CORRIDOR JOINT POWERS BOARD  
STAFF REPORT

TO: JPB WPLP Committee

THROUGH: Jim Hartnett  
Executive Director

FROM: Seamus Murphy  
Chief Communications Officer, Caltrain

SUBJECT: **SB797 Update**

**ACTION**

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

**SIGNIFICANCE**

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

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

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

**BUDGET IMPACT**

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

**BACKGROUND**

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

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