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
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.
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**: Completion of Business Plan
- **Spring 2020**:
## Caltrain’s 2040 Service Vision

### Illustrative Service Details

| Trains per Hour, per Direction | Peak: 8 Caltrain + 4 HSR  
Off-Peak: Up to 6 Caltrain + 3 HSR |
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Stopping Pattern</td>
<td>Local / Express with timed transfer in Mid Peninsula</td>
</tr>
</tbody>
</table>
| Travel Time, STC-Diridon       | 61 Min (Express)  
85 Min (Local) |
| New Passing Tracks             | Millbrae, Hayward Park-Hillsdale, Redwood City area, Northern Santa Clara County, Blossom Hill |
| Service Plan Description      | Local and Express trains each operating at 15-minute frequencies with timed cross-platform transfer at Redwood City  
All trains serve Salesforce Transit Center  
Trains serve Capitol and Blossom Hill every 15 minutes and Morgan Hill and Gilroy every 30 minutes  
Skip stop pattern for some mid-Peninsula stations |

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Conceptual 4 Track Segment or Station to be refined through further analysis and community engagement.
Caltrain’s 2040 Service Vision - Investments

**Capital Costs**

- **$23 Billion** Total Capital Costs
- **$9.4B** Grade Separations
- **$7.8B** Terminal Improvements
- **$3.3B** Rail Infrastructure and Systems
- **$1.4B** Station Improvements
- **$1.1B** Fleet Upgrades

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

**Operating Costs**

- **$370 Million** 2040 Annual Operating Costs
- **$266M** Operating Costs Covered by Farebox (72%)
- **$104M** Annual Operating Investment Needed (28%)

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.
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.

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

2. Accompanying financial projections and funding plan

3. 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
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.
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?
The Next Decade of Caltrain

- Understanding Demand
- Priorities for CalMod
- The Next Big Step
- Costs and Funding
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 ½ 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

<table>
<thead>
<tr>
<th>Highest Ridership (&gt;4,000 Daily Riders)</th>
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</thead>
<tbody>
<tr>
<td>4th &amp; King</td>
</tr>
<tr>
<td>Redwood City</td>
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<tr>
<td>Palo Alto</td>
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<tr>
<td>Mountain View</td>
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<tr>
<td>San Jose Diridon</td>
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<table>
<thead>
<tr>
<th>Moderate Ridership (2,000 – 4,000 Daily Riders)</th>
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<tbody>
<tr>
<td>Millbrae</td>
</tr>
<tr>
<td>San Mateo</td>
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<tr>
<td>Hillsdale</td>
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<td>Sunnyvale</td>
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<table>
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<tr>
<th>Lower Ridership (&lt;2,000 Daily Riders)</th>
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<tbody>
<tr>
<td>22nd Street</td>
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<tr>
<td>Bayshore</td>
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<tr>
<td>South San Francisco</td>
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<tr>
<td>San Bruno</td>
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<tr>
<td>Broadway</td>
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<td>Burlingame</td>
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<td>Hayward Park</td>
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<tr>
<td>Belmont</td>
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<td>San Carlos</td>
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<td>Atherton</td>
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<td>Menlo Park</td>
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<td>San Antonio</td>
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<td>Santa Clara</td>
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<td>Tamien</td>
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<tr>
<td>Capitol</td>
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<tr>
<td>Blossom Hill</td>
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<td>Morgan Hill</td>
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<tr>
<td>San Martin</td>
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<tr>
<td>Gilroy</td>
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# Potential 2020s Demand by Station

<table>
<thead>
<tr>
<th>Highest Ridership Potential</th>
<th>Moderate Ridership Potential</th>
<th>Lower Ridership Potential</th>
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</thead>
<tbody>
<tr>
<td>&gt;4,000 Daily Riders</td>
<td>2,000 – 4,000 Daily Riders</td>
<td>&lt;2,000 Daily Riders</td>
</tr>
</tbody>
</table>

### Stations

- 4th & King
- 22nd Street
- Millbrae
- Redwood City
- Palo Alto
- Mountain View
- Sunnyvale
- San Jose Diridon
- Bayshore
- South San Francisco
- San Mateo
- Hillsdale
- Menlo Park
- California Ave
- San Antonio
- Lawrence
- Santa Clara

- Tamien
- Capitol
- Blossom Hill
- Morgan Hill
- San Martin
- Gilroy
- San Bruno
- Broadway
- Burlingame
- Hayward Park
- Belmont
- San Carlos
- Atherton
- San Antonio
- Lawrence
- Santa Clara
Potential 2020s Demand by Station

8
Highest Ridership Potential
>4,000 Daily Riders

9
Moderate Ridership Potential
2,000 – 4,000 Daily Riders

13
Lower Ridership Potential
<2,000 Daily Riders

Stations experiencing significant changes

4th & King
22nd Street
Millbrae
Redwood City
Palo Alto
Mountain View
Sunnyvale
San Jose Diridon

Bayshore
South San Francisco
San Mateo
Hillsdale
Menlo Park
California Ave
San Antonio
Lawrence
Santa Clara

San Bruno
Broadway
Burlingame
Hayward Park
Belmont
San Carlos
Atherton
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
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.

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**Two Zone with Express**

<table>
<thead>
<tr>
<th>PEAK PERIOD</th>
<th>2 Trains / Hour</th>
<th>2 Trains / Hour</th>
<th>2 Trains / Hour</th>
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</thead>
<tbody>
<tr>
<td>San Francisco</td>
<td>22nd St</td>
<td>Bayshore</td>
<td>South San Francisco</td>
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<td></td>
<td>San Bruno</td>
<td>Millbrae</td>
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<td>Hayward Park</td>
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<td>San Carlos</td>
<td>Redwood City</td>
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<td>San Jose Diridon</td>
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<td>Menlo Park</td>
<td>College Park</td>
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<td></td>
<td>Blossom Hill</td>
<td>Morgan Hill</td>
<td>Gilroy</td>
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*Future Atherton service levels under discussion

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**Distributed Skip Stop**

<table>
<thead>
<tr>
<th>PEAK PERIOD</th>
<th>2 Trains / Hour</th>
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<tbody>
<tr>
<td>San Francisco</td>
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<td>San Jose Diridon</td>
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<td>Morgan Hill</td>
<td>Gilroy</td>
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*Future Atherton service levels under discussion

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SF to SJ

- 74 min
- 70 min
- 67 min

Gilroy Service - 4 round trips per day

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Express

- Diesel
- EMU

Zone Express

- Hourly stop
- Half-hourly stop

Skip - Stop

- Runtime
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.

<table>
<thead>
<tr>
<th>Service Comparison at Stations</th>
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<tbody>
<tr>
<td>Existing - SB AM/NB PM</td>
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<tr>
<td>&lt;2 TPH</td>
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<tr>
<td>Existing - NB AM/SB PM</td>
</tr>
<tr>
<td>&lt;2 TPH</td>
</tr>
<tr>
<td>6 Train Service Plans</td>
</tr>
<tr>
<td>2 TPH</td>
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</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Line A</th>
<th>Line B</th>
<th>Line C</th>
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<tbody>
<tr>
<td>●</td>
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</tbody>
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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.
The Next Big Step

Understanding Demand
Priorities for CalMod
The Next Big Step
Costs and Funding
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.
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 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

Service improvements from electrification adds 21,000 riders over three years.

Increasing service to 8 trains adds 20,000 riders over three years.

Caltrain is near-capacity today, which limits ridership growth.

- Electrification Service Plans (6 TPH Peak in 2022)
- Expanded Service (8 TPH in 2027)
Investing In Improvement - Costs & Funding

- Understanding Demand
- Priorities for CalMod
- The Next Big Step
- Costs and Funding
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.
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.
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.
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

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Service Description</th>
<th>Capital Investments</th>
<th>Major Operating Cost Drivers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline CalMod</strong></td>
<td>• 6 tphpd during peak hours (4 hours per day)</td>
<td>• PCEP completed in early 2020s (already funded)</td>
<td>• TASI costs related to increased service hours</td>
</tr>
<tr>
<td></td>
<td>• Modest off-peak service increases</td>
<td>• Ongoing investment in State of Good Repair.</td>
<td>• Maintenance of new systems and expanded fleet</td>
</tr>
<tr>
<td></td>
<td>• Approx 116 trains per day throughout the decade.</td>
<td></td>
<td>• Electricity for Traction</td>
</tr>
<tr>
<td></td>
<td>• Increase to 4 round trips per day to Gilroy.</td>
<td></td>
<td>• Reduced fuel consumptions</td>
</tr>
<tr>
<td><strong>Enhanced Growth</strong></td>
<td>• 6 tphpd during peak hours (7-8 hours per day) increasing to 8 tphpd by late 2020s.</td>
<td>• PCEP completed in early 2020s.</td>
<td>Same as above, plus:</td>
</tr>
<tr>
<td></td>
<td>• Expanded peak periods and off-peak service</td>
<td>• Ongoing investment in State of Good Repair.</td>
<td>• Additional TASI costs related to further expanded service</td>
</tr>
<tr>
<td></td>
<td>• 168 trains per day increasing to 204 trains by the end of the decade.</td>
<td>• Direct investments required to support 8 tphd service</td>
<td>• Additional electricity for traction</td>
</tr>
<tr>
<td></td>
<td>• Increase to at least 5 round trips per day to Gilroy</td>
<td></td>
<td>• Additional maintenance related to expanded fleet</td>
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</table>
### Two “Scenarios” for Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Scenario</th>
<th>Diesel Fleet</th>
<th>Baseline CalMod</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>Diesel Fleet</td>
<td>5 trains/peak hour</td>
<td>6 trains/peak hour</td>
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<tr>
<td></td>
<td></td>
<td>92 trains/day</td>
<td>116 trains/day</td>
</tr>
<tr>
<td>2022</td>
<td>Enhanced Growth</td>
<td>6 trains/peak hour</td>
<td>6 trains/peak hour</td>
</tr>
<tr>
<td></td>
<td></td>
<td>168 trains/day</td>
<td>116 trains/day</td>
</tr>
<tr>
<td>2027</td>
<td>Service Expansion</td>
<td>8 trains/peak hour</td>
<td>204 trains/day</td>
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<td></td>
<td>204 trains/day</td>
</tr>
<tr>
<td>2040</td>
<td>Service Vision</td>
<td>268 Caltrains/day</td>
<td>134 CAHSR trains/day</td>
</tr>
</tbody>
</table>

**Baseline CalMod**

**Enhanced Growth**

**2022**

**2027**

**2040**
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.
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.
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
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.
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.
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.
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 $
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.
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.
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 OpEx

All costs shown in YOE $
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.

<table>
<thead>
<tr>
<th>Existing Grant Sources</th>
<th>Regional Funding Measure (FASTER)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member Contributions</td>
<td>Local Sales Tax (SB797)</td>
</tr>
<tr>
<td>Fares</td>
<td>Capital Cost Sharing</td>
</tr>
<tr>
<td>Carbon Credits</td>
<td>Value Capture Strategies</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>New (known) Grant Sources</td>
<td>Value Capture Strategies</td>
</tr>
<tr>
<td>Parking</td>
<td>Commercial Development</td>
</tr>
<tr>
<td>Advertising</td>
<td>Naming Rights</td>
</tr>
<tr>
<td></td>
<td>Utilities &amp; Digital Services</td>
</tr>
<tr>
<td></td>
<td>Track Access Fees</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Federal Programs (FTA and FRA)</th>
<th>Size of source and amount available</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Programs (Transit and Intercity Rail Capital Program, Solutions for Congested Corridors)</td>
<td>Individual grant eligibility and criteria</td>
</tr>
<tr>
<td>Regional Programs (Carl Moyer)</td>
<td>Competing with other, worthy projects</td>
</tr>
<tr>
<td>Local Measures (Measures K, A, W, B)</td>
<td></td>
</tr>
</tbody>
</table>

**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 -

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)

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.
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.

<table>
<thead>
<tr>
<th>Projected Expense – Enhanced Growth</th>
<th>Funding Gap (No JPB Member Contributions Included)</th>
<th>Funding Gap (JPB Member Contributions Maintained at FY20 Levels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing OpEX</td>
<td>$58 million annually (average)</td>
<td>$28 million annually (average)</td>
</tr>
<tr>
<td>Ongoing Annual Capital Needs</td>
<td>$40 million annually (average)</td>
<td>$20 million annually (average)</td>
</tr>
<tr>
<td>New Capital Investment</td>
<td>$1 billion</td>
<td>$1 billion</td>
</tr>
</tbody>
</table>
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)

<table>
<thead>
<tr>
<th>Projected Expense – Baseline CalMod</th>
<th>Funding Gap (No JPB Member Contributions Included)</th>
<th>Funding Gap (JPB Member Contributions Maintained at FY20 Levels)</th>
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<tr>
<td>Ongoing OpEX</td>
<td>$27 million annually (average)</td>
<td>$7 million annually (average)</td>
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<td>Ongoing Annual Capital Needs</td>
<td>$40 million annually (average)</td>
<td>$20 million annually (average)</td>
</tr>
<tr>
<td>New Capital Investment</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
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
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
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.