



BOARD OF DIRECTORS 2020

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EXECUTIVE DIRECTOR

AGENDA

PENINSULA CORRIDOR JOINT POWERS BOARD

Work Program – Legislative – Planning (WPLP) Committee Meeting

Committee Members: Charles Stone (Chair), Cindy Chavez, *SF Rep. TBD*

Due to COVID-19, this meeting will be conducted as a teleconference pursuant to the provisions of the [Governor’s Executive Orders N-25-20 and N-29-20](#), which suspends certain requirements of the Ralph M. Brown Act.

THE PUBLIC MAY NOT ATTEND THIS MEETING IN PERSON.

Directors, staff and the public may participate remotely* via the Zoom website at <https://zoom.us/j/430715831> for audio/visual capability or by calling 1-669-900-9128, Webinar ID: 430 715 831 for audio only. You also may view a [video live stream](#) during or after the meeting at <http://www.caltrain.com/about/bod/video.html>

Public comment also may be submitted via email to publiccomment@caltrain.com. Please indicate in your email the agenda item to which your comment applies. Please submit public comments as soon as possible so that they can be provided to the Directors before and as feasible during the meeting. Any written public comments received after an item is heard will be included in the Board’s weekly correspondence posted online at http://www.caltrain.com/about/bod/Board_of_Directors_Meeting_Calendar.html.

March 25, 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 February 26, 2020

MOTION

5. Caltrain Business Plan - Update Covering March 2020 INFORMATIONAL
6. Update on 25th Ave Grade Separation/Hillsdale Station Closure INFORMATIONAL
7. Committee Member Requests
8. Date/Time of Next Regular WPLP Committee Meeting: April 22, 2020 at 3:00 pm, San Mateo County Transit District Administrative Building, 2nd 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. Communications to the Board of Directors can be e-mailed to 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

Date and Time of Board and Committee Meetings

JPB Board: First Thursday of the month, 9:00 am; JPB Finance Committee: Fourth Monday of the month, 2:30 pm. Date, time and location of meetings may be changed as necessary. Meeting schedules for the Board and committees are available on the website.

Location of Meeting

Due to COVID-19, the meeting will only be via teleconference as per the information provided at the top of the agenda. The Public may not attend this meeting in person.

Public Comment*

The public comment will be available remotely via the Zoom website using the link provided at the top of the agenda. Public commenters may enter in comments for specific agenda item(s) into the Zoom Q&A section and wait for the Chair to open for public comment and when you are called upon and for up to the allotted time allowed per speaker. The telephone call in number, provided at the top of the agenda, is only to listen to the meeting and does not have the capability to take any verbal comment. As directed at the top of the agenda, you may email comments/correspondence to publiccomment@caltrain.com and it will be distributed to the Board and included for the official record. Comments that require a response may be deferred for staff reply.

Accessible Public Meetings/Translation

Upon request, the JPB will provide for written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in and provide comments at/related to public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, auxiliary aid, service or alternative format requested at least 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; 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 FEBRUARY 26, 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 JANUARY 22, 2020

Motion/Second: Chavez/Brinkman

Noes: None

Absent: None

5. CALTRAIN BUSINESS PLAN - UPDATE COVERING JANUARY & FEBRUARY 2020

Sebastian Petty, Director of Policy Development, provided an update; highlights included vision implementation, equity analysis, standardizing schedules, enhanced growth (extend peak hours), funding gap, self-generated revenue, carbon credits, parking and advertising as revenues, and new public investment.

Director Cheryl Brinkman inquired about visually making the importance of the efficiency of trains vs cars on a highway clear to members and the public.

Director Charles Stone commented on bikeshare and more frequented stops.

Public Comment

Roland LeBrun, San Jose, commented additional stops increasing, and accommodating riders coming from south of Santa Clara County.

Adina Levin, Friends of Caltrain, commented on increasing Caltrain ridership diversity and equity, fare integration, and 101 managed lane study.

Sebastian acknowledged Melissa Jones for her contribution to the presentation.

Director Brinkman said carbon credits would help Bay Area cities meet their greenhouse gas emission goals.

6. SENATE BILL 797 IMPLEMENTATION

Seamus Murphy, Chief Communications Officer, provided an update; highlights include demonstrating investments and benefits with this tax fund, operating and capital needs, 7-agency approval, baseline vs enhanced growth service, expanding to 8 trains per hour over the next decade, outreach, and other major capital & accelerating Caltrain increases in the next term. Mr. Murphy mentioned the short timeline of the bill, going to various counties from San Mateo in April to San Francisco in July.

Director Cindy Chavez asked whether every jurisdiction needed to vote for the faster measure.

Mr. Murphy said a regional agency would put it on the ballot.

Director Chavez provided an outline of objectives, goals and concerns around this tax, particularly with VTA (Santa Clara Valley Transportation Authority).

Director Brinkman asked about change in language addressing equity concerns.

Public Comment

Roland LeBrun, San Jose, commented on comparing ridership to fare boxes as a percentage, especially to determine which counties should contribute to and benefit from operations.

Adina Levin, Friends of Caltrain, commented on carbon credit, accountability, shared goals and VTA budget concerns.

Mr. Murphy said in terms of low carbon credit, it is accounted for in terms of shortfall; by looking at most recent budget from half cent sales tax and calculated what 1/8 would be, and enabling legislation does not allow for different sales tax in different counties,

Director Brinkman asked whether the public wanted to expand Caltrain hours of service.

Mr. Petty said they are not contemplating expanding service hours but are looking at increasing off peak service.

Michelle Bouchard, Chief Operations Officer, thanked Director Brinkman for her contribution and support and wished her well in her travels.

Director Brinkman said it was an honor to be on the committee as well as the Caltrain Board.

7. COMMITTEE MEMBER REQUESTS

None.

8. DATE/TIME OF NEXT REGULAR WPLP COMMITTEE MEETING: MARCH 25, 2020 AT 3:00 PM, SAN MATEO COUNTY TRANSIT DISTRICT ADMINISTRATIVE BUILDING, 2ND FLOOR, 1250 SAN CARLOS AVENUE, SAN CARLOS, CA

9. ADJOURN

The meeting adjourned at 4:25 p.m.

**PENINSULA CORRIDOR JOINT POWERS BOARD
WPLP -STAFF REPORT**

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Caltrain

SUBJECT: **CALTRAIN BUSINESS PLAN – UPDATE COVERING MARCH 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 March 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 March 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 spring of 2020

Prepared by: Sebastian Petty, Deputy Chief, Caltrain Planning

650.622.7831

Caltrain Business Plan

WPLP

March, 2020



Agenda for Today



Process Overview



Rounding out the Long Range Vision

- Station Access and Connectivity



- Existing Opportunities & Challenges

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

Winter 2019-2020



Rounding Out the Vision
and Implementation
Planning

Spring 2020



Completion of
Business Plan

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

Stopping Pattern

Local / Express with timed transfer in Mid Peninsula

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

Service Type

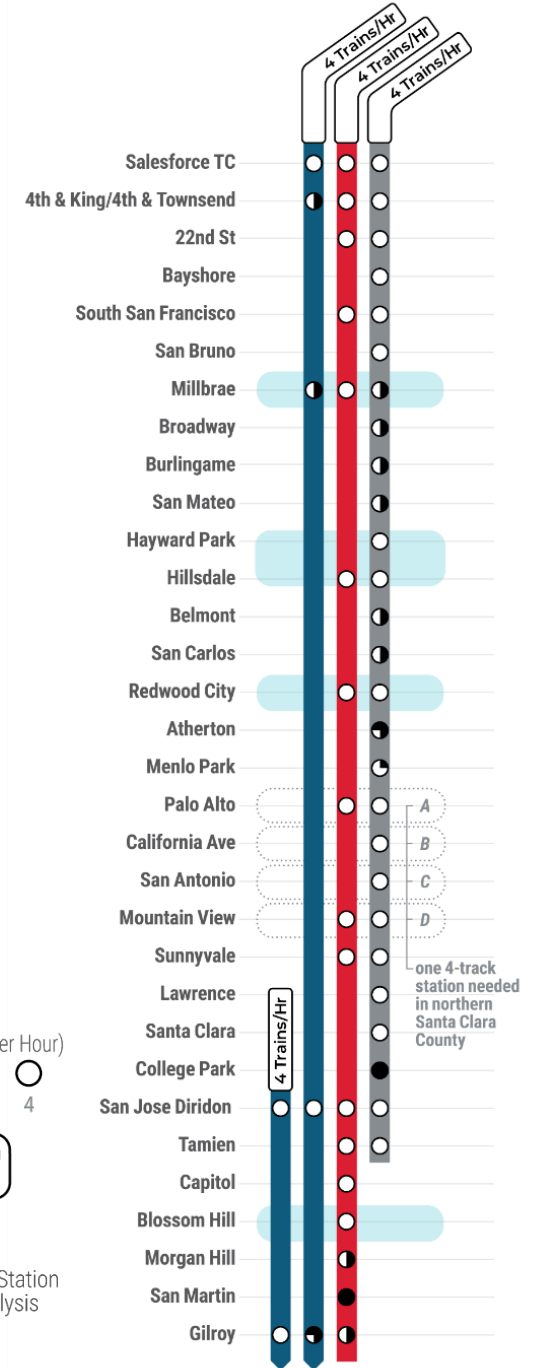


Service Level (Trains per Hour)



Peak Direction Trains/Hour

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*

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%)

Rounding Out the Vision

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 overall 2040 Vision (will be presented in April)

Connecting to Caltrain



Getting to Caltrain

The Service Vision plans for ridership to triple over the next two decades.

Achieving this kind of growth will mean big changes for how riders connect to and access the Caltrain system.

As it plans for the future, Caltrain must decide how to invest in first- and last-mile programs and prioritize the use of resources to improve access and connectivity to the system.

This assessment considers how station access needs may change over time, and potential paths forward to realizing the service vision.



Caltrain's Roles in Station Access

Today Caltrain plays a limited and uneven institutional role in providing and coordinating access to the system. Access and connectivity functions not provided or coordinated through Caltrain are undertaken by Caltrain's partners (MUNI, SamTrans and VTA), by cities and local jurisdictions, and at times by the private sector.

Current Roles



Partially funds some first/last mile shuttle operations



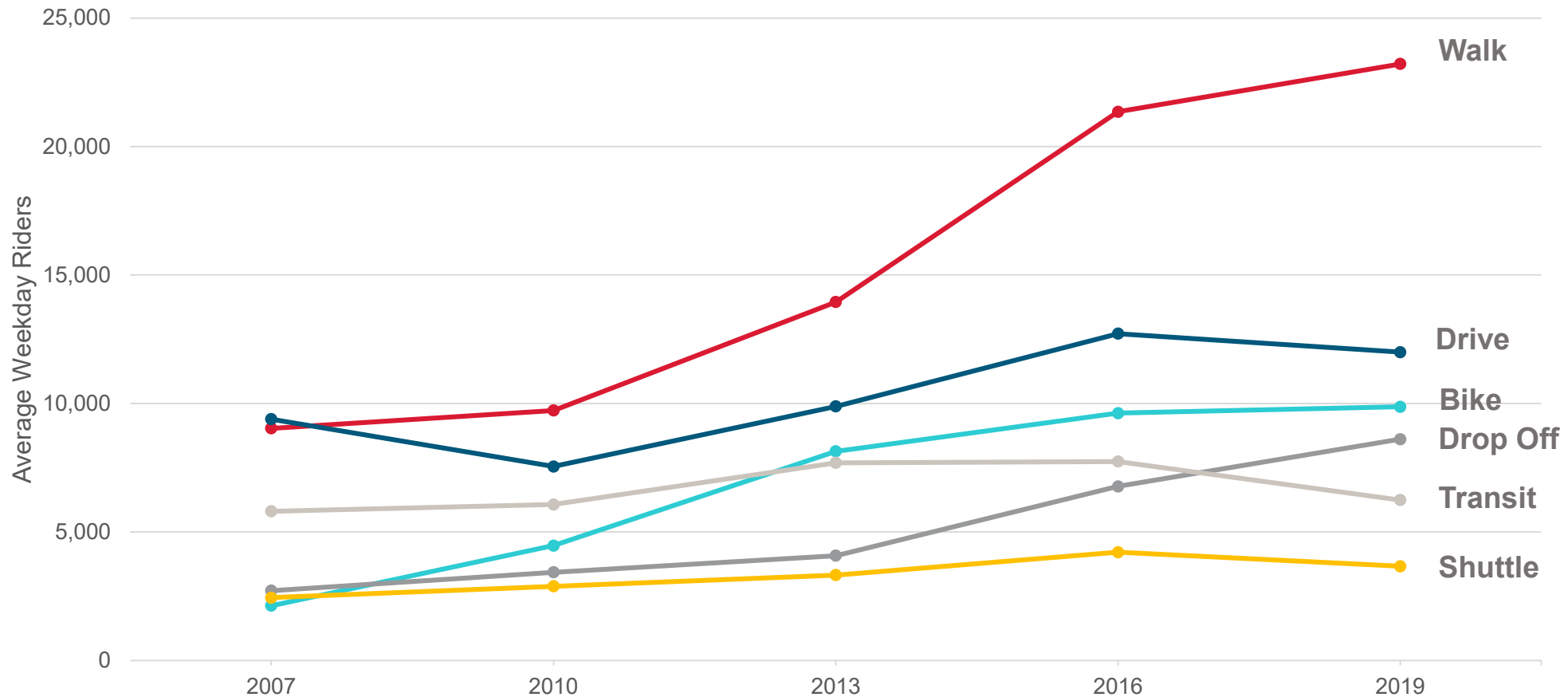
Provides and manages parking at some stations



Provides on-board and wayside bike parking; responsible for onsite pedestrian circulation on JPB-owned station facilities

How do Weekday Passengers Travel to and from Caltrain?

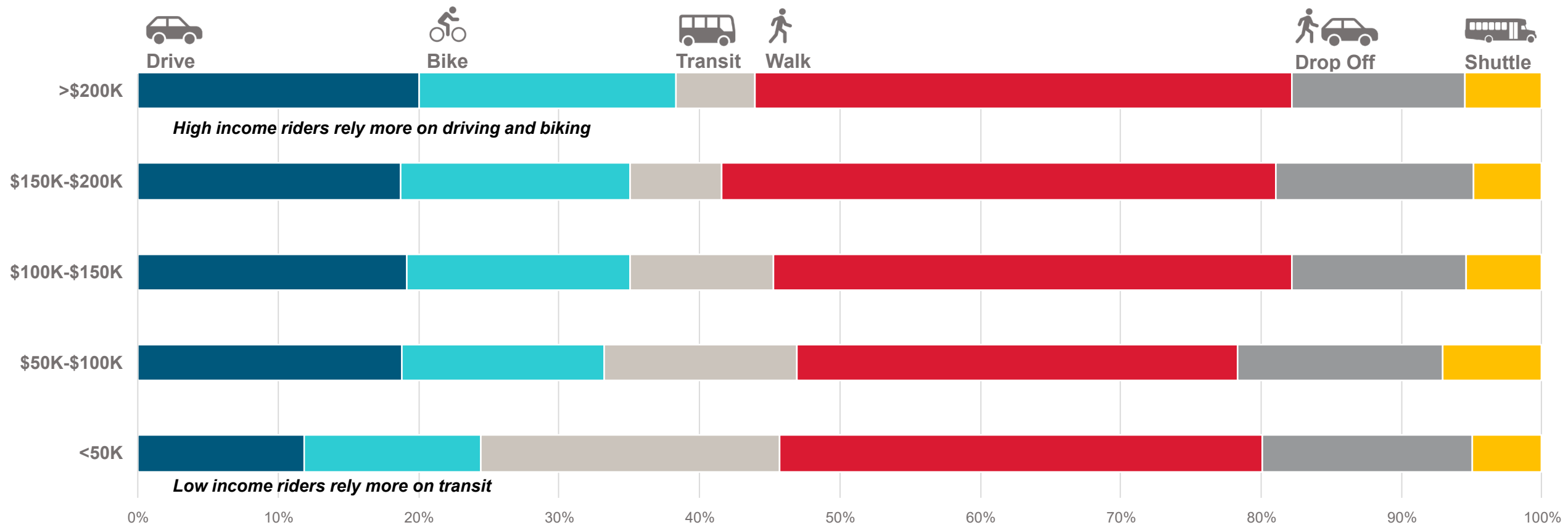
Data from Caltrain's Triennial Surveys- 2007 through 2019



Equity

Station Access by Household Income

Data from Caltrain's 2019 Triennial Survey



Caltrain Manages 7,600 Parking Spaces for Low or No Fees



SF
0
JPB-
Managed
Spaces

Bayshore – Diridon

5,400

JPB-Managed Spaces

Parking Rates

Weekday \$5.50 daily flat fee
\$82.50 monthly flat fee
Weekend Free

Tamien – Gilroy

2,200

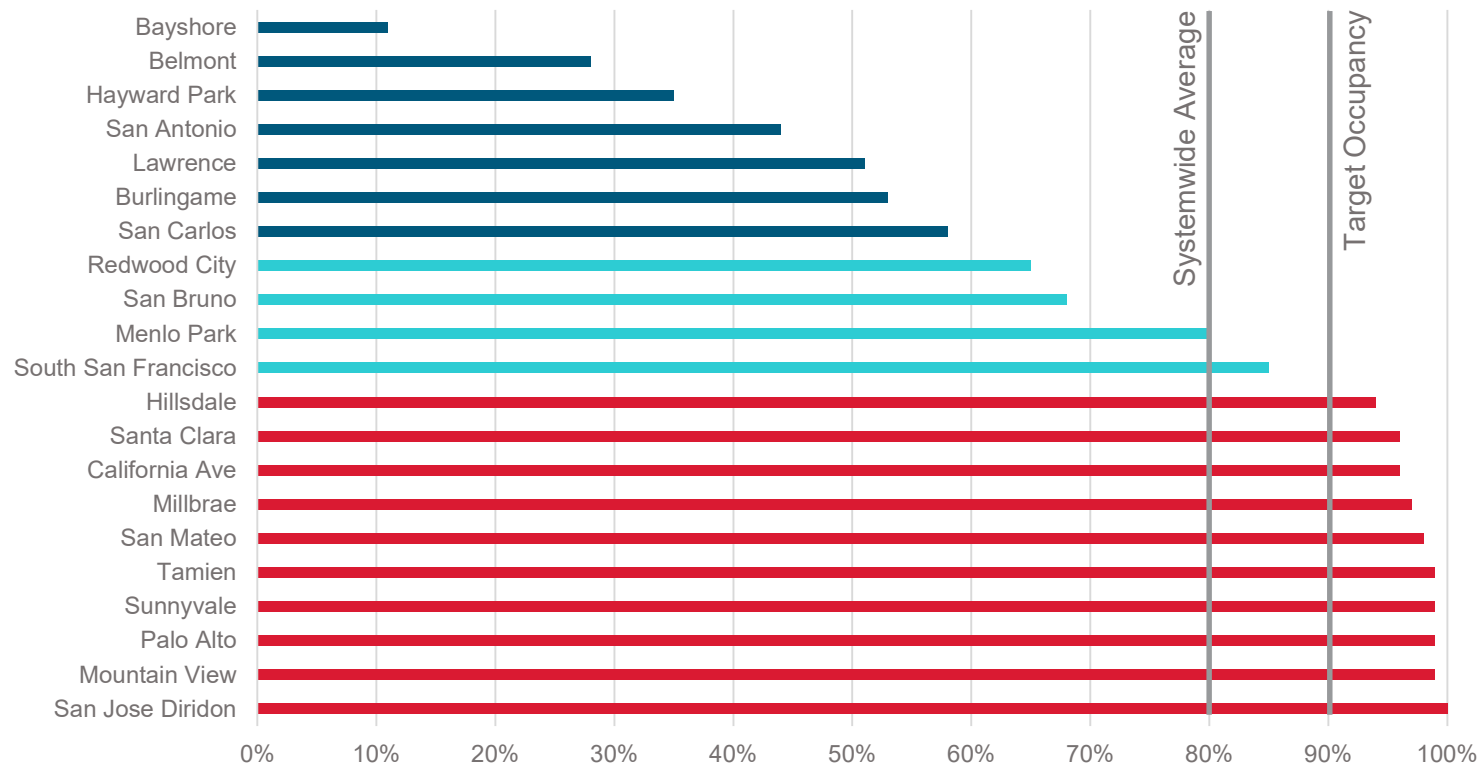
VTA-Managed Spaces

Parking Rates

Free

Parking is Undersubscribed at Some Stations and Oversubscribed at Others

Parking Occupancy



Demand

7

Mainline stations with <60% parking occupancy, where parking is potentially overpriced relative to demand & service levels

10

Mainline stations with >90% parking occupancy, where parking is underpriced compared to nearby public and private lots

Revenue and Pricing

\$5.6M

**Annual Caltrain
Parking Revenues**

Including daily rates of
\$5.50 per day or \$82.50
per month

1.5-5X

**Price of Nearby Public
& Private Parking Lots**

Daily Rate Examples at public
lots:

- Downtown San Mateo:
\$7.50/day
- Menlo Park: \$10/day
- Downtown Palo Alto:
\$25/day

Free

**Parking at stations south of
Diridon (owned by VTA)**

Free lots may be used by
non-Caltrain passengers



Managing and Pricing Parking Are Key Opportunities

Current Operations

Caltrain Subsidizes Parking at Some Stations Relative to Market Rates

By charging a uniform rate across the system, Caltrain underprices parking at 10 high-demand stations relative to nearby public and private lots, which charge two to three times Caltrain's price

The benefits of this underpriced parking tend to accrue to high-income riders who are more likely to park at stations

This trend is likely to continue over time, although some spreading may occur as service improves across all stations

Future Operations

Active Parking Management Will Become More Important as Caltrain Increases Service

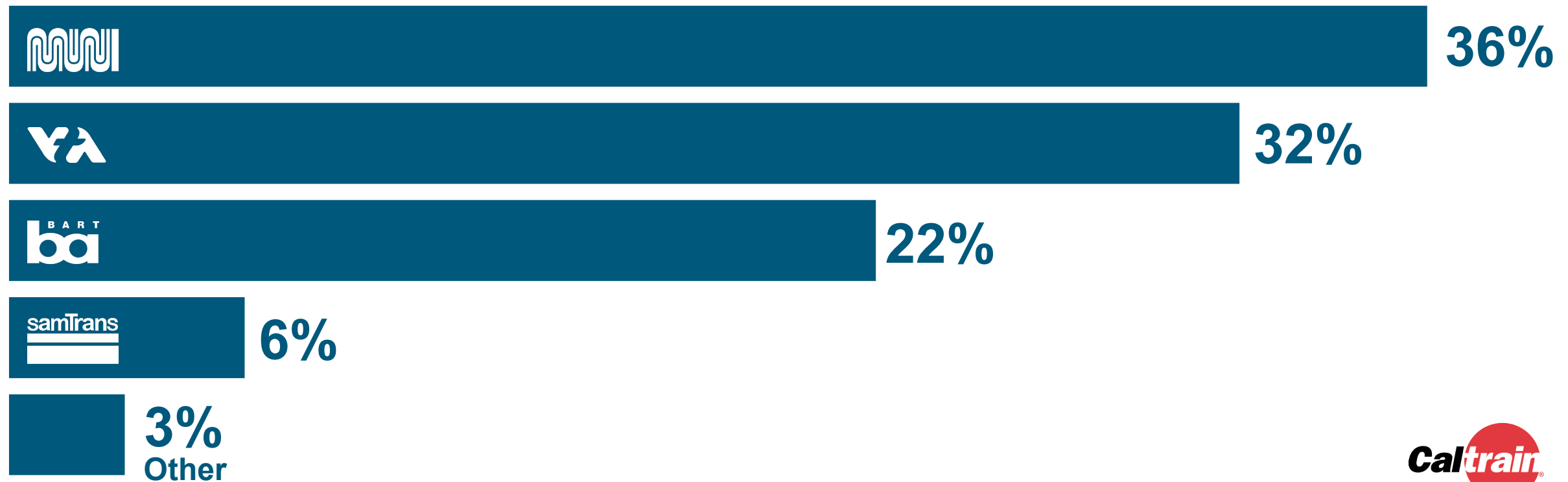
Caltrain may consider market-based pricing to better manage supply and demand during weekdays and weekends, similar to BART's proposed program

A market-based program could increase prices at some stations and decrease prices at other stations in order to reach a target weekday occupancy of around 90 percent

Pricing could be tied to occupancy surveys and service frequency

10% of Caltrain Riders Connect to Other Transit Services

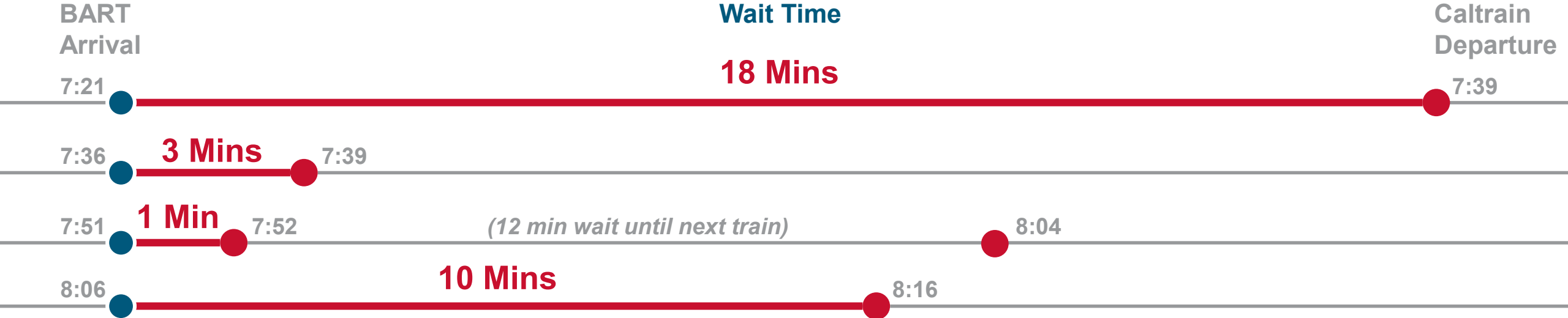
Percent of Caltrain transfers to other operators



Caltrain's Complex Service Pattern Limits Schedule Coordination

Today, Caltrain's highly customized schedule prevents regular coordinated transfers (~5 Minutes) with bus and rail services at most stations

Example: Southbound AM BART-Caltrain Connection at Millbrae



Bus Operators Provide Discounted Transfers for Some Caltrain Fares

VTA and SamTrans offer transfer discounts to most Caltrain Monthly Pass holders, while Muni provides a discount for all Caltrain riders using a Clipper Card. Fare savings tend to accrue to higher income passengers, who represent a disproportionate share of Monthly Pass users



- ✓ 50 cent fare discount to all riders using a Clipper Card
- ❑ No discount on paper tickets



- ✓ Free local rides for two-zone or greater Monthly Pass holders
- ❑ No discount for one-way fares and other products



- ✓ Free local rides for two-zone or greater Monthly Pass holders
- ❑ No discount for one-way fares and other products



- ❑ No discounts



Standardizing Caltrain Service Allows Improved Schedule Coordination

Coordinating Schedules

Shifting to standardized clockface schedules with electrification will help Caltrain better coordinate transit connections

A Distributed Skip Stop pattern could offer timed connections to high and low frequency buses, BART, and VTA Light Rail.

A Two Zone with Express pattern could offer timed connections to BART and low frequency buses but would some connections would remain challenging

Coordinating Fares

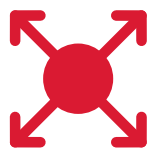
Further fare coordination presents an opportunity to increase ridership for Caltrain and partner agencies

Improved fare coordination could make transfers more seamless and convenient for all riders and could help Caltrain provide more equitable access for low- and middle-income riders who are more likely to connect via transit

Shuttles Fill Gaps in the Transit Network



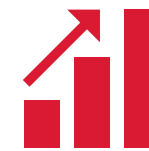
Public and Private Shuttles Fill Gaps in Schedules and Service Areas



Service to areas where buses do not operate



Timed connections when buses can't coordinate with Caltrain's schedule



Augmented capacity where buses cannot handle peak-period demand

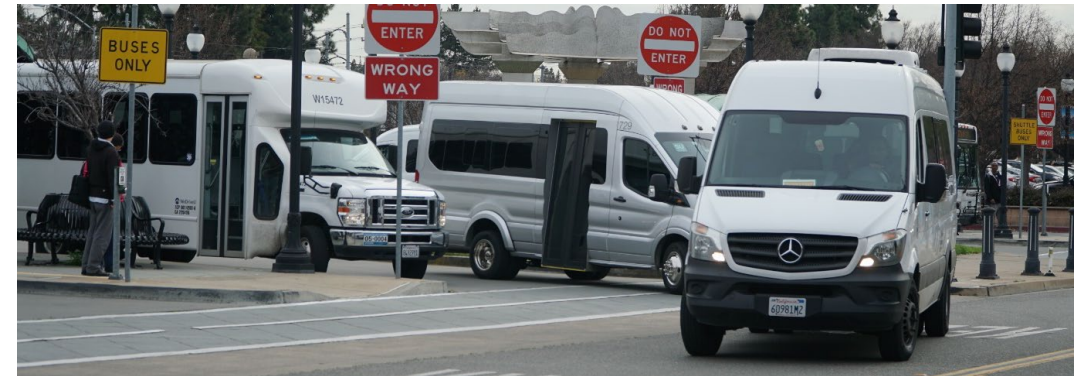
Many Types of Shuttles Operate on the Caltrain Corridor



Publicly Managed

Caltrain and the SMCTA manage 33 shuttles in San Mateo and Santa Clara Counties connecting to Caltrain

- 31 are free to the public
- 26 are co-funded by employers
- 4 are community shuttles oriented toward local travel needs



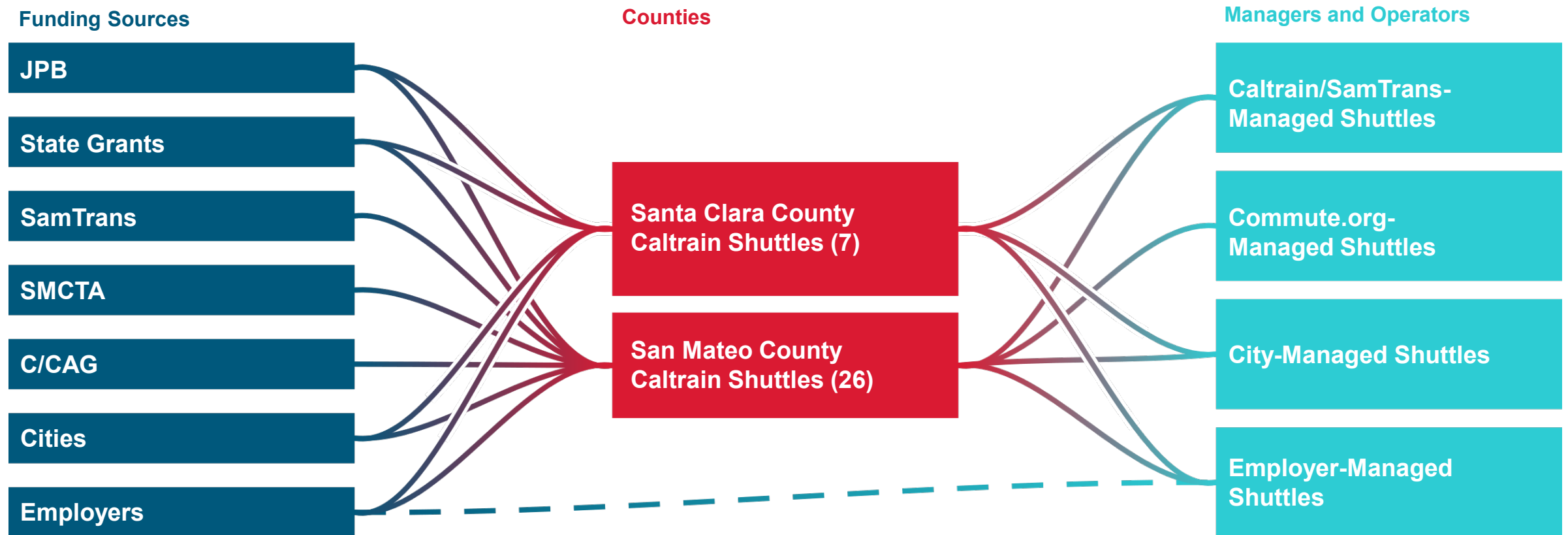
Privately Managed

Major employers like Stanford and Genentech operate first/last mile shuttles free to the public

Dozens of other employers offer private shuttles for employees only

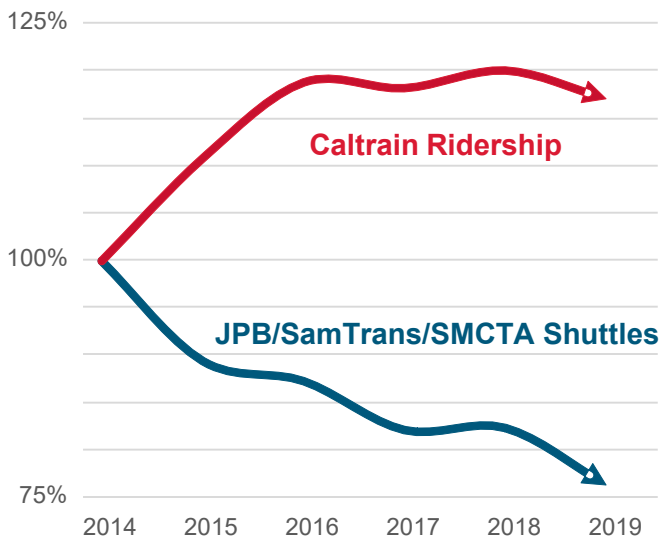
Shuttle Funding Structure

The current system of shuttle funding and operations is extremely varied and complex. Funding comes from many different sources and varies significantly from route to route.



Ridership on Publicly Managed Shuttles is Declining

Ridership Comparison: Caltrain vs. Publicly-Managed Shuttles



Shuttle Ridership is Declining as Caltrain Ridership Grows

Shuttle ridership on publicly managed shuttles has declined by 25% since 2014 while Caltrain ridership increased by 17%

Three quarters of routes have lost ridership over the past five years, with 14 routes experiencing losses greater than 40%

Publicly Managed Shuttles Struggle to Match SamTrans /VTA Productivity Goals

6 of 33 routes meet SamTrans fixed route performance criteria for passengers per revenue hour

Shuttles Lack Reliability and Time-Competitiveness

Limited funding, organizational capacity, and administrative complexity have contributed to ridership loss, including:

- Driver shortages
- Circuitous routes
- Inadequate stop infrastructure
- Competition from private services

Privately Managed Shuttles Continue to Grow

Stanford Marguerite

Stanford's shuttle ridership has increased 16% since 2014. About 20% of all their employees commute via Caltrain. Stanford's TDM program offers Caltrain Go Passes and financial incentives to employees to discourage driving to work

Genentech

Genentech and other South San Francisco employers operate two shuttle routes to connect to Caltrain at Millbrae Station. The shuttle is open to the public.



Caltrain's Role in Shuttle Operations

The current publicly-managed system is under-resourced to meet the changing needs of the Caltrain corridor

Demand for first/last mile services will increase substantially as land use intensifies and Caltrain service increases over time

The current system lacks the financial resources and operational capacity to efficiently handle increased demand over time

Caltrain and its partners will need to evolve the shuttle program to better leverage public buses and private partnerships

Caltrain and SamTrans are jointly funding a comprehensive study of the shuttle program

Additional work will be needed to further coordination around shuttles with all of Caltrain's member agencies, local jurisdictions and large employers

Pickup & Dropoff Activity is Increasing, but Facilities are Lacking

Pickup & drop-off activity is increasing at most Caltrain stations

Result of both limited parking as well as Uber/Lyft growth

Half of Caltrain stations lack dedicated passenger loading zones

Most passenger loading activity occurs in existing surface parking lots and nearby streets

Caltrain must think holistically about onsite circulation

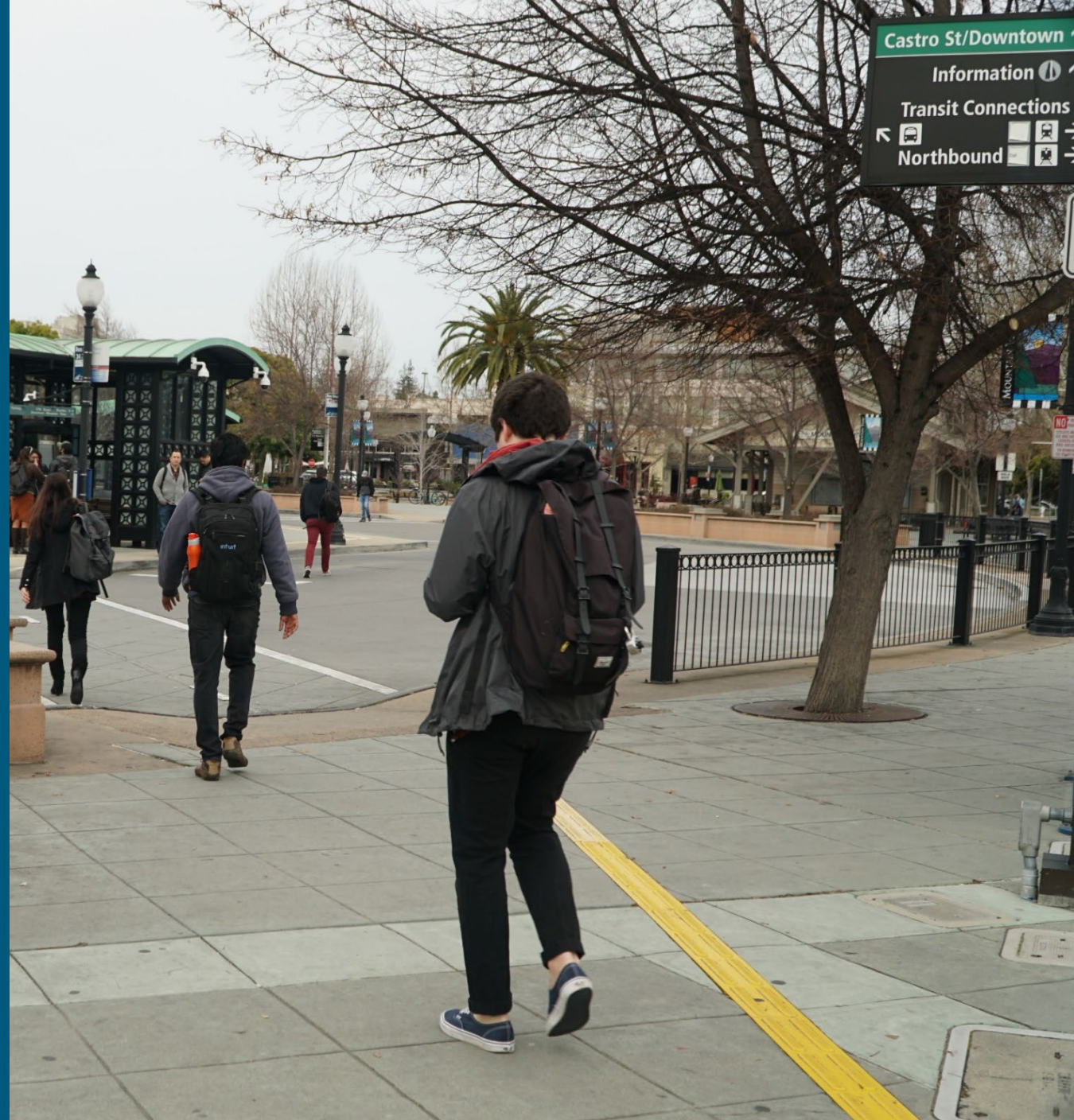
Station circulation and curb programming are critical to handling increased pickup & dropoff activity while minimizing conflicts



Walking & Bicycling Conditions

There is substantial need to invest in offsite and onsite bicycle and pedestrian access to stations. However, offsite improvements are outside of Caltrain's jurisdiction and rely on City-led decisions and processes.

This section will focus on onsite improvements to bike parking and pedestrian circulation.



Wayside Bike Parking and Bike Sharing are Critical to Expanding Bike Access

Onboard bike demand will exceed capacity in the short- and long-term

Caltrain has provided significant on-board capacity within its system, but expanding onboard bike capacity beyond the commitments already made by the JPB will limit overall passenger capacity, exacerbating crowding issues

Improvements to wayside bike parking and shared bikes/scooters show promise to scale access

A \$4M investment in bike parking is underway and will be used to fund improved bike parking, including e-lockers

4% of San Francisco and San Jose passengers use shared bikes or scooters to access Caltrain – a total expected to grow with the recent reintroduction of shared e-bikes

Investing in shared bike stations present an opportunity to scale capacity over time

Pedestrian Facilities Need Improvement

Caltrain stations need to prioritize pedestrians to handle expanded passenger volumes at stations

Most stations will need programmatic investments to accommodate increased ridership, improve onsite circulation, and reduce conflicts between modes

Major stations may need focused design efforts to handle increased volumes, particularly in the context of grade separations and joint development projects



Station Upgrades Needed to Accommodate Increased Ridership

Examples of upgrades needed to accommodate increased ridership



Expanded Shelters to offer shade and weather protection



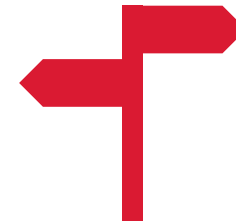
Strategically located Clipper readers at station entrances and along platforms



Clipper-integrated ticket machines (coming soon to most stations)



Level boarding



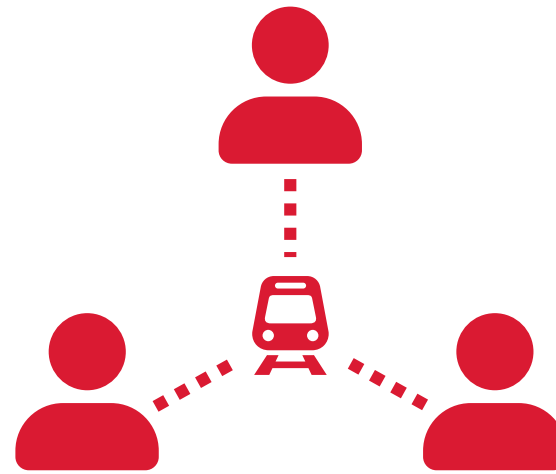
Improved Wayfinding and Signage



More Pedestrian-scale lighting

Strong Growth Predicted in Ridership and Station Use by 2040

Under the Long Range Service Vision adopted by the Caltrain Board, ridership is projected to triple from today's levels. This will mean significant changes to the way that people access the Caltrain system



+120,000

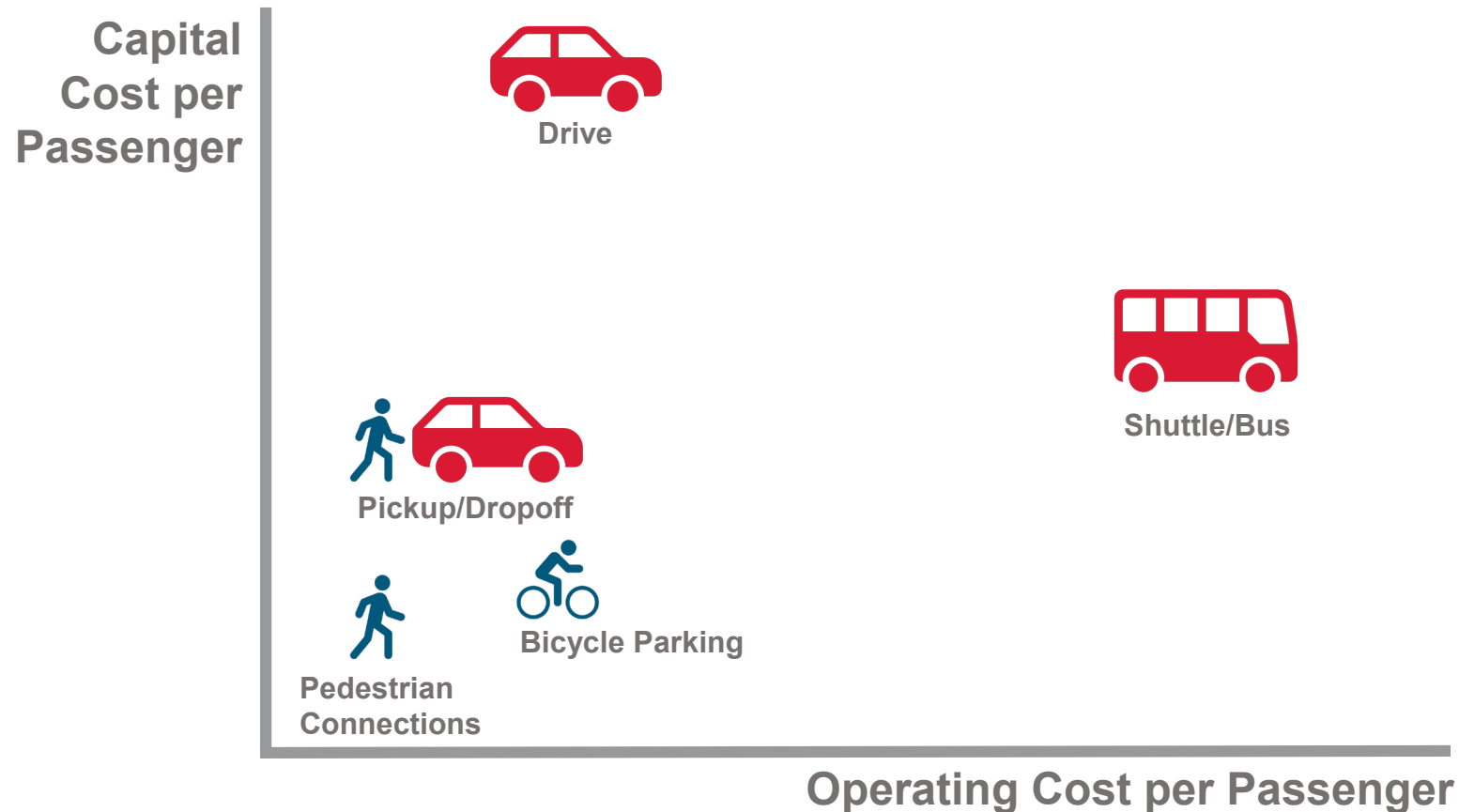
Passengers Traveling to and from Caltrain



10X

Growth in use for some stations compared to today

Making improvements to enhance walking, biking, and passenger loading are the least costly access investments



Walking and biking are also the most scalable/sustainable access modes

Scalability to
Accommodate
Demand



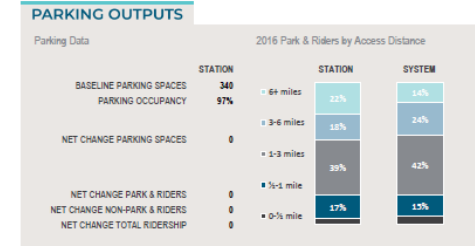
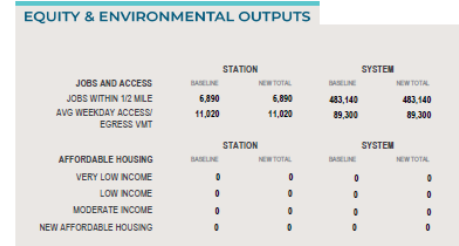
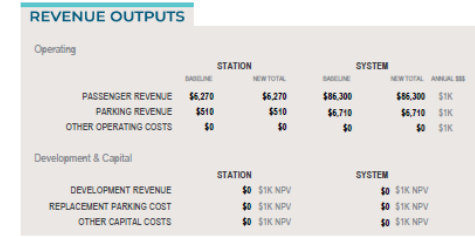
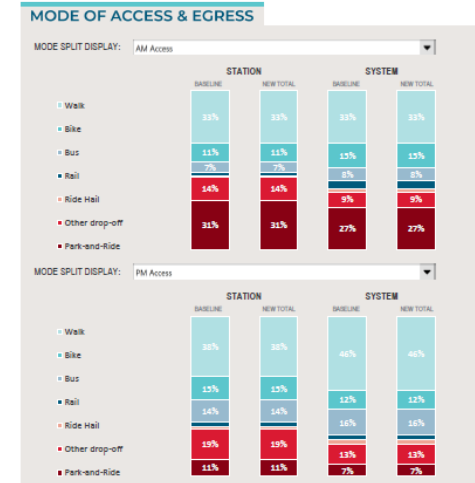
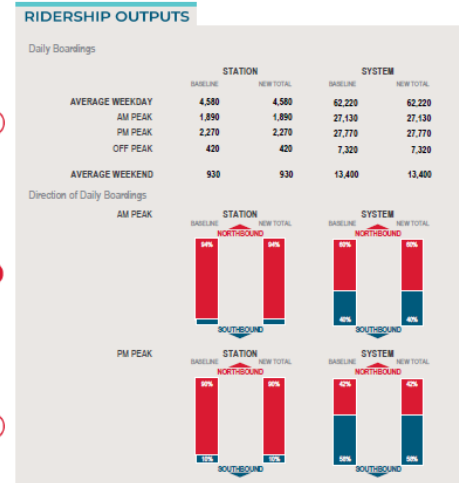
Sustainability

Caltrain Station Management Toolbox

Caltrain received a grant from the Federal Transit Administration to develop a tool to analyze the effects of access investments and joint development for Caltrain

Based on this analysis, Caltrain developed a Station Management Toolbox for staff use to evaluate individual and system wide changes – this tool has been updated to support the Business Plan analysis

Caltrain STATION MANAGEMENT TOOLBOX OUTPUTS



Three Alternative Access Improvement Scenarios Explored

1: Ad-Hoc Approach

- Investments and programs occur as funding becomes available- similar to today
- Investments and programs are mostly led by entities other than Caltrain
- Caltrain is mostly agnostic to the types of investments that occur

2: Expand Parking Supply

- Investments and programs focus on growing parking supply in proportion to ridership
- Caltrain organization becomes more proactive in building new parking garages including land acquisition as needed

3: Prioritize Non-Auto Access and Joint Development

- Investments and programs emphasize modes other than park-and-ride
- Caltrain organization becomes more proactive in shuttles, service integration, pedestrian/bicycle infrastructure, and TOD

Analysis Assumptions Drive Results

The Following Assumptions Were Used in This Scenario Analysis:

1: Ad-Hoc Approach

- 1.5x increase in parking supply
- No change to shuttle services
- Moderate improvement to bike/ped access
- Moderate development intensity at feasible sites with all parking replaced
- New parking assumed to cost \$75,000 per space due to garage and parking replacement costs

2: Expand Parking Supply

- 3x increase in parking supply
- No change to shuttle services
- Minimal improvement to bike/ped access
- No new joint development
- New parking assumed to cost \$100,000 per space due to garage, parking replacement, and land acquisition costs

3: Prioritize Non-Auto Access and Joint Development

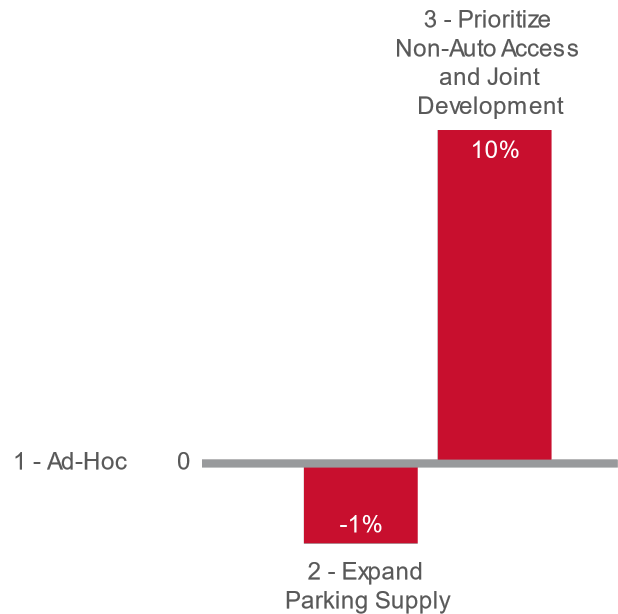
- No new parking supply
- 3x increase in shuttles service
- Substantial improvement to bike/ped access
- High intensity development at all sites without replacement parking

Change in Ridership & Mode of Access through 2040

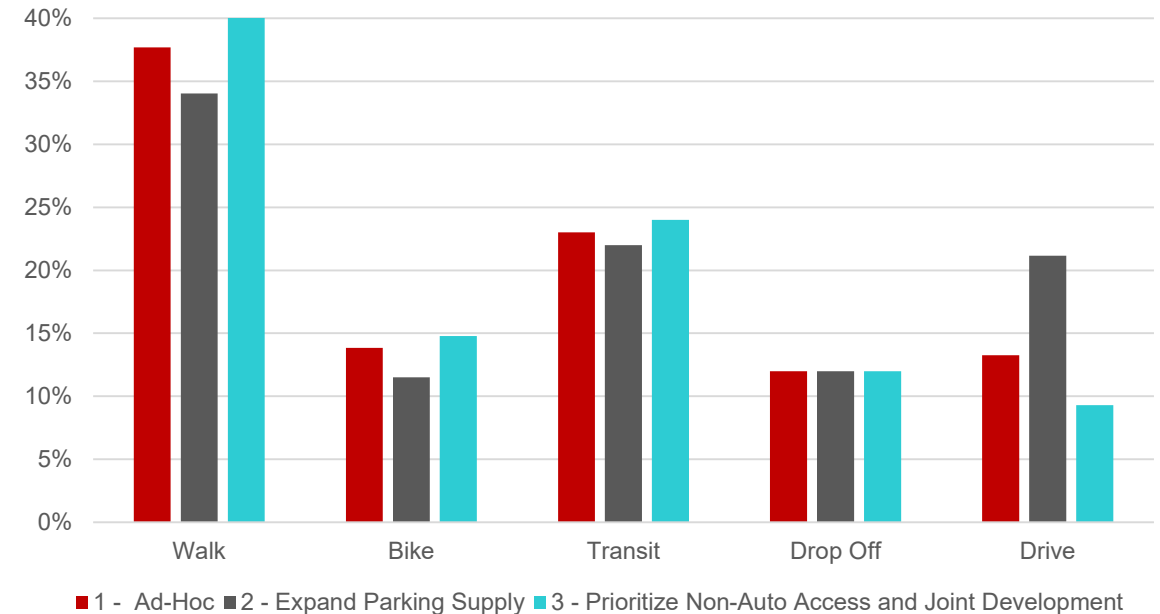
Prioritizing park-and-ride access shifts more passengers to driving but results in *lower* ridership than investing in other modes.

Maximizing joint development, active transportation, and transit access results in *higher* ridership and less driving.

Change in Ridership



Change in Mode of Access

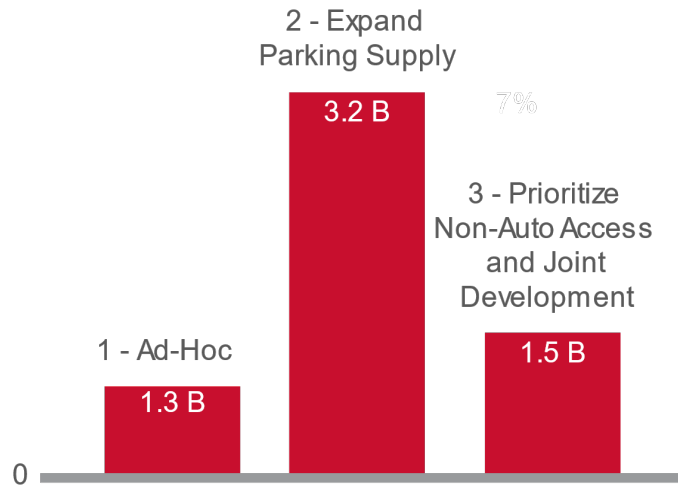


Change in Costs & Revenues

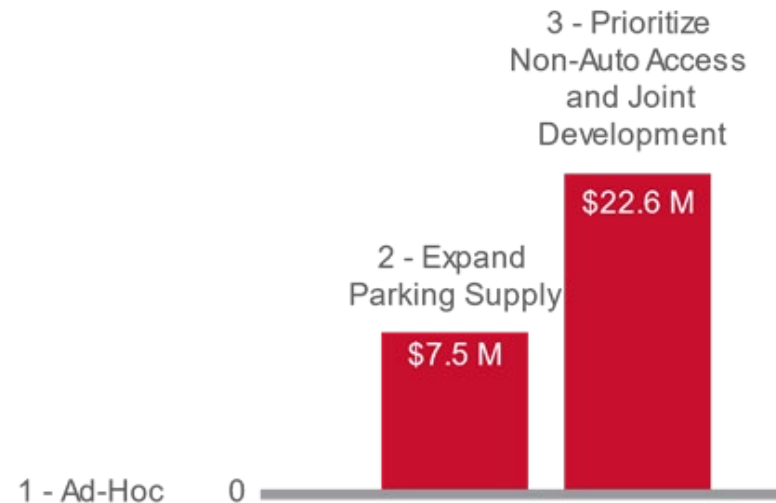
Tripling parking supply could cost double that of investing in non-auto modes.

Expanding access for non-auto modes more than triples the revenue generated by expanded parking supply.

Approximate Cost over 50 Years



Approximate Additional Annual Revenue



Station Access Results Present a Variety of Policy Questions



Is More Parking Worth the Investment?

- Parking garages are costly (analysis assumed \$100,000 per new space including replacement parking and land acquisition)
- Building new garages may come at the expense of housing and office TOD
- Increasing parking supply is less effective in supporting ridership growth than investments in other modes



How Should Caltrain Address Shuttle and Bus Connections?

- There is substantial demand to scale shuttle/bus service to match growth of Caltrain service and development
- However, organizational and operational challenges may limit the potential for expansion
- Ongoing operational subsidies are high



What is Caltrain's Role in Bike/Ped Access?

- Improving bicycle parking and shared use at stations represents a key opportunity to accommodate long-term ridership growth
- Addressing offsite barriers to pedestrian and bicycle access are necessary to accommodate ridership growth, but these areas are typically outside Caltrain's jurisdiction

Equity Assessment

Why Focus on Equity?

The equity assessment is intended to help Caltrain understand how it can improve equity within its system- both in the near term and as the Service Vision is implemented over time.

Caltrain is Focusing on Equity for Multiple Reasons

- Stakeholder and Policy maker feedback through the Business Plan and other Caltrain undertakings have made it clear that equity is an important priority for the system
- Caltrain is planning to grow. The Long Range Service Vision calls for tripling the system's ridership. To do this, we want our service to be an accessible, useful and attractive choice for all members of our community
- Caltrain will need public investment to achieve its vision. Focusing on equity helps ensure that we deliver benefits and value to all members of the public

Equity Assessment Work Plan

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



Opportunities & Challenges

- Review of existing plans
- Stakeholder interviews
- Market assessment



Analysis of the Service Vision

- Qualitative & quantitative evaluation of the Service Vision
(will be presented in April)



Recommendations

- Context-specific recommendations developed from the analysis of the Service Vision and opportunities and challenges
(will be presented in April)

Existing Plans Review

1. Bayview Community Based Transportation Plan (2019)
2. Redwood City Citywide Transportation Plan (2018)
3. Moving San Mateo County Forward: Housing and Transit at a Crossroads (2018)
4. San Bruno/South San Francisco Community-Based Transportation Plan (2012)
5. San Mateo County Transportation Plan for Low-Income Populations (2012)
6. East Palo Alto Community-Based Transportation Plan (2004)
7. Community-Based Transportation Plan for East San Jose (2009)
8. Community-Based Transportation Plan for Gilroy (2006)
9. Equitable Access to Caltrain: Mapping and Scheduling Analysis (2019)

Stakeholder Engagement

To better understand existing barriers for disadvantaged riders and residents in the corridor, surveys were sent to community-based organizations along the corridor. Representatives who wanted to provide more feedback were interviewed in person or over the phone.



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Community Stakeholder Survey Responses



6

In-Person Community Stakeholder Interviews - 2 in each Caltrain county



6

Community Stakeholder Phone Interviews

Feedback From Stakeholders

Service & Stations



Better Service For Nontraditional Work Schedules And Non-work Trips

Currently, Caltrain is focused on traditional commute hours, whereas low-income and vulnerable populations are more likely to have commutes that fall outside of these times.

Recommendations

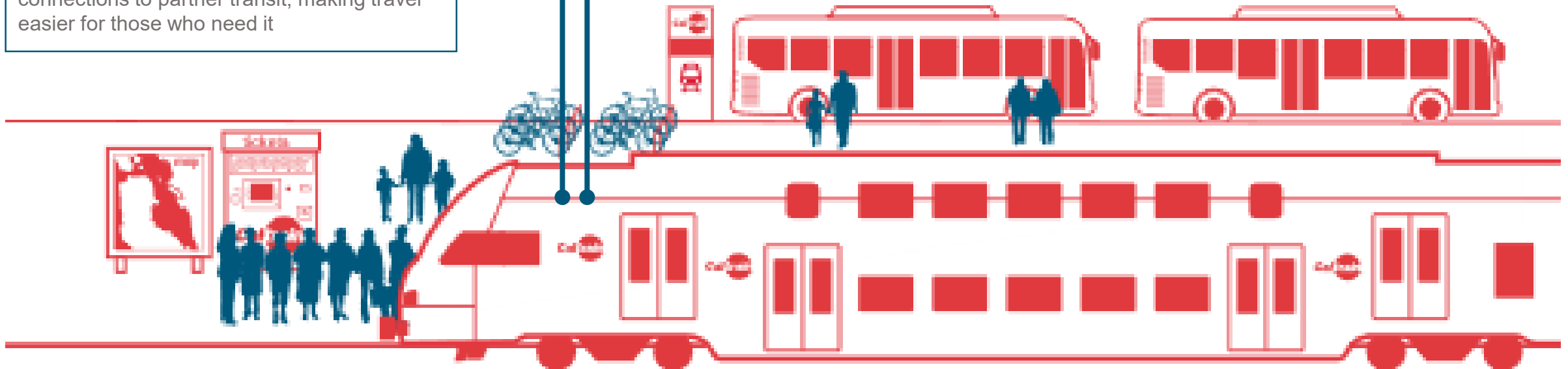
- More mid-day, late evening, and early morning service
- Connecting services during non-typical commute times need to be coordinated

More Frequent Service

Upgraded service would offer more flexibility and choice to access the corridor and better connections to partner transit, making travel easier for those who need it

Open Stations In Communities Of Concern

The Bayview neighborhood of San Francisco would like to see the Oakdale station built to replace the Paul Ave station closed in 1999. North Fair Oaks would like to see a local station on either the Caltrain or Dumbarton rail corridor.



Better Connecting Bus Service

Currently, existing and potential Caltrain riders are poorly served by connecting bus services in San Mateo and Santa Clara Counties

Recommendations

- Better scheduling coordination with SamTrans and VTA to reduce the number of bus connections that result in long waits or insufficient (<5 minutes) transfer times
- More frequent connecting bus services to Caltrain stations

Better Bike & Pedestrian Connections

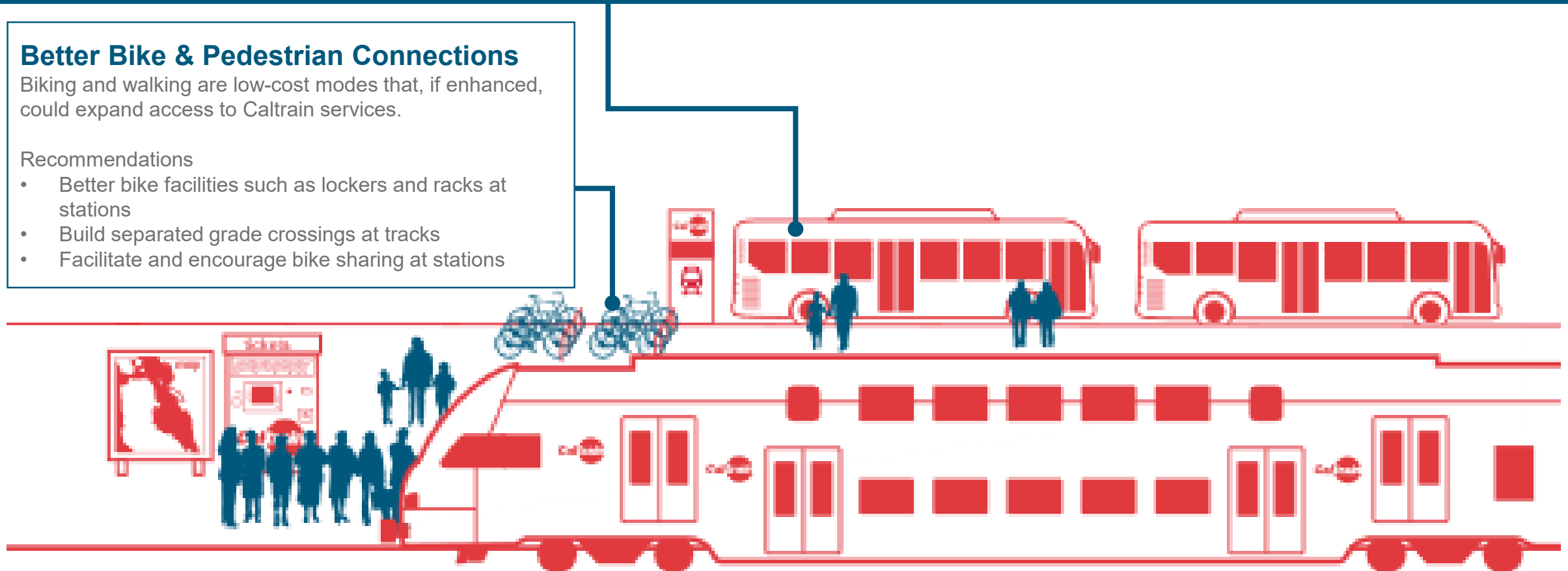
Biking and walking are low-cost modes that, if enhanced, could expand access to Caltrain services.

Recommendations

- Better bike facilities such as lockers and racks at stations
- Build separated grade crossings at tracks
- Facilitate and encourage bike sharing at stations

Feedback From Stakeholders

Station Connections



Feedback From Stakeholders

System Accessibility



Better Rider Information

The fragmented nature of public transit service in the Bay Area makes it difficult for riders, especially those from marginalized and limited English-proficient backgrounds, to navigate myriad systems and agencies

Recommendations

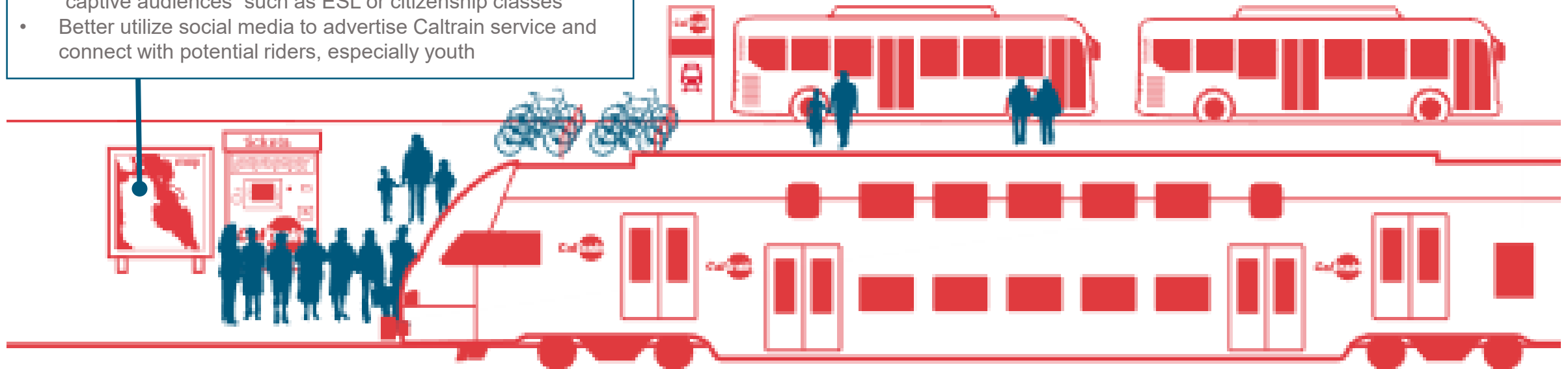
- Area-based maps and schedules that show services from all agencies, ideally in multiple languages
- Conduct outreach to teach people how to ride, perhaps with “captive audiences” such as ESL or citizenship classes
- Better utilize social media to advertise Caltrain service and connect with potential riders, especially youth

Accessible Station Design

Some Caltrain stations are poorly lit, provide limited access to ADA riders, and feel uninviting to riders

Recommendations

- Provide amenities at stations that improve rider experience, such as more lighting, shelter from the elements, and seating
- Implement level boarding at all stations



Feedback From Stakeholders



Fares & TOD

Discounted Fares For Low-income Riders

Currently, Caltrain does not offer discounts for low-income riders and has a significantly lower share of low-income riders compared with other agencies along the corridor (Muni, VTA, and SamTrans)

Recommendations

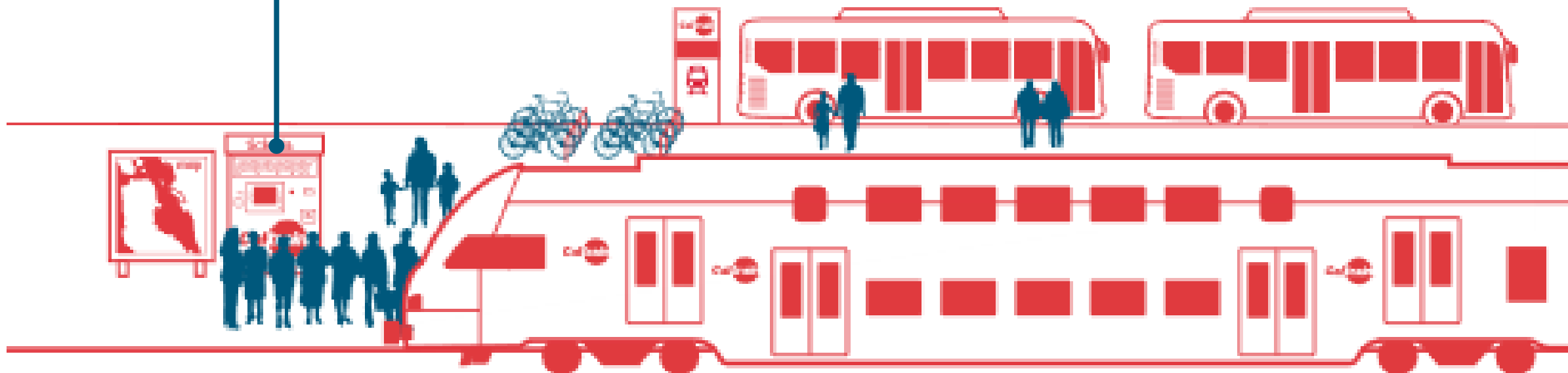
- Offer a reduced fare or subsidy program for low-income riders
- Revisit the zone fare structure to make sure that it is not disincentivizing the use of any connecting bus service

More Affordable Housing Near Stations

Housing along the Peninsula is becoming increasingly expensive and inaccessible to low-income and transit-dependent households.

Recommendation

- Partner with jurisdictions along the corridor to prioritize developing affordable housing and implement anti-displacement or local preference policies near stations



Equity Assessment Key Questions

The equity assessment will help us to understand how the Service Vision affects equitable access to Caltrain and will identify a series of potential policy interventions that could improve equitable access further

1. Does Caltrain ridership reflect corridor communities?

Tool: census and on-board survey data

2. Do the travel patterns of lower income and minority communities reduce their likelihood of using Caltrain?

Tool: Census Transportation Planning Products data

3. What policy levers could Caltrain shift to increase ridership from low income and minority communities?

Tool: Review of fare structure and service plans, stakeholder interviews, plan review

The Corridor is Diverse

Within a two-mile station area:

20% of households are located within an MTC-designated Community of Concern

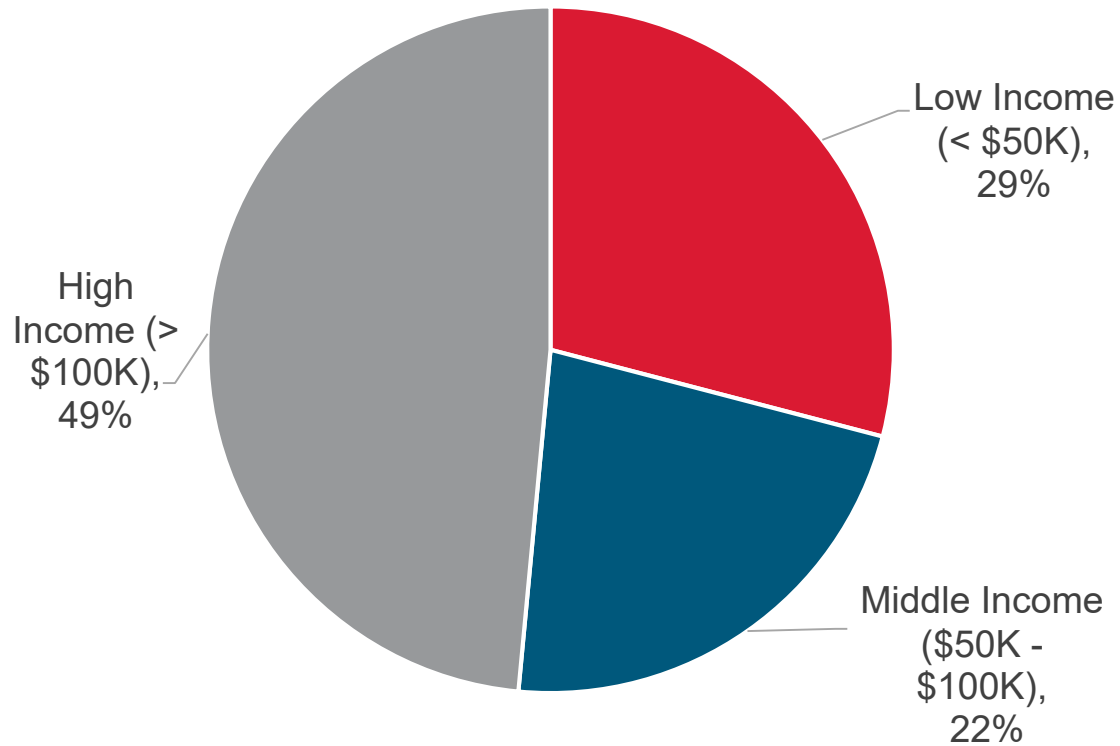
29% of households are low income (annual income less than \$50,000)

63% of residents identify as a person of color

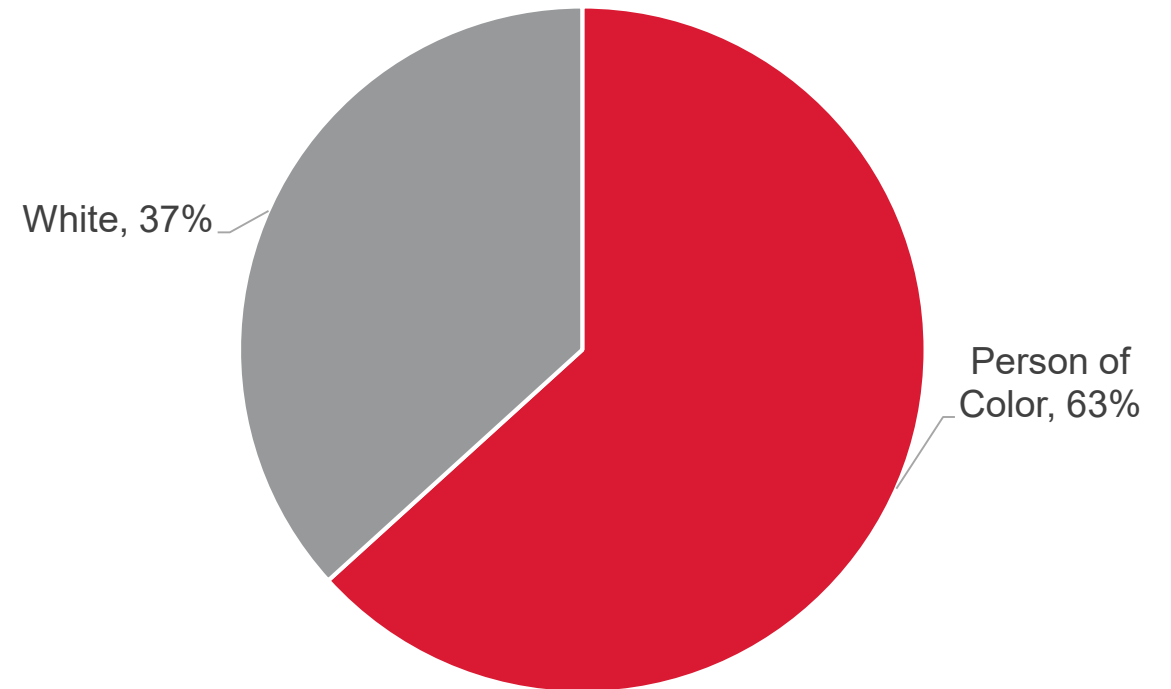


Residents within 2 Miles

Household Income

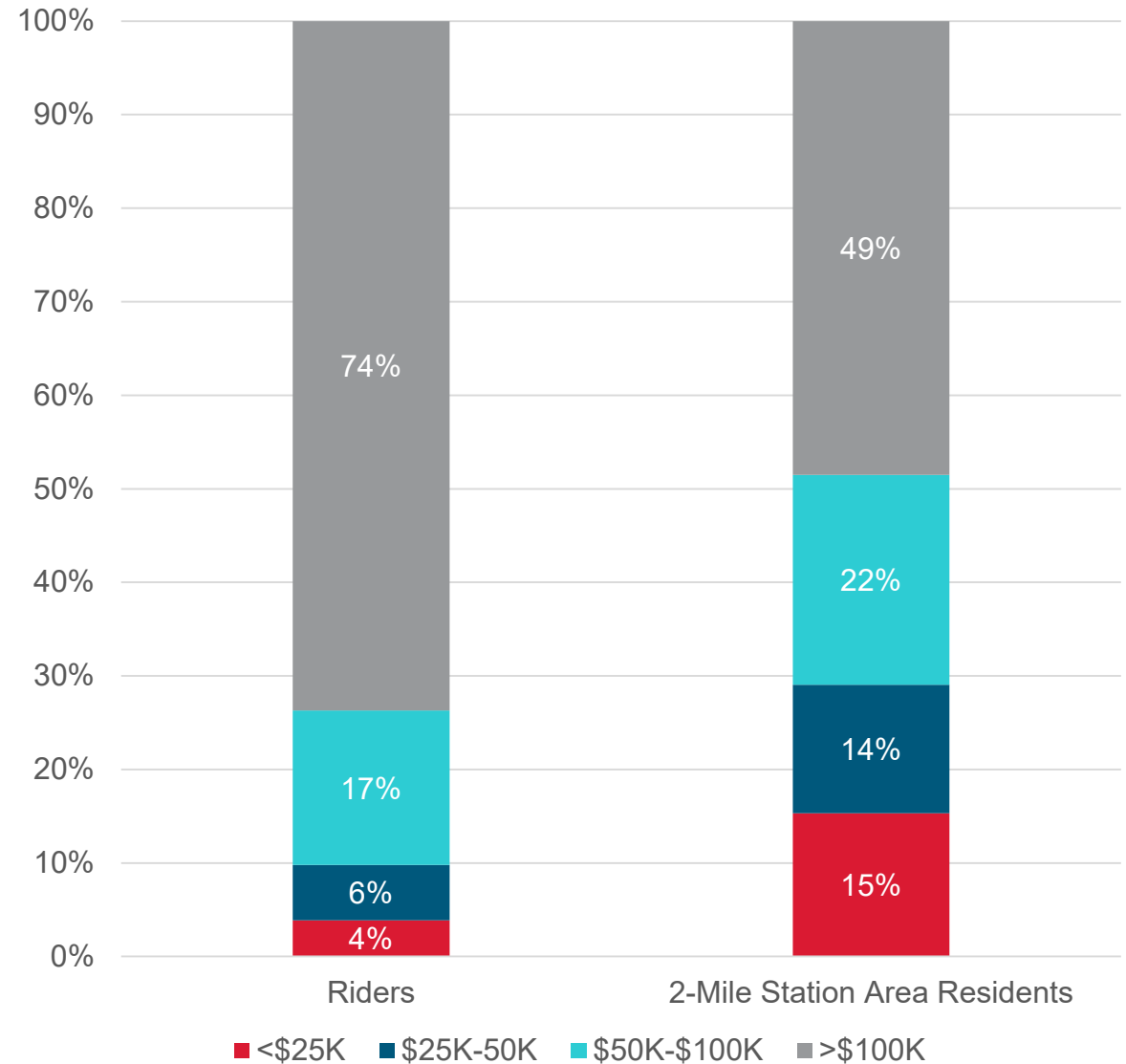


Race



Caltrain Rider Income does not Match that of Corridor Residents

Very-low, low, and middle-income brackets are underrepresented in Caltrain ridership relative to the surrounding corridor

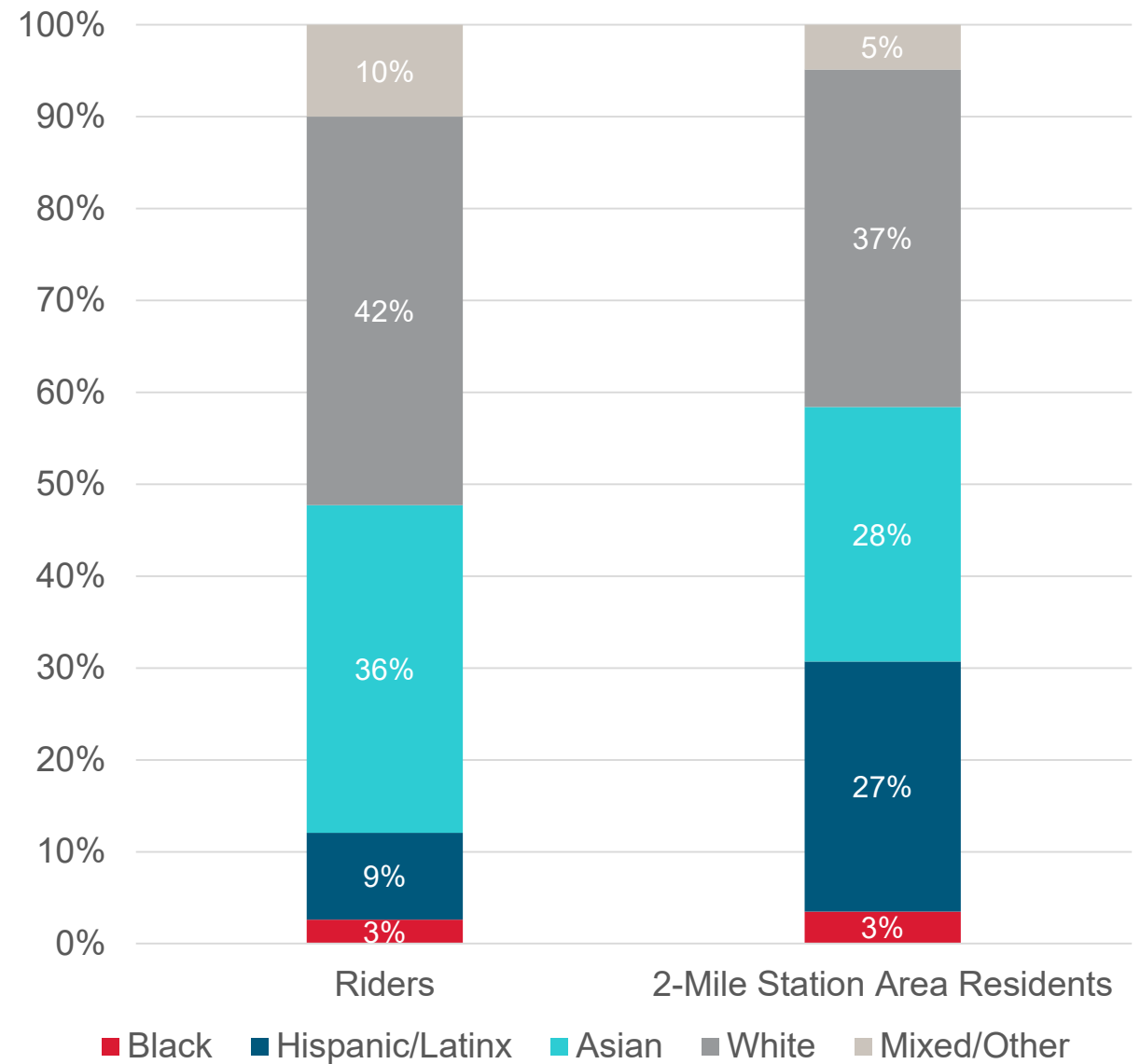


Source: U.S. Census, American Community Survey 2017. 2019 Triennial Caltrain Survey



Caltrain Rider Race/Ethnicity does not Match that of Corridor Residents

White and Asian neighbors are overrepresented in Caltrain ridership and Latinx neighbors are significantly underrepresented relative to the surrounding corridor



Source: U.S. Census, American Community Survey 2017, 2019 Triennial Caltrain Survey

Do the Travel Patterns of Lower Income and Minority Communities Reduce their Likelihood of Using Caltrain?

This question is answered by exploring:

- **Commuter Trips vs. Non-Commuter Trips:** Does trip-making by Caltrain riders and other commuters within the Caltrain corridor vary by income? Do commute travel patterns vary by income?
- **Parallel Transit Routes:** Is there a difference in the way low-income and minority riders travel along parallel transit routes?

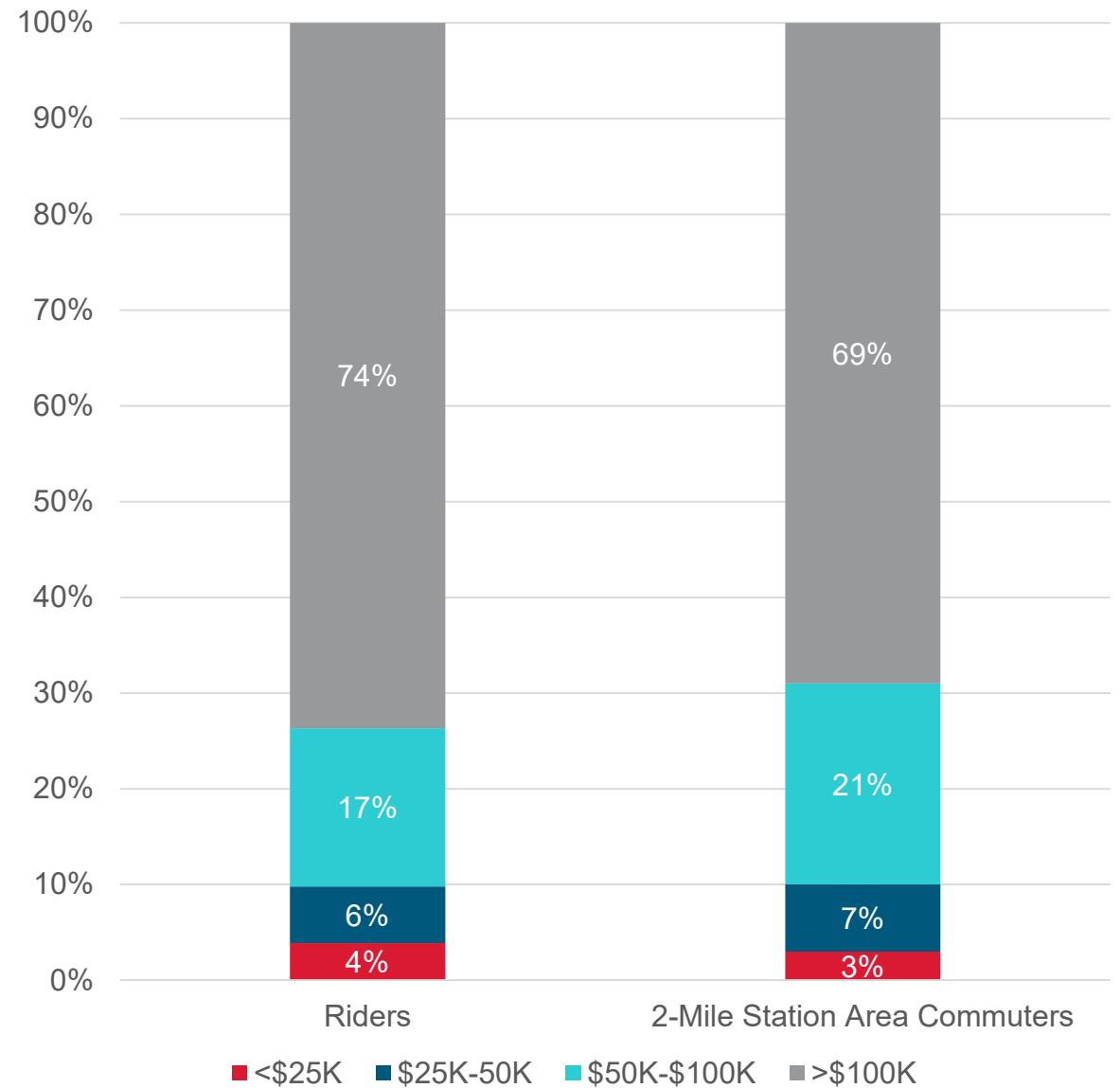
Commuting in the Corridor

Any work trip that has the work, home, or both trip-ends within 2-miles of a Caltrain station is considered a “corridor commute trip”

Trips that start and end in the same city are excluded



Caltrain Rider Income Closely Matches Income of Commuters within 2 Miles of the Corridor

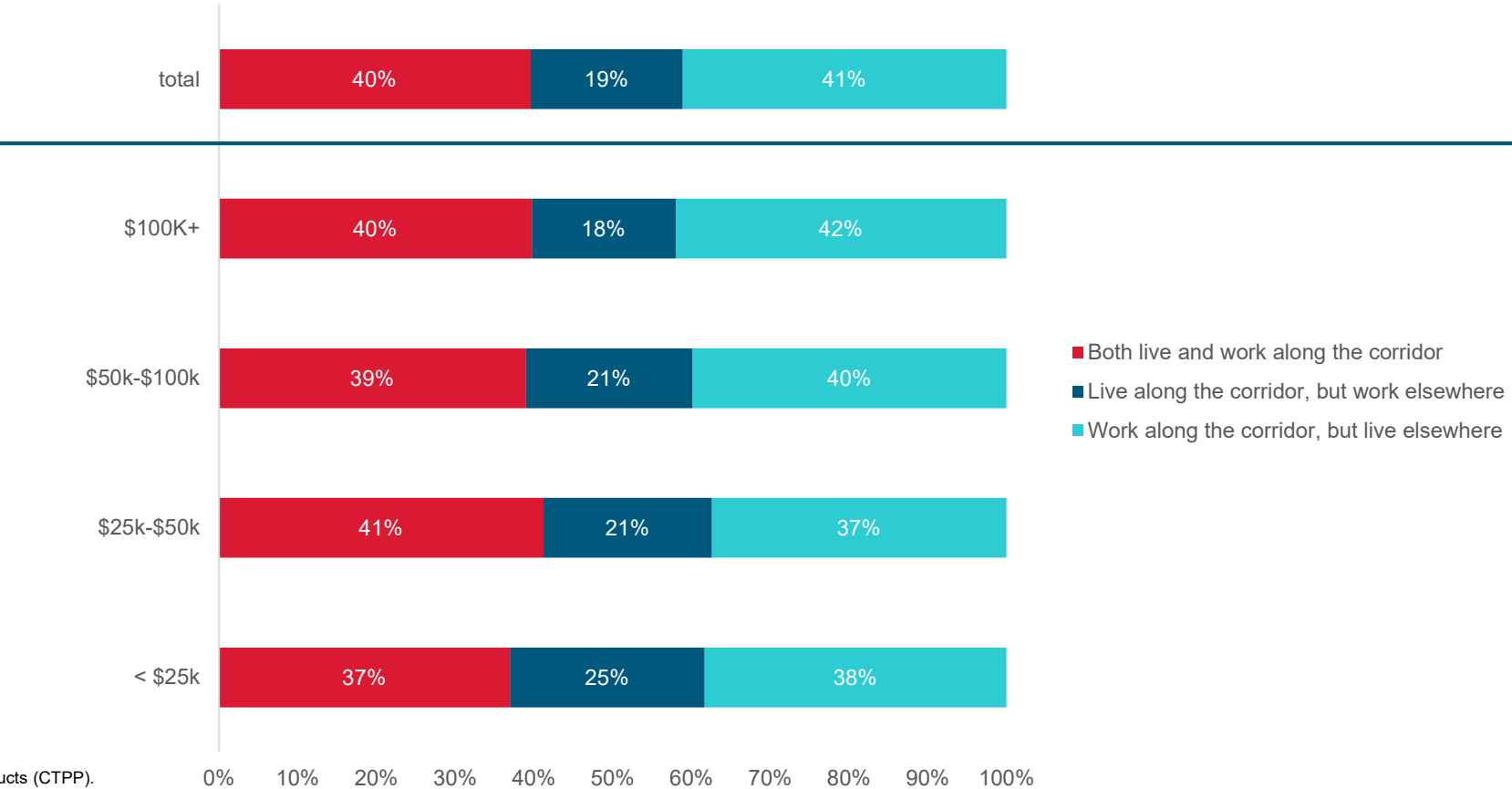


Source: U.S. Census, American Community Survey 2017. 2019 Triennial Caltrain Survey, Census Transportation Planning Products (CTPP). *Analysis excludes trips that start and end in the same city.



Low Income Commuters Have Similar Corridor Travel Patterns as Other Income Brackets

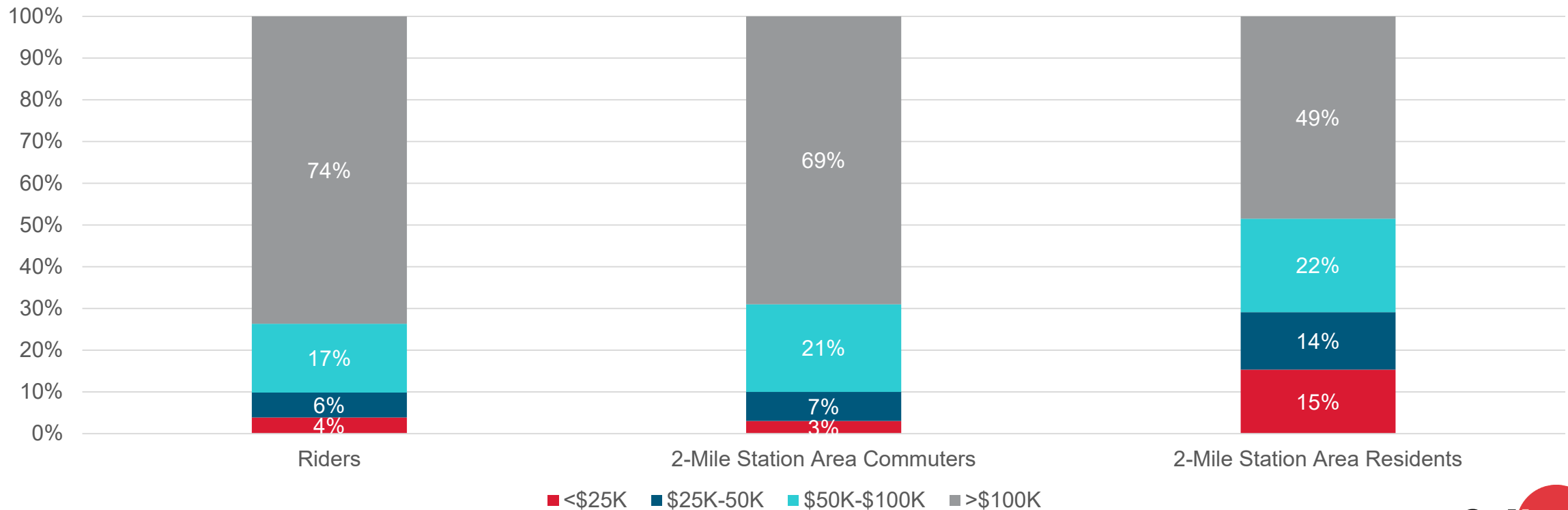
Home-based work trips with at least one end within 2-miles of a station



Source: Census Transportation Planning Products (CTPP).
*Analysis excludes trips that start and end in the same city.

Only 10% of Corridor Commuters Are Low Income Despite Being 29% of Residents

Caltrain is underserving non-work trips. This has the greatest impact on low-income populations.



Source: Census Transportation Planning Products (CTPP).
*Analysis excludes trips that start and end in the same city.

Parallel Transit Service

Several alternative transit lines run parallel to the Caltrain corridor. Although service is geographically similar to portions of the Caltrain route, ridership on these routes looks very different than on Caltrain.



- 8, 8AX, 8BX
- 9, 9R
- T-Third Light Rail



- ECR, ECR Rapid
- 292
- 398
- 397 (OWL)

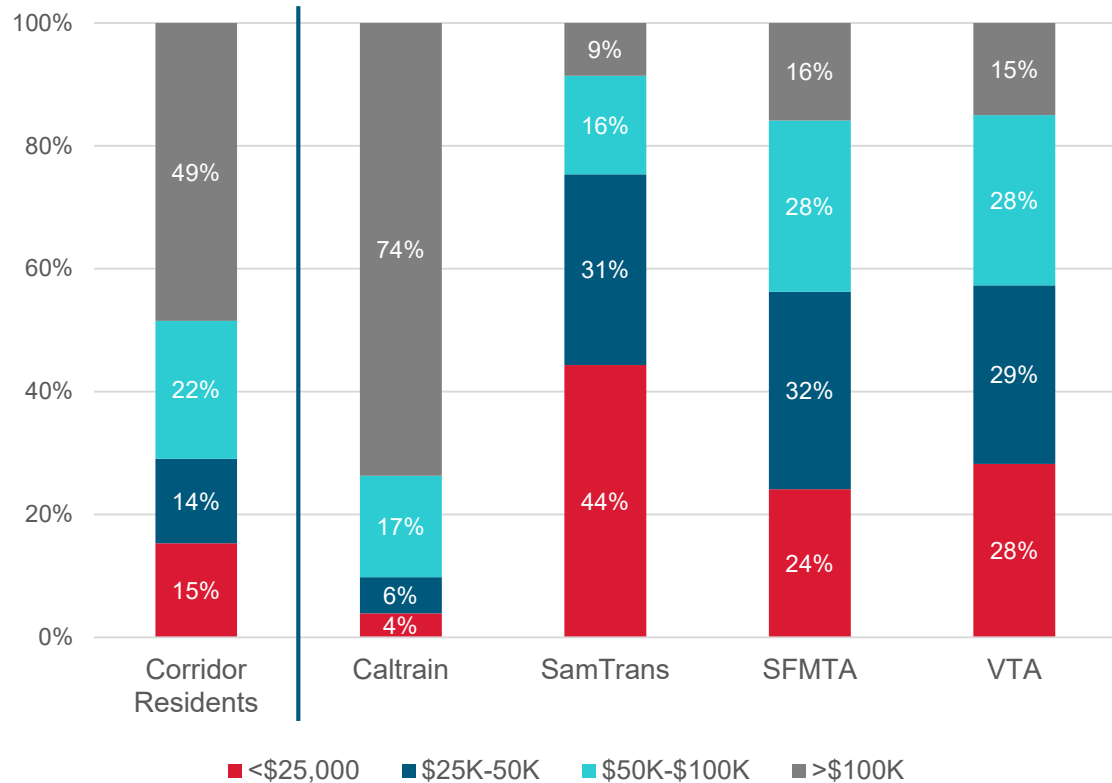


- 22
- 66
- 68
- 102
- 103
- 121
- 122
- 168
- 182
- 185
- 304
- 522

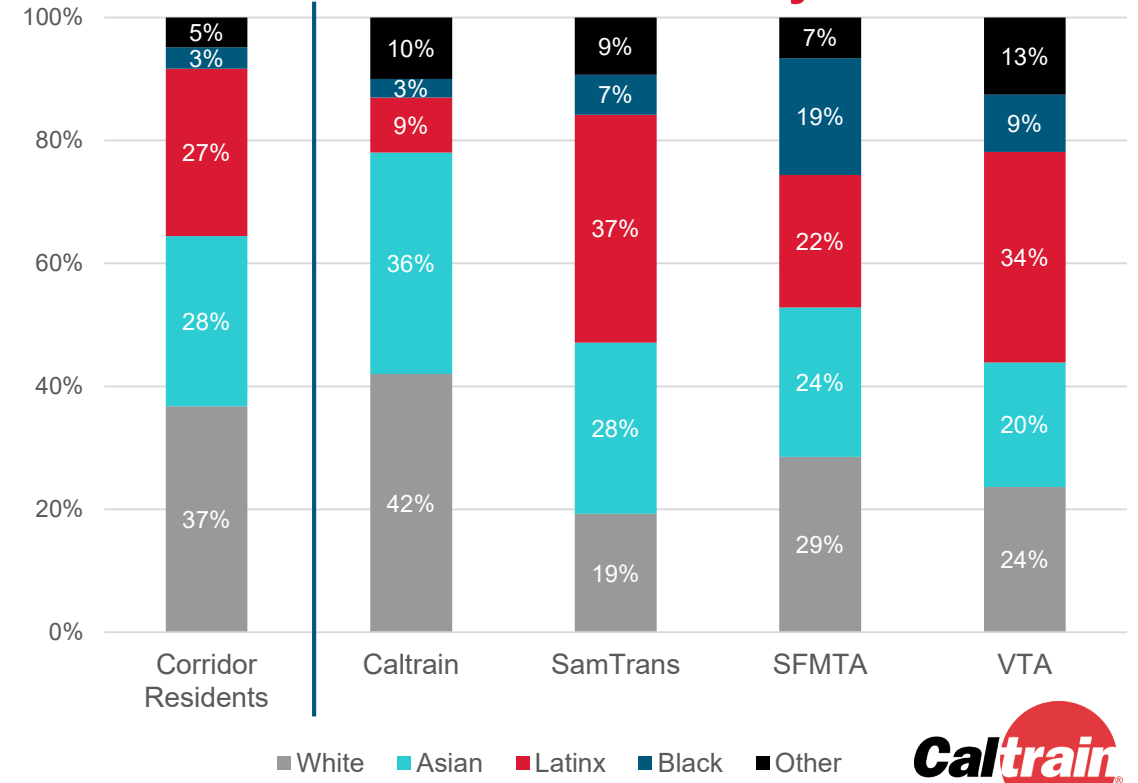


Parallel Routes Proportionally Serve More Low-Income Riders and People of Color than Caltrain

Household Income



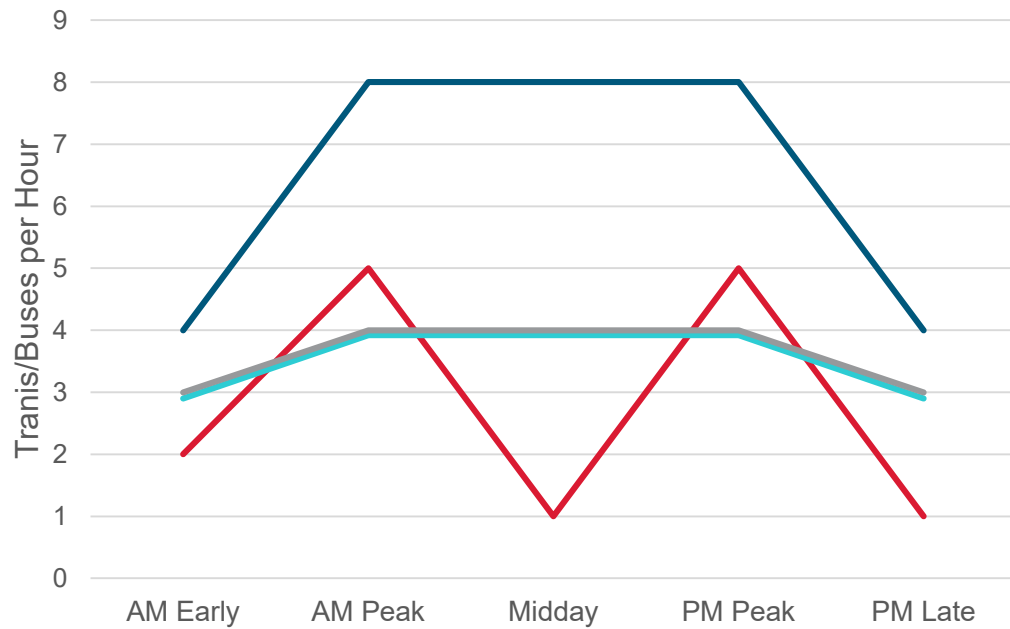
Race/Ethnicity



Source: U.S. Census, American Community Survey 2017, Caltrain 2019 Triennial Survey, SamTrans, SFMTA, and VTA on-board surveys.

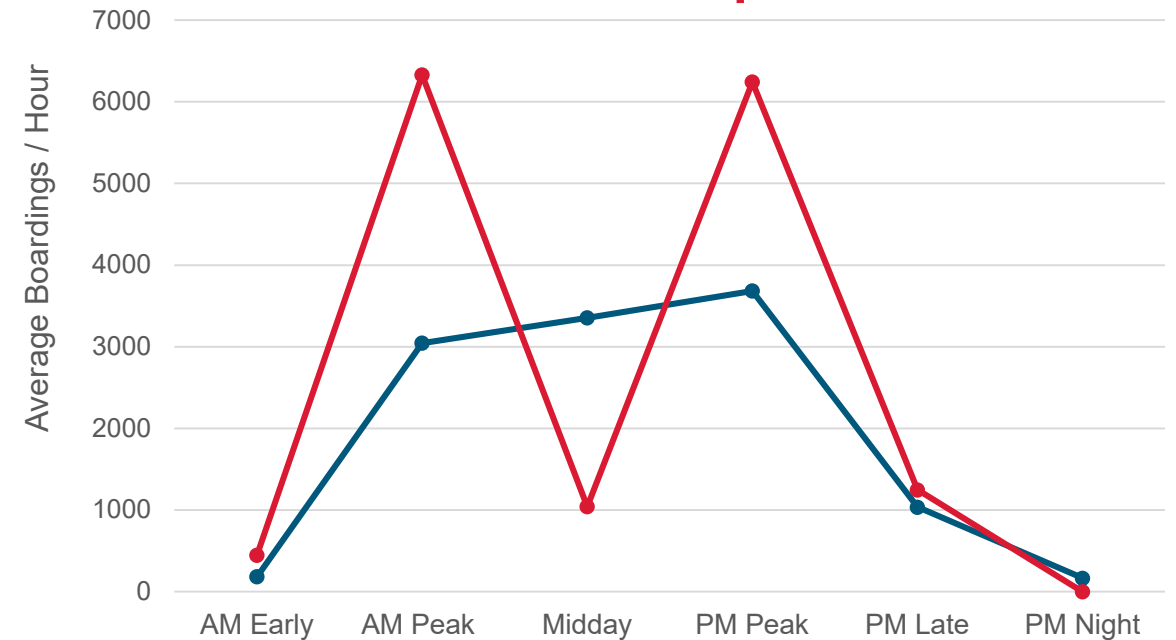
Parallel Transit Has More Frequent All-Day Service & Serves More Midday Riders

Frequency



—● Caltrain (5AM-12AM) —● SFMTA -T-Third (5AM-12AM)
—● SamTrans - ECR (4AM-2AM) —● VTA - 522 (5AM-12AM)

Ridership



—● Parallel Transit —● Caltrain





Schedule & Frequency

- Caltrain service is concentrated in the peaks with very little service during the early morning, midday, and evening hours
- Parallel transit service runs consistent headways through the peak and midday hours
- Parallel transit service operates in the corridor 24/7
- As a result, off-peak demand is largely served by parallel transit service

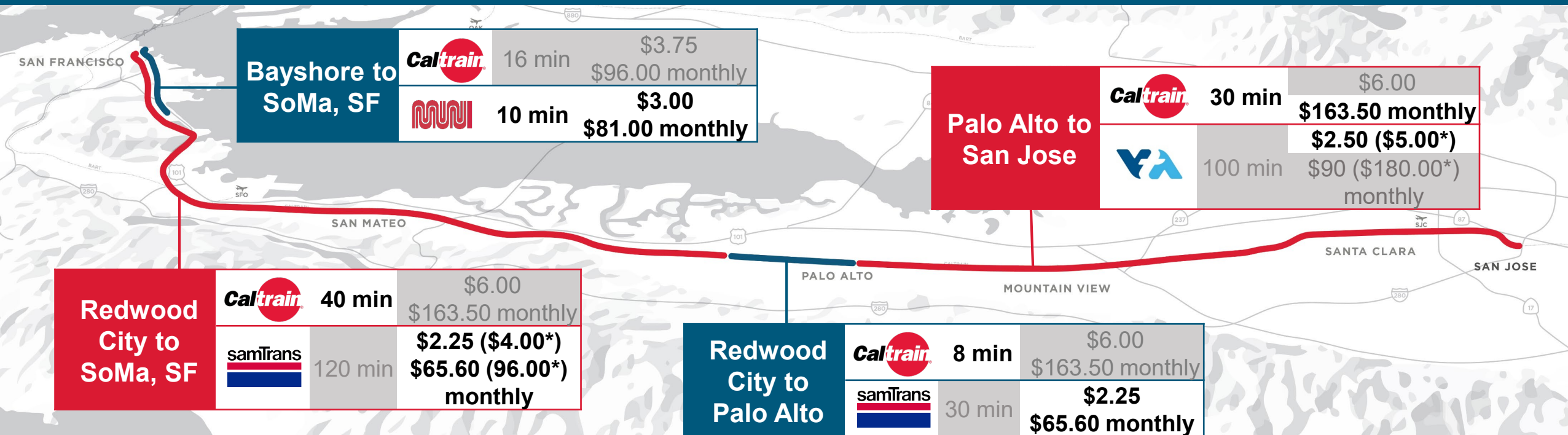


Comparisons: Travel Time & Cost

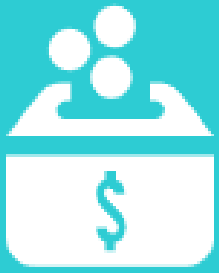


Travel Time

- Caltrain is generally faster but more expensive
- Caltrain has a zone-based fare structure: costs increase with distance travelled
- Parallel systems use flat rates with higher fares for express bus services



* Adult fares are higher on all VTA express buses and on SamTrans express buses leaving SF.



Cost & Fare Structure

- Within the corridor, SFMTA currently provides a low-income discount fare option
- Caltrain will begin participating in a means-based fare option through MTC's Clipper START Program (20% discount)
- Caltrain's need to maintain an overall high farebox recovery is driven by its underlying funding constraints

Transit Agency	Discount Programs				
	Youth	Senior	Disabled	Low-Income	Approx. Farebox Recovery
Caltrain	✓	✓	✓	20% discount starting in 2020	70%
BART	✓	✓	✓		70%
SFMTA	✓	✓	✓	50% discount	25%
SamTrans	✓	✓	✓		15%
VTA	✓	✓	✓		11%

Discount Pass Programs are More Heavily Used By Middle- and High-Income Riders

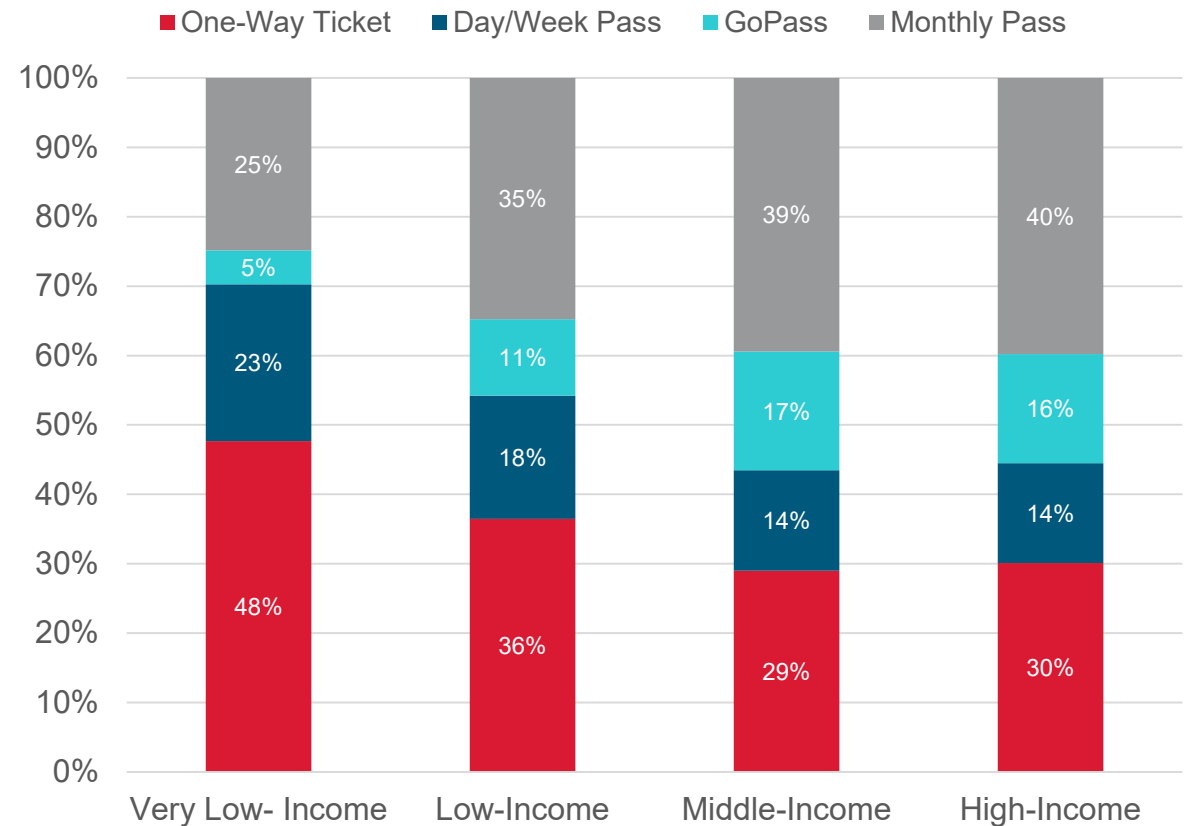
Caltrain's most discounted pass is the GoPass. In October 2016, the average GoPass customer paid \$2.89, versus the non-GoPass customer average of \$5.96.*

The GoPass and Monthly Pass are the fare payment options with the least use by very-low and low-income riders.

Household Income and Fare Method



Cost & Fare Structure

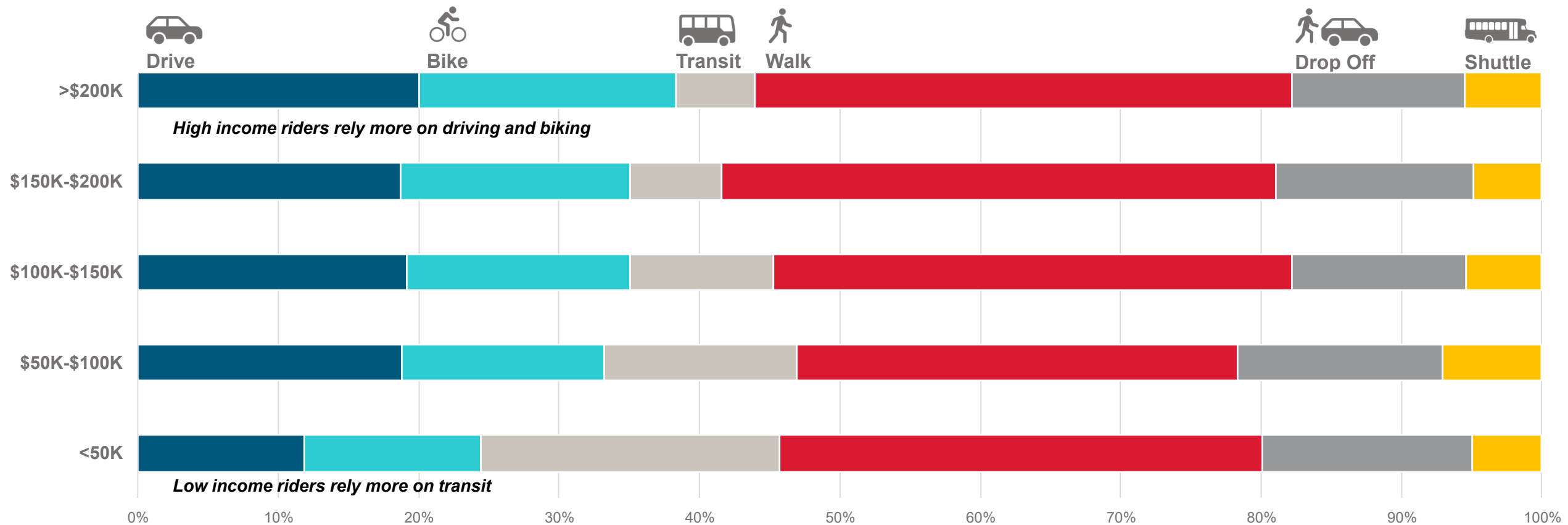


Source: Caltrain 2019 Triennial Survey.

Equity

Station Access by Household Income

Data from Caltrain's 2019 Triennial Survey



Fares & Station Access



Access

A higher share (25%) of Very Low-Income riders take transit to access the Caltrain system – more than any other income group

- Bus to Caltrain fare transfers are not offered
- Some Caltrain Monthly Pass holders receive a discounted bus fare when transferring from Caltrain*

Very-low income riders are the least likely of all income groups to use a Monthly Pass.

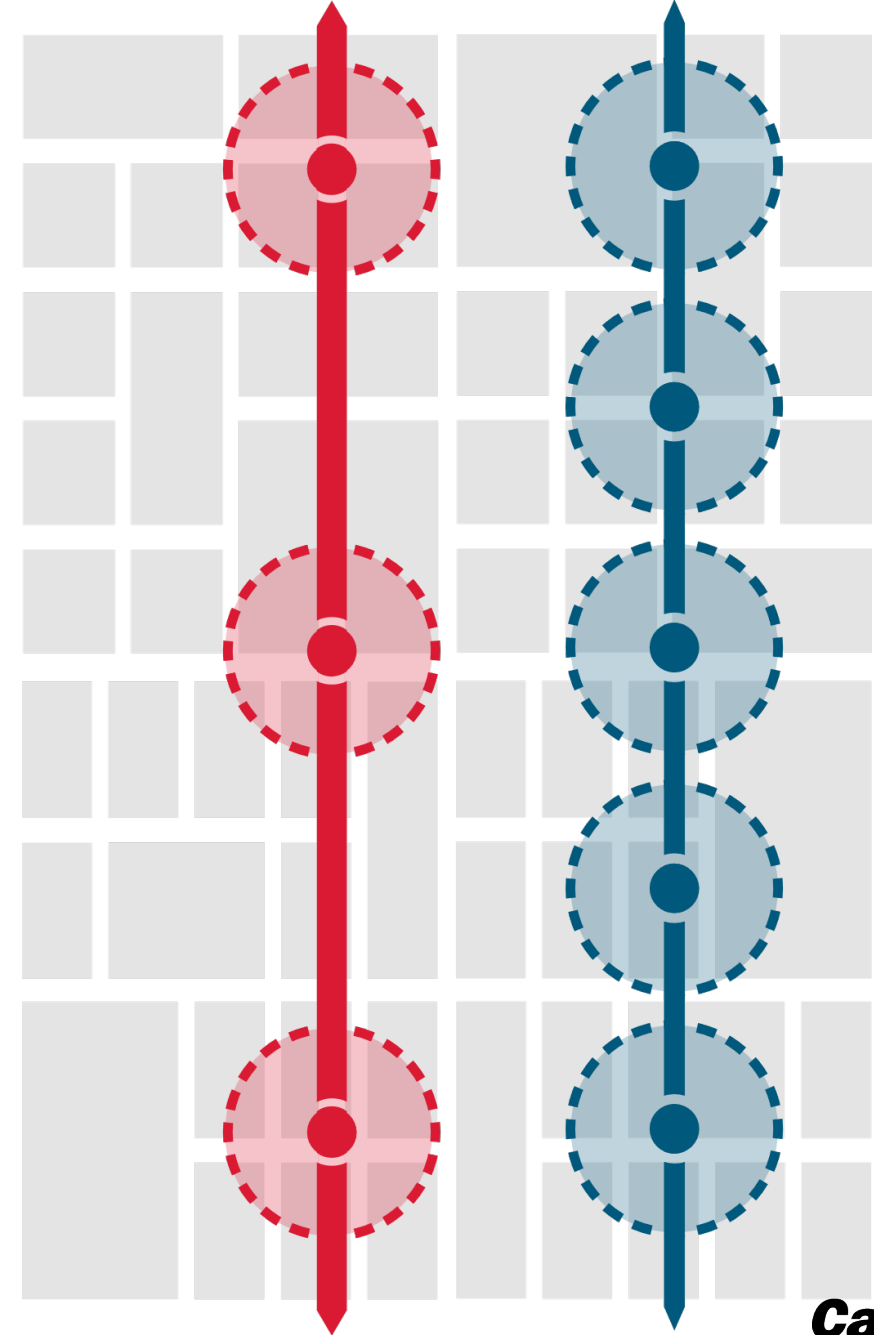


* Muni provides a 50-cent discount to all Caltrain transfers who use Clipper.



Access

- Buses and light rail provide more frequent stop spacing, which means easier access to destinations and transfers
- Because Caltrain is unable to easily add more stations, Caltrain can utilize station access policy and time transfers with other transit services to facilitate ease of access



What Policy Considerations Can Caltrain Explore to Increase Ridership from Low-Income Communities?

Caltrain could attract more low-income riders by:

- Expanding service during off-peak hours and non-traditional commute times
- Offering low-income fare products. Caltrain has committed to piloting low-income fare products starting this year as part of the regional MTC SMART program launch
- Evolving and simplifying fare structure so that discounts and transfer benefits accrue equitably to all types of riders
- Expanding and investing in first- and last-mile access that benefits all types of trips and people with a focus on Communities of Concern that have expressed a desire for better station access such as Bayview in SF and North Fair Oaks in San Mateo County

Analysis of the Long Range Service Vision

This analysis of the Long Range Service Vision will include qualitative and quantitative factors – it will focus on illuminating how Caltrain’s achievement of the Vision can help equity and will highlight areas where extra focus or reinforcing policies may be needed

Themes in blue are the focus for the evaluation of the service vision. Themes in gray may arise during conversations with stakeholders and will potentially be used to guide policy recommendations.

Evaluation Framework	
Key Questions	Measure Themes
How does Caltrain provide service?	Infrastructure Quality
	Fare Structure+
	Transit service (service planning)+
	Network Completeness
Who benefits or is burdened from those services?	Station Access
	Affordability*
	Safety
	User Perceptions
	Distribution of Construction/Supportive Infrastructure
How does Caltrain impact surrounding land use?	Displacement Risk*
	Equitable TOD
	Environmental Impacts*
	Accessibility of Destinations*
How are decisions made?	Stakeholder Representation
	Distribution of Funding
	Quality of Engagement

(MTC Equity Focus Area)*; (Title VI Equity Focus Area) +



FOR MORE INFORMATION

WWW.CALTRAIN2040.ORG

BUSINESSPLAN@CALTRAIN.COM

650-508-6499



**PENINSULA CORRIDOR JOINT POWERS BOARD
WPLP COMMITTEE - STAFF REPORT**

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: **UPDATE ON CONSTRUCTION OF 25th AVENUE GRADE SEPARATION**

ACTION

Staff will present the Board an update on the 25th Avenue Grade Separation project. No action is required.

SIGNIFICANCE

Construction of the 25th Avenue Grade Separation project has been ongoing since October 2017. On May 16, 2020 the existing Hillsdale Caltrain Station will be temporarily closed, to allow for construction of the new Hillsdale Caltrain Station in November 2020. Enhanced rail service will be provided at Belmont during the closure, and bus transport between Hillsdale and Belmont will be available along El Camino Real.

BUDGET IMPACT

There is no impact on the budget.

BACKGROUND

The 25th Avenue Grade Separation project is a safety improvement project which will raise the tracks from State Route (SR) 92 to Hillsdale Boulevard, slightly lower the road at E. 25th Avenue, complete east-west street connections at 28th and 31st Avenues, and construct a new elevated Hillsdale Station located at E. 28th Avenue with new parking lots East of the new station between 25th Avenue and 31st Avenue.

The Construction Contract was awarded to Shimmick Disney, a JV, in July 2017 for \$82,890,000. The total board approved budget for the project is \$180,000,000. Construction has been ongoing since October 2017, and is currently scheduled to be complete in May 2021. The project is funded by a combination of San Mateo County Transportation Authority, City of San Mateo, California High Speed Rail and California Public Utilities Commission funds.



25th Avenue Grade Separation

WPLP Committee – March 25, 2020

Agenda

- I. The Project
- II. Progress Update
- III. Financial Status
- IV. Update on Temporary Station Closure



The Project

The Project

- Grade Separation of Three Road Crossings and One Pedestrian/Bike Underpass
- New Relocated Hillsdale Station
- Parking Track

Future Grade Separation



Project Location





Progress Update

Since Last Update...

- Completed retaining walls
- Installed all bridges
- Constructed skeleton track
- Constructed 28th/31st Avenue West Side
- Began Station

Completed Walls and Bridges



New Track



New Roads – West Side



New Station Under Construction

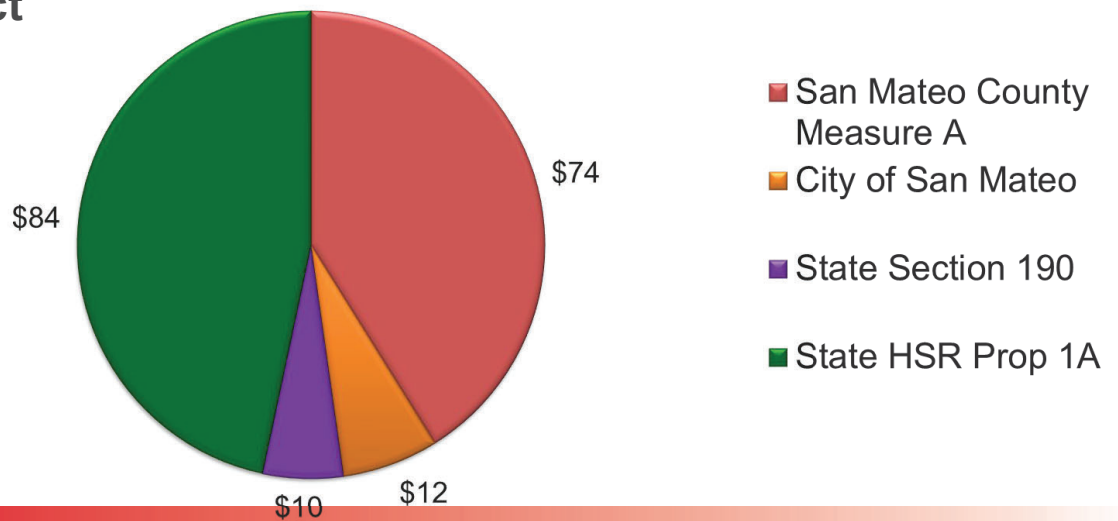




Project Funding

Project Funding, in Millions

\$ 180 Project





Update on Temporary Station Closure

Temporary Station Closure

- Existing Hillsdale Station to Close May 16, 2020
- New Station to open 6 months later
- Closure is required to allow for construction of new Station

During Closure

- Belmont will receive Caltrain Service
- If you drove (or drop off) drive or drop off to Belmont
- Otherwise ECR Samtrans bus + Shuttle service



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Proposed Shuttle Service

- **ECR Service – Free connection from select stations**
 - Every 15 minutes peak schedule
- **Caltrain Belmont/Hillsdale shuttle service to run during closure**
 - Current shuttle headways: ~15-40 min
- Private and Commute.org shuttles will move service to Belmont Station



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Hillsdale Station – Bus and Shuttle Stops



- PROPOSED SAMTRANS STOPS (1 NB, 2 SB)
- SHUTTLE STOP (EFFECTIVE 1/27/20) BOTH SIDES OF PACIFIC BLVD

Belmont Station – Bus and Shuttle Stops



- PROPOSED SAMTRANS STOPS (NB & SB)
- PROPOSED SHUTTLE STOPS (IN PARKING LOT, ALONG EL CAMINO)

Stations Modifications

- **Belmont Station**

- Shuttle Boarding Curbside
- Revised Parking Lot Striping for Shuttle Pick-up & Drop-Off
- Added Shuttle Pick-up & Drop-Off Signage

Customer Communication

- **At Stations (1.5 months before Closure)**

- Signage Installation
- Visual Electronic Signs on platforms
- A-frames, Info Boards, and Banner at Hillsdale Station
- Windshield drops in Hillsdale Station parking lots
- Ambassadors leading up to closure and during start of closure

- **On the Train**

- Seat drops (1 Month Before & 1 Week before Closure)
- Conductor announcements (1 Month Before Closure)

Closure Information: In the Community

- Dedicated webpage at www.caltrain.com/HillsdaleTempClosure
- ✦ Regular communication to electeds and organizations (ongoing)
- ✦ Community meeting (in-person and online): 1.5 mo. prior to closure
- ✦ Notices: Weekly Construction, Mailers before key milestones
- ✦ Hillsdale closure distribution list
- ✦ Social Media
- ✦ Belmont & Hillsdale Station webpage alerts



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Questions?