

CAPITOL CORRIDOR JOINT POWERS AUTHORITY



Capitol Corridor Station Access Study

Intermodal Access Improvements

Prepared by Aaron Rubin, Project Coordinator
June 2020



City Station Owner's / Partner's Guide to Using Report

Intention of Study

The research presented for each Capitol Corridor rail station is intended to be provided to city-owning station partners as suggestions for enhancing multimodal access within the immediate station vicinity and surrounding service areas of each station. These suggestions came from a combination of four main sources:

- *Capitol Corridor Ridership Observations*
- *Researcher Observations Collected through Site Visits*
- *Researcher Observations Specifically Inspired by Qualitative and Quantitative Feedback from Ridership Survey & Interviews*
- *City Plans (e.g. City Amtrak Station Planning / City & County Bike Plans / Community-Based Transportation Plans)*

Capitol Corridor recognizes that some cities have conducted their own and more thorough multimodal station access planning studies or community-based transportation plans for areas incorporating Capitol Corridor rail stations. Capitol Corridor defaults to the conclusions of these studies when findings in this report do not directly align, or potentially conflict with, the findings in a city or county's studies related to multimodal travel planning. Researchers producing this report attempted to read through cities' publicly available community transportation & active travel planning studies. It is highlighted when a suggestion provided to a city in this report is Capitol Corridor placing its support behind a planning project proposed by a city or county that may directly help encourage improved access by a certain travel mode to a Capitol Corridor train station.

Recommendations in this report for each station are not presented in any order of prioritization as to which suggestions may be most important for a city to potentially address. Additionally, there is no defined budget for the implementation of multimodal access projects identified in this study. The next steps thus involve cities identifying the highest performing design change projects and balancing this against the varying costs that improvement projects in this report will entail / how easy a suggestion is to implement. Many projects could be candidates for grant funding, and this may help determine the process for a city selecting certain access projects for implementation. CCJPA encourages local jurisdictions to engage with Capitol Corridor as an active partner in implementing identified access solutions.

3 Types of Proposed Multimodal Access Recommendations

All station access improvements proposed to city station owners / partners in this report are designed to align with BART/CCJPA station access policy goals. These goals include creating healthier/safer/greener communities, increasing train ridership, improving the customer experience of traveling to/from stations, promoting transportation equity through investing in access choices for all riders, and establishing partnerships with municipalities and connecting transit partners. Station audits were done with a focus on promoting these goals after a station access survey was conducted in 2019. To help cities identify potential access projects to prioritize, projects in this report were labeled with tags (\$, #, *) depending on if they were a direct ridership proposal, based on ridership input, solely a research observation resulting from a station site visit, or inspired by an existing city transportation plan.

\$ Ridership Observation - A ridership observation was a direct comment left by riders either in public comments in the 2019 Capitol Corridor Station Access Survey, in conversations with riders occurring during station site visits, or in the Capitol Corridor Customer Comment Portal. Suggestions labeled in this report as ridership observations are access projects that were specifically detailed in a comment by Capitol Corridor customers – e.g. designing a Class II or Class III bikeway on a specific roadway near a Capitol Corridor station.

Researcher Observation - A researcher observation was the result of field notes collected at all Capitol Corridor stations through multiple audits/station site visits. There was limited to no customer input on these projects – e.g. researcher noticing that a stop sign was removed/stolen and should be reinstalled to improve pedestrian crossing safety at a station.

*** Rider-Inspired Researcher Observation** - A rider-inspired researcher observation involved researchers in this study reading through comments related to station access left in the 2019 Station Access Study or in public comments left in the Capitol Corridor Customer Comment Portal. This feedback was then used during site visits to generate specific ideas for access improvements surrounding each station. Capitol Corridor customers often had good ideas for ways to improve station access for their mode of travel, but did not provide the technical terminology for phrasing a specific access improvement project – e.g. researchers may have turned a customer’s concerns about crossing a busy intersection via bike into a proposal for a bike activated stoplight for crossing over an intersection on a bike boulevard.

% City Plan - Publicly available city studies related to the design of Amtrak stations, active travel street design, and community transportation planning were consulted before conducting site visits at each Capitol Corridor station. Once assessing intermodal access conditions surrounding each station and reviewing data provided on access conditions at each station by our ridership, access improvement proposals in this report were labeled as city plans. This label indicates that the CCJPA's study team agreed that an existing city plan would help significantly reduce barriers to multimodal station access and be strongly supported by our ridership – e.g. a city plan to add Class I bikeways on a road extending into a Capitol Corridor station's service area may be included as an access improvement proposal and be labeled as a city plan.

Data Sources Utilized

1. *Amtrak Data: Daily ridership estimates (boardings & alightings) based on 2019 ridership data at the station level provided by Amtrak.*
2. *Transportation Injury Mapping System:* Bicycle and pedestrian collisions within ½ mile or 1 mile of Capitol Corridor stations provided by UC Berkeley TIMS data source. All pedestrian collisions within the years of 2017 and 2018 were included in collision maps (2019 data had not yet been released at the beginning of producing research for this report).
3. *Bike Link eLocker Facilities Data:* Occupancy of Capitol Corridor bike eLockers (total rentals daily / total lockers at a station) is monitored daily by Bike Link. Occupancy was averaged for all days over the course of 2019 for average occupancy numbers provided in this report.
4. *Bikeways Near Stations:* Bikeways were digitized using ArcGIS & QGIS programs and were based on most recent bikeway maps provided by cities or counties showing station access areas.
5. *2019 Station Access Survey:* Access mode split estimates in this report were generated by combining home & destination mode split data for each station from responses to questions in the 2019 Station Access Survey. Both qualitative data (e.g. rider responses to questions like “What do you like/dislike about your bike ride to the station?”) and quantitative data (e.g. riders providing assessments on a numeric scale for intermodal station access criteria such as the “quality and safety of bikeways extending to the station”) were also incorporated from this survey to gather the data necessary to design access improvement proposals based on ridership comments/input.
6. *Capitol Corridor Customer Comment Portal:* Customer comments left in the Capitol Corridor Customer Comment Portal were read through to find ridership input related specifically to station access or station design. These observations were then used to design intermodal access improvement proposals based on ridership input.

Study Funding

The Capitol Corridor Station Access Study was produced through a fellowship partnership between Capitol Corridor Joint Powers Authority and Strategic Energy Innovations. The motivation for producing this report involved matching Strategic Energy Innovations' goals of working with public sector partners to design alternative/clean transportation initiatives that reduce overall GHG emissions with Capitol Corridor's goals to improve Californian communities by enabling riders to get to and from stations safely, comfortably, affordably, & cost-effectively.

About the Author

Aaron Rubin served as a Project Coordinator at Capitol Corridor and a Fellow at Strategic Energy Innovations from September 2019 to June 2020. He currently resides in Portland, Maine, and is a 2019 graduate of Bowdoin College with a degree in Environmental Studies / Government & Legal Studies. Aaron is passionate about work in public service and civic innovation, with specific interests in doing community-based research and analytical work to inform decisions made in the renewable energy and transportation sectors. To reach out with inquiries or comments related to the contents of this report, please reach Aaron at the email address provided below.

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Appendix I – 2019 Station Access Survey Results

Introduction

CCJPA conducted a field audit-based station access study during the 2020 fiscal year. The study will be shared with station-owning city partners and has been designed to promote access improvements that may help achieve the following goals:

- **Increase Ridership.** Connect more passengers to Capitol Corridor stations and enhance the customer experience traveling to and from all stations.
- **Foster Community and Environmental Benefits.** Generate greenhouse gas reductions and positive health outcomes for the local community by ensuring that infrastructure is in place for walking, biking/scootering, and using public transit systems.
- **Promote Transportation Equity.** Ensure equitable transportation investments by making access to stations feasible and convenient across all travel modes used by local train riders.
- **Enhance Perceptions of Safety.** Identify access improvement projects that may make Capitol Corridor stations and their surrounding service areas zones fee; safer and more able to accommodate a diverse clientele.

Methodology

Existing intermodal access conditions at all Capitol Corridor stations were assessed through public comments, site visits, examinations of existing trail and road networks, and information from CCJPA ridership databases. After barriers to intermodal access at each station were identified, potential improvement projects were proposed to highlight ways to improve current access conditions. Each station access profile and set of improvement proposals were based on field data collected from the customer perspective by a CCJPA study team, feedback provided by Capitol Corridor riders collected during site visits, and public comments left by stakeholders in the CCJPA 2019 Station Access Survey (see appendix). CCJPA hopes to collaborate and partner with station-owning cities to help identify how to address the highest priority barriers to intermodal access at each station along the Capitol Corridor rail line. To achieve this, the contents of this report will be shared with all station-owning city partners.

In addition to intermodal station access summarization profiles, maps showing the locations of proposed access improvement projects at each station are included in this report. Proposed access improvement projects at each station are labeled with both a project description and an explanation of how the project may help to expand intermodal access. Each suggested access improvement project is also labeled according to whether its inclusion in this report was the result of a direct ridership observation/suggestion from public comments or 2019 Station Access Survey responses, an original observation collected by the CCJPA research team, a suggestion derived by the CCJPA research team from ridership observations, or an observation supported by a suggestion made in an existing city transportation plan. Stations in this report are listed in the same order as provided in the 2019 Station Access Survey results.

Berkeley Station (BKY)

Berkeley, California

The Berkeley Station is an urban station with a mixed access mode split and an estimated 24% of riders parking a car to go to and from the station. The station is located in south Berkeley immediately to the east of the Berkeley Marina and is located in an expanding residential and shopping area on 4th Street with a hierarchical road network. The station serves CCJPA ridership primarily living and working in the Berkeley, Albany, Kensington, and El Cerrito areas. Parking is adequate at the station and has a safe connection channel for riders transitioning from their cars to the station platform. The station has heavy bike/scooter usage and is connected to core ridership areas through a series of bicycle boulevards extending into the residential areas of Berkeley.

Characteristics

Daily Boardings: 239 riders **Daily Alightings:** 239 riders

Parking: 3 (30-minute limit) & 19 (2-hour limit) spaces at Amtrak Station lot, 348 regular spaces & 9 accessible spaces in the public 4th Street lot. 71% of riders say they can always find their needed parking space type at BKY. The 4th Street lot is connected to the station platform through a pedestrian-only gateway. The cost of parking near the Berkeley station was rated by users as good (4.00 out of 5.00) and lighting in the lot was rated by users as fair (3.00 out of 5.00).

Bikes: There are 12 Bike Link eLockers at the Berkeley Station. The average daily occupancy of lockers over course of 2019 (total lockers rented / total lockers available at the station) was 26% and has never exceeded 83%. Bay Wheels bike-share service located near the station on the corner of 4th Street and Addison St.

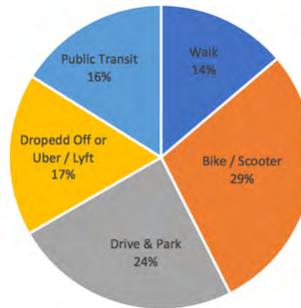
Public Transit: Serviced by AC Transit, routes 51b and 802.

Bike Connections: Channing Way & Virginia St Bicycle Boulevards connect bikeways in Berkeley to the immediate 4th Street BKY station zone.

Trail Connections: SF Bay Trail (Bike & Pedestrian Path) & Ohlone Green Way (Bike & Pedestrian Path) provide access to the station from origin points north of BKY.

Existing Conditions

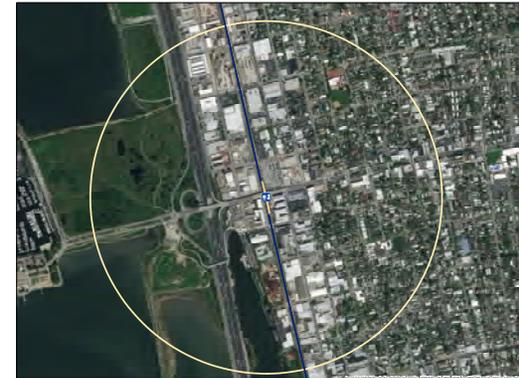
Access Mode Split – Both To & From Station



94 Rider Sample

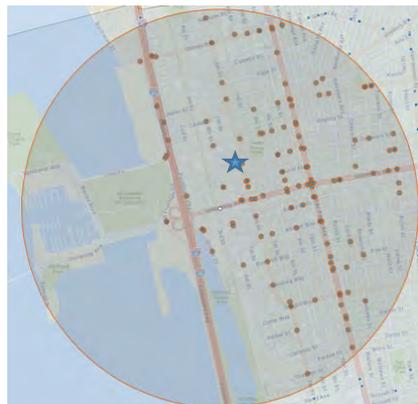
Collected from Capitol Corridor 2019 Station Access Survey

Land Use (1/2-mile BKY station buffer)



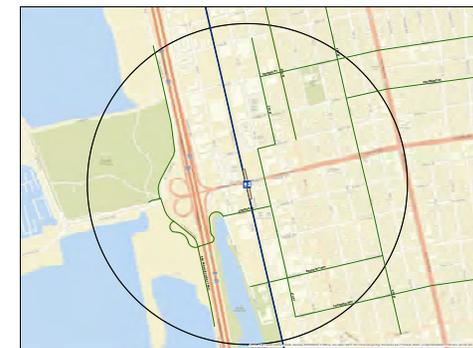
Developed in immediate station vicinity, residential to the east, and conserved lands and waterfront to the west.

Pedestrian & Bike Collisions (2017–18, 1-mile BKY buffer)



Several bike and pedestrian collisions on the Channing Way and Virginia St intersections with San Pablo Ave and along the 4th Street primary station access road. Data collected from UC Berkeley Transportation Injury Mapping System.

Existing Bikeways (1/2-mile BKY station buffer)



Popular and safe bike routes to the station are via the Channing Way and Virginia St Bicycle Boulevard connections onto the 4th St BKY access road. Transition into BKY station occurs at stop sign areas on either side of the 4th St & University Ave intersection.



— 4th Street
 Berkeley Station Footprint
■ Berkeley Station

0 0.005 0.01 0.02 0.03 0.04 Miles



Key

\$ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired
 Researcher Observation | % = City Plan Observation

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. Include pedestrian traffic calming controls on 4th St and University Avenue station crosswalks with pedestrian crossing reflective warning signs and or flashing beacons to prioritize walkers and promote safe night usage. #
2. Replace graffitied sign on the corner of 4th St. and University Ave directing walkers to the pedestrian bridge to improve the transition between BKY and the SF Bay Trail. #
3. Remove obstacles and increase the width of sidewalks on University Avenue between 5th St. and 6th St on the side of University Ave with traffic flowing to BKY. Remove parking meters in the center of the sidewalk, remove Amtrak sign restricting sidewalk from achieving adequate width, and remove overgrown plants obstructing the sidewalk. *

Bike Safety and Access Improvements

4. Repaint shared bike lane road markings on both sides of the road in immediate station access zone on the segment of 4th Street between Hearst Ave and Adeline St with white “sharrow” lane symbols outlined in green and an indicator underneath for cars to reduce speeds to 15mph within this segment of 4th St. \$

Public Transportation Access Improvements

5. Use an automated verbal announcement when doors open at stops to more easily distinguish/differentiate between AC Transit RT 51b busses ending at BKY station and RT 51b busses ending at the Berkeley Marina. For busses going to the Marina and not stopping at BKY station, indicate that Univ. Ave and 6th St. is the closest stop to BKY. #
Note: Suggestion aimed at AC Transit (not the City of Berkeley).

Driving / Parking Facilities Access Improvements

6. Add two additional ADA parking spaces in the 4th Street parking lot in spaces closest to the BKY Station connection pathway (only one handicap space near the station, with most located on the lot side near 4th Street instead of near the station platform). #
7. Introduce parking spaces with charging stations for electric vehicles in the 4th Street lot to encourage environmentally friendly/diverse driving options. #
8. Remove all parking spaces on edge of station loop exit and rearrange into one designated passenger pick-up and drop-off facility (with visual markings designating this area). This may increase safety within the station entrance loop and reduce the chance for pick-ups & drop-offs to conflict with arriving/departing AC Transit busses. #

Access Improvements Outside Immediate Station Vicinity

Bike Safety and Access Improvements

9. **Design bike activated stoplights on Virginia St and Channing Way bike boulevards across the busy San Pablo Ave and Sacramento Street intersections** that have had high rates of cyclist and pedestrian collisions. Ideally, we would like to see a bike designated lane at intersections with an activated light (as exists where Channing Way bike boulevard crosses busy MLK Street). A secondary strategy could be designing green bike crossing zones with a shared light for pedestrian and bike intersection crossings that can be activated at night to make travel safer in the dark. \$
10. **Add signage at Amtrak station to direct riders to the Bay Wheels bike-share station on the corner of 4th Street and Addison St.** This could help increase connectivity of BKY station to nearby micro-mobility options / enhance ridership awareness of available first and last-mile transportation options. #
11. **Repave south side of 4th St segment between Channing St and Adeline St and create a Class II bike lane on the right side of 4th St where there appears to be adequate width.** This will help improve safety and comfort for cyclists while riding alongside cars to reach the station. \$
12. **Design and designate with signage a best/safest way to move between Virginia St Bike Boulevard and BKY on 4th St** -Ideally this could occur by extending bike lane road markings down 4th Street for an immediate connection with Virginia St, or by adding wayfinding signage to direct cyclists to take Hearst Ave and 5th street turns to move between 4th St and Virginia St. *
13. **Add sign on 6th St directing cyclists to turn onto Virginia St Bike Boulevard to access the station.** This may help better emphasize existing low-stress street access points to reach BKY and thus improve cyclist safety. *

Public Transportation Access Improvements

14. **Add signage at station directing riders to walk up University Avenue to reach AC Transit RT 80 (Univ Ave and 6th St) and RT G (6th St) stops.** This may help extend the scope of public transit services existing at BKY by connecting riders to new routes/stops, including the Ashby & El Cerrito Plaza BART stations. #



Emeryville Station (EMY)

Emeryville, California

The Emeryville Station is an urban station with a mixed access mode split and an estimated 17% of riders parking a car to go to and from the station. The location has a high level of bike infrastructure in place and primarily services local riders using active travel modes to access the station via well-designed pedestrian and bicyclist routes, taxi / Uber users from South Berkeley and North Oakland neighborhoods (Elmwood, Claremont, Piedmont, and MacArthur), and riders from San Francisco accessing the Emeryville station via the Amtrak connecting bus service (~ 1/2 of riders estimated to use this service to reach EMY). In its immediate 1/2 mile buffer zone, the station is adjacent to the heavy traffic volume I-80 freeway to the west, shopping facilities to the south, and offices and residential areas to the east.

Characteristics

Daily Boardings: 548 riders **Daily Alightings:** 564 riders

Parking: 125 regular parking spaces available at Terraces Parking Lot, with garage stairs connecting riders to the station with no traffic exposure. Parking owned by the City of Emeryville and available on a first-come, first-served basis.

Bikes: There are 12 Bike Link eLockers at the Emeryville Station. The average daily occupancy of eLockers for 2019 (total lockers rented / total lockers available at the station) was 54%, but has reached up to 183% and frequently exceeds the 100% threshold. This indicates that adding more bike eLockers at this station could be beneficial for riders. Bay Wheels bike-share services are located immediately outside of the station on the east side at the corner of Horton St and 59th St, and one block south of the station across the Amtrak overpass on Shellmound St near the south end of the Public Market.

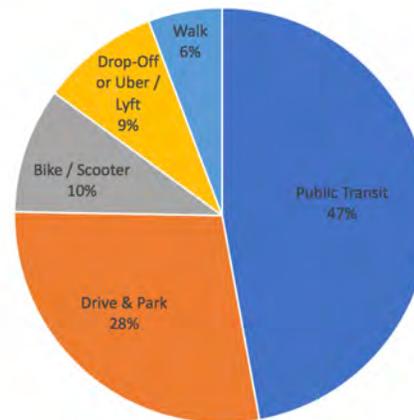
Public Transit: Serviced by Emery Go-Round - Purple Line (to the west side of the station at Shellmound St, Stop 25) & Red Line (to the east side of station at Horton St, Stop 7), which connect the station to MacArthur BART and Emeryville AC Transit Lines.

Bike Connections: Class II bikeways on Shellmound St. and Horton St. serve as immediate access roads on the west and east sides of the station. Horton St. connected by series of bicycle boulevards running perpendicular (63rd, 59th St, 53rd St, and 45th St), and Powell Street and western Emeryville bikeway channels connected to Shellmound St.

Trail Connections: Doyle Street Greenway (bike and pedestrian path) connecting the station to points in south Berkeley and northern Emeryville & SF Bay Trail (bike and pedestrian path) connecting the station to the west side of Emeryville.

Existing Conditions

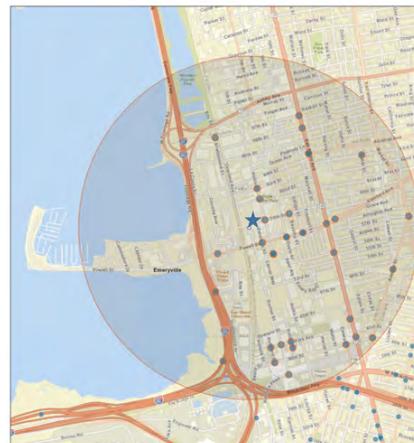
Access Mode Split – Both To & From Station



174 Rider Sample

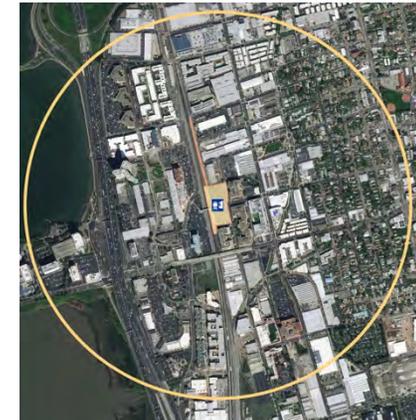
Data Collected from 2019 Capitol Corridor Station Access Survey

Pedestrian & Bike Collisions (2017–18, 1-mile EMY buffer)



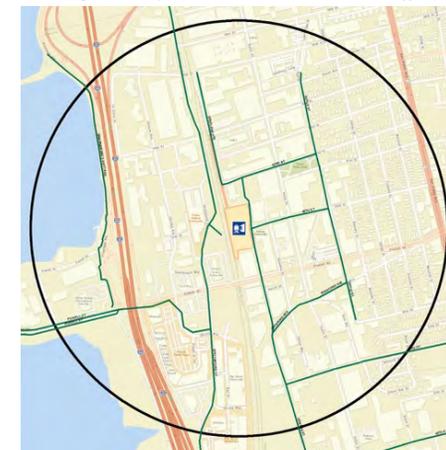
Only a few pedestrian and cyclist collisions on Emeryville's low traffic & bike-friendly streets near the station. Data collected from the UC Berkeley Transportation Injury Mapping System.

Land Use (1/2-mile EMY station buffer)

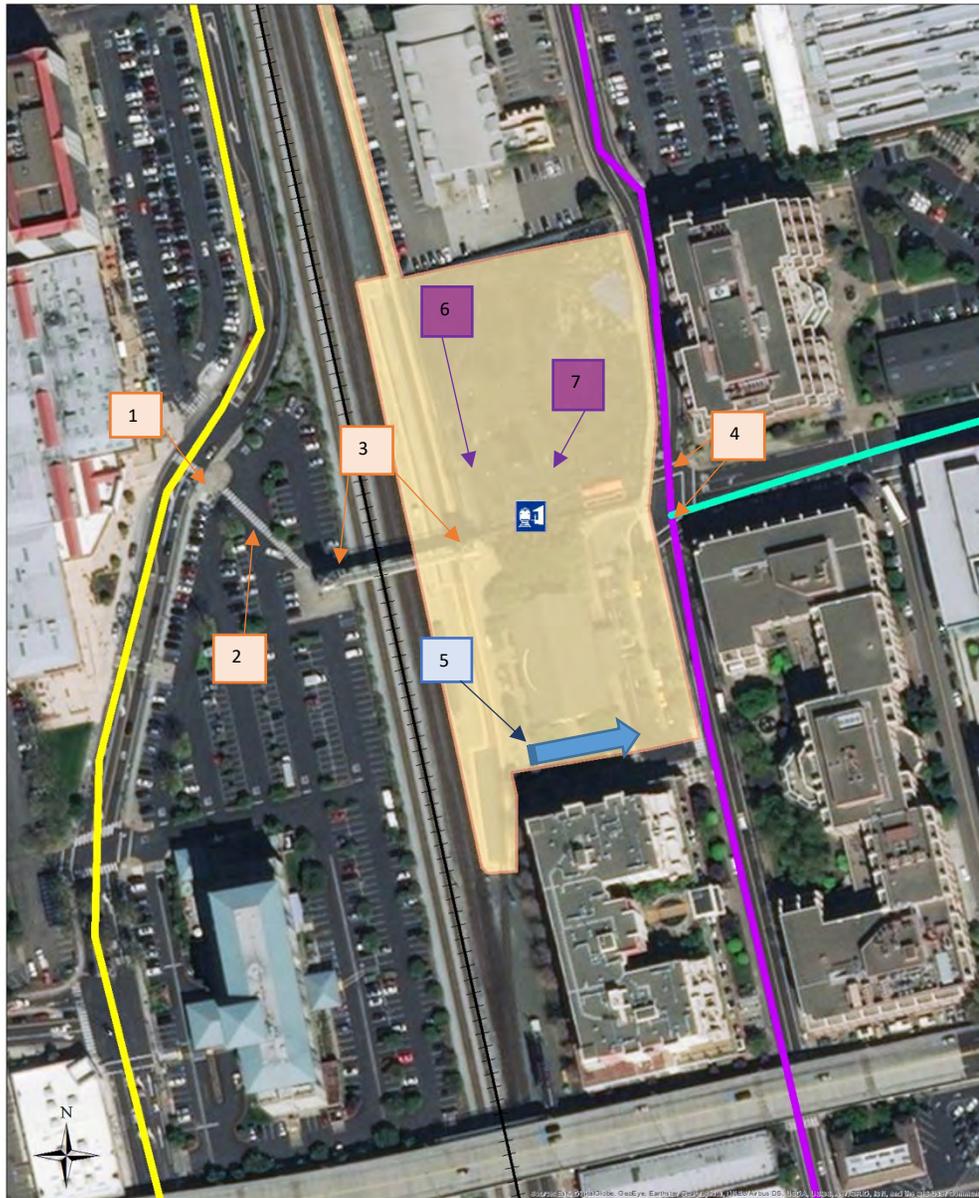


Highly developed land use in the immediate station vicinity. Busy highways to the west & high traffic volume roads running west to east. Residential road networks exist a quarter-mile east and northeast of EMY.

Existing Bikeways (1/2 - mile EMY station buffer)



Bike access on both the east and west sides of the station. Bikers must take the Amtrak bridge to reach station from the west side of Emeryville.



Key

§ = Ridership Observation | # = Researcher Observation |
 * = Rider-Inspired Researcher Observation | % = City Plan Observation

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. **Add wayfinding signage on Shellmound St. indicating proper turnoff point for accessing the crosswalk leading to the Amtrak overpass and station.** This may help promote active travel access to the Amtrak station from the west side of the station. #
2. **Design a new raised crosswalk with yellow sightlines connecting Shellmound St. with the Amtrak overpass access point to help reduce vehicle exposure risk for riders accessing the station through the busy Public Market parking lot.** This could help prioritize pedestrian movements and provide a safer approach from the west side of the station by incorporating measures designed to reduce vehicle speed, increase pedestrian visibility, and improve car yielding. #
3. **Clean /remove the stains, odors, and graffiti from the Amtrak overpass elevators (especially in elevator nearest to station) to reduce the unwillingness of ADA riders and riders carrying bikes & scooters to access the station from the west side.** §
4. **Include pedestrian traffic calming controls on 59th St and Horton St crosswalks and across station parking garage exit – ideally through pedestrian crossing warning signs and flashing beacons to prioritize pedestrian travel and promote safe night usage (designed similarly to Shellmound Street crossings near the Public Market).** §

Public Transportation Access Improvements

5. **Add wayfinding/directional signage near station platform to direct riders to go around station and to the right to reach the San Francisco bus connection boarding zone.** This could help to reinforce the directional cues provided by Amtrak conductors. #

Driving / Parking Facilities Access Improvements

6. **Add signs in parking garage directing riders to the elevator and stairs that safely lead to the EMY station via a safe sidewalk connection. Also, add signs prohibiting drivers from using car entrance & exit ramps to walk to and from their cars while moving between the station and the garage.** #
7. **Add long-term parking options on the west side of the station for Amtrak users.** The garage parking lot frequently fills up by midday & additional parking could also improve ease of access for motorists from the west side of the station. *

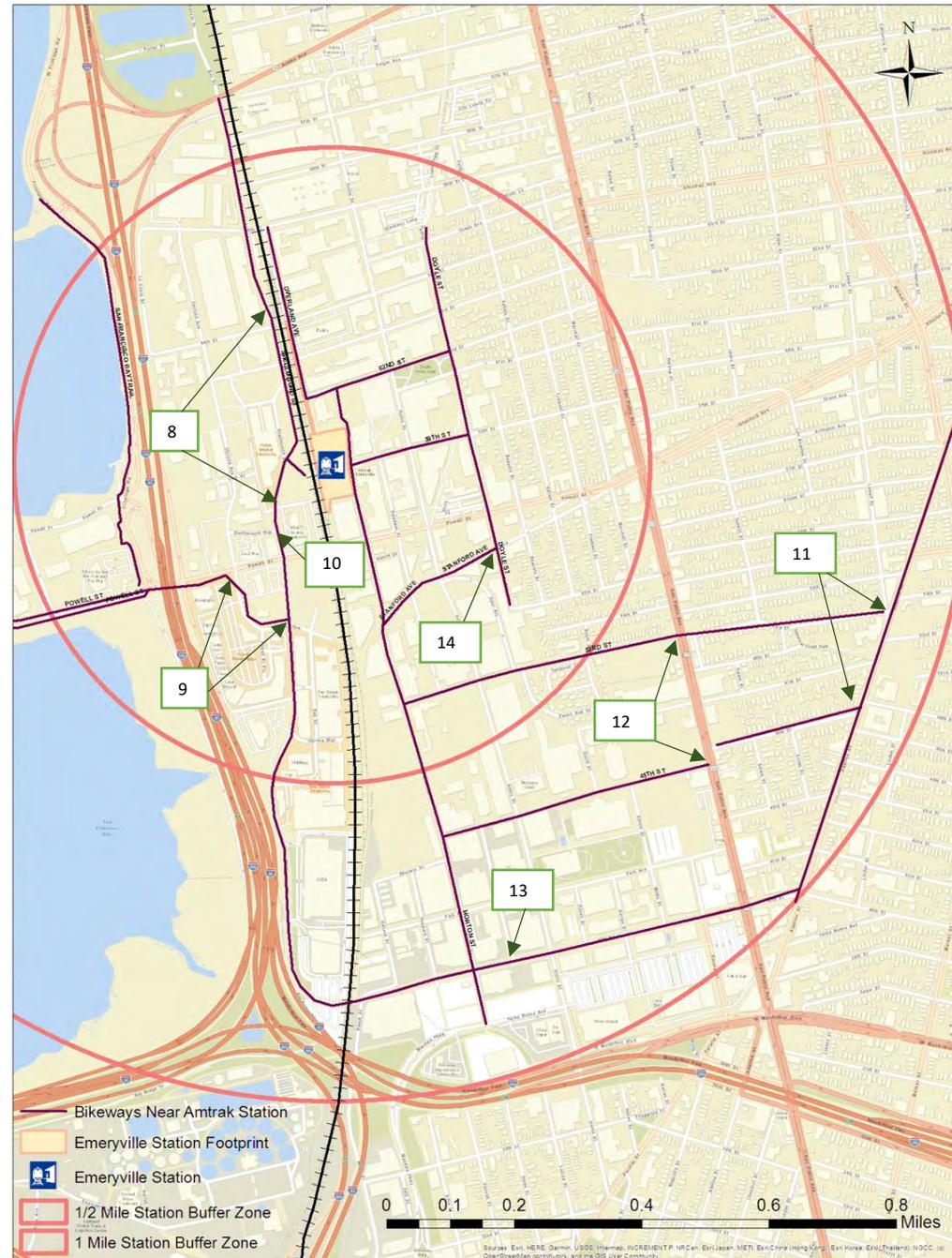
Emeryville Station Footprint
 Emeryville Station
 59TH ST
 HORTON ST
 SHELLMOUND ST

0 0.0125 0.025 0.05 0.075 0.1 Miles

Access Improvements Outside Immediate Station Vicinity

Bike Safety and Access Improvements

8. **Add bicycle wayfinding signage for bikers moving in both directions on Shellmound Street towards the station** (with distance and direction to Amtrak station bridge connection provided). #
9. **Better connect neighborhoods west of the Emeryville Station with access to the station via the SF Bay Area Trail by adding wayfinding signage** – ideally, signage would include telling bikers on SF Bay Trail to continue right on the trail at the corner of Powell St and Christie Ave and then to turn left off of the SF Bay Trail and onto the Shellmound St bike lane where riders will be directed to the station overpass bridge (see #8 above). *
10. **Paint green dashed bike crossing lane on the Shellmound St bike lane when crossing over Shellmound Way.** This will better prioritize & protect bicyclists leaving the Amtrak station from turning motorist traffic. #
11. **Delineate side streets off of Adeline Street as bicycle boulevards** (no indicator for bicyclists on Adeline St that these two streets are low speed and low traffic or connecting to the Amtrak station, and the two streets are not designated as official bike boulevards until after San Pablo Street). \$
12. **Improve the safety of crossing high-traffic San Pablo St on the 53rd St and 49th St bicycle boulevards by designing bike activated stoplights or manually activatable shared bike and pedestrian sensor lights at each intersection with colored lane treatment for bicycle lanes crossing the hazardous intersections that can help warn drivers of a crossing cyclist.** Ideally, also add bike lane infrastructure for the small segment of the road on both sides of San Pablo St that are required for travel across the intersection on 49th Street. \$
13. **Improve the safety of high traffic 40th Street bike lanes between Adeline St and Horton St by separating lanes on both sides of the street from the flow of traffic** (18-inch-wide buffers between street and bike lane and/or physical dividers between street and bike lane as exists near EMY on Horton Street). *
14. **Indicate the end of Stanford Avenue bike boulevard while traveling east from EMY station and the continuation of the same bicycle boulevard on Doyle Street by taking a left to access destination points provided on Stanford Avenue wayfinding signs.** #



Oakland Jack London Station (OKJ)

Oakland, California

Oakland Jack London station is an urban station with a mixed access mode split and an estimated 29% of riders parking a car to go to and from the station. A significant 31% of riders bike to reach the station. The location has bike infrastructure in place on 2nd Street but needs safer protected bike lanes extending off of 2nd Street to better connect the station to downtown Oakland and nearby BART stations. The station also currently lacks adequate infrastructure for biker and pedestrian access from Alameda. In its immediate 1/2 mile buffer zone, the station is adjacent to shopping and residential facilities in Jack London Square, residential communities in Alameda, and downtown Oakland (Lake Merit, Chinatown, & Old Oakland areas). Several connecting public transit options exist for riders near the station that could be made more accessible with better directional cues.

Characteristics

Daily Boardings: 415 riders **Daily Alightings:** 401 riders

Parking: 1045 regular spaces and 21 accessible spaces located in the Market Garage adjacent to the Amtrak station and connected via a traffic-free outdoor station plaza. 168 regular spaces and 3 accessible spaces located north-west of the station at Embarcadero Street Lot. Parking owned respectively by the City of Oakland and the Port of Oakland and available on a first-come, first-served basis.

Bikes: There are 12 Bike Link eLockers at the Oakland Jack London station. The average daily occupancy of eLockers for 2019 (total lockers rented / total lockers available at the station) was 37%. 2019 daily occupancy has reached up to 117% and has exceeded the 100% threshold on only 4 of 364 days, which indicates that an adequate number of eLockers exist at this station for current ridership levels. Bay Wheels bike-share services are not located in the immediate station vicinity, with the nearest location nearly 3 blocks from the station on the corner of 2nd St. and Webster St.

Public Transit: Serviced by AC Transit RT 12, 72, & 72M (Gilman and 6th St. Berkeley, Contra Costa College, and Point Richmond), SF Bay Ferry (Ferry Building, SF Pier 41, South SF), RT 21 Amtrak Thruway Bus (Jack London to Santa Barbara), & BART (Lake Merritt and 12th St. stations each around a 0.8-mile walk or bike from OKJ).

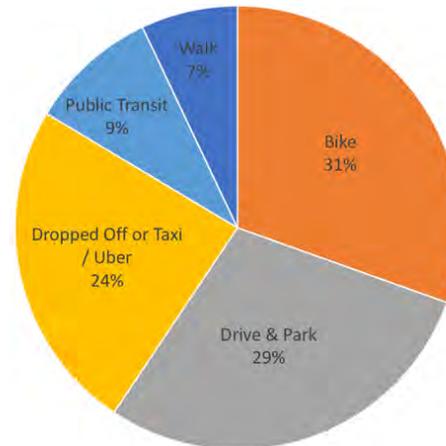
Bike Connections: Class II bikeways on 2nd St serve as an immediate station access road. Oak Street bikeways connect the station to Lake Merit BART Station and bikeways on the lake. Class II bikeways also extend

station's bikeable service zone south-east of the station into Fruitvale. Extremely narrow and dark bike lane connects Alameda to OKJ station via the Posey Tube.

Trail Connections: SF Bay Trail (bike and pedestrian path) connecting the Jack London shops and residential points to OKJ.

Existing Conditions

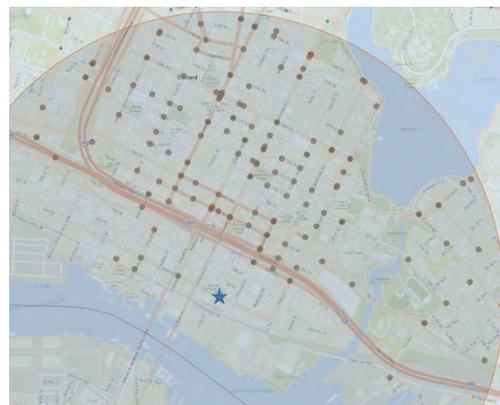
Access Mode Split – Both To & From Station



128 Rider Sample

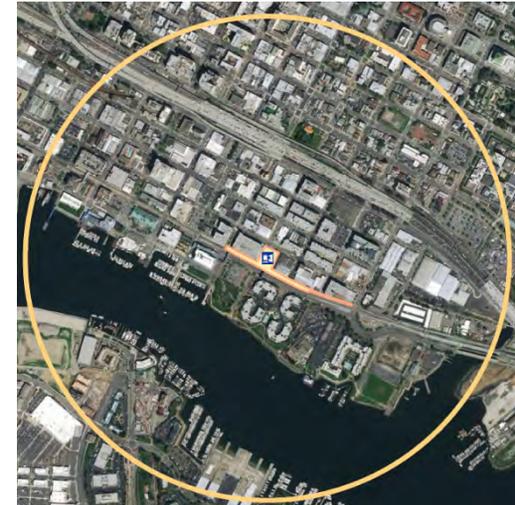
Data Collected from 2019 Capitol Corridor Station Access Survey

Pedestrian & Bike Collisions (2017–18, 1-mile OKJ buffer)



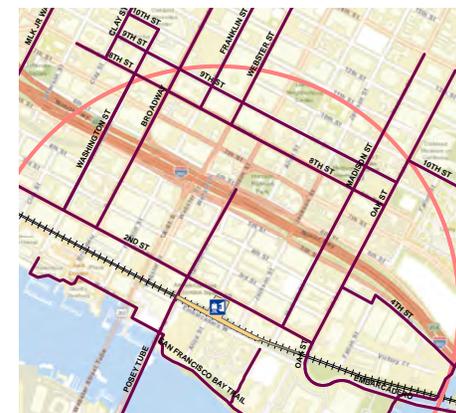
High pedestrian and biker collision rates in heavily trafficked downtown Oakland area. Data collected from UC Berkeley Transportation Injury Mapping System.

Land Use (1/2-mile OKJ station buffer)

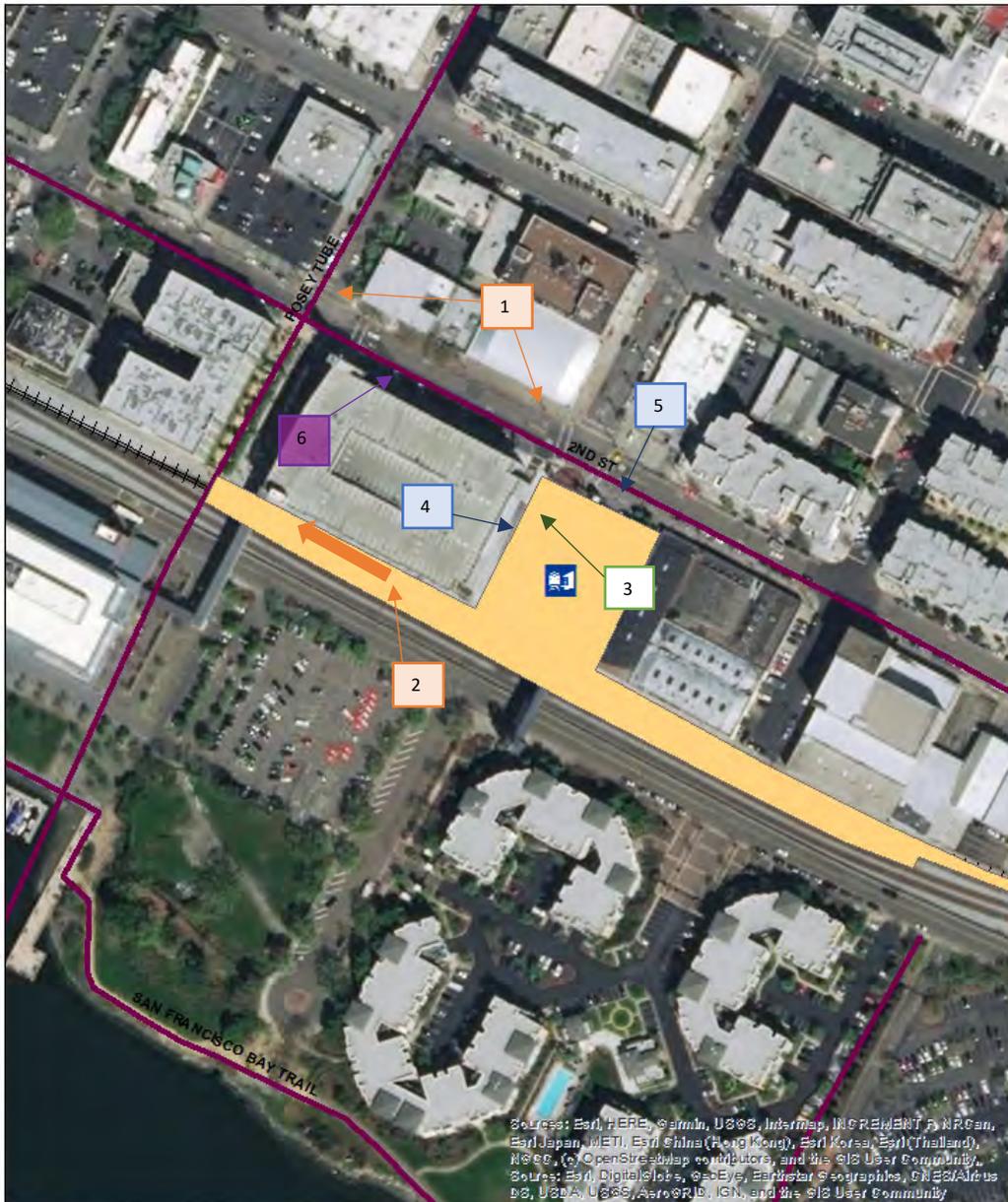


Highly developed waterfront in the station vicinity. Busy highways to the north of the station and high traffic volumes on roads extending into Jack London Square from Oakland. Street design more suitable for walking and biking in the immediate Jack London Square area.

Existing Bikeways (1/2 - mile OKJ station buffer)



Bike access connections via 2nd Street on both the east and west sides of the station (bikers enter and leave the station on the north side of the tracks).



-  Oakland Jack London Station
-  Oakland Jack London Station Footprint
-  Bikeways Near OKJ Station

Key

- \$ = Ridership Observation | # = Researcher Observation |
- * = Rider-Inspired Researcher Observation | % = City Plan Observation

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. **Add reflective yellow pedestrian crossing warning signs near sidewalks in immediate station vicinity extending across 2nd St & Alice St and 2nd St & Harrison St to safely connect riders to downtown Oakland points via Broadway. ***
2. **Add directional signage to help with the transition from OKJ to Jack London Square & the SF Ferry location via the safe sidewalk alongside the station platform connecting OKJ to Embarcadero St. This project may help to increase interconnectivity of available transportation options at Jack London Square. #**

Bike Safety and Access Improvements

3. **Add a Bay Wheels bike share station in immediate Jack London station vicinity in center of outdoor station plaza (closest Bay Wheels station is currently 3 ½ blocks away on the corner of Webster St and Embarcadero St. and not connected to the station via useful directional signage). \$**

Public Transportation Access Improvements

4. **Create an interconnected transit center at Jack London including a map in the center of Jack London Station plaza with directional cues to connecting transit options including the SF Ferry, Broadway Shuttle Amtrak Stop (and various stopping points along the route), and Lake Merit & 12th St. BART stations (along with preferred bike routes designated on the next page to reach the BART stations). #**
5. **Move Broadway Shuttle Amtrak stop to 2nd St. and Alice St. (where AC Transit RT 12 currently stops at the Jack London station) and improve time transfers between the bus and Capitol Corridor trains to reduce accessibility barriers by decreasing walk length, reducing transfer time, and increasing the exposure of the free shuttle to train riders. 70% of respondents surveyed desired better-timed transfers between trains and the Broadway Shuttle, while 25% of respondents wanted a more convenient station stop location. \$**

Driving / Parking Facilities Access Improvements

6. **Convert street parking running parallel to Market Garage from regular parking into preferred space types including handicap, electric vehicle, and carpool reserved first-come, first-served free parking spaces. This may help incentivize riders to use diverse types of vehicle travel to reach OKJ. #**

Access Improvements Outside Immediate Station Vicinity

Pedestrian Safety and Access Improvements

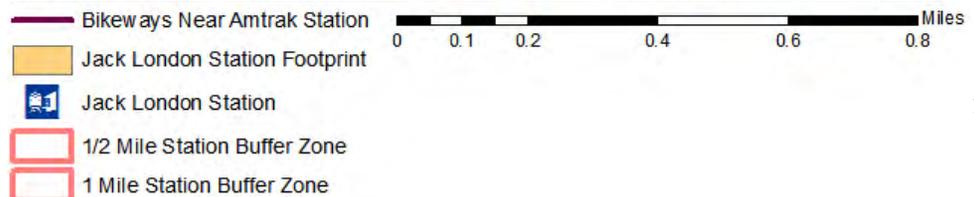
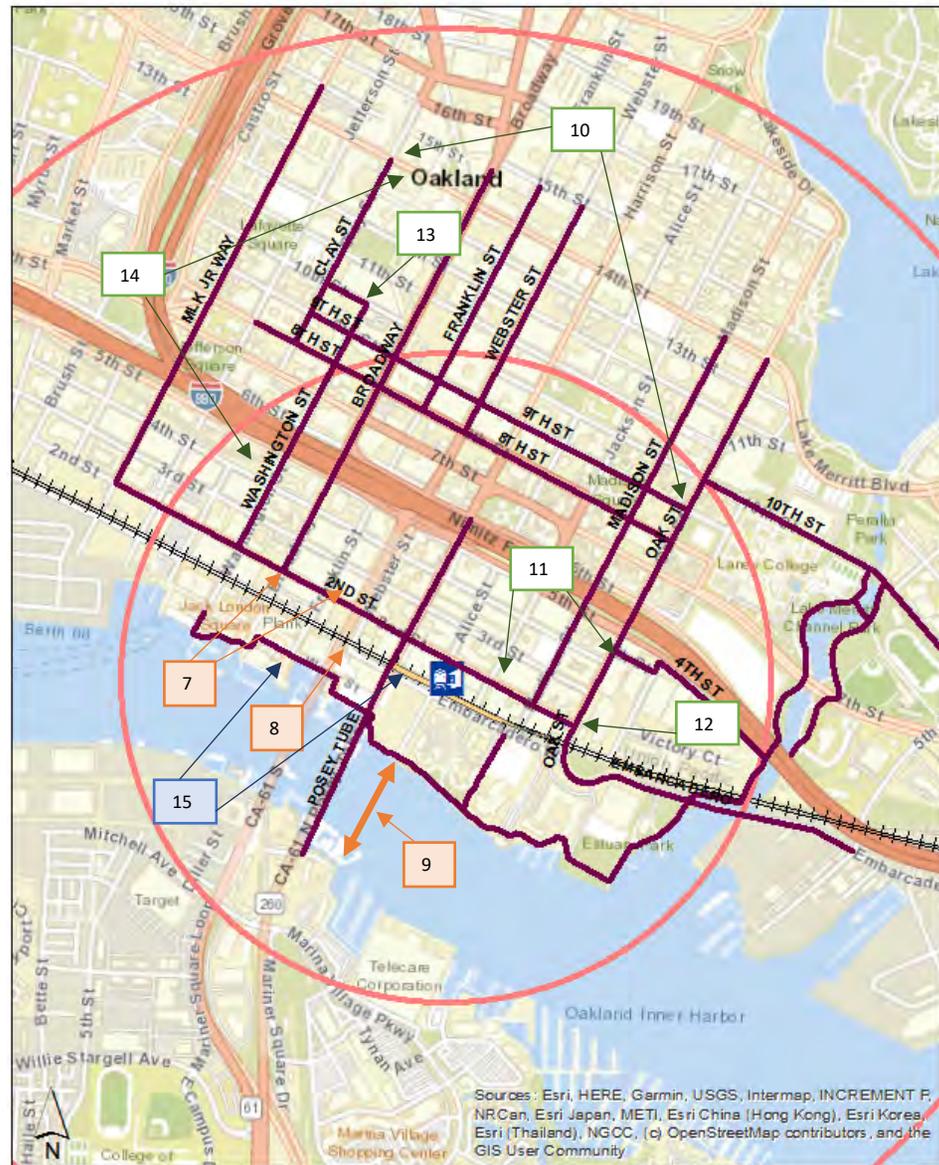
7. Add pedestrian traffic calming controls on intersections along 2nd Street and Embarcadero St, with yellow reflective pedestrian crossing warning signs on Webster St & Embarcadero St and 2nd St & Webster St and flashing beacons to prioritize pedestrian travel and promote safe night usage on the busy Embarcadero St & Broadway St crossing (this will improve safe night travel and increase connectivity of OKJ to SF Ferry and nearby locations). *
8. Add pedestrian wayfinding signage indicating the direction to the Amtrak boarding zone on the corner of Embarcadero St. and Webster St. via the sidewalk running parallel to the station tracks. This will help designate a safe and direct pathway for walkers. #
9. CCJPA supports the proposed establishment of an active travel bike and pedestrian bridge connection between western Alameda and Jack London Square in order to make the station more accessible for riders from Alameda. * / %

Bike Safety and Access Improvements

10. Connect OKJ to 12th Street and Lake Merit BART stops via improved and officially designated bike routes highlighted on a new map in the central OKJ plaza. #
 - a. Lake Merit: 2nd Street to Oak St (to BART), 8th St to Jackson St to Oak St (from BART)
 - b. 12th St: Washington St to 10th St to Clay St to 12th or 14th St (to and from BART)
11. Improve bike lane road crossings on 2nd St and Oak St with dashed or outlined crossing bike lane channels to designate crossings over intersecting roads. *
 - a. 2nd Street – lane markings across Jackson St. and Madison St.
 - b. Oak Street - lane markings across 2nd, 3rd, 4th, 5th, 6th, 7th, and 8th streets on the route going away from OKJ to reach Lake Merit BART.
12. Enhance the safety of bike turns across traffic on the 2nd St and Oak St intersection with cross-traffic colored lane treatment for bicycles – both for taking a left off of Oak St and onto 2nd St and for taking a left from 2nd St onto Oak St. *
13. Add dotted turn prioritization bike lane channel to connect the bike lane on the right side of Washington St. to the bike lane on right side of 10th St. to help guide bikers across this dangerous intersection and increase driver exposure to bikers. *
14. Designate Washington St. and 14th St. as car and bike shared roads to improve the safety of the busiest OKJ to 12th St. BART route sections that are difficult to navigate by bike - despite being marked as a shared bike road, painted signage on Washington St. should be redone to more clearly designate the street as a primary biking road to transition between Jack London Square and downtown Oakland. #

Public Transportation Access Improvements

15. Add directional signage to designate a route of travel between OKJ and the SF Ferry departure location - from Embarcadero West St., to Washington St., to Water St., & to SF Ferry connection. #



San Jose Diridon Station (SJC)

San Jose, California

San Jose Diridon station is an urban station with a mixed access mode split and an estimated 19% of riders parking a car to go to and from the station. A significant 46% of riders bike or use public transit in order to reach the station. The location has very good Class II bike lane infrastructure in place on San Fernando St. and Santa Clara St. Efforts should be focused on improving side bike lane safety when bike lane streets cross busy intersections and on addressing section along San Fernando St where road narrows and bike and car lanes merge. Pathways near the station are wide and viewed favorably by station users. A VTA light rail station connects Capitol Corridor services at the station to points in San Jose and a bus-only lot conveniently links the Capitol Corridor to Amtrak Thruway and VTA connecting bus services. In its immediate 1/2-mile buffer zone, the station is adjacent to shopping and residential facilities to the west, parking and transit facilities to the east, and the SAP center to the north. There is good signage at the station indicating the location of connecting transit services & nearby destination points.

Characteristics

Daily Boardings: 280 riders **Daily Alightings:** 277 riders

Parking: 55 regular spaces, 21 accessible spaces, and 5 short-term spaces (30 minutes) in Capitol Corridor Amtrak lot, with free parking for monthly and 10-ride ticket holders only. 581 regular spaces in Caltrain lot for \$5 on a first-come, first-served basis.

Bikes: There are 24 Bike Link eLockers at the San Jose Diridon station owned by VTA. Bay Wheels bike share station located near the station facility with 27 bikes available.

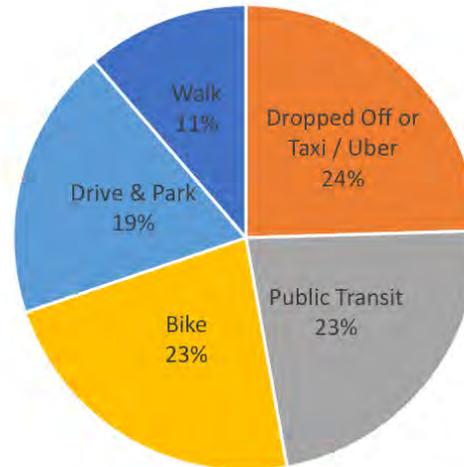
Public Transit: Serviced by Amtrak Thruway Buses RT 17 (to Monterey) & RT 21 (to Santa Barbara), VTA RT 81 (to San Jose State) and RT 802 (to Mountain View), ACE (east to Stockton), and Caltrain (north to SF).

Bike Connections: Class II bikeways on San Fernando St, Stockton Ave, and Santa Clara St connect Montgomery St & Cahill St station access points to popular residential and downtown areas of San Jose.

Trail Connections: *Guadalupe River Trail* (bike and pedestrian path) connecting points northeast of SJC.

Existing Conditions

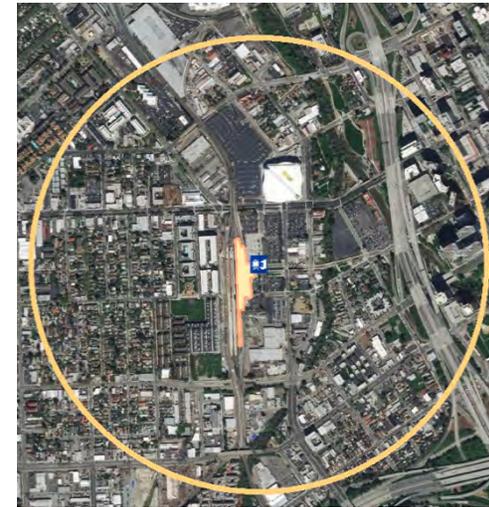
Access Mode Split – Both To & From Station



53 Rider Sample

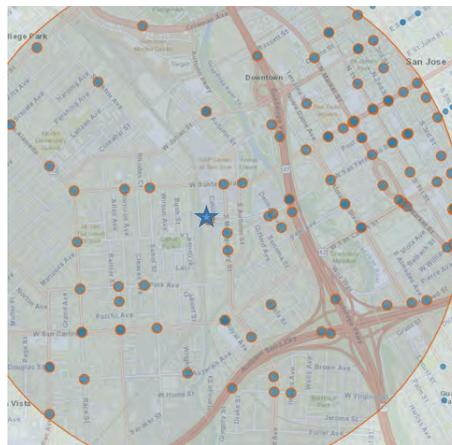
Data Collected from 2019 Capitol Corridor Station Access Survey

Land Use (1/2-mile SJC station buffer)



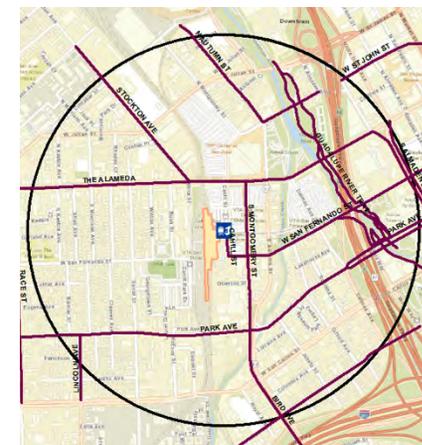
Urban area of mixed development type in the immediate station area. Urban zone to the east, SAP arena and parking areas located to the north, residential facilities to the west, and busy roads and residential areas to the south side of the station.

Pedestrian & Bike Collisions (2017–18, 1-mile SJC buffer)

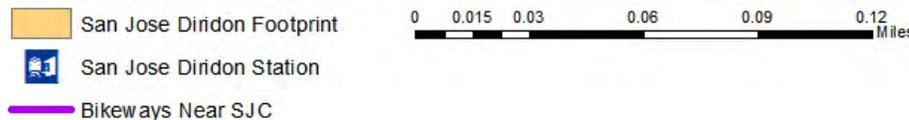
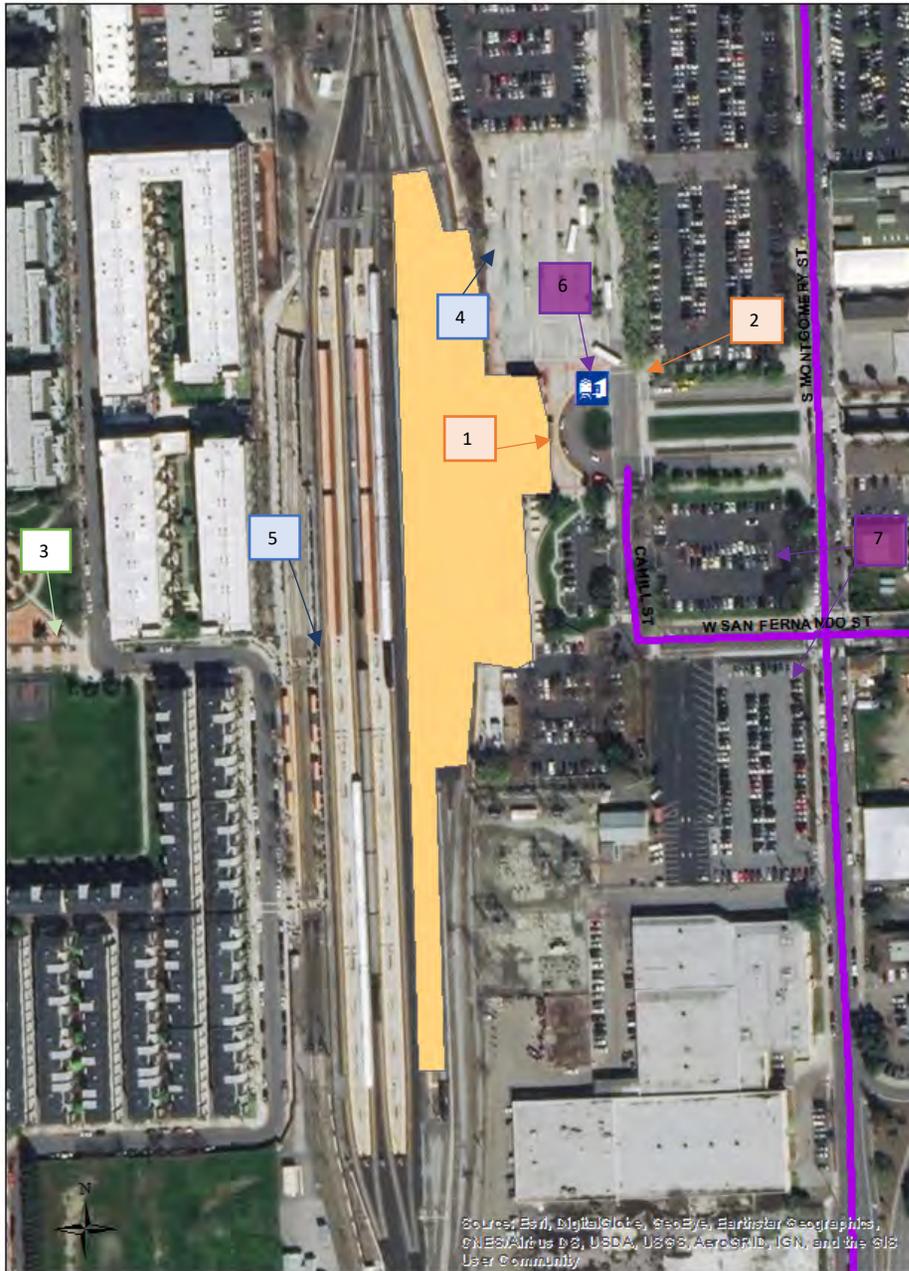


Collision data collected from UC Berkeley Transportation Injury Mapping System. High collision volume along street crossings of the two primary bike access roads from downtown San Jose (San Fernando St & Santa Clara St) indicates need for better bike solutions across intersections.

Existing Bikeways (1/2 - mile SJC station buffer)



Bike access via Santa Clara St. and San Fernando St. (into downtown San Jose), the Alameda & Stockton Avenue (north-west, west), and Park Avenue (south, south-west). The *Guadalupe River Trail* extending through station buffer zone is an active travel space connected to the station via bike lanes.



Key

\$ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation
 | % = City Plan Observation

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. **Add Capitol Corridor and San Joaquin logos on all SJC directional cues containing the agencies and companies serviced by the transit center** to enhance customer wayfinding and increase public exposure to Capitol Corridor. This includes adding the logo on signs at the front of the main station entrance, at the corner of Santa Clara St. & Cahill St., and on digital boards in the station tunnel indicating boarding platforms for scheduled departures. \$
2. **Add directional sign for SAP center on the Cahill St station access corner on the sidewalk side opposite of the station pointing north** to direct fans visiting SAP down the sidewalk that leads to the arena. #

Bike Safety and Access Improvements

3. **Add signage directing riders exiting the west side of the Amtrak station to the Cahill Park Bay Wheels bike station (near VTA light-rail Diridon Station exit) and add the bay wheels station to the 511 transportation maps located at the station facility.** This will better highlight the availability of shared bikes for reaching end points located to the west of the Amtrak station. #

Public Transportation Access Improvements

4. **Design new Amtrak Thruway bus dock signs with route numbers** (in addition to a larger Amtrak logo) to better designate bus slot spaces two through four in the transit lot as connecting bus services for Amtrak customers. Only the stops are currently listed on the signs. #
5. **Enhance interconnectivity between VTA light-rail and Capitol Corridor train boarding zone and ticket counter at Diridon Transit Center by adding a sign on top of the VTA light rail platform pointing to go down the ramp and into the tunnel to reach the main transit center with Capitol Corridor & San Joaquin services.** This sign should be similar to the directional cue currently existing for Caltrain and will improve train access from the west side of the station. *

Driving / Parking Facilities Access Improvements

6. **Repave ADA accessible pick-up & drop-off zone in the Amtrak station entry loop** to make it easy and clear where ADA riders can most easily reach trains & where other cars should not stop to drop off riders. This includes repainting street markings for the ADA drop-off zone on the road and repainting the curbside blue. #
7. **Add better wayfinding signage for ADA and Capitol Corridor/Amtrak priority parking facilities (with on street parking turn cues).** Also, add instructional signage in the Capitol Corridor lot telling riders to see the agent inside the station to print free Capitol Corridor parking permit for car windshield. This will make it easier for Capitol Corridor riders moving down Cahill St. from the Santa Clara St. side to identify their needed type of parking and distinguish the two designated lots from the generic Caltrain facilities (currently hard for new riders to distinguish these lots). #

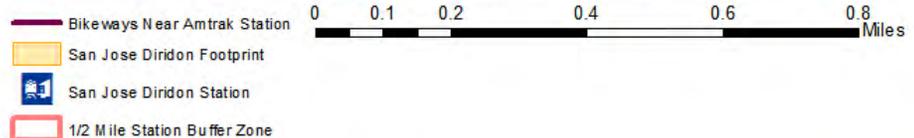
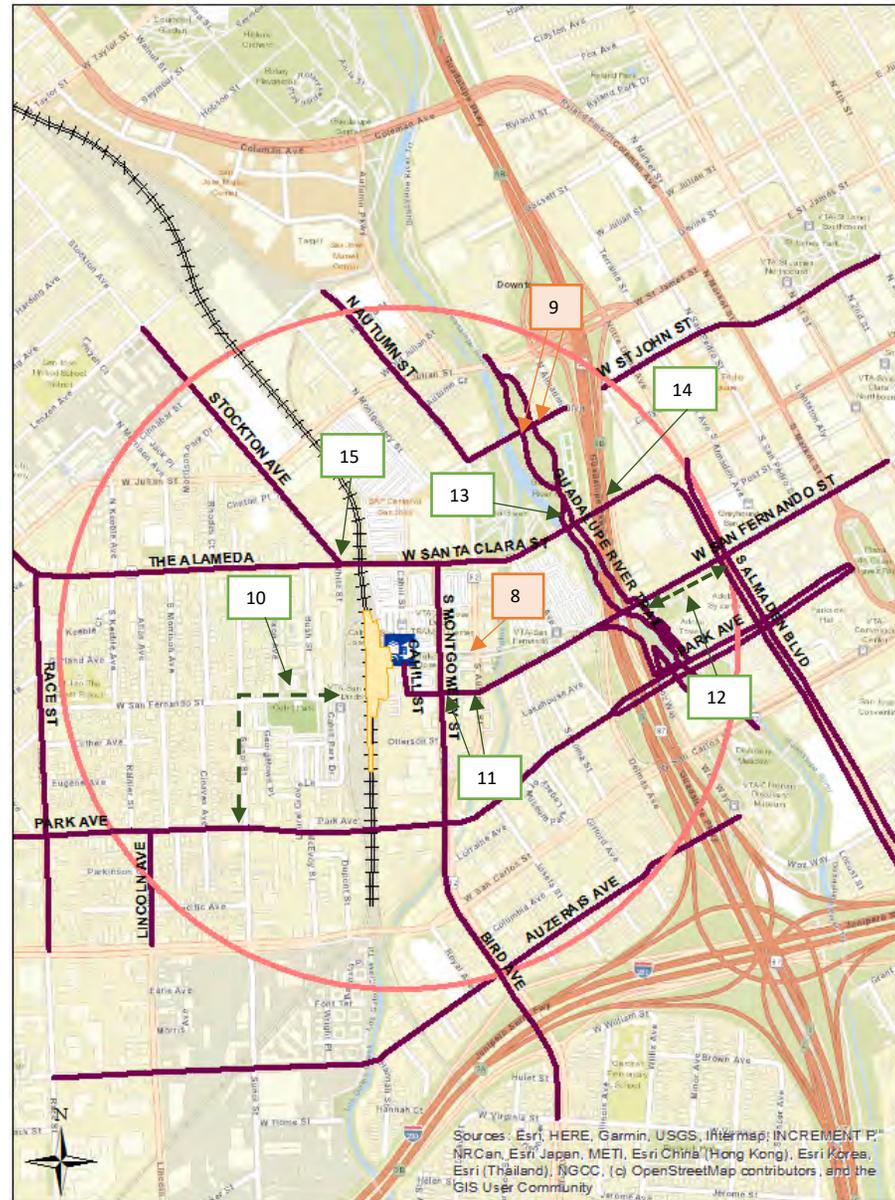
Access Improvements Outside Immediate Station Vicinity

Pedestrian Safety and Access Improvements

- 8. **Add sign directing pedestrians down to the San Fernando VTA station and downtown San Jose points via the safe/direct walking zone off of Montgomery Street and parallel to gated VTA tracks. ***
- 9. **Add bike and pedestrian crossing signage, preferably with a light-up reflective push button, to warn drivers of Guadalupe River Trail pedestrian and bike path crossing over West Saint John St. There are currently no warnings for motorists marking this pedestrian pathway crossing over the street. #**

Bike Safety and Access Improvements

- 10. **Improve bike access from the west side of the station by adding a bike lane strip on one side of the wide path cutting through Cahill Park (convert from pedestrian path to multi-use path, with ramps allowing bikes to get on and off the path from the main road). This multi-use path will connect Laurel Grove Ln Amtrak station access point to the bike lane on Park Ave via Sunol St and make access from the west side of the station more direct and convenient. #**
- 11. **Add dashed green intersection crossing markings in the two locations where the intended pathways of bicycles across side streets are missing on the San Fernando St. Amtrak station bike access road (across Autumn St intersection moving away from SJC & across Montgomery St. moving towards SJC). This will help reduce conflicts between bicyclists and motorists by increasing visibility and making bicycle movements more predictable. ***
- 12. **Repaint shared bike & car road section of San Fernando St. where the road narrows with green shared bike lane markings and green outlined directional arrows designating the end of the separated lane for bikers and the beginning of shared between Highway 87 (side moving away from SJC) and Almaden Blvd (side moving towards SJC). This may enhance bicyclist safety by increasing motorist awareness of a brief merging point between bike & car traffic into a single lane. ***
- 13. **Add signage on Guadalupe River Path Trail for bikers that indicates trail turnoff point for SAP Center & Diridon Transit Center in order to link the multi-use path to Santa Clara Street Class II bike lane moving towards SJC. This may help ensure the safe connection of existing bike lanes to active travel pathways and ensure that bikers riding to SJC know not to continue on the bike and pedestrian pathway under Santa Clara St. #**
- 14. **Add dashed green intersection crossing markings where Santa Clara St Class II bike lane crosses over the freeway exit to increase visibility of biker space and movements in a high car volume and low visibility area for motorists. Several riders indicated that cars turning right off of the exit often have visibility blocked by the other two lanes of cars, do not come to a complete stop at the stop sign, and are often unaware that bikers are traveling on the side of Santa Clara St. \$**
- 15. **Connect Santa Clara St and Stockton St Class II bike lanes via dashed bike turn lanes across Alameda St intersection to distinguish proper paths of travel across the intersection and increase the predictability of bike movements for vehicles. This will better connect SJC station to north and north-west origin/destination points. #**



Sacramento Station (SAC)

Sacramento, California

Sacramento is an intermodal station with a mixed access mode split and an estimated 32% of riders parking a car to go to/from the station. A significant 30% of riders are dropped off or use a taxi / Uber to reach the station, while 16% take public transit. The downtown location has good bike infrastructure in place, but current conditions with one-way streets into and out of the SAC station make multi-modal egress from the station difficult. Additionally, despite SacRT servicing the station, several riders indicated that limited service time windows in the early morning and late evening force them into driving to reach the station. While well-served to downtown Sacramento points, residential locations west of the station are poorly serviced for active travel to the station as a result of poor multimodal infrastructure on the I St bridge. Despite being located in an urban area, SAC's high driving percentage is partially explained by being the northernmost stop for the majority of trains on the Capitol Corridor line. This makes the station's driving access zone expansive to the north of SAC. Finally, bike access to/from the station is limited by the primary access road on H St having only one-way cyclist traffic, the long transition for cyclists from the bike egress point to the train platforms, and the lack of a legal bike connection to Old Town Sacramento. CCJPA recognizes that the City of Sacramento and local transit partners are working on addressing these matters and were awarded a TIRCP grant to improve intermodal station access. Suggestions proposed by the cities and local transit partners will likely supersede and elaborate on the access improvements suggested in this report.

Characteristics

Daily Boardings: 1,321 riders **Daily Alightings:** 1,276 riders

Parking: 275 regular spaces 15 short-term spaces, 10 accessible spaces, and 5 motorcycle spaces in Capitol Corridor Amtrak lot owned by the City of Sacramento. Additional parking available in Old Sacramento Garage on I St and 2nd St.

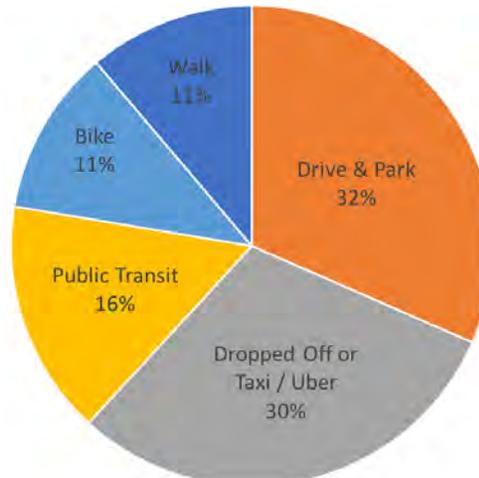
Bikes: There are 40 BikeLink e-Lockers at SAC in addition to the Sacramento Valley BikeHub secure parking lot. The average daily occupancy of eLockers for 2019 (total lockers rented / total lockers available at the station) was 8% and never exceeded 65%, which indicates that there is more than enough secure bike parking at the station. There are no bike-share stations located within proximity of SAC, although Jump bikes are widely used and typically found parked within the station vicinity and throughout Sacramento.

Public Transit: Served by SacRT RT Goldline, 30, & 38 (Folsom, Sacramento State, and O St), Yolobus RT 42, 45, 46, & Davis Express (Sacramento Airport, Woodland, & UC Davis), E-Tran RT 14 & 15 (Elk Grove), & Amtrak Thruway RT 3 & 20 (Reno/South Lake Tahoe & Redding).

Bike Connections: Class II bike lanes on H St (one-way), 5th St, and I St serve as immediate access roads to the station. There is a separate zone on H St for bike entry and egress at the back of the historic SAC station building.

Trails: American River Bike Trail (bike and pedestrian path), connecting origin/destinations points north-west and south-west of SAC.

Existing Conditions
Access Mode Split – Both To & From Station



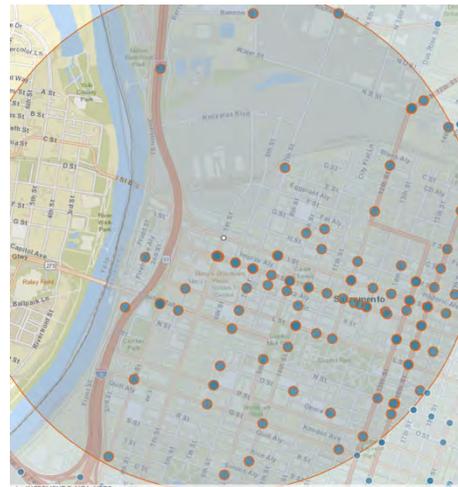
304 Rider Sample
Data Collected from 2019 Capitol Corridor Station Access Survey

Land Use (1/2-mile SAC station buffer)



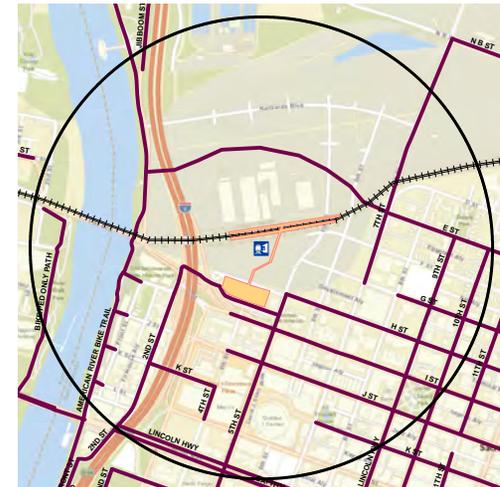
An urban area of mixed development type in immediate station area to the east and south. Residential areas across I St bridge to the west and railyard located in the region to the north.

Pedestrian & Bike Collisions (2017–18, 1-mile SAC buffer)

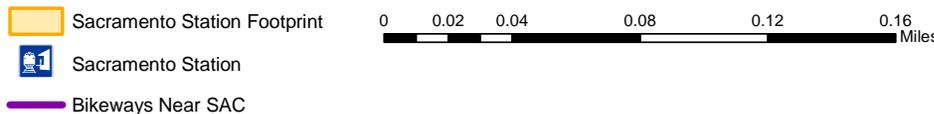
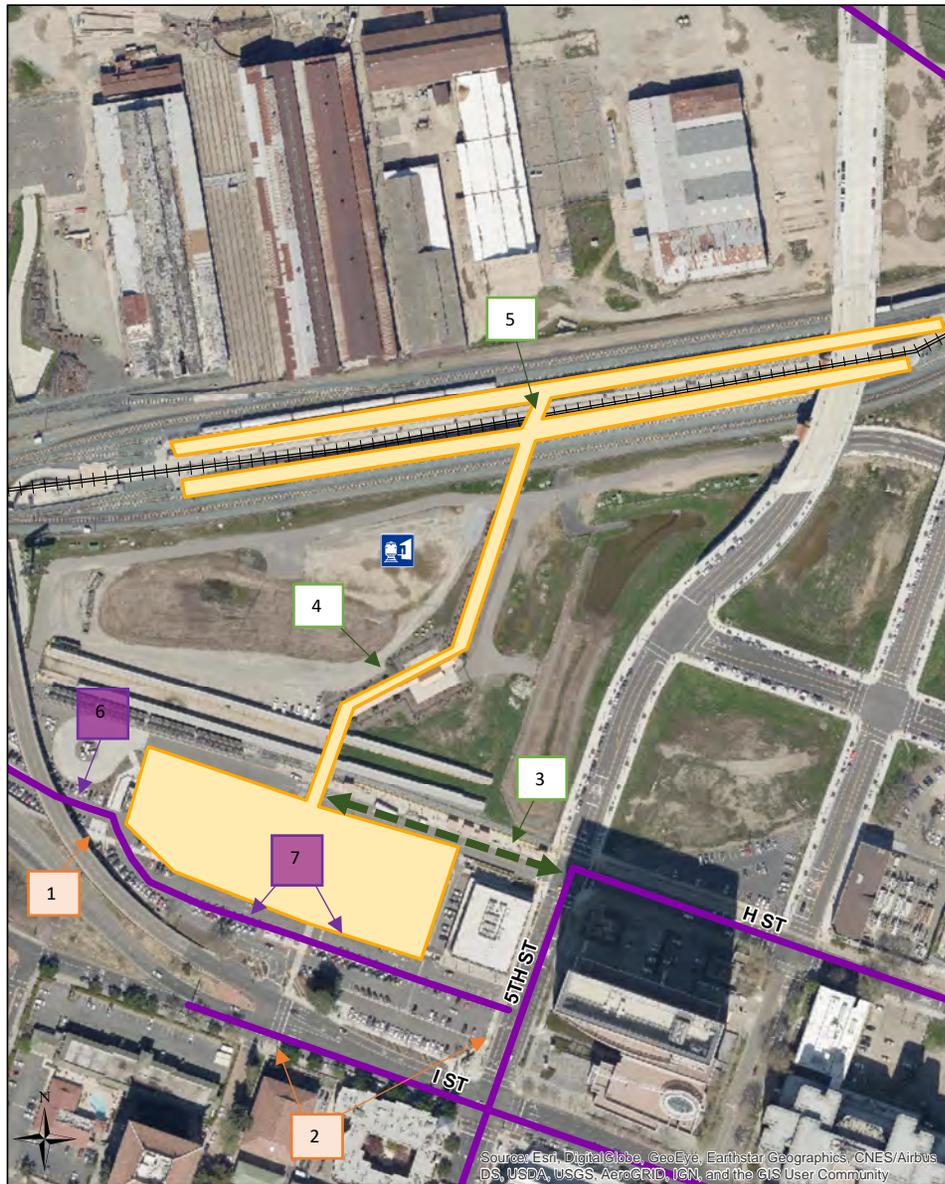


Collision data collected from UC Berkeley Transportation Injury Mapping System. High collision volume along busy J St and 7th St, but less on roads like I St, 5th St, and H St with Class II bike lane infrastructure. These roads should be designated with signage as official station access roads.

Existing Bikeways (1/2-mile SAC station buffer)



Bike access via H St, 5th St, I St, and 2nd St to the station. H St primary access road is currently one-way, while there is no legal bike access between SAC and Old Town Sacramento.



Key

§ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation | % = City Plan

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. **Improve safety at SAC parking lot crosswalks by enhancing vehicle exposure to pedestrians with the addition of reflective pedestrian crossing warning signs.** Pedestrian visibility should be increased on the crosswalk linking western destination/origin locations to the station through the parking lot and on the crosswalk designating space for pedestrians to move between their vehicles in the lot and the parking payment machine. *
2. **Add wayfinding signage for pedestrians exiting the station that will direct new visitors of the city to nearby popular attractions including:**
 - a. Add directional signage on I St and 5th St directing riders to continue straight for Golden 1 Center. #
 - b. Add signage on I St crosswalk on sidewalk opposite of station directing riders to turn left for Golden 1 Center and right to reach Old Sacramento Waterfront. #

Bike Safety and Access Improvements

3. **Add green shared bike lane road markings on the portion of H St adjacent to the historic station building in both directions to allow for easy entrance and egress to the station.** This will designate H St as the primary bike access road to the station and better separate SAC bike infrastructure on the north side of the station from the vehicle drop-off and parking infrastructure on the south and west sides of the station. *
4. **Increase the ability of bike/scooter users to reach the station platforms by allowing for micro-mobility movement between H St bike access zone and station platforms.** Proposed suggestions by Capitol Corridor riders include adding a barrier in the tunnel passageway connecting the station to the Amtrak platforms to designate a safe lane for cyclists separate from foot traffic, allowing cyclists to ride the path to the platform that the station tram takes, and/or allowing cyclists to ride through the tunnel during off-peak hours. § / %
5. **Add secure bike parking lockers at the Amtrak station platforms or in the tunnel underneath the station platforms.** The current location of all bicycle parking is a five-minute walk from the platforms, which is perceived as a long transition for cyclists not planning on using their bikes as a last-mile solution on the Sacramento end of their trips. §

Driving / Parking Facilities Access Improvements

6. **Add “Carpool-Only” designated spaces in the SAC station lot to alleviate parking pressures in a space that typically reaches full capacity.** A monthly parking permit could be applied for and received for these spaces by two or more individuals purchasing multiride Capitol Corridor tickets. *
7. **Designate a pick-up & drop-off zone with spray-painted boundaries and 5 to 10-minute maximum parking signage indicators adjacent to the SAC building entrance.** This should be on the two portions of the vehicle entrance street with widened curbsides that enable vehicles to safely pull over out of the way of traffic. Make one of these designated for ADA pick-up & drop-off with a blue painted curbside & the other portion designated for general pick-up and drop-off with a white painted curbside. #

Access Improvements Outside Immediate Station Vicinity

Pedestrian Safety and Access Improvements

8. Repaint the fading crosswalk on the 3rd St and I St intersection. This will enhance pedestrian safety at the crossing and thus provide a better walking connection between the SAC overflow parking lot and/or Old Sacramento Waterfront locations with the SAC station. #
9. Improve the safety of the existing I St Bridge pedestrian route to the station. This includes adding a pedestrian crosswalk between the Amtrak station approach on the north side of the bridge and the main crosswalk on the south side of the bridge with a pedestrian crossing warning signal, cleaning up debris on sidewalks underneath the freeway, and adding lights on underpass leading to the I St bridge on the west side of SAC to enhance the safety of nighttime walking. *

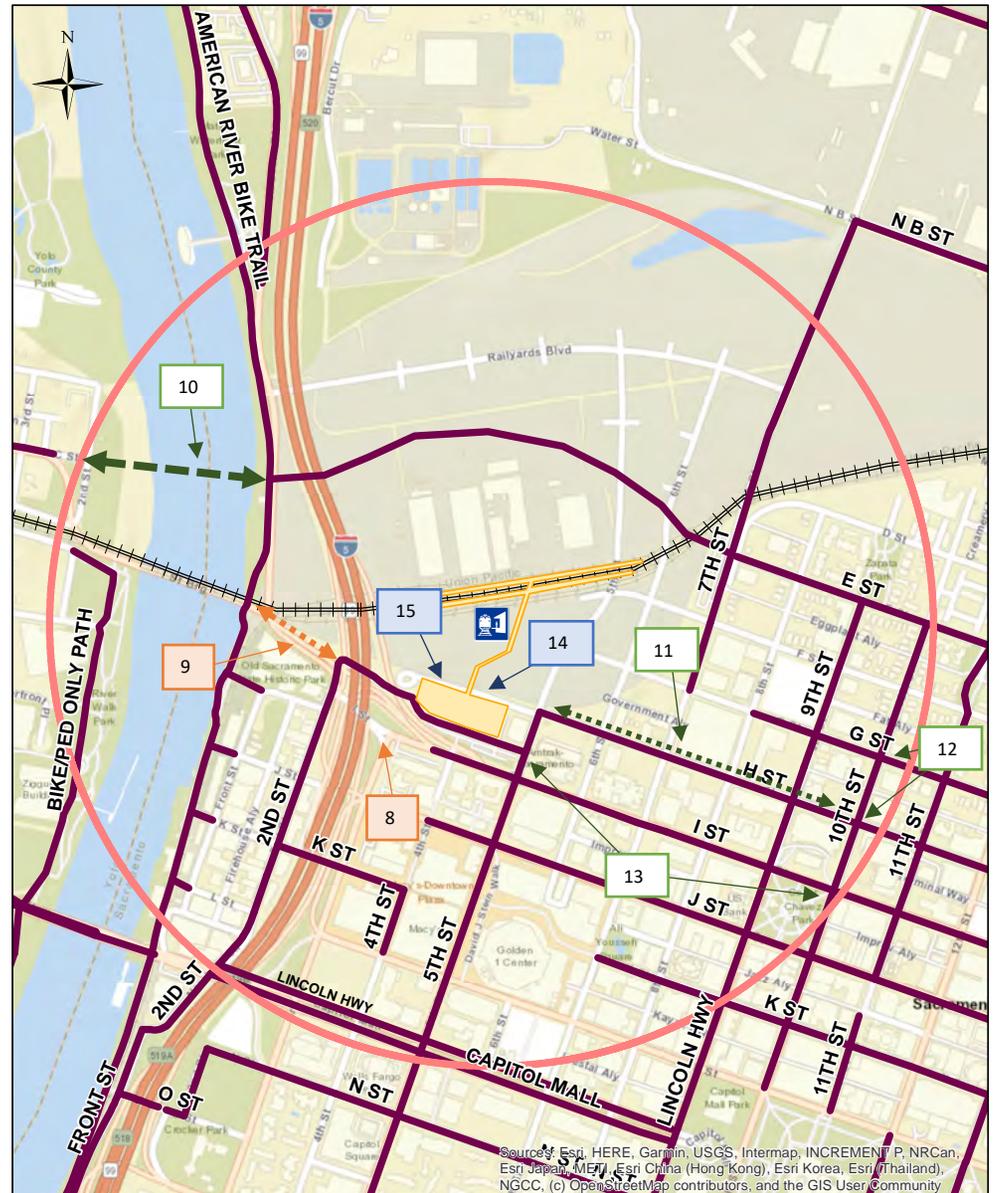
Bike Safety and Access Improvements

10. CBJPA strongly supports the City of Sacramento’s plan to construct a new bridge upstream of the existing I St bridge for multimodal car, bike, transit, and pedestrian use. This will add a river crossing that better meets universal accessibility standards and also enable the upper deck above the railroad crossing on the existing I St bridge to be turned into a shared-use pedestrian and bicyclist pathway that could provide direct west-side SAC station and waterfront access via active travel modes. %
11. Between 5th St and 10th St, redesign H St into a two-way cycle track. This could be done through adding wayfinding signage directing riders to station via H St on connecting downtown bike lanes (5th St, 9th St, and 10th St) and through making changes to H St by either: * / %
 - a. Removing one of the one-way traffic lanes and replacing it with a two-way bike lane separated from the street by a 5 ft buffer zone.
 - b. Painting green shared bike lane markers on road in the direction going with traffic and adding a buffered side lane in the direction moving against traffic.
12. Add signage to improve bike connectivity of G St (and residential communities on this street) to SAC by adding directional cues for the station on the corner of G St and 10th St and on the corner of H St and 10th St (with dashed intersection turn lanes to increase biker visibility and make movements more predictable). This will diminish public confusions related to reaching station via G St bike lanes *
13. Add wayfinding signage on 5th St and on the corner of I St & 10th St to direct riders to the designated cyclist station entrance on H St (see locations on map). This will encourage the use of safe bike lanes on H St & I St to reach the station. *

Public Transportation Access Improvements

14. Improve coordination between the arrival of SacRT public transit at the station with the departure of Capitol Corridor trains. Specifically, busses and light rail options should reach station 15 minutes before train departures to ensure that small delays will not lead riders to miss the train and have to wait an hour at the station for the next Capitol Corridor train arrival. \$
15. Extend SacRT SAC time windows to include hours earlier in the morning and later in the evening to work as a first-and-last mile service for all Capitol Corridor trains. Several riders complained that they’d like to use transit, but that the earliest arrival times (6:51 a.m. for 30, 7:21 a.m. for 38, & 6:29 a.m. for Gold Line) and latest departure times (9:01 p.m. for 30, 8:31 p.m. for 38, & 8:49 p.m. for Gold Line) of connecting SacRT transit forces them to rely on personal vehicles or Ubers/taxis to reach SAC. \$

Note: Public transit suggestions 14 and 15 in this report aimed at SacRT (not City of Sacramento).



- Bikeways Near Amtrak Station
- Sacramento Station Footprint
- Sacramento Station
- 1/2 Mile Station Bufferzone

0 0.075 0.15 0.3 0.45 0.6 Miles

Davis Station (DVS)

Davis, California

The Davis station is a suburban intermodal station with a mixed access mode split and an estimated 39% of riders parking a car and 26% of riders taking a bike to go to and from the station. Public transit usage (2%) is very low at the station. The location has class II bike lane infrastructure in place on main roads and is located in a bike-friendly community with trails connected to UC Davis, Mondavi Center, Downtown Davis, and nearby neighborhoods north of the station. The station is currently suffering from an inadequate level of available parking at the existing free Amtrak Capitol Corridor lot, limited public transit availability, and a lack of separation between bike, park, drop-off, and public transit entrance and egress station infrastructure. There is also ridership demand for an increased quantity of secure bike parking. The City of Davis recently conducted their own (and much more thoroughly researched) Amtrak station access project. We would divert to the results of this study when our proposed access improvements contradict with the improvements proposed in the study conducted by the City of Davis.

Characteristics

Daily Boardings: 506 riders **Daily Alightings:** 528 riders

Parking: 135 regular spaces, 5 accessible spaces, and 2 EV spaces in Capitol Corridor Amtrak lot with free parking available on request of a parking permit. Overflow parking owned by the City of Davis exists on the corner of 1st St and F St (not free and not Amtrak preferred).

Bikes: There are 24 Bike Link eLockers at the Davis station. The average daily occupancy of eLockers for 2019 (total lockers rented / total lockers available at the station) was 43%. 2019 daily occupancy has reached up to 126% and has exceeded the 100% threshold on only 4 of 364 days, which indicates that there is close to an adequate number of eLockers existing at DVS for current usage levels. There is no bike-share hub currently located at the station, but Lyft bikes can often be found parked in the station vicinity.

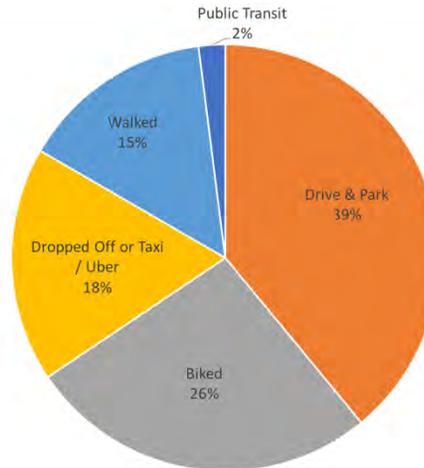
Public Transit: Serviced by Unitrans RT A, O, & Z (Memorial Union, Alhambra Drive) & Yolobus (Winters, Woodland, West Sacramento, and Sacramento routes). Both transit options accept Capitol Corridor Transit Transfers.

Bike Connections: Class II / Class III bikeways on 3rd St and Class II bikeways on 5th St serve as immediate station access roads from east and west of the station. J St and F St class II bikeways provide north side station access, while bike-only paths going under I-80 connect destinations south of downtown Davis to the Amtrak station.

Trail Connections: Putah Creek Bicycle Undercrossing (bikes avoid high-speed merging traffic on I-80 with tunnel connection to downtown Davis & Amtrak station from south Davis) & Old Highway 40 Bike Path (connecting station to points in east Davis).

Existing Conditions

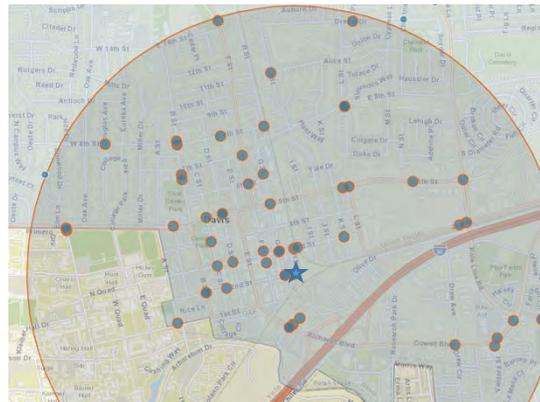
Access Mode Split – Both To & From Station



889 Rider Sample

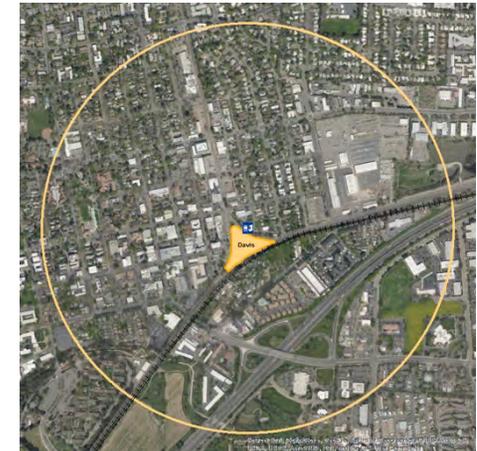
Data Collected from 2019 Capitol Corridor Station Access Survey (85) & Fehr & Peers Amtrak Station Study (804)

Pedestrian & Bike Collisions (2017–18, 1-mile DAV buffer)



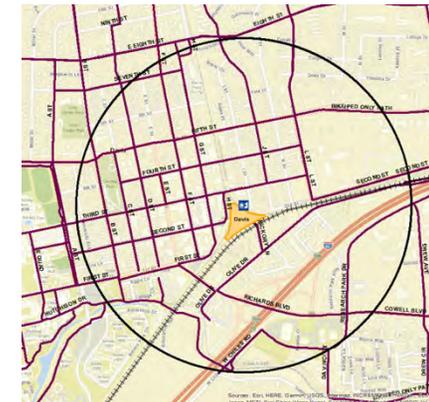
Collision data collected from UC Berkeley Transportation Injury Mapping System. Fatalities exist along street crossings of the two primary bike access roads from downtown Davis (3rd St and H St, 3rd St. and G St).

Land Use (1/2-mile DAV station buffer)

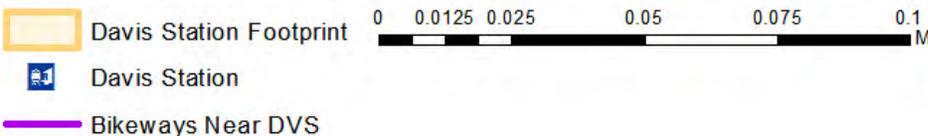


Suburban area of mixed development type in the immediate station area. City center and UC Davis campus to the west, residential areas to the north and east, and mixed development types (neighborhoods separated by large freeways and shopping centers) to the south.

Existing Bikeways (1/2 - mile DAV station buffer)



Pathways including 5th St, 2nd St, 1st St, and G St serve as primary station bike access roads. Consolidating one way of bike travel could help to separate bike entrance and egress from other access modes and make station more friendly for intermodal travel.



Key

§ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation
 | % = City Plan

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. Add reflective yellow pedestrian crossing warning signs on the immediate 2nd St sidewalk where incoming car traffic is not required to stop in order to increase the visibility of pedestrians and encourage the slowdown of vehicles rounding the turn near the station. An alternative solution could be to add a stop sign for traffic moving east on 2nd St and turn station entrance point into a four-way-stop intersection. *
2. CCIPA supports the plan to design a bicycle/pedestrian overcrossing that will connect the Amtrak station and downtown Davis to the Olive Drive neighborhood. This will enhance pedestrian and bike access by reducing the distance traveled to the station and reduce illegal pedestrian crossings over the tracks. % / *
3. Improve pedestrian safety at the 3rd St and H St crossing by adding a crosswalk over 3rd St, repainting sidewalk across H St, and adding a stop sign on 3rd St for cars traveling east towards the intersection. This will help slow down traffic and increase the feasibility of active travel to and from the station. *

Bike Safety and Access Improvements

4. Add a Jump Bike station docking platform in the center of the outdoor station plaza. Knowing there will always be a bike share option at the station will help alleviate pressures to add more secure bike parking at the Davis station and onboard trains. §
5. Design a two-way bike lane divided from the road along H St between 3rd Street and the DVS station entrance. Include a turn box at H St & 3rd St intersection to assist with cross-traffic turn from H St onto 3rd St and add dashed bike lane channels moving across the intersection to help with the transition to and from the bike path (space could be made by either removing parking or making into a one-way street). This design change will help safely separate bikes from exposure to vehicle entry and exit points. *

Public Transportation Access Improvements

6. Create an interconnected transit plaza design at the station by adding a map in the center of the outdoor plaza designating the location of and routes (including stops) traveled by public transit options servicing the station. This will increase public exposure to transit options servicing the station and hopefully help to reduce the number of single-car drivers using the station. *

Driving / Parking Facilities Access Improvements

7. Add carpool-only designated spots in the Capitol Corridor station parking lot. Parking permits for these spaces could be received by two or more riders presenting their tickets to a station agent. This design idea would incentivize individuals to carpool and reduce parking demands in the lot as a result. #
8. Paint a clearly designated pick-up and drop-off zone with wayfinding signage on the far side of the parking lot. Nearest to the curb and pathway leading to the platform, spray paint the curbside blue and add an ADA accessible pick-up and drop-off station with direct access to the trains. This will help to designate a specific pick-up and drop-off facility from the main parking lot area. #

Access Improvements Outside Immediate Station Vicinity

Pedestrian Safety and Access Improvements

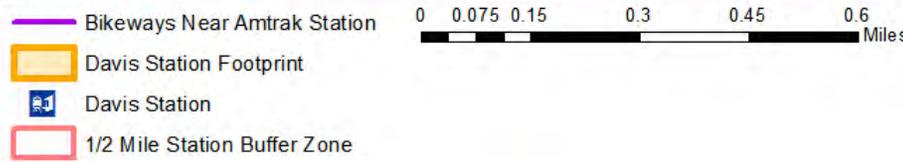
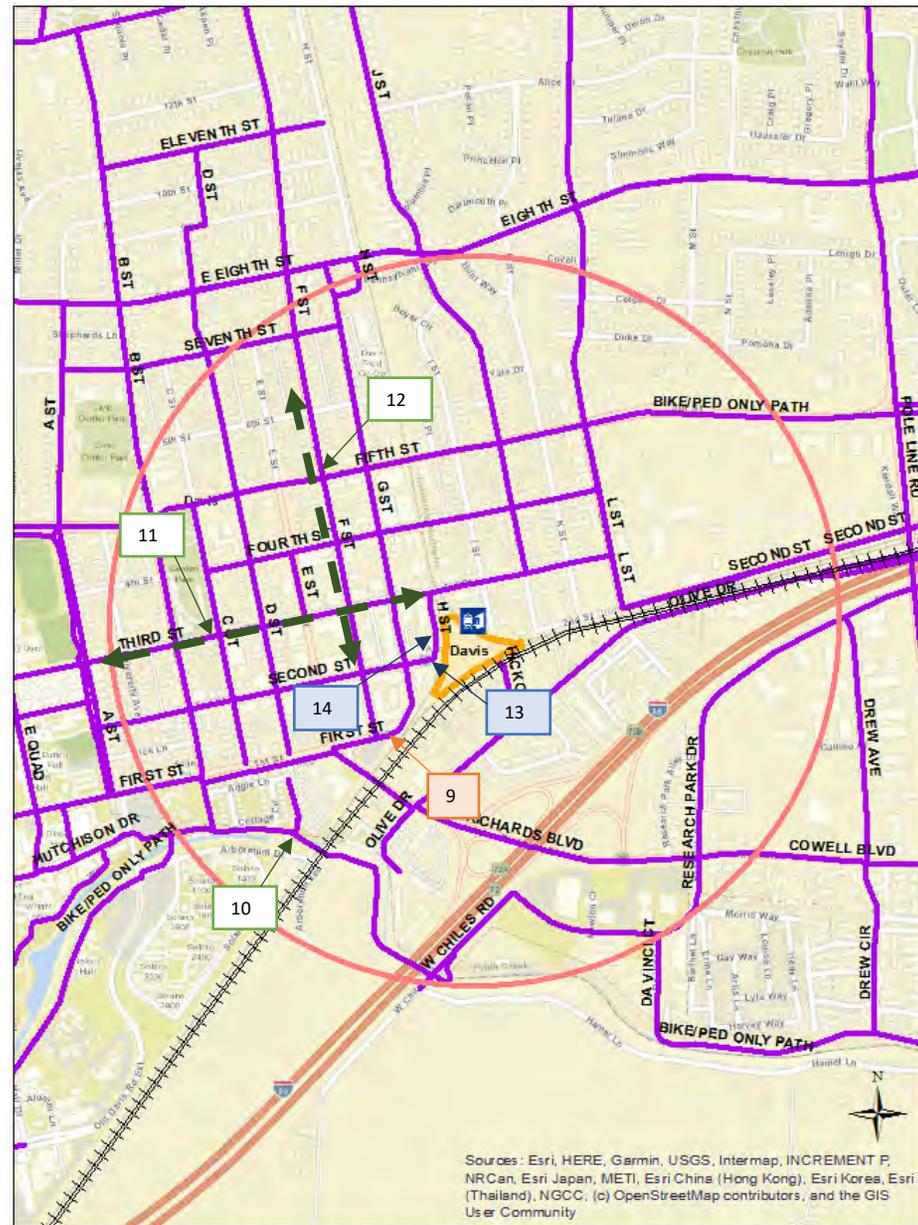
- 9. **Improve pedestrian safety of the 1st St station connection point to both the overflow parking lot (1st and F St) and the I-80 pedestrian underpass by adding a crosswalk with reflective pedestrian crossing signage.** This will improve the connectivity of the Amtrak Station to nearby pedestrian pathways and enable better west-side station access for walkers. #

Bike Safety and Access Improvements

- 10. **Add directional / wayfinding signage for the DVS Amtrak Station off of the Putah Creek Pathway underneath the existing directional cues pointing to downtown Davis (and split from UC Davis Campus path).** This will help enable safe and convenient access to 3rd St and the Amtrak station from the south side of Davis and encourage increased use of shared-use bicycle & pedestrian pathways in Davis. #
- 11. **Add dashed bike lane intersection crossing markings along 3rd St intersections between Davis and the Amtrak station (B St, C St, D St, E St, F St, & G St crossings).** Adding these bike channels approaching the proposed main access point to the Amtrak station will help reduce conflicts between bicyclists and motorists by increasing biker visibility and making bicycle movements more predictable. #
- 12. **Designate F St as the primary northern bike access street into downtown Davis in order to move bike traffic across the busy 5th St and onto the 3rd St Amtrak access road point.** Improvements to make include adding a bike box on 5th St for bikers turning left onto F St traveling from the east side of the station and adding dashed bike lane intersection crossing markings across F St intersections on 5th St and 4th St for bikers traveling in both directions to increase motorist awareness of bike traffic along these road sections.*

Public Transportation Access Improvements

- 13. **Work to better connect busses servicing the station with the arrival and departure times of Capitol Corridor trains in order to make using the service more feasible for a lot of riders.** Poor public transit services were commonly mentioned in survey responses as a reason why train riders feel like they have to drive and park at the station. **Note:** This suggestion requires collaboration with Unitrans and Yolobus transit agencies, not the City of Davis. \$
- 14. **Increase public awareness to Yolobus services at the station and add wayfinding & bus stop signage for the transit service near the station.** The inability to easily identify public transit options at the station was mentioned in Davis Amtrak station surveys as a reason for not using these services.*



Richmond Station (RIC)

Richmond, California

The Richmond station is an urban station with a mixed access mode split and an estimated 55% of riders using public transit to go to and from the station and 23% of riders driving and parking at the station. The station is the primary BART connection to SF for travelers going to and from stations along the line north of RIC. Very few riders currently walk or bike to the station (14% combined). This is partially a result of the limited bike lanes linking the immediate RIC area and the extensive shared bike and pedestrian pathway networks near the station, the lack of Bay Wheels bike-share services in Richmond (being introduced in late Spring 2020), and the unique geographic characterization of ridership at RIC (a significant portion of ridership traveling far distances from Marin and San Francisco origin/destination points). Riders using RIC as a home or destination station also indicated a desire for better public transit services (better coordination between Capitol Corridor and BART, more frequent AC Transit bus headways, & direct GGT service from San Rafael Transit Center to the Richmond BART & Amtrak station).

Characteristics

Daily Boardings: 313 riders **Daily Alightings:** 344 riders

Parking: 20 regular spaces in Richmond BART Parking Garage by reservation via BART or with Clipper card on the day of arrival. 43 additional regular spaces in Marina Way commuter lot owned by the City of Richmond on the corner of Marina Way and MacDonald Avenue.

Bikes: There are 24 Bike Link eLockers at the Richmond station. Bay Wheels bike-share services are not located in the immediate station vicinity and have yet to be deployed in Richmond. Richmond is set to introduce E-Bikes by the end of 2020 through a partnership with Gotcha Mobility.

Public Transit: Serviced by BART (Fremont / Warm Springs & SF / Millbrae), AC Transit RT 70, 71, 72M, 74, 76, 376, & 800 (Richmond Parkway Transit Center, Sheridan Point Park, Contra Costa College, Hilltop Mall), & Golden Gate Transit (Marin to Richmond Station via a connection at El Cerrito BART).

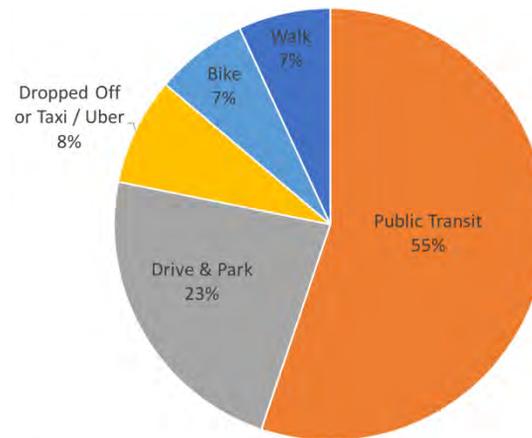
Bike Connections: 16th St and Nevin Avenue bike boulevards serve as immediate access roads to the station for bikers on the west (16th) and east (Nevin) sides of RIC's access buffer zone. 24th St, Marina Way, Barret, and 19th St bikeways extend off of main RIC bikeways.

Trail Connections: *Ohlone Greenway* (bike and pedestrian path) connecting station to points south of the station in El Cerrito & Albany, *Richmond Greenway* (bike and pedestrian path), *SF Bay Trail* (connecting

points in north Richmond to RIC station), *Richmond Greenway* (bike and pedestrian path) connecting Ohlone Greenway and Bay Area Trail to central Richmond (close to RIC station entrance), *Richmond-San Rafael Bridge Trail* (bike and pedestrian path) connecting Marin points to Richmond.

Existing Conditions

Access Mode Split – Both To & From Station



87 Rider Sample

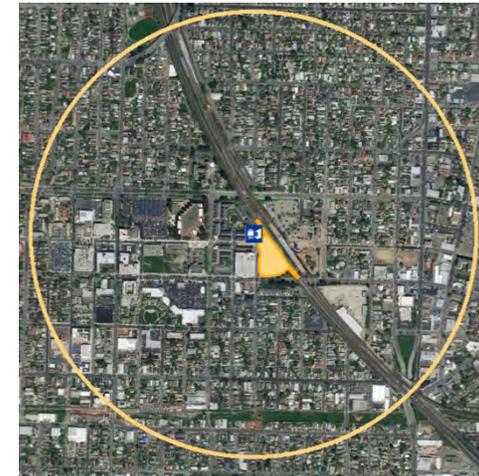
Data Collected from 2019 Capitol Corridor Station Access Survey

Pedestrian & Bike Collisions (2017–18, 1-mile RIC buffer)



Collision data collected from UC Berkeley Transportation Injury Mapping System. Fatalities near the RIC station occurred primarily along major streets and intersections in downtown Richmond (Macdonald Ave, Barret Ave, 22nd St, and Harbor Way).

Land Use (1/2-mile RIC station buffer)

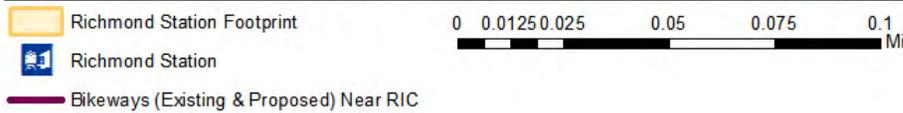
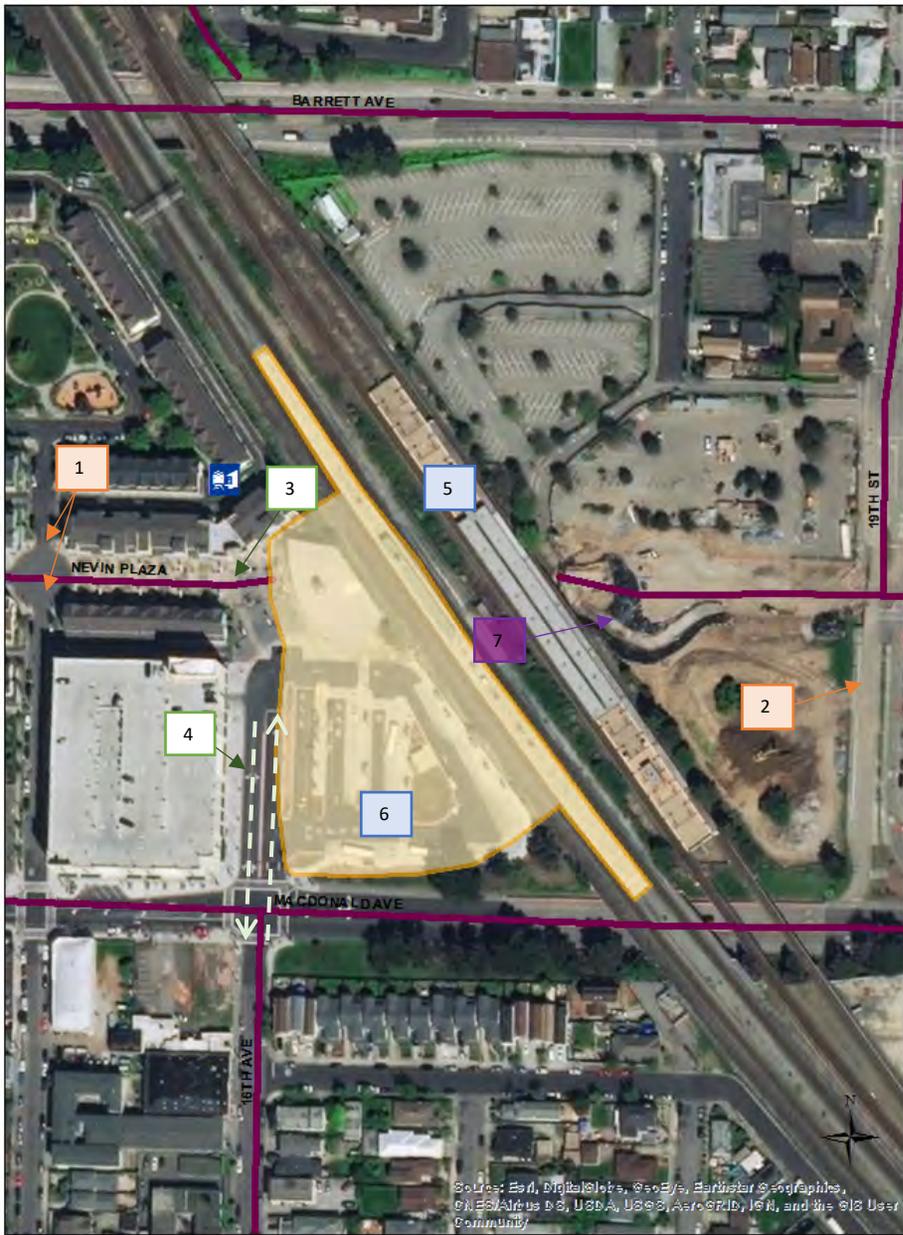


Urban area of mixed development type in the immediate station area. Downtown area located to the west of station, businesses and busy road networks to the east, and residential areas directly to the north and south (with bike paths and park space).

Existing & Proposed Bikeways (1/2 - mile RIC station buffer)



Limited bike pathway networks currently extending to the station. Main access bikeways include 16th St, Nevin Ave, and 19th St bike boulevards.



Key

§ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation
 | % = City Plan

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. Design crosswalks across both sides of the Nevin Avenue and 15th St intersection circle with reflective pedestrian crossing warning signage for vehicles. Adding crosswalks here will connect the downtown Richmond area to the west side of the station via a safe and direct pedestrian-only pathway. #
2. Repave sidewalk segment on 19th St between MacDonald Ave and Nevin Ave on the station side of the road where badly cracked concrete / significant indentations in the path poses ADA accessibility challenges from the east side. Fixing this will help provide a continuous pathway within the immediate station vicinity. #

Bike Safety and Access Improvements

3. CCJPA supports the City of Richmond’s plan to add bike share stations at the Richmond BART / Amtrak Station and throughout the City of Richmond. This will make active travel more accessible for train riders, reduce pressures on station bike parking, and offer environmental and health benefits for the community. % / §
4. On the west side station access point, design a safe and efficient way for bikers to move between the adjacent streets (16th St Bike Boulevard) and the station entrance/parking facilities. There is currently no street infrastructure to direct bikers into & out of the station. We propose:
 - a. For biker egress, convert lane for traffic at the station intersection leaving the station to move straight on 19th St into a shared car and bike lane with green shared bike road markers. This will help bikers feel comfortable moving with motorist traffic and safely and easily transition from the station to streets and pathways with bike infrastructure. #
 - b. For biker entrance, add a Class II bike lane on the right side of the lane vehicles use to take a left-hand turn into the garage (a separated lane is preferable, but a shared car and bike lane for station entrance in this lane is also possible and may be more feasible). #

Public Transportation Access Improvements

5. Better coordination between the arrival of BART trains and the departure of Capitol Corridor trains is needed, with Capitol Corridor trains leaving 5 – 10 minutes after the arrival of BART trains in Richmond. This will help make BART a more reliable and attractive option for Capitol Corridor ridership. **Note:** this is for CCJPA to work out in its train scheduling in order to achieve, not a suggestion for the City of Richmond. §
6. Work with Golden Gate Transit to add direct bus service from Marin to access the Richmond Amtrak / BART station from the San Rafael Transit Center, and/or increase the frequency of current GGT route going to El Cerrito BART (currently hourly). Several riders who take Capitol Corridor trains from Marin indicated a desire to use transit to reach RIC if it were more feasible. **Note:** Suggestion for GGT, not the City of Richmond. §

Driving / Parking Facilities Access Improvements

7. Add signage pointing to the pick-up & drop-off zone (with ADA accessible space) underneath the 19th St / Civic Center station exit sign in the tunnel and designate the passenger loading area with clear on-street boundaries. Designating this area of the station as an official pick-up/drop-off zone will help to safely and conveniently separate station egress by travel mode. #

Access Improvements Outside Immediate Station Vicinity

Pedestrian Safety and Access Improvements

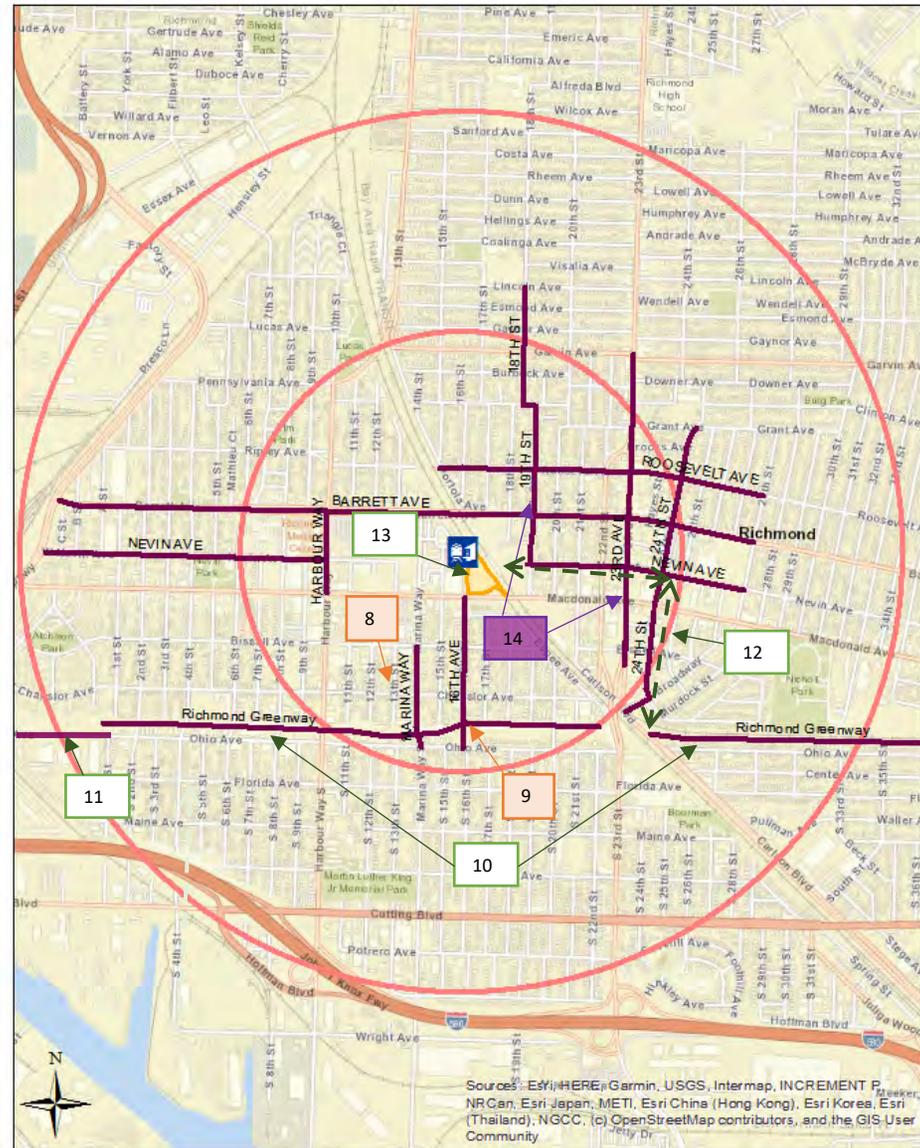
- 8. Add pedestrian crossing signage across Nevin Ave & 13th St intersection where there is currently no requirement for oncoming vehicle traffic to have to stop. This may increase vehicle exposure to pedestrians here and help connect the Kaiser complex and the downtown area of Richmond to RIC via safe pathways. #
- 9. Add RIC Amtrak / BART wayfinding signage on the Richmond Greenway directing pedestrians and/or bikers to turn off of the greenway and onto the 19th St exit. This will help highlight the most direct way to reach the station and encourage the use of shared-use pathways in the city to reach RIC. #

Bike Safety and Access Improvements

- 10. Add street signage for exit points along the Richmond Greenway on both the eastern and western portions of the trail. This will help make the greenway easier to use by helping riders to turn off of the shared-use path and onto the most convenient and direct roadways to reach their destinations after leaving the Amtrak station. #
- 11. Clear glass off of the West Ohio Ave Class I bike lane that poses hazards to bicyclists. Cleaning up this lane would improve the connection to the RIC station by improving the safety of the bike transition between the Bay Trail or San-Rafael Richmond Bridge Trail and the Richmond Greenway. \$
- 12. Designate a safe and easy way for bikers to reach the eastern portion of the Richmond Greenway via Nevin Ave, 24th St, and Broadway connection points. Needed improvements to this connecting bikeway route include repainting old Class II side bike lanes on 24th street, adding traffic control measures or signage to assist bicyclists with crossing over Macdonald Ave while on 24th St, and adding directional signage for the RIC station and the Richmond Greenway on the corners of Nevin Ave & 24th St, 24th St and Broadway, and Broadway and Carlson Blvd. *
- 13. Add a bike route map in the central underground Richmond station plaza so that bikers know how to best connect to locations and pathways in the area (Richmond Greenway, Ohlone Greenway, SF Bay Trail, San-Rafael Richmond Bridge Trail, etc.) and better understand whether they should exit the station on the east or west side in order to reach their final destination. #

Driving / Parking Facilities Access Improvements

- 14. Add Amtrak station signage alongside BART station wayfinding signage on major station access roads used by vehicles, including signage south of the station on 23rd St and north of the station on the corner of Barret Ave and 19th St. This will help clarify directions for new Capitol Corridor riders who do not realize that BART services are located in the same transit center as Amtrak. #



Hayward Station (HAY)

Hayward, California

Hayward station is a suburban station with an estimated 50% of riders driving and parking at the station. Very few riders are biking or taking public transit to and from the station in comparison to other stops along the Capitol Corridor route. Enhancing the interconnectedness of bike lanes within the station’s bikeable access zone (specifically in directions in which B St bike lane infrastructure is not usable) and redesigning the AC Transit RT 34 Amtrak station bus stop to provide riders with closer access to the train platform could help increase station travel by these two modes and improve multimodal access at the station. HAY primarily services residential neighborhoods and roads in Hayward within 1.5 miles of the station to the east, but also services areas further away including Ashland, Castro Valley, and cities on the opposite side of the Hayward Bridge including San Mateo and Redwood City. There is a BART connection within a bikeable 0.7-mile distance of HAY via B St, which can also be accessed via riding AC Transit RT 34.

Characteristics

Daily Boardings: 97 riders **Daily Alightings:** 97 riders

Parking: 70 regular spaces and 3 accessible spaces in the Capitol Corridor lot owned by the City of Hayward. Free parking with no lot restrictions and no parking permit needed.

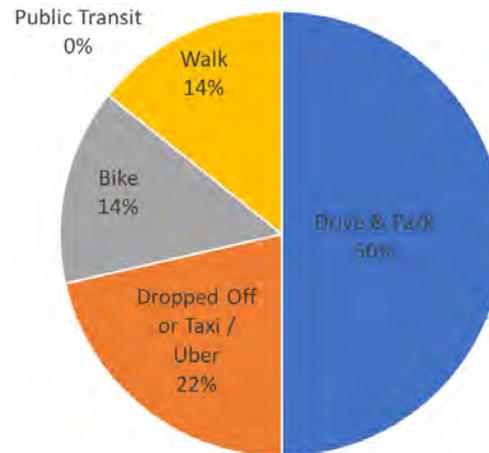
Bikes: There are 4 Bike Link eLockers at the Hayward station. The average daily occupancy of eLockers for 2019 (total lockers rented / total lockers available at the station) was 18%. 2019 daily occupancy reached up to 100% occupancy on 3 of 364 days. This indicates that there is an adequate level of bike lockers at the station for current usage levels. Bay Wheels stations are not located in the immediate station vicinity and have yet to be deployed in the City of Hayward.

Public Transit: Serviced by AC Transit RT 34 (Oakland – Hayward BART) on the corner of Meekland Avenue and A St. Serviced every 32 minutes between 6:03 a.m. and 10:03 p.m. The location of this current stop does not provide immediate and universally accessible service to the station from the bus.

Bike Connections: B St is the primary cyclist access road and moves cyclist traffic in both directions to points east and northeast of the station (where the majority of station ridership is located). Bike access in other directions is limited. Meekland Ave bike lanes end before the station. A St bike lane crosses Meekland Ave on an overpass that restricts the ability to use the lane to directly access the station.

Existing Conditions

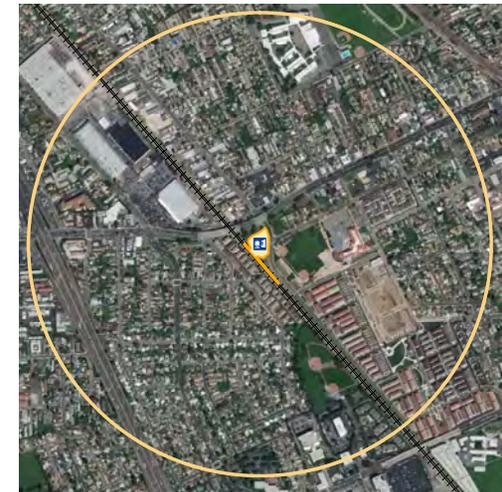
Access Mode Split – Both To & From Station



28 Rider Sample

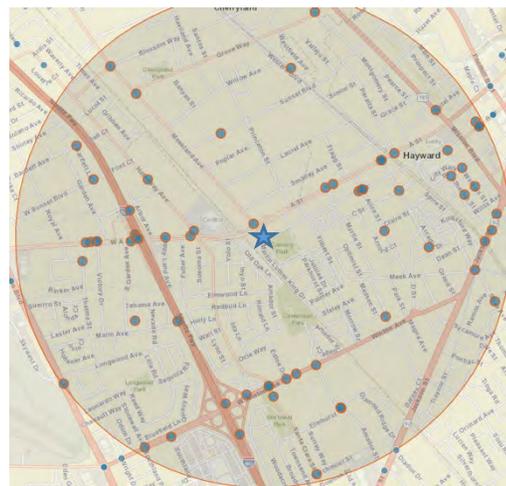
Data Collected from 2019 Capitol Corridor Station Access Survey

Land Use (1/2-mile HAY station buffer)



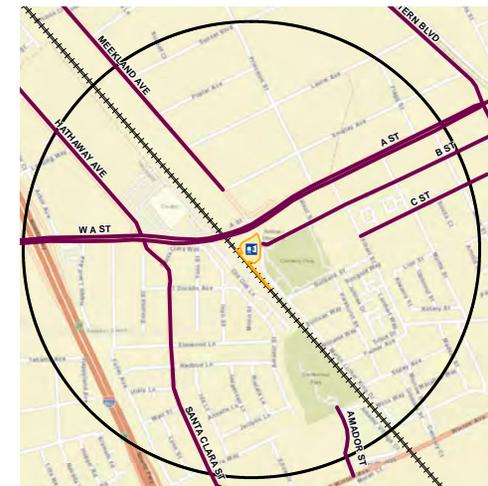
Land use around HAY is primarily suburban & residential. Homes to the east, parks and homes to the south and west, busy roads and industrial facilities to the west and northwest, and more homes and city parks to the northeast of HAY.

Pedestrian & Bike Collisions (2017–18, 1-mile HAY station buffer)



Collision data collected from UC Berkeley Transportation Injury Mapping System. Fatalities near the HAY station occurred primarily along major streets (A St & Winton Ave) and along roads with Class II bike infrastructure that cross over intersecting streets (e.g. roads crossing A St & B St).

Existing Bikeways (1/2-mile HAY station buffer)



Limited bike pathway networks currently extending to the station. Main access bikeway is B St to the east and Meekland Ave (though not fully connected to the station) to the north.



Key

\$ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation
 | % = City Plan

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. **Add wayfinding signage along the sidewalk on the A St bridge overpassing Meekland Avenue (on the side near the Amtrak station) to direct pedestrians to exit via the stairway path descending to Meekland Ave and the sidewalk leading to the Amtrak station.** This may make A St more feasible for intermodal station access by distinguishing as direct and as clear of a route to the station for pedestrians as possible. #
2. **Add crosswalks across the two parking lots adjacent to Cannery Park along the Martin Luther King Avenue sidewalk leading to the Amtrak station.** This could help safely connect pedestrians traveling to HAY from points south of the station and increase motorist visibility of pedestrian movements & travel channels. #
3. **Clean up the broken glass in the parking lot and on the station platforms** in order to make the station safer and more aesthetically pleasing for riders walking around the station property. \$

Bike Safety and Access Improvements

4. **Extend the Meekland Avenue bike lane from its terminus at the intersection of Smiley Ave & Meekland Ave and instead end the bike lane at the Amtrak Station on the corner of Meekland Ave & B St.** With the road narrowing underneath the A St overpass, the Meekland Ave bike lane should be transitioned from Class II side lanes to a Class III vehicle-bike shared use travel lane with green outlined shared lane bikeway markings painted on Meekland Ave in both directions between Smiley Ave and B St. This will provide a continuously connected bike lane to the station from origin/destination points north of the station and enhance the ability to use bikes as a first and last-mile travel solution to HAY. *

Public Transportation Access Improvements

5. **Move the AC Transit RT 34 HAY Amtrak station bus stop from its current location on Meekland Ave & A St to a new location immediately in front of the station platform inside the HAY loop.** This will add a few minutes to the bus route but will significantly decrease the time and distance it takes to reach the train platform from the public transit bus stop and make bus service at the station more accessible for ADA riders. #

Driving / Parking Facilities Access Improvements

6. **Designate a pick-up/drop-off zone at the HAY station platform with signage and physical markings on the street designating a safe and legal zone for drop-offs.** The zone will be separated physically from the AC Transit stop by the central station crosswalk and will help to separate entry to the station by travel mode in a way that will better encourage multimodal station usage. #
7. **Reduce parking pressures in the HAY parking lot, which is typically at or near full vehicle capacity.** This may include adding carpool designated spots, adding directional cues for overflow parking spaces a block south on Martin Luther King Ave adjacent to Cannery Park, or expanding the size of the lot with the open land south of the current lot. #

Hayward Station Footprint
 Hayward Station
 Bikeways Near HAY

0 0.01 0.02 0.04 0.06 0.08 Miles

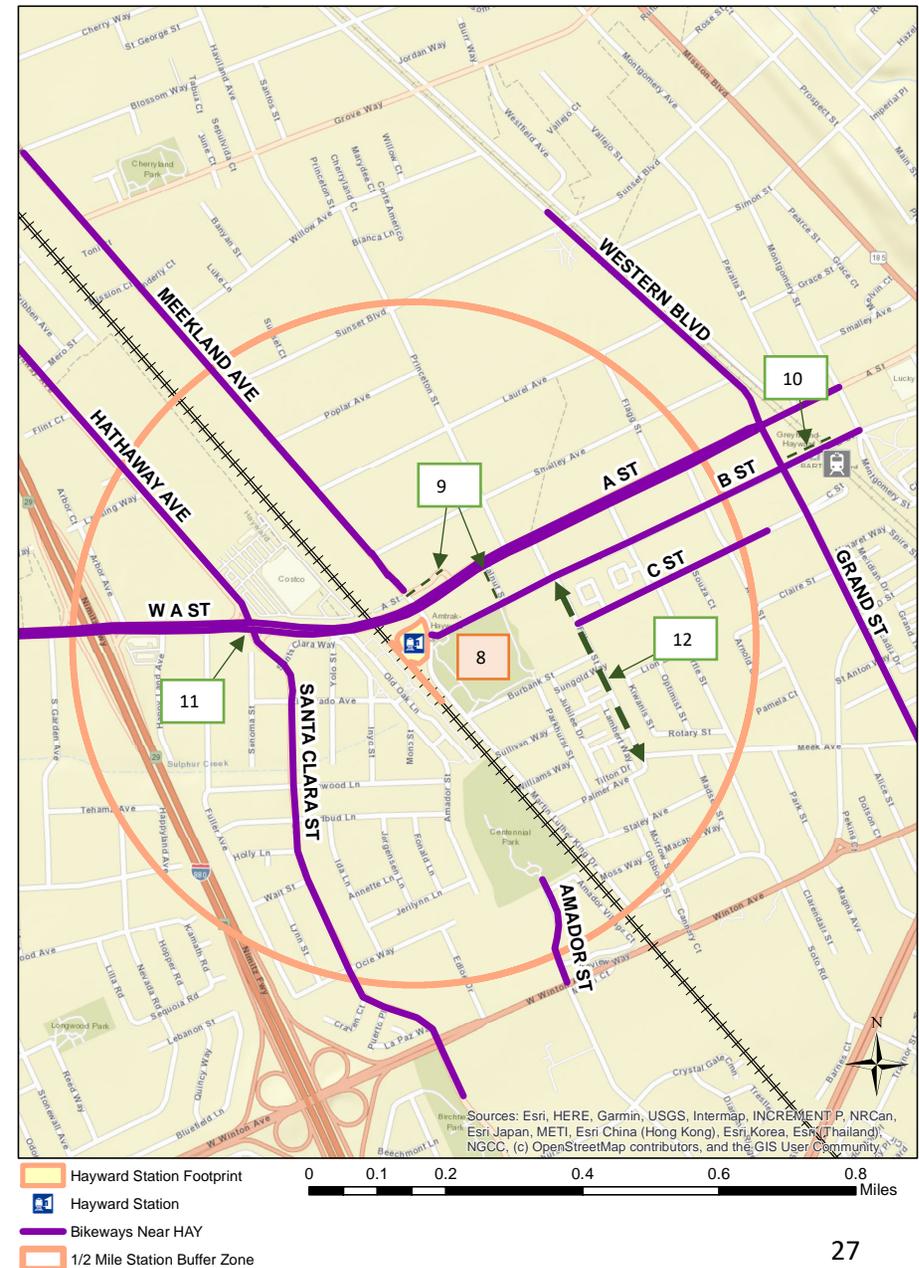
Access Improvements Outside Immediate Station Vicinity

Pedestrian Safety and Access Improvements

8. Add additional pedestrian design features to the pathways cutting through Cannery Park to better connect HAY via vehicle-free pathways to the residential developments south of the station. This could include:
 - a. Add crosswalks across Burbank Street on the south side entrance of Cannery Park to link residential communities on Tilton Dr, Parkhurst St, and Jubilee Dr to B St & HAY station via a safe and continuous pathway. #
 - b. Add directional signage guiding walkers to B St and Burbank St, as well as to the HAY Amtrak and Hayward BART stations in appropriate places within Cannery Park. This will improve pathway design for active travel and increase park usage as a convenient path for transit connections. #

Bike Safety and Access Improvements

9. Design continuous bike pathways to/from the west side of the HAY Amtrak station by connecting A St Class II bike lanes to the primary HAY bike access roads. This will make entry & egress from the west side of the station safer and more feasible by bike and could include:
 - a. **Station Entry:** Add HAY station wayfinding signage on the corner of A St and Walnut Ave (and on the corner of Walnut Ave and B St) & design a Class II bike lane on Walnut Ave in traffic direction moving towards B St. This will connect A St bike traffic to main B St HAY station bike access road. Also, redesign A St turn lane that exists on B St near the Walnut Ave approach into a vehicle-bike shared use turn lane. *
 - b. **Station Egress:** Add Class II bike lane on Smiley Ave in the direction leaving the station to connect A St to the proposed Class III bike lane section of Meekland Ave. At the intersection of Smiley Ave and A St, add a dashed bike lane channel to help guide cyclists turning right onto A St bike lane. *
10. Improve the bike connection between the HAY Amtrak station and the Hayward BART station to promote BART as a connection solution for Amtrak trains. This could include:
 - a. Adding a Class III vehicle-bike shared used travel lane with green outlined shared lane markings painted on B St in both directions between Grand St and the BART station parking lot entrance. This will link BART to Class II B St bike lanes extending to the HAY station. *
 - b. Adding wayfinding signage to highlight the bike lane connection between the two stations with a sign for BART on the B St & Meekland Ave corner and a sign for HAY Amtrak on the Grand St & B St corner. #
11. Add wayfinding signage on the corner of Santa Clara St and A St Class II bike lanes directing riders to turn right onto A St for transit centers (BART & HAY Amtrak stops). Adding wayfinding signage here will enhance the ability of cyclists to use existing bike lane infrastructure to connect to the station. #
12. Add Class III bike lanes with green shared vehicle-bike lane road markings in both directions on Filbert St between Palmer Ave and B St (including connection to C St Class II bike lane) and add dashed left turn lane across intersection traffic to assist with turning left into the B St bike lane from Filbert St. This will better connect existing bike lane infrastructure and provide communities south-east and east of the station with continuous bikeways to the HAY Amtrak station. *



Santa Clara University Station (SCC)

Santa Clara, California

Santa Clara University station is a suburban station located immediately to the north-east of a university campus. The station has a mixed access mode split and an estimated 30% of riders using public transit to go to and from the station and 25% of riders driving a vehicle to get to and from the station. Bikeways near the station are limited, which indicates that the high volume of walkers and bikers accessing the station may result from SCC containing Santa Clara University within its immediate service buffer zone. An extensive network of VTA bus connection services also exists on Railroad Ave to help transition riders to/from SCC. To the immediate north of the station (and accessible via the station underpass) are the San Jose International Airport and Avaya Stadium. The primary station access improvement suggested by ridership using SCC as a home station was the creation of separate lanes for bikes extending to/from the station, such as the creation of the proposed Class II bike lane on Benton St. Additionally, basic infrastructural & design improvements can be made to improve multimodal access to/ from the east side of the SCC station tracks.

Characteristics

Daily Boardings: 96 riders **Daily Alightings:** 90 riders

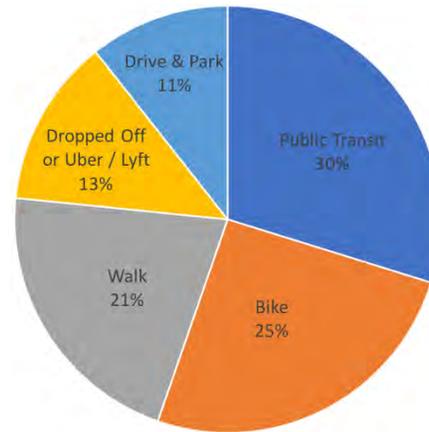
Parking: 245 regular spaces and 11 accessible spaces available across the street from SCC station in Capitol Corridor and Caltrain parking lot on the corner of Benton St & Railroad Ave. \$5 all-day pay-by-space parking in a 24-hour lot.

Bikes: There are 48 Bike Link eLockers owned by the VTA at Santa Clara University station. Bike share stations are not located at SCC, but Zagster bike share station exists nearby on the Santa Clara University campus.

Public Transit: Serviced by VTA RT 10, 22, 32, 60, 81, & 522 (San Jose Airport, Palo Alto Transit Center, San Antonio Shopping Center, Great America, Winchester Station, Ames Center, San Jose State, Eastridge), Altamont Corridor Express (north to Stockton), & Caltrain (north to San Francisco). VTA station stops circle around the side of Railroad Ave, while ACE and Caltrain leave from train platforms at SCC station.

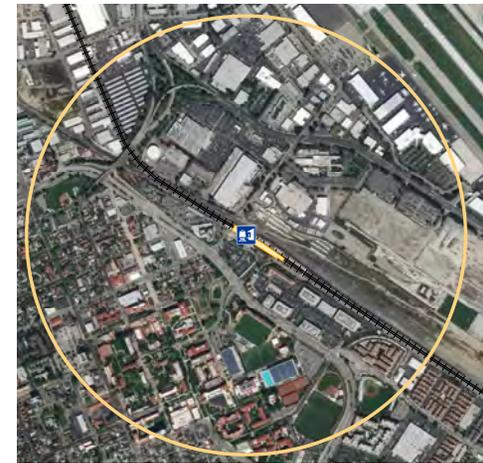
Bike Connections: Currently no official bikeways extending all the way to the station. Benton St is commonly used for bikers accessing the station from the University of Santa Clara and points west of the station, while The Alameda is used by bikers coming from points north and south of the station.

Existing Conditions
Access Mode Split – Both To & From Station



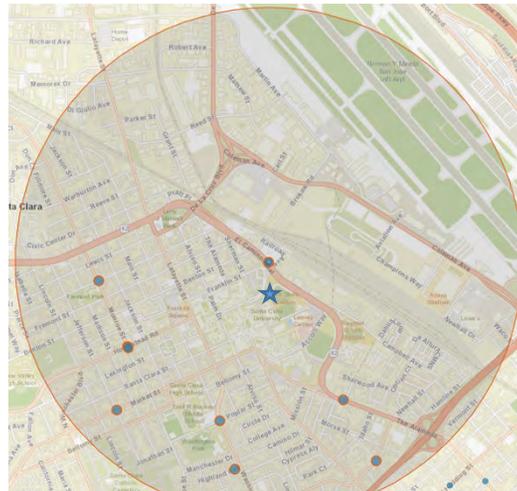
47 Rider Sample
Data Collected from 2019 Capitol Corridor Station Access Survey

Land Use (1/2-mile SCC station buffer)



Suburban & mixed development type in immediate SCC vicinity. Offices, airport, and sports stadium on north and north-east side of SCC and university campus and residential communities to the west and south-west.

Pedestrian & Bike Collisions (2017–18, 1-mile SCC station buffer)



Collision data collected from UC Berkeley Transportation Injury Mapping System. Very few fatalities near the SCC station, with most occurring at intersections along main roads more than a half-mile from the station.

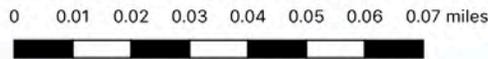
Proposed (Red) & Existing (Green) Bikeways (1/2-mile & 1-mile SCC buffers)



Limited existing bike infrastructure extending to the station or within a half mile buffer zone of the station. The main proposed bike access road to the station is the Class II Benton St bikeway connecting SCC to Santa Clara University and origin/destination points west of the station.



 Santa Clara Station



Key

\$ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation
 | % = City Plan

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. **Add wayfinding signage for exiting train riders directing passengers to use underpass connecting the station to Brokaw Road to reach Avaya Stadium and Coleman Avenue destinations.** This will help direct sports fans and special event riders to exit the station from the proper backside of SCC and will enhance general awareness of the ability to use active travel modes to reach locations on the north side of the tracks. #
2. **Enhance perceptions of safety while walking on the main crosswalk connecting pedestrian pathways, parking lots, and connecting public transit stops to the main station entrance and building by adding a push-button pedestrian crossing flashing beacon to warn oncoming traffic at night that pedestrians are present.** This addition could be a critical improvement due to the crosswalk’s presence immediately on a sharp turn where traffic is not forced to stop. Tree branches blocking existing pedestrian signage for traffic moving in the above-mentioned direction should also be cut to better expose crossing signage. #
3. **Add pedestrian crosswalk with reflecting crossing warning signage on the side of Railroad Ave running perpendicular to the station (no sidewalk all the way to station on this side of the road).** This will connect points south of SCC via safe and continuous pedestrian pathways and enable easier active travel to/from hotels, local businesses, and residential communities to the immediate south. #

Bike Safety and Access Improvements

4. **Increase ease of finding and utilizing secure bike parking at the station by:**
 - a. **Adding bike locker infrastructure (~2-4 lockers) immediately outside of the northeast side of the station,** so that cyclists can drop off their bikes and then reach the platforms without having to cross to the other side of the tracks to park bikes and then return to the tunnel to reach the station platforms. #
 - b. **Adding more lockers to the central station plaza located near Benton St and/or adding signage near the central station lockers and at the entrance to the backside parking lot informing cyclists of additional available VTA bike lockers in the overflow parking lot to the south-east side of the station.** These lockers are currently difficult to find (no signage off of Railroad Ave) and the continued presence of lockers here may cause problems with cyclists entering & leaving from the same parking facility as cars. #

Driving / Parking Facilities Access Improvements

5. **Add Caltrain / Amtrak parking lot signage at the entrance of the overflow parking lot located adjacent to the south side of the station building off of Railroad Ave.** There is no way for new train riders to know that this lot is designated for train parking without turning directly into the lot, and there are always available spaces here. #
6. **Designate an official pick-up/drop-off zone next to the SCC station building on Railroad Avenue (where the road widens) and mark the zone with spray-painted street boundaries and signage highlighting the space.** This will help separate pick-up and drop-off infrastructure from bicyclist and pedestrian entry and egress points, and thus enhance safety and practicality of intermodal access at SCC. #

Access Improvements Outside Immediate Station Vicinity

Pedestrian Safety and Access Improvements

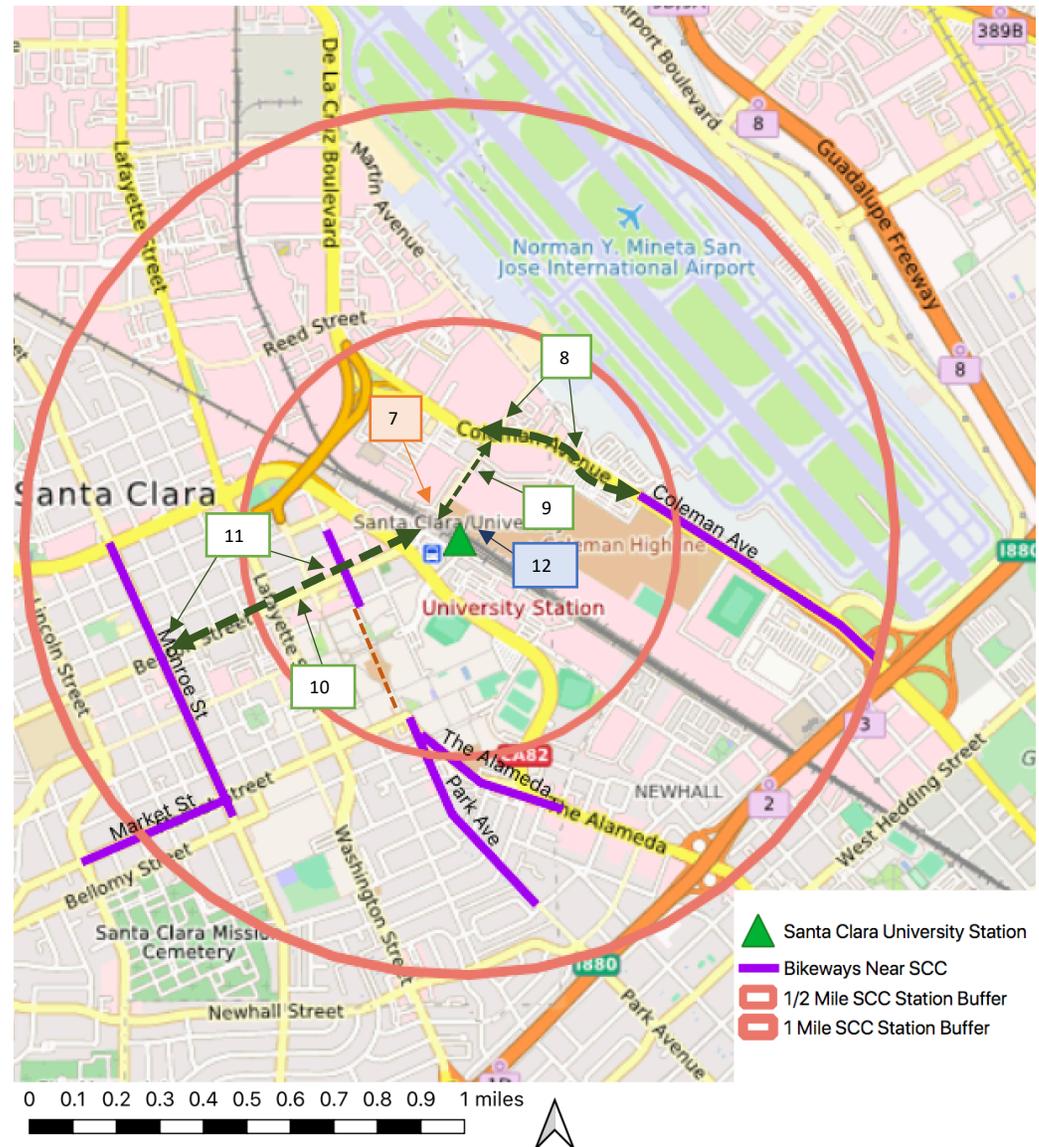
7. Improve pedestrian accessibility and safety while traveling on Brokaw Ave by adding a crosswalk to connect the main Brokaw Ave sidewalk to the SCC station tunnel underpass and widening the sidewalk and/or removing telephone polls that prevent the pathway from remaining an ADA compliant 3 feet wide at all points. Improving sidewalks here could further encourage the use of the Brokaw Road tunnel connection to reach SCC station. #

Bike Safety and Access Improvements

8. Extend bike lane infrastructure on Coleman Ave so that the road can be used to access the station by bike from the east side of the station. This project could include:
 - a. Extending Class II cyclist lanes currently ending on the corner of Coleman Ave & Aviation Ave to instead end at the corner of Brokaw Rd & Coleman Ave. This would ideally be through continued Class II bike lanes, but could also be made into a Class III shared bike-vehicle lane segment. *
 - b. Adding wayfinding signage at the Coleman Ave & Brokaw Rd intersection directing cyclists to turn left to reach the station and design the left turn lane on Coleman Ave into a shared bike-vehicle use turn lane. This may potentially help make the turn across multiple lanes of traffic and onto the station access road safer. *
9. Add a Class II multi-directional cycle track on the side of Brokaw Rd moving with vehicle traffic to connect SCC station to the Coleman Ave intersection. This will connect SCC to origin/destination points located to the east of the station and provide a primary bike access road for cyclists traveling to/from this direction via bike lanes on Coleman Ave. \$
10. Design Class II bikeway on Benton St with side bike lanes extending in both directions to serve as a primary bike access road for origin & destination locations to the west of the station. This will connect to existing Class II bike lanes on The Alameda (Santa Clara University Location points), on Park Ave, and on Monroe St, which will help to facilitate continuous/connected bikeways to/from the station in all directions on the west side of the tracks at SCC. \$
11. Add cyclist wayfinding signage on the corners of Benton St & The Alameda and Benton St & Monroe St with included directions and distances to the SCC station. This will work with the above suggestion to promote commuting alternatives to the station by encouraging bike travel on a specific entrance roadway to the station. #

Public Transportation Access Improvements

12. Add a map in the center of the SCC outdoor transit plaza that highlights the nearby VTA bus boarding locations for various routes as well as the routes traveled by the station's connecting public transit options. This is important since routes extend all around the inner curbside of Railroad Avenue and can be difficult to locate from SCC with the signage at the stops out of reach and no preexisting information on specific bus routes. #



Auburn Station (ARN)

Auburn, California

ARN is an auto-dependent station located on the end of the Capitol Corridor line with one daily round trip. It has a large service radius to the north resulting from being an end-of-line station and connects to Amtrak Thruway services to reach points further north. Parking is free in the lot on Nevada St, while bikeways near the station are limited to shared bike-vehicle roads that are not physically designated on the street with “sharrow” lane markings. Public transit options provided by Placer County Transit & Auburn Transit are available, but often not useful for CBJA ridership since several passengers are traveling to the station from outside the service zone of connecting public transit. Efforts to improve on-street bike lane signage on station access roads could improve the ability of local residents to use active travel to reach ARN and may promote increased local ridership.

Characteristics

Daily Boardings: 27 riders **Daily Alightings:** 21 riders

Parking: Drop-off and ADA parking in Nevada St Lot owned by the City of Auburn. 3 short-term spaces (15-minute limit) and 7 accessible spaces. Parking is free and offered on a first-come, first-served basis.

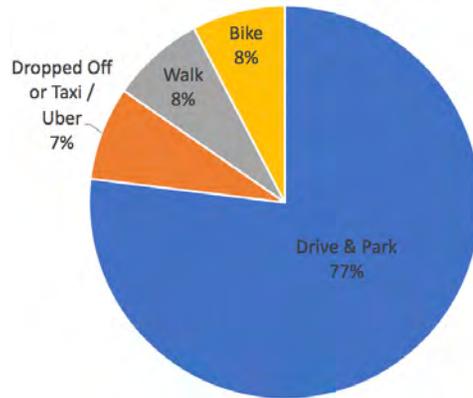
Bikes: There are 4 Bike Link eLockers at Auburn Station. The average daily occupancy of eLockers for 2019 (total lockers rented / total lockers available at the station) was just 3.6% and only reached or exceeded 100% on 2 of 364 days, which indicates that there is no need for additional lockers as usage is currently low. No bike-share services are available at the station or in the City of Auburn.

Public Transit: Serviced by *Amtrak Thruway RT 20* (between Sacramento, Auburn, and Reno, NV), *Placer County Transit* (RT 30 - every 2 hours to/from North Auburn & RT 10 – every 1 hour to/from south Sacramento light rail connection), & *Auburn Transit* (purple & red lines, to/from Old Town & Downtown Auburn).

Bike Connections: There are several Class III bikeways shared with vehicles in Auburn extending to locations in both North Auburn and Old Town Auburn. Limited protected Class II or Class III bike lanes in the station’s service buffer zone. Class III bikeway on Nevada St serves as the primary station access road.

Existing Conditions

Access Mode Split – Both To & From Station



14 Rider Sample

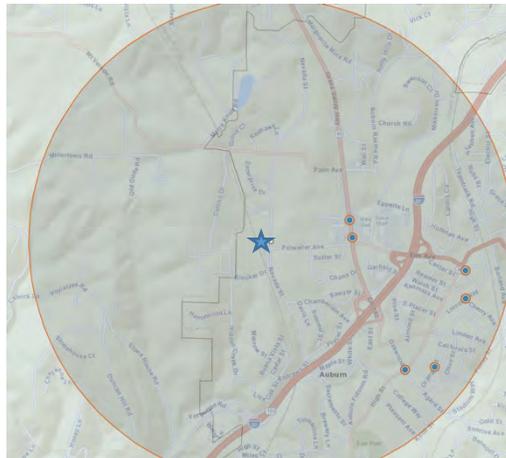
Data Collected from 2019 Capitol Corridor Station Access Survey

Land Use (1/2-mile ARN station buffer)



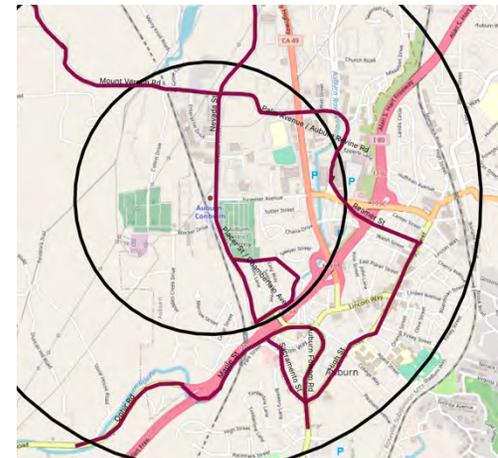
Mixed rural and suburban land use with some shops / industrial development in immediate 1/2-mile ARN buffer zone. Population density is low, providing barriers to the effectiveness of public transit and active travel to serve as access solutions at ARN.

Pedestrian & Bike Collisions (2017–18, 1-mile ARN station buffer)



Collision data collected from UC Berkeley Transportation Injury Mapping System. Very few fatalities near the ARN station, with most occurring at intersections along main roads, rather than immediate Class III Nevada St station access bikeway.

Placer County on Street Bikeways, No Physical Lane Markings (1/2-mile & 1-mile ARN buffers)



Limited bike lanes extending to the station or within a 1/2-mile buffer area of the station, with Class II bikeways located currently only on Ophir Rd. Nevada St connects the station to Old Town Auburn. Shared bike-vehicle routes listed by County of Placer, but not presented with on-street “sharrow” lane markings.



 Auburn Station

0 0.01 0.02 0.03 0.04 0.05 0.06 0.07 0.08 0.09 0.1 miles

Key

§ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation
 | % = City Plan

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. **Add wayfinding signage at station intersection exit (Nevada St & Fulweiler Ave) for pedestrians with mileage estimates and directional cues for various town locations and popular city destinations, including Placer County Library, Old Town Auburn, Placer County Museum, and Gold Country Fairgrounds. This will make the station more user-friendly for train passengers unfamiliar with the City of Auburn. #**
2. **Improve the safety of crossings on Fulweiler Ave (one nearest to Nevada St) and Nevada St (over the Auburn station parking lot entrance). #**
 - a. **Fulweiler Ave: Add a crosswalk across the intersecting road/facility entry point to create a continuous pathway on the Fulweiler Ave connection to the station. This will help increase vehicle exposure to pedestrians near the station and may as a result improve safety.**
 - b. **Nevada St: Add a stop sign for vehicles exiting from the Auburn station lot. This could enhance safety by ensuring that drivers do not roll through a pedestrian crossing zone in an area critical for ARN pedestrian entry & egress.**

Bike Safety and Access Improvements

3. **Connect Nevada St to the ARN station cyclist entry and egress point on Blocker Road (location of bike lockers & bike racks) to allow for a smooth & safe transition between the station and roads for cyclists. This might include:**
 - a. **Designating a Class III bikeway with green shared bike & vehicle on-street road markings between bike racks / eLockers on Blocker Rd and station entrance/exit point on Nevada St. #**
 - b. **Adding bike & vehicle shared turn lane markers to designate all turn lanes moving to and from Blocker Rd as lanes that drivers must share with cyclists. #**

Public Transportation Access Improvements

4. **At the ARN #1 bus stop, highlight the stops serviced from the station by Auburn Transit on a map and include a timetable for daily service at the stop. This information may help to address riders' concerns with lack of transit service reliability, which is especially important since the lack of continuous sidewalks between ARN and Old Town Auburn places a high degree of importance on using transit to get into town. ***
5. **Work with Placer County Transit and SacRT to ensure that Placer County Transit RT 10 busses arrive consistently ~5-10 minutes before the departure of light rail at the RT 10 terminus stop. With only one train leaving Auburn daily and 30-minute headways for the SacRT light rail route to Sacramento Valley Station, coordination of these two transit routes will ensure that ridership from the Auburn area has a way to reach the train during times of day with no service in Sacramento. Note: Suggestion aimed at Placer County Transit & SacRT, not the City of Auburn. ***

Access Improvements Outside Immediate Station Vicinity

Pedestrian Safety and Access Improvements

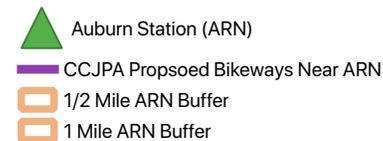
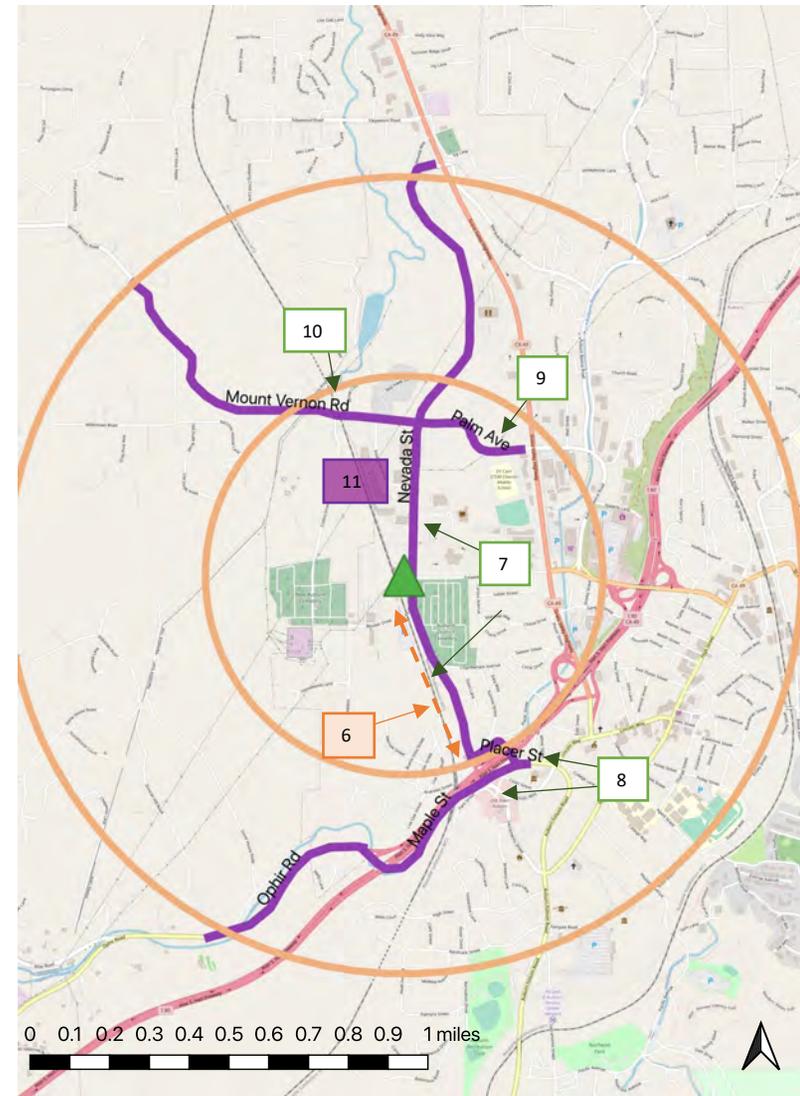
6. Consider the feasibility of constructing a pedestrian pathway/sidewalk on Nevada St and down to Old Town Auburn via connecting roads on Placer St & Maple St (~0.7 miles). This would help integrate ARN to downtown Auburn points and enable riders arriving without a vehicle to have an alternative to public transit for reaching the downtown area. #

Bike Safety and Access Improvements

7. Design section of Nevada St between Mount Vernon Road & I-80 into an officially designated bikeway to encourage and enhance the safety of bike travel on the main access road to ARN. This would expand bikeable station access zone into North Auburn and Old Town Auburn area and could entail:
 - a. Expanding shoulder width on Nevada St from 1 ft-3 ft variation to a consistent 3ft and designing Class II physically separated bikeways in both directions on the side of the street. This project would likely include a small road width extension. % / #
 - b. Designating Nevada St as an official Class III bikeway. This would entail painting this section of Nevada St with green “sharrow” bike and vehicle on-street markings to alert drivers that they are sharing the road with cyclists. This suggestion (7b) could be paired with suggestion 6 if a small road width extension project was included. #
8. Connect Nevada St to Old Town Auburn points via an official Class III route for cyclists on Placer St & Maple St (including the Maple St I-80 crossing). This will establish an official route from ARN to local businesses and popular destinations in town and also connect existing Ophir Rd Class II bikeway to Maple St, which will provide even longer continuously marked bikeways to the station. #
9. Create a Class II or Class III bikeway on Palm Ave to connect Elm St shopping communities, in addition to local schools and residential communities east of ARN, to the station. Sidewalk reconstruction may be needed to redesign the street for Class II bikeways. % / #
10. Construct a Class II bikeway to end of city limits on Mount Vernon Rd to serve as a cyclist access road to ARN from the west. The road here is already adequately wide on both sides of the street for Class II bikeways, which may make this a cost-effective project to pursue. % / #

Driving / Parking Facilities Access Improvements

11. Add directional wayfinding signage for ARN to assist in helping drivers find the station as they approach it from various possible directions. This project could include adding wayfinding signs in all three directions while approaching the main station intersection (Fulweiler Ave & Nevada St) and adding directional signage on corners of Nevada St intersections with Placer St, Mt Vernon Rd, and Palm Ave. This is an important access improvement since some riders at ARN are infrequent and coming from far distances to the north, which may make them less familiar with the Auburn area or ARN station location. #



Rocklin Station (RLN)

Rocklin, California

Rocklin station is an auto-dependent station located near the north end of the Capitol Corridor line with one daily round trip. Parking is free and the station is located in a low-density area, which influences “Drive & Park” to be the primary travel mode used to access the station. Better bike entry/egress to the station and a more direct public transit stop immediately at the station could help to diversify travel modes used at the station. Class II bikeway infrastructure is extensive and side-of-road lanes are of adequate width, but lanes could be improved by adding on-street markings and by continuing Class II lane infrastructure on Rocklin Rd in the section near the station where the road narrows down for better station-to-road-transitions for cyclists. Good infrastructure for pedestrians is in place, but low-density land use surrounding the station can make walking inconvenient as a mode of travel.

Characteristics

Daily Boardings: 30 riders **Daily Alightings:** 24 riders

Parking: 91 regular spaces, 5 short-term (2-hr limit) spaces, 4 30-minute spaces, and 2 ADA spaces in Capitol Corridor Amtrak lot. Free parking and no permit required, owned by the City of Rocklin.

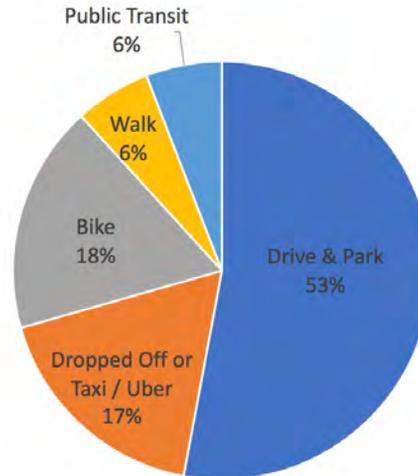
Bikes: There are 5 bike rack spaces and 0 Bike Link eLockers or high-security bike parking options at the Rocklin Station. No bike-share services are available near the station.

Public Transit: Served by Amtrak Thruway RT 20 & Placer County Transit RT 20 (Pacific St & Bush St, hourly, but not early enough to match with Capitol Corridor train departure).

Bike Connections: There is an extensive network of Class II bikeways existing near RLN. The main bike access road is Rocklin Rd, which connects points both east and west of the station to the primary access road on Bush St. Class II bikeways running north and south connect to Rocklin Rd on both the east and west sides of the tracks. Making the turn onto Rocklin Rd is difficult as Class II lanes disappear at the moment right before turning across traffic onto Bush St.

Existing Conditions

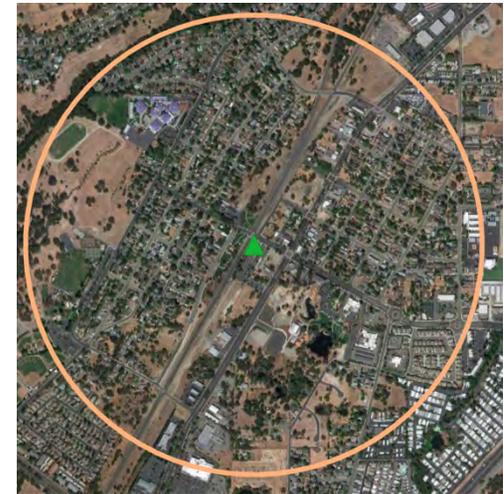
Access Mode Split – Both To & From Station



17 Rider Sample

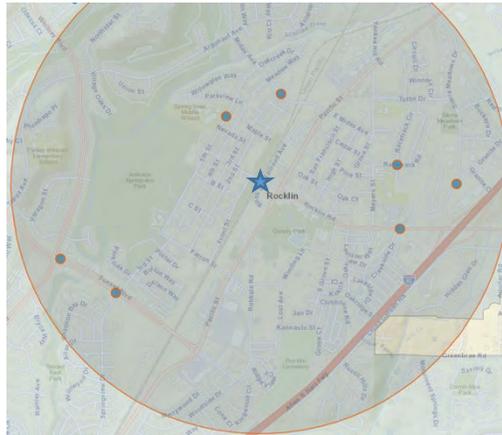
Data Collected from 2019 Capitol Corridor Station Access Survey

Land Use (1/2-mile RLN station buffer)



Suburban, low-density land use in immediate 1/2 mile station vicinity. Small downtown area near RLN in center of the station service area, with low & medium density housing and open space on the edges of the 1/2-mile station buffer zone.

Pedestrian & Bike Collisions (2017–18, 1-mile RLN station buffer)



Collision data collected from UC Berkeley Transportation Injury Mapping System. Very few fatalities near the RLN station, with most occurring either on major roads for motorists or at street intersections/crossings on bikeways.

Existing Bikeways (1/2-mile RLN station buffer)



Class II bikeways exist around the station, with Rocklin Rd serving as the primary cyclist connection road to the station. Main improvement points include entry/egress onto Bush St and designating Class II bikeways with official on-street bike lane markings.



 Rocklin Station



Key

§ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation
| % = City Plan

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. **Construct crosswalk near the Bush St & Pacific St intersection with reflective pedestrian signage to connect pathways on the opposite side of Pacific Street to the station access pathway on Bush St.** This would increase safety & convenience of southside station access since the absence of a crosswalk here forces walkers traveling on the opposite side of Pacific St to have to use the Rockland Rd / Bush St station entry point if they are to access the station via a continuous pathway. *
2. **Add reflective pedestrian crossing signage at the primary station crosswalk on Rocklin Rd for traffic flowing east to warn vehicles of pedestrian movements and reduce the potential risk of collisions** (reflective signage exists here for traffic moving on the opposite side of the road). This will enhance motorist exposure to pedestrians traveling to/from points north of the station, especially since the train departs/arrives in Rockland at times of the day when it is often dark outside. #
3. **Add wayfinding signage at station intersection exit (Bush St and Rockland Rd) for pedestrians with mileage estimates and directional cues for various town locations and popular city destinations, including Rocklin History Museum, Sierra College, and Johnson-Springview Park.** This will make the station more user-friendly for train passengers unfamiliar with the City of Rocklin. #

Bike Safety and Access Improvements

4. **In conjunction with suggestion 1, construct a dashed green spray-painted bike crossing zone and a green bike turn box sign on the Class II side bike lane to connect cycling lanes going northbound on Pacific St to the Pacific St & Bush St intersection station entrance.** This is important since bike infrastructure on Pacific St ends at this point and cyclists currently have to merge across two lanes of traffic to get into the Pacific St vehicle turn lane in order to access Bush St. Design this bike crossing parallel to the proposed pedestrian crossing. #
5. **Improve bike entry and egress to Rocklin Station at the main station entry point at the Rockland Rd / Bush St intersection by:**
 - a. **Constructing a Class III bike lane with bike-vehicle green “sharrow” lane marking on the portion of Rockland Rd between Pacific St & Railroad Ave where road narrows and Class II bike lane infrastructure disappears.** #
 - b. **Redesigning Rocklin Rd turn lane onto Bush St into a shared bike-vehicle turn lane with visible “sharrow” lane markings, and add dashed bike movement channels to increase visibility and safety of cyclist movements across traffic while entering/exiting the station (left from Bush St into westbound Rocklin Rd bike lanes, left from Rocklin Rd onto Bush St station entry road).** #
6. **Add a secure Bike Link eLocker pair at the Rocklin station to make biking feasible for riders using Rocklin as a home station who do not want their bikes on the opposite end of their trips.** RLN is one of the only stations without lockers, and the extensive & continuous Class II bike infrastructure within the station’s 1-mile buffer zone suggests that it is very practical to bike to the station (even in a community with low population density, especially in comparison to other Capitol Corridor auto-dependent stations). #

Access Improvements Outside Immediate Station Vicinity

Bike Safety and Access Improvements

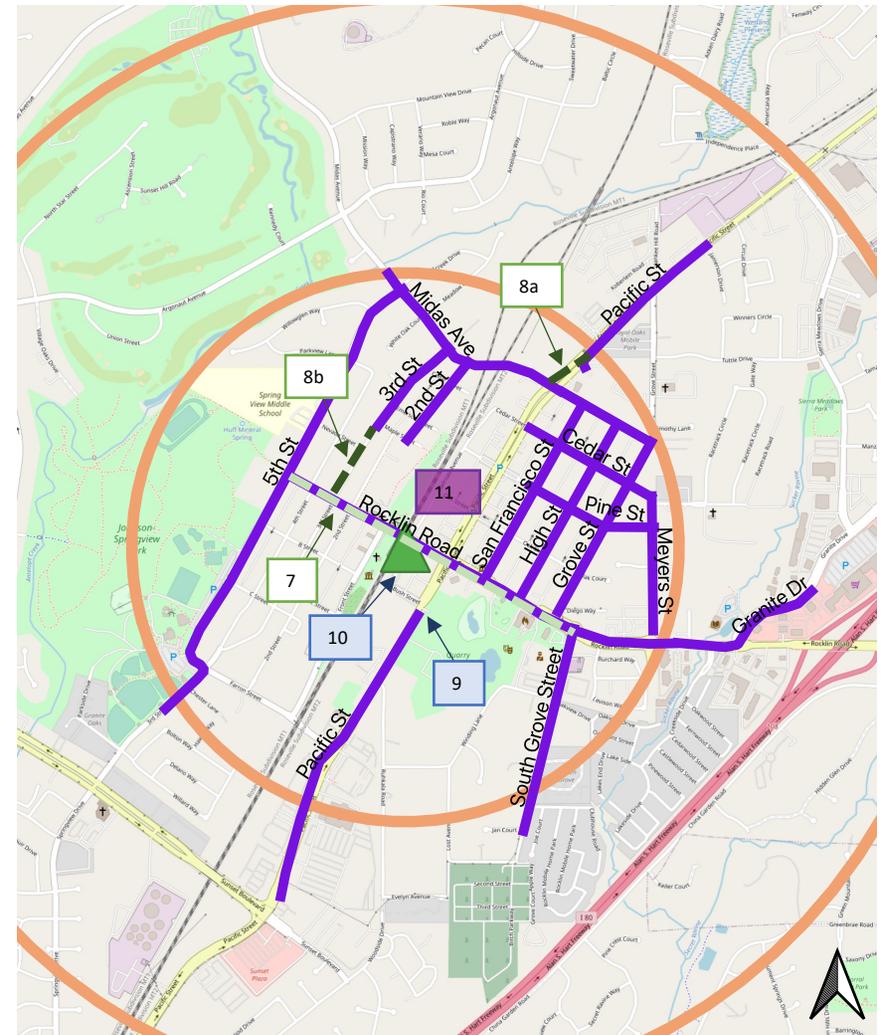
7. Add dashed bike lane channels to the Class II bike lane segments on Rocklin Rd between 5th St and South Grove St where the side bike lanes intersect with side streets. This will enhance the safety of the primary bike lanes into downtown Rockland by increasing visibility and predictability of cyclist movements for drivers moving across or turning onto Rocklin Rd. #
8. Improve northside access into downtown Rockland and the Amtrak station by better integrating Pacific St Class II bike lanes to existing downtown Rocklin bike lane infrastructure. This could include:
 - a. Designing a bike turn box on the corner of Pacific St and Midas Ave to enable southbound cyclists on Pacific St to safely turn right (without having to move across traffic) into the Class II bike lanes on Midas Ave (which connects to 3rd St & Rocklin Rd). #
 - b. Creating a two-way Class III bike lane on 3rd St where the road narrows nearing Rocklin Rd (with shared bike-vehicle road lane marking in both directions) to increase connectivity of existing cyclist infrastructure to the station. #

Public Transportation Access Improvements

9. Work with Placer County Transit to expand the existing time window for RT 20 so that the Bush St / Pacific St stop can connect to the inbound and outbound Capitol Corridor trains, ideally making stops at around 7:10 a.m. and 6:09 p.m. This will enable train users to reach the station from the Rocklin, Lincoln, and Sierra College areas with a public transit service. *
 10. Work with Placer County Transit to add RT 50 commuter hour service that aligns with the inbound and outbound Capitol Corridor train and starts/ends at the train station. This would require expanded service hours for RT 50 and an additional end of route stop at the station during these two runs of RT 50, but would help connect the station and downtown Rockland to Loomis, Penryn, and Newcastle neighborhoods via public transit. *
- Note:** Suggestions 9 & 10 aimed at Placer County Transit, not the City of Rockland.

Driving / Parking Facilities Access Improvements

11. Add Amtrak station wayfinding along major access roads used by vehicles to reach the station. This could include signage directing vehicles traveling northbound on the south side of Pacific St to turn right onto Bush St, vehicles traveling southbound on Pacific St to turn right onto Rockland Road, and vehicles traveling in each direction on Rocklin Road to continue straight and then to turn onto Bush St to reach RLN. This is important as the station is not easily identifiable from some vehicle access points, especially the Pacific St & Bush St and Rocklin Rd & Pacific St intersections. #



 Rocklin Station (RLN)

 Bikeways Near RLN

 1/2 Mile RLN Buffer

 1 Mile RKN Buffer

Roseville Station (RSV)

Roseville, California

Roseville station is an auto-dependent station located near the north end of the Capitol Corridor line with one daily round trip. Parking is free and the station is located in a residential area with relatively low population density, which helps facilitate a preference for driving personal vehicles over active modes of travel such as walking to get to/from the station. Class II bikeway infrastructure exists, but barriers to access include limited existing options to connect bikeways on the east side of the train tracks to the station and portions of major bike access roads where Class II lanes disappear nearing the station and the heavier trafficked area of Old Town Roseville. Reducing barriers to using public transit at the station should also be a top priority and could include adding a stop in front of RSV for all Roseville Transit routes servicing the Civic Center/downtown Roseville area at the time of day when the train leaves and arrives at the station.

Characteristics

Daily Boardings: 59 riders **Daily Alightings:** 52 riders

Parking: 74 regular spaces, 12 short-term spaces (2-hour limit), and 4 accessible spaces in the Capitol Corridor Amtrak lot. Owned by City of Roseville & free with no restrictions or permit required. Additional parking in the Pacific Street lot and available on the street.

Bikes: There are 5 bike rack spaces and 4 Bike Link eLockers / high-security bike parking options at the Roseville Station. The average daily occupancy of eLockers for 2019 (total lockers rented / total lockers available at the station) was 2%. There is no current need for additional secure parking as eLocker occupancy only surpassed 50% occupancy on 2 of 364 days.

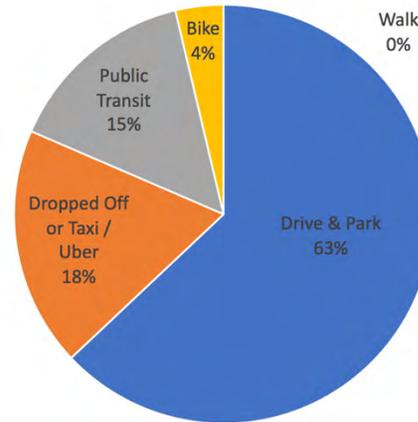
Public Transit: Serviced by Amtrak Thruway RT 20 (Sacramento to Auburn/Reno), SMART Ride (Citrus Heights pick-ups to/from RSV), & Roseville Transit (Commuter hours RT 3, regular hours RT A, RT B, & RT D)

Bike Connections: Main bike access roads to RSV are Church St, Main St, and Lincoln St / Pacific St. Class III bikeway segments of these access roads could be better marked with “sharrow” lane markers to increase motorist exposure to the presence of cyclists on these streets. Despite the presence of bikeways on the south side of the train tracks (Atlantic St & Oak St), there is currently limited efficient connection points that link these portions of Roseville to RSV & the Old Town area. Bike access much more complete on the north side of the tracks.

Trail Connections: *Miners Ravine Trail* (bike and pedestrian-only pathway) running north-south in Roseville to the east of the tracks, but not yet connected to the station via continuously connected bikeways.

Existing Conditions

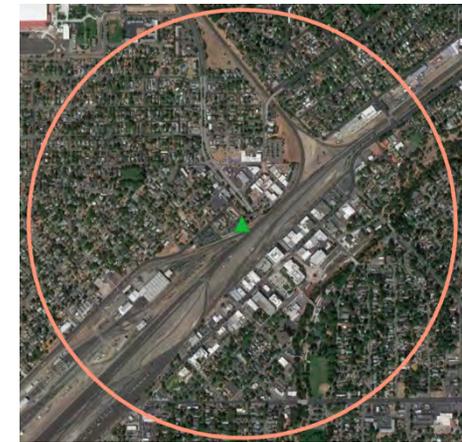
Access Mode Split – Both To & From Station



27 Rider Sample

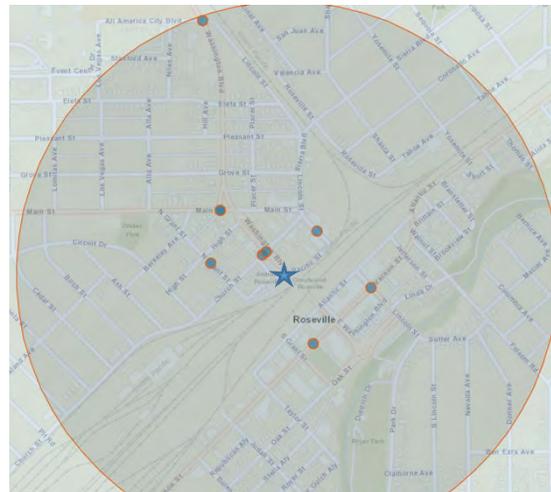
Data Collected from 2019 Capitol Corridor Station Access Survey

Land Use (1/2-mile RSV station buffer)



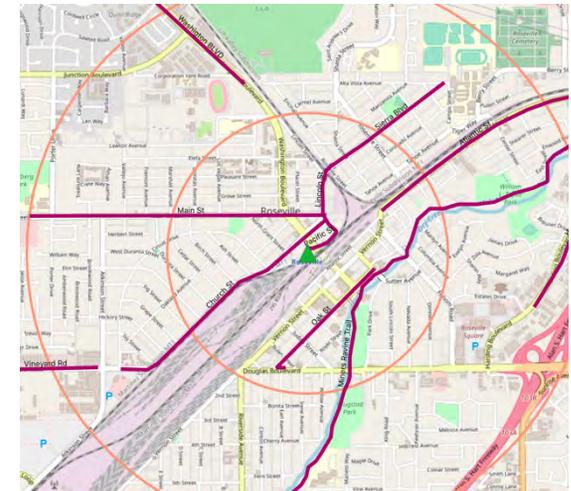
Suburban, low-density land use in the immediate 1/2 mile station vicinity. Residential neighborhoods to the east of tracks divided from the station by a series of busy roads. These conditions encourage vehicle travel to/from RSV.

Pedestrian & Bike Collisions (2017–18, 1-mile RSV station buffer)



Collision data collected from UC Berkeley Transportation Injury Mapping System. The most problematic area for active travel is along bikeways crossing over Washington Blvd, including the Church St & Washington St and Main St & Washington St intersections.

Existing Bikeways (1/2-mile RSV station buffer)



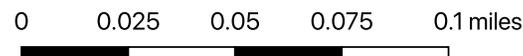
Bike access to Roseville station via Church St, Main St, Lincoln St, and Pacific St. Oak St / Miners Ravine Trail, Atlantic St, Washington Blvd, and Vineyard Rd could be linked to existing bike infrastructure for intermodal access improvements at RSV and in downtown Roseville.

Key

§ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation | % = City Plan



 Roseville Station (RSV)



Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. **Construct two crosswalks extending across Church St at the Grant St intersection with reflective pedestrian crossing signage to connect walkways existing on both sides of Grant St.** As an intersection serving as an immediate access point to the station, this is an essential space to design crosswalks that will increase vehicle exposure to pedestrians and provide safe connected active travel pathways to the station. #
2. **Add a crosswalk between the accessible station building entrance pathway and walkways on the side of Pacific St opposite the station.** This project should include extending the pathway on Pacific St so that a crosswalk can directly connect the pathway to the RSV main entrance building and will allow pedestrians accessing the station via Washington Blvd (either from the north side of town or via the tunnel) to safely & directly reach the station entrance or train platform via an accessible pathway without having to walk further and use sidewalk infrastructure on Pacific St. #

Public Transportation Access Improvements

3. **Work with Roseville Transit to have local routes servicing the Civic Center/downtown portion of the city stop directly at the station during the arrival and departure time of Capitol Corridor trains from the station (6:17 a.m. & 5:16 p.m.).** Local busses currently only stop on Vernon St & Washington Blvd (RT A, B, & L) and on Washington Blvd & Main St (RT D), which provides a barrier to using public transit for riders incapable of walking long distances or not knowing how to transition between the station and their appropriate bus stops. Having an official bus stop at the station twice a day for these local bus routes would enhance the likelihood that riders will find it more feasible to reach RSV with public transit. **Note:** Suggestion aimed at Roseville Transit, not the City of Roseville. §

Driving / Parking Facilities Access Improvements

4. **Designate the curbside on North Grant St nearest to the station platform as an official pick-up & drop-off zone, with signage on the side of the curb & a spray-painted section on the side of the road permitting cars to park and wait up to 15 minutes to pick up train riders.** This should include an ADA-only pick-up and drop-off space located on the curbside directly in line with the ramp providing access to the train platform and will ensure that all pick-ups/drop-offs at the station occur in a location that is safe, convenient, and accessible for all riders. #
5. **Add Amtrak wayfinding signage to reach the station on the access roads lacking directional cues,** in order to make the transition from vehicle to the station platform as efficient as possible for new riders. This could include adding:
 - a. **Sign directing vehicles exiting Washington Blvd tunnel to turn right onto Church St.** #
 - b. **Sign on Lincoln St & Church St corner directing riders to continue down Pacific St.** #
 - c. **Sign for Pacific St station parking lot that can be read by drivers approaching the lot in both directions & that specifies the lot as an additional Amtrak parking area.** #
 - d. **Sign on Church St & Grant St corner directing riders to turn right for station pick-up/drop-off, short-term parking, & Amtrak park & ride lot.** #

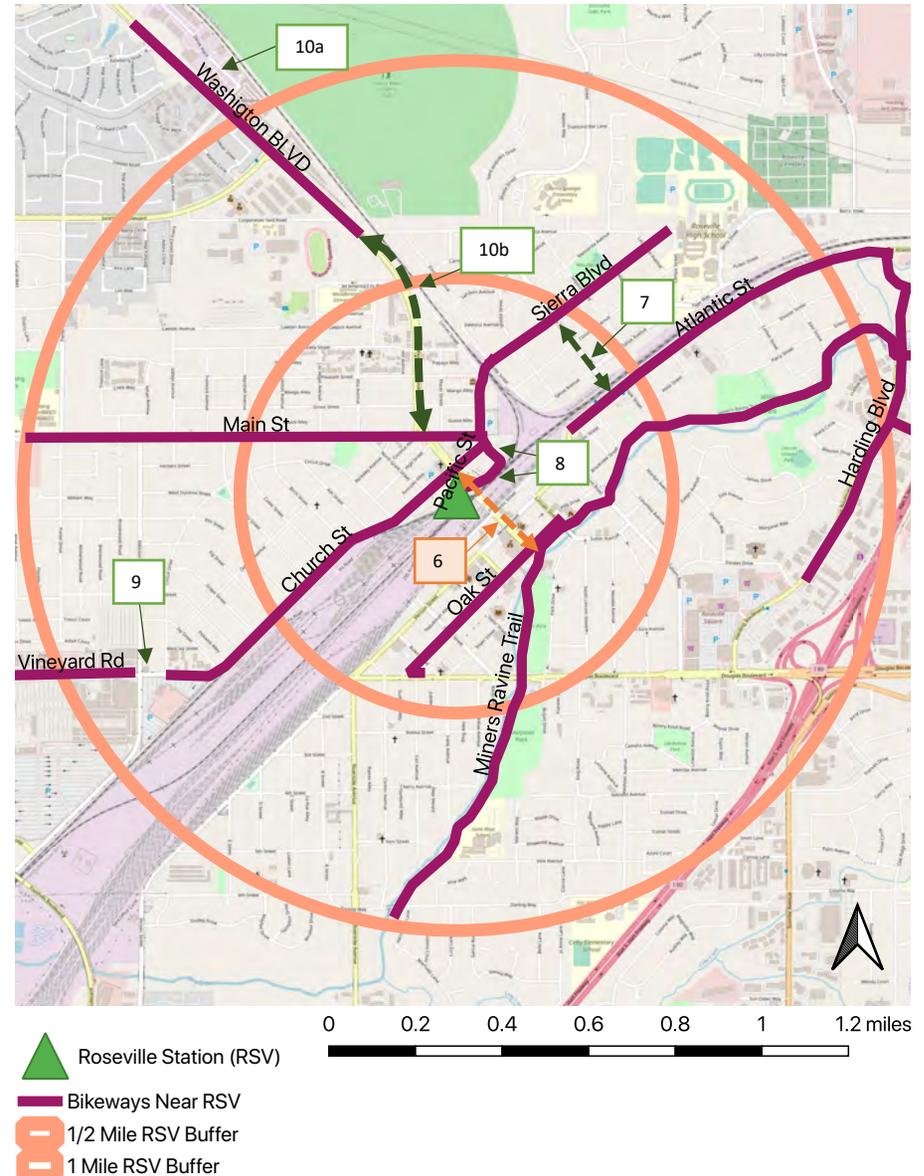
Access Improvements Outside Immediate Station Vicinity

Pedestrian Safety and Access Improvements

6. Enhance connectivity of Miners Ravine Greenway (pedestrian & cyclist pathway) to the Amtrak Station / Old Town Roseville area with wayfinding signage designating the existing/available active travel route to cross over the railroad tracks. This includes:
 - a. Signage directing pedestrians (and cyclists) to turn off of Miners Ravine Trail at Washington Boulevard and to use the crosswalk and ramp leading up to Vernon St (and sign in other direction on Vernon St pointing to go down the ramp to reach the Miners Ravine Trail). #
 - b. Signage at Vernon St access point directing pedestrians and cyclists (foot traffic only) to use the Washington Blvd underpass to reach Old Town Roseville and RSV station. #

Bike Safety and Access Improvements

7. Redesign Yosemite St into a Class II bikeway with side cycling lanes in both directions between Atlantic St and Sierra Blvd, with signage on the corner of Atlantic St and Yosemite St directing riders to the Amtrak station and Old Town Roseville. This will help provide a bikeable travel corridor across the train tracks and provide continuously connected bikeways from the north-eastern side of the station for improved access (especially in conjunction with basic infrastructural improvements on Lincoln St & Pacific St detailed in the following suggestion). #
8. Improve official designations of Lincoln St & Pacific St as Class III bikeways by painting white “sharrow” bike & vehicle road use markers on the segment of these streets between the Amtrak Station & the Lincoln St / Sierra Blvd connection point. These markings in both directions on this street will enhance the status of these roads as real Class III bikeways, increase driver awareness of cyclist movements, and enhance cyclist perceptions of safety while biking to the station on roads shared with cars. *
9. Add Class III green outlined “sharrow” bike lane markers on the narrow road section between Vineyard Rd & Church St where Class II side lane bikeways disappear. This will improve bike access to the Amtrak station/downtown Roseville area from the west side of town by creating continuous & safe bike lanes with on-street markings that enhance driver awareness of cyclist movements on a road segment shared by cars and bikes. *
10. Enhance safety and feasibility of active travel into Old Town Roseville and the Amtrak station area from the north side through projects that include:
 - a. The City of Roseville’s 2 phase plan to widen Washington Blvd. This project could help increase the number of individuals walking & biking into the Old Town & RSV station area and significantly improve active travel safety / reduce opportunities for cyclist accidents to occur. %
 - b. Continuing Class II bikeways on Washington Blvd where infrastructure disappears on both sides of the road between Elefa St and Main St. Road shoulders here are already wide enough for Class II lanes, so a basic infrastructural design improvement may help enhance safety and ability to use multimodal travel to access downtown Roseville / RSV. *



Fairfield-Vacaville Hannigan Station (FFV)

Vacaville, California

Fairfield-Vacaville Hannigan Station is an auto-dependent station (estimated 92 % of riders reaching the station via car) located south of Davis on the Capitol Corridor line. Parking is free and the station is located in a low-density area away from the immediate vicinity of the Fairfield and Vacaville communities it primarily serves. This results in personal vehicles being the primary access mode used to reach the station. There are very few communities within walkable distance of the station, but improvements to bike infrastructure on Peabody Rd (specifically increased connectivity of lanes north of Vandenberg Rd) could help lead cycling to the station to become a safer and more convenient option for train riders. Similarly, expanding public transit services offered (particularly in areas near the majority of origin points for ridership) is an important component towards enhancing equity of access options for reaching the station. This is critical as a result of the station’s substantial distance from downtown Vacaville and Fairfield communities.

Characteristics

Daily Boardings: 138 riders **Daily Alightings:** 141 riders

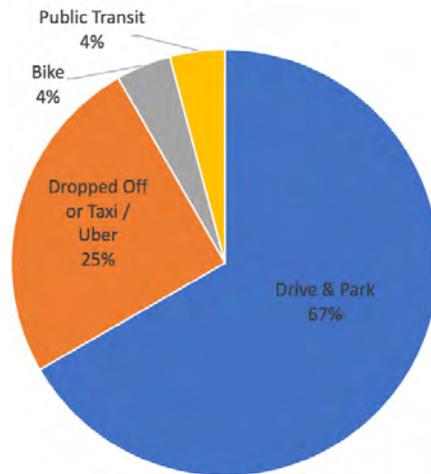
Parking: 139 regular spaces and 5 accessible spaces in Capitol Corridor Amtrak lot owned by the City of Vacaville. According to 2019 Station Access Survey results, parking spaces were described as always (83.3%) or usually (16.7%) available in the FFV Amtrak lot. Parking is free and on a first-come, first-served basis.

Bikes: There are 8 bike rack spaces and 14 Bike Link eLockers at the station, which are more than enough spaces to meet/exceed the demand for secure bike parking at FFV.

Public Transit: Serviced by Fairfield & Suisun Transit (FAST) RT 2, connecting Solano Town Center in Fairfield to FFV. FAST accepts Capitol Corridor Transit Transfers.

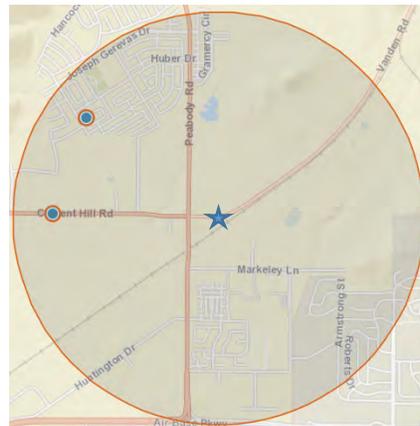
Bike Connections: There is a network of Class II bikeways existing near FFV, with good access from the south side of the station via Peabody Rd that connects into Fairfield via bikeways on Air Base Parkway. Connections to the station in northern Fairfield and Vacaville could be improved by making existing Class II bikeways on Vandenberg Rd & the side of Peabody Rd north of FFV run continuously to the station. Adding bike infrastructure on Cement Hill Rd would also be beneficial by connecting FFV to existing Class I bike lanes in Fairfield.

Existing Conditions
Access Mode Split – Both To & From Station



24 Rider Sample
Data Collected from 2019 Capitol Corridor Station Access Survey

Pedestrian & Bike Collisions (2017–18, 1-mile FFV station buffer)



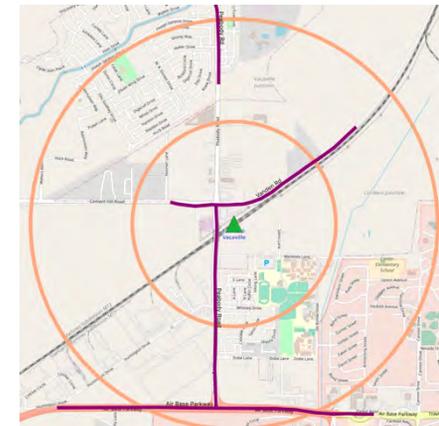
Collision data collected from UC Berkeley Transportation Injury Mapping System. Only two collisions within the mile service zone of FFV, in contrast to downtown Suisun & Fairfield where there are high-density collision areas. This is indicative of the limited road infrastructure and low-density land-use patterns within the FFV 1-mile buffer zone, which does not extend into downtown areas.

Land Use (1/2-mile FFV station buffer)



Undeveloped land with a few pockets of low-density neighborhoods, parks, and industrial facilities within the FFV service zone. Downtown Fairfield and Vacaville communities providing the majority of station clientele are not in the station’s immediate proximity and are connected to the station by just a few main roads. This facilitates conditions of auto-dependency to/from FFV.

Existing Bikeways (1-mile FFV station buffer)



Existing bikeways near FFV, with access points via Peabody Rd & Vandenberg Rd. All bike lanes are Class II. Bike lanes to the south side of the UP tracks are well connected, with east-west connections via Air Base Parkway. Increasing the connectivity of existing bike infrastructure to the station on the north side of tracks could enhance multimodal access to FFV.

Key

§ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation | % = City Plan



▲ Fairfield-Vacaville Hannigan Station (FFV) 0 0.025 0.05 0.075 0.1 miles

Note on Figure: Empty field where driving suggestion #6 is located is currently an Amtrak parking zone area, which is not depicted in this out of date satellite map layer.

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. Consider a street widening project on the final segment of Peabody Rd where sidewalks disappear while nearing the Vanden Rd intersection so that sidewalks exist from the origin area for the majority of ridership (intersecting neighborhood streets off of Peabody Rd) to the station. This would expand the opportunity for many individuals who would prefer to walk to FFV to be able to do so. §
2. Add wayfinding signage before the Peabody Rd bridge pedestrian walkway directing riders to precede over the bridge on the sidewalk to reach the Amtrak station. This will improve directional cues for active travel and encourage pedestrian use of the bridge & existing pathways. #

Bike Safety and Access Improvements

3. Improve bike entry & egress to the station by making turns for cyclists in a high-traffic zone at the intersection of Peabody Rd & Vanden Rd safer & easier to navigate. This might include:
 - a. Redesigning the left-hand turn lanes on Vanden Rd (east of the intersection) and Peabody Rd (north side of the intersection) into lanes that cyclists are permitted to access and turn to/from the station in by adding “sharrow” bike & vehicle turn lane makers. This will prevent cyclists from trying to make dangerous turns across multiple lanes of traffic from the side bike lanes & enhance vehicle exposure to cyclists already using the main turn lane. *
 - b. Turn the sizeable road shoulder on the right side of Peabody St (while approaching the intersection from the south) into a buffered right-hand turn lane for cyclists to use to reach Vanden Rd and the FFV Amtrak station (with dashed markings on turn connecting Vanden Rd infrastructure to the Peabody St bike turn lane infrastructure). By dividing infrastructure between cars and cyclists at the station, the safety of multimodal access at FFV may increase. *

Driving / Parking Facilities Access Improvements

4. Add directional signage to show riders where to turn while nearing the station on a.) Peabody Road (both directions), b.) Cement Hill Rd, and c.) Vanden Rd (before Peabody St intersection). This could help new train riders driving to properly navigate the intersection closest to the station and make transitions into the station as easy as possible. #
5. Designate an official pick-up and drop-off zone in front of the station (with a space marked for ADA drop-offs, as ADA parking spaces are relatively far from the train platform) where cars are permitted to wait up to 15 minutes for passengers. This should include a painted drop-off curbside zone and signage to designate the area. The new zone will ensure that all pick-ups and drop-offs are occurring in an area that is safe, accessible, and convenient. #
6. Add motorcycle spaces and electric vehicle spaces/charging stations at two spots in the centrally paved parking lot. As an auto-dependent station, it may be important to offer diversified parking alternatives to ensure all riders have options to get to the station. #

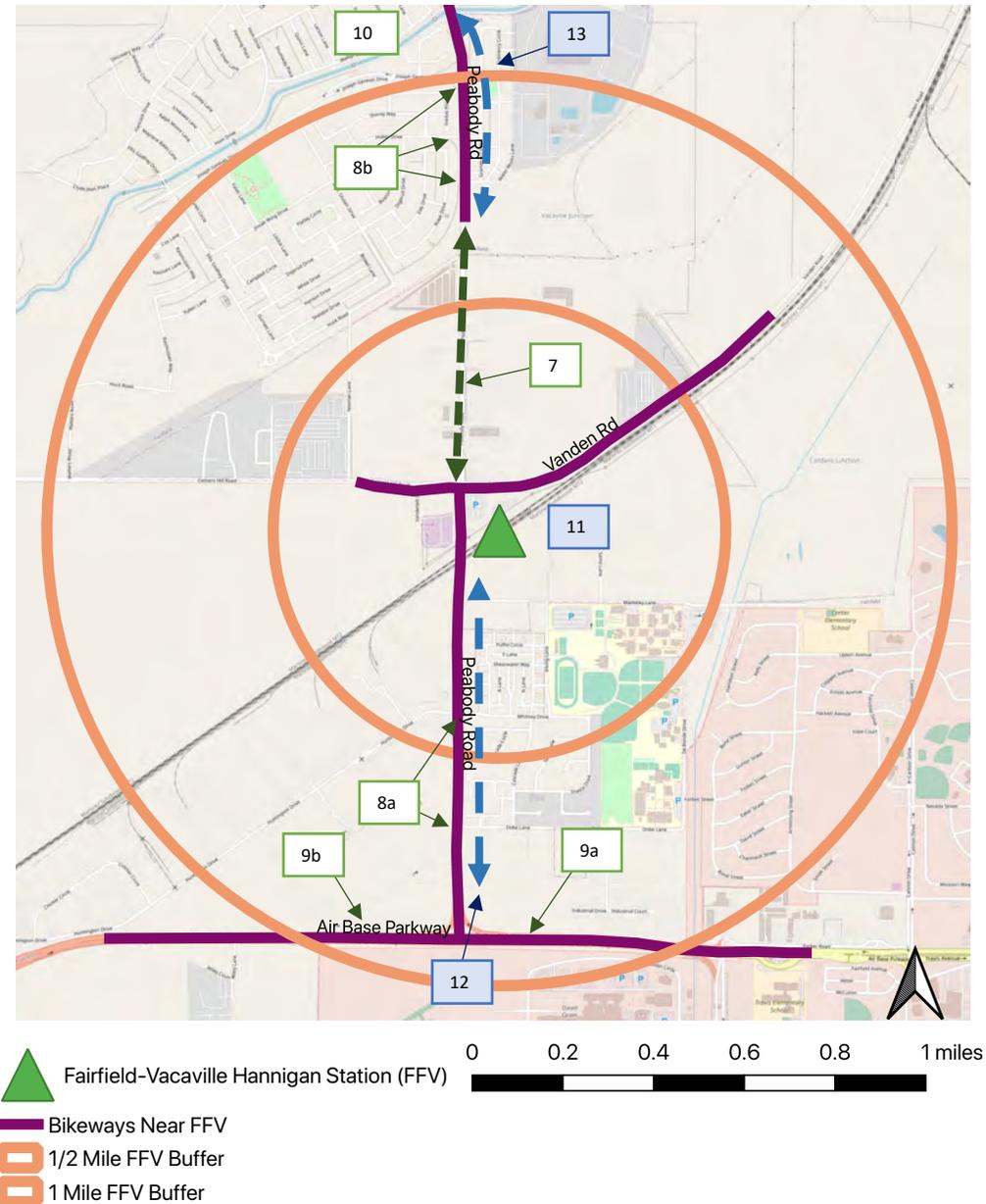
Immediate Station Vicinity Access Improvements

Bike Safety and Access Improvements

7. As part of the proposed Peabody Rd widening project (see suggestion #1), add Class II bikeways on Peabody Rd between Vanden Rd and Water Works Ln (nearest intersection to where bike lanes end) to provide continuous Class II lanes for cyclists between downtown Vacaville / residential communities and the FFV Amtrak station. If widening is not feasible, add Class III bike lanes with “sharrow” lane markers to increase vehicle exposure to cyclists on this road portion. *
8. Add dashed bike lane channels across busy intersection points on Peabody Rd. This will improve safety by connecting cyclist infrastructure via predictable channels of movement across traffic and increasing vehicle exposure to cyclists as a result of on-street markings and should include:
 - a. Peabody Rd intersections south of FFV with Whiten Dr, Hunting Dr, and Dobe Ln. #
 - b. Peabody Rd intersections north of FFV with Water Works Ln, Huber Dr, & Joseph Gerevas Dr. #
9. Improve connectivity of bike lane infrastructure on Airbase Pkwy and bike lane infrastructure on Peabody Rd and add signage directing riders to reach FFV station by turning onto Peabody Rd. This project might include:
 - a. For bike traffic moving westbound on Air Base Pkwy towards Peabody Rd, add sign directing riders to turn right onto Peabody Rd to reach FFV and turn expansive buffer area to the side of the car turn lane into a Class II bike lane that could continuously connect into Class II side bike lanes on Peabody Rd. This should begin where the Class II lane on Air Base Pkwy diverges from the curbside on Peabody Rd. #
 - b. For bike traffic moving eastbound on Air Base Pkwy, add sign directing cyclists to exit the bike lane and turn left onto Peabody Rd (with Amtrak station directional cue on the sign) and design the turn lane nearest to the Air Base Pkwy bike lane into a shared bike and vehicle turn lane with “sharrow” lane markings. #
10. Add signage along Alamo Dr side bikeways on both sides of the street directing cyclists to turn south onto Peabody to get to the Amtrak station. This will enhance cyclist station wayfinding from one of the primary intersection points in Vacaville and encourage the use of extensive Peabody Rd Class II cycling lanes. #

Public Transportation Access Improvements

11. Work with Fairfield & Suisun Transit (FAST) to expand the service hours for existing RT 2 route and/or run a direct shuttle service to the station so that riders can use a public transit service and make it in time for commute hour train departure times (e.g. 521 – 5:15 a.m. & 523 – 6:16 a.m.). Riders living outside of a bikeable or walkable distance to the station mentioned lack of transit services at the time of day they need to reach the station as their primary reason for having to drive themselves to FFV. \$
12. Collaborate with Fairfield & Suisun Transit (FAST) to add an FFV Amtrak station stop on one round trip of RT 4. This route nears the station already (corner of Air Base Pkwy & Peabody Rd), and adding a detour twice a day during a time aligning with a commute hour morning and evening train pairing would extend the network of locations public transit services at FFV (new locations southeast and west of the station would be covered).* **Note:** Suggestions 11 & 12 are specifically aimed at FAST, and not at the City of Fairfield or the City of Vacaville.
13. Add daily round trips to the Amtrak station from Vacaville to reach commute hours trains (e.g. 523 & 525) that begin in downtown Vacaville (Alamo St & Merchant Dr) and then service residential communities off of Alamo St and Peabody St. City Coach (Vacaville Public Transportation service) currently has no service extending to the station. This is problematic because the majority of ridership resides in Vacaville in neighborhoods off of Peabody Rd and Alamo Dr (see 2019 Station Access Survey results) and frequently expressed that they did not have any public transit options to the station. **Note:** Suggestion aimed at Vacaville City Coach, not the City of Vacaville. \$



Suisun - Fairfield Station (SUI)

Suisun City, California

SUI is an auto-dependent station (estimated 87% of riders accessing via drive & park or drop-off) located between MTZ and FFV on the Capitol Corridor line. Population density is low in the area, which limits the number of riders within a walkable or bikeable distance of the station. Major multimodal access improvements proposed by ridership at the station include basic infrastructural improvements to make traveling to the station via the Central County Bikeway safer and better scheduling alignment of public transit services connecting to the station with the arrival/departure of Capitol Corridor trains. Additional improvements may include better wayfinding cues to the Lotz Way Amtrak Park & Ride lot, basic infrastructural and wayfinding enhancements to enable walking and biking to destinations in Suisun City, and increasing the connectivity of bikeways in Fairfield to the bike overcrossing leading to SUI and Suisun City.

Characteristics

Daily Boardings: 170 riders **Daily Alightings:** 182 riders

Parking: 8 short-term parking spaces (1-hour limit) and 1 accessible space in Capitol Corridor Amtrak Lot & 256 regular spaces, 5 accessible spaces and, 2 electric vehicle spaces in Lotz Way Park and Ride Lot. Parking in both lots is free with no permit necessary. The overall quantity of parking spaces appears to be adequate for current ridership levels.

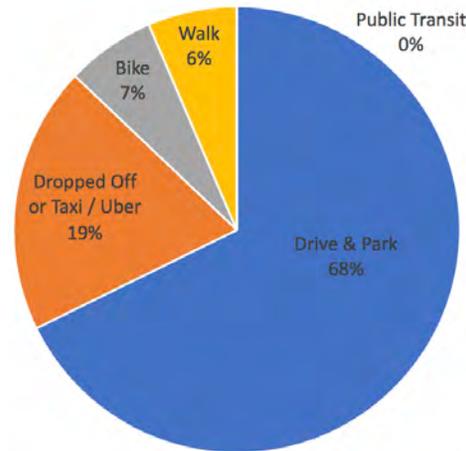
Bikes: There are 5 bike rack spaces and 8 Bike Link eLockers / secure bike spaces available at SUI. The average daily occupancy of eLockers for 2019 (total lockers rented / total lockers available at the station) was 17%. There is minimal need for more secure parking, as eLocker occupancy only reached or surpassed 100% daily occupancy on 4 of 364 days.

Public Transit: Serviced by Rio Vista Delta Breeze (RT 50 – Rio Vista, Isleton) & Fairfield and Suisun Transit (RT 1 – Dickson Hill, RT 3 – Solano Town Center, RT 5 – Suisun City, & RT 7 – Solano Community College).

Bike Connections: Officially designated bikeway infrastructure is limited within the SUI station access zone. A pedestrian and bike shared use overcrossing connects active travelers from points in Fairfield safely to the station across the train tracks, while Railroad Ave and Marina Blvd provide access to the station from the east. Oliver Rd and Fairfield Linear Park Trail could be connected to SUI for improved bike connections to the station

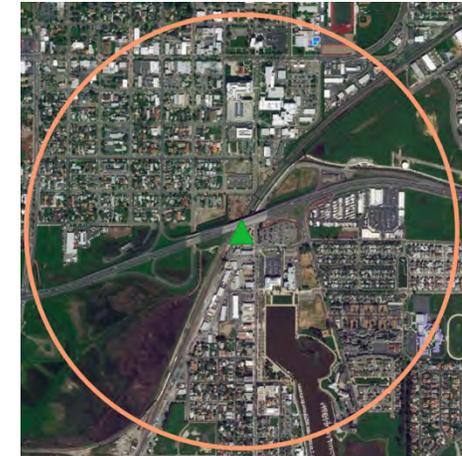
Trail Connections: Central County Bikeway provides immediate cyclist and pedestrian shared-use access to the station from the east, while Fairfield Linear Park Trail connects Solano Community College and Solano downtown to bikeways in Fairfield that connect to SUI.

Existing Conditions
Access Mode Split – Both To & From Station



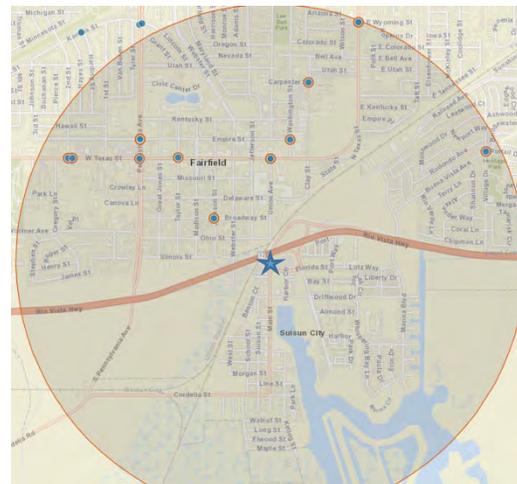
31 Rider Sample
Data Collected from 2019 Capitol Corridor Station Access Survey

Land Use (1/2-mile SUI station buffer)



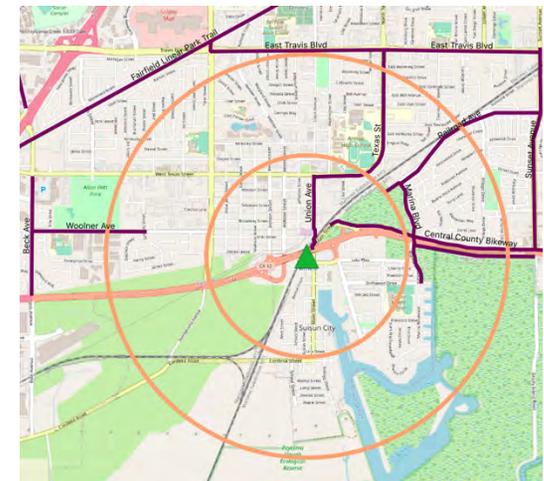
Relatively low-density residential (Fairfield) and downtown (Suisun) communities separated by a freeway, train tracks, and marshland. A very limited number of riders located within immediate 1/2 - mile buffer zone of SUI.

Pedestrian & Bike Collisions (2017–18, 1-mile SUI station buffer)



Collision data collected from UC Berkeley Transportation Injury Mapping System. 9 bike fatalities (concentrated on Texas St and Pennsylvania Ave) on the Fairfield side of the station service zone and zero fatalities on the Suisun side of the station service zone. This suggests that limited cyclists are using street infrastructure in Suisun and that there is a need for new cycling alternatives to shared roadways with vehicles in Fairfield.

Existing Bikeways (1/2 mile, 1-mile SUI station buffer shown)



Besides the eastern side of the station (Central County Bikeway) and the northern side of the station (Union Ave & Texas St), continuous bikeway access to the station is limited. Several roadways in both Suisun & Fairfield have minimal vehicle traffic and could be redesigned into Class II / Class III bikeways.

Key

§ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation | % = City Plan



Suisun Fairfield Station



Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. **Add wayfinding signage for pedestrians at station intersection exit with mileage estimates and directional cues for various nearby trails and landmarks, including Central County Bikeway, Suisun City Marina & Trail, and Suisun City Center.** This could make it easier for new riders exiting the train to navigate the area around SUI. #
2. **Create a crosswalk on Main St across the Spring St intersection point to connect sidewalks on both sides of the intersecting roads.** This will link the SUI station to downtown Suisun via continuous and well-marked pedestrian pathways and may improve walking as a last-mile solution to reach destination points in the city center of Suisun. #
3. **Add wayfinding signage at the entry ramp to the pedestrian/cyclist overcrossing bridge (located adjacent to SUI) to direct riders to use the bridge to reach all destination points in the City of Fairfield, including Solano Town Center, Texas St, and Solano County government buildings. On the opposite side of the bridge, add signage directing pedestrians to use the bridge to reach the SUI Amtrak station and Main Street in Suisun City.** Adding signage for the bridge may make it easier for new riders to walk or bike between SUI and Fairfield origin/destination points. #

Public Transportation Access Improvements

4. **Design a crosswalk on Spring St to connect the main train platform at SUI to the connecting public transit system platform/island between Railroad Ave and Spring St.** This may help increase vehicle exposure to transit users crossing the street here and more safely connect public transit to the SUI platform. #
5. **Label the bus shelters where different connecting public transit services (with signs indicating route numbers) make their stops along the side of Railroad Ave.** Current conditions highlight transit services stopping at the island platform, rather than the specific stops on the platform. Labeling specific stops of transit services instead could make transit connections more accessible and efficient for all riders. #

Driving / Parking Facilities Access Improvements

6. **Create signage directing cars to park in the Lotz Way parking lot to access the station.** The lot is located one block to the south and on the opposite side of the street from SUI Amtrak station, with an entrance on a different access road (Lotz Way) than SUI (Main St). To help make finding parking for SUI easier and to ensure a smooth transition between the lot and station, improvements might include:
 - a. **Adding an “Amtrak Park and Ride” sign at the main entrance to the parking lot on Lotz Way.** #
 - b. **Designing new signs for drivers accessing the station from the north and south via Main St to turn onto Lotz St to park for SUI.** This may reduce confusion caused by the separation of the lot from SUI. #
 - c. **Constructing sign on the corner of Lotz Way & Main St directing riders to cross the street and then turn right to reach SUI (place sign on side of crosswalk opposite of the parking lot).** #
7. **On the corner of Railroad Ave & Main St, add a sign directing vehicles to turn onto Railroad Ave for pick-ups & drop-offs and short-term parking at the designated curbside zone near the SUI train platform.** With some distance between the main station lot and train platform, it may be valuable to signal to train riders that there is a universally accessible pick-up facility available (where drivers can locate passengers debarking). #

Access Improvements Outside Immediate Station Vicinity

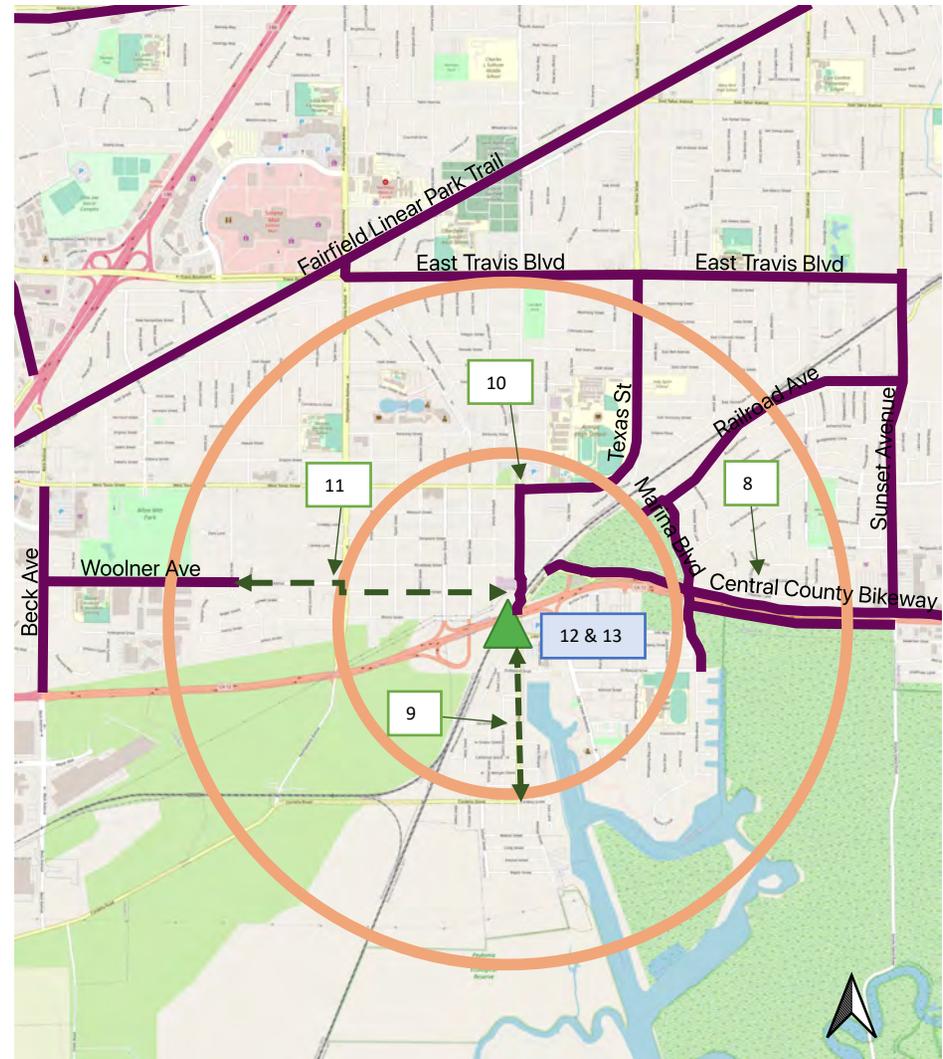
Bike Safety and Access Improvements

8. **Improve Class I infrastructure on the Central County Bikeway by keeping fences intact and adding lighting in the darker corridors along the portion of the lane within a bikeable three-mile distance of SUI.** Multiple bikers, in addition to drivers explaining why they choose not to bike, were concerned about the lack of fencing and darkness on the trail at the times of day they travel to/from SUI. These improvements thus may help improve east side bike access. \$
9. **In Suisun, design Main St into a Class III bikeway between the SUI Amtrak station (Railroad Ave & Main St) and the end of the city center of Suisun (Cordelia St & Main St).** This addition of bike infrastructure might come with many benefits, including connecting SUI to the Suisun City Marina Trail and increasing vehicle exposure cyclists moving between SUI and final destination points in downtown Suisun City. % / #
10. **In Fairfield, add signage on the corner of Texas St and Union Ave directing riders to turn onto Union St Class III bikeway to reach the pedestrian/cyclist bridge leading to SUI and Suisun City.** This should also include designing a shared vehicle and cyclist turn lane to increase vehicle exposure to cyclists transitioning between bikeway infrastructure on the two streets. This wayfinding enhancement and design improvement may promote bike ridership by creating better-integrated bikeways between locations in Fairfield and the SUI Amtrak station. #
11. **Improve bike movement between Fairfield and the SUI Amtrak station from the west side of the station through better bike connections to the bike/pedestrian crossing into Suisun City.** Beneficial projects to create more continuous bikeways to the station may include:
 - a. **Designing Class III bikeway with “sharrow” bike & vehicle lane markings on Woolner Ave between Gregory Lane (Class II lanes end here) and Pennsylvania Ave. #**
 - b. **Designing Class III bikeway with “sharrow” bike & vehicle lane markings on Ohio St connecting directly to Union Ave & the bike/pedestrian overpass to SUI. #**
 - c. **Adding signage directing cyclists to dismount bikes and use the crosswalk to cross Pennsylvania Ave and move between Class III bikeways on Woolner Ave & Ohio St. #**

Public Transportation Access Improvements

12. **Better coordinate FAST RT 5 buses moving between SUI and the Fairfield Transportation Center with the arrival and departure of Capitol Corridor trains by scheduling buses to arrive/depart ~10 minutes before or after a train’s departure/arrival.** Riders in comments noted buses on this route arrive a few minutes after a train departure or right upon train arrival during commute hours, which prevents riders from confidently using FAST as a station transit connection (e.g. RT 5 arrives at 6:14 a.m. & 8:14 a.m. to connect with trains 523 & 529 leaving at 6:16 a.m. & 8:14 a.m.). \$
13. **Work with Vine Transit to expand the service time window for RT 21 (SUI <-> Fairfield <-> Napa) so that the route can service earlier and later commute hour times.** Specifically, start the earliest route to the station fifteen minutes earlier so that it arrives 5-10 minutes before the departure of train 525 (rather than 6 minutes after) and push back the final departure time of 6:20 pm to coordinate with the arrival of train 542 (arrives in SUI at 6:22 p.m.). These basic improvements were highlighted by train riders living in Napa who currently drive to the station as barriers to using Vine Transit for round trips to SUI and may lead RT 21 to be a much more feasible feeder public transit system route for Capitol Corridor riders. \$

Note: Suggestions 12 & 13 respectively aimed at Fairfield and Suisun Transit (FAST) and Vine Transit, not the cities of Fairfield and Suisun.



-  Suisun Fairfield Station (SUI)
-  Bikeways Near SUI
-  1/2 Mile SUI Buffer
-  1 Mile SUI Buffer

Martinez Station (MTZ)

Martinez, California

Martinez station is an auto-dependent station, but with a substantial estimated 36% of ridership use public transit, cycling, and walking to reach the station. Parking is free and the immediate station has relatively few residential streets, which influences "Drive & Park" to be the primary travel mode used to access the station. Better bike egress from the station for bike traffic moving to the east and improvements in the connectivity of bikeways could make getting to/from the station via bike easier. Good infrastructure for pedestrians is in place, with main areas for potential access improvements related to crosswalk infrastructure on southside access roads and narrowness of some sidewalks near the station. Public transit agencies and geographic locations serviced by this station are extensive, but connecting transit options are viewed by train riders as unreliable and often lacking needed flexibility. Aligning transit arrival times with the arrival/departure of Capitol Corridor trains might help to address these concerns.

Characteristics

Daily Boardings: 276 riders **Daily Alightings:** 297 riders

Parking: 136 regular parking spaces, 6 accessible spaces, and 2 motorcycle spaces in the Capitol Corridor Amtrak Lot & 175 additional spaces available across tracks in Ferry Street overflow lot. Parking in both lots is free and permit from station agent required. Parking demand is high at MTZ and the Amtrak lot usually fills up by 8:00 a.m., which is supported by the fact that only 40% of ridership say they always find their needed parking type at the station (See 2019 Station Access Survey results).

Bikes: There are 8 bike rack spaces and 8 Bike Link eLockers / secure bike spaces available at MTZ. The average daily occupancy of eLockers for 2019 (total lockers rented / total lockers available at the station) was 22%. Quantity of bike lockers is more than adequate for current MTZ bike ridership levels, as eLocker occupancy only reached or surpassed 100% daily occupancy on 2 of 364 days.

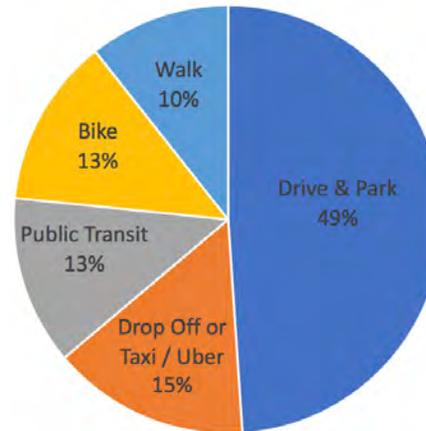
Public Transit: Serviced by Amtrak Thruway RT 7 (to Vallejo, Santa Rosa, & McKinleyville), County Connection (to Concord, North Concord, Pleasant Hill, & Walnut Creek BART stations), WestCAT (Hercules Transit Center), Tri-Delta Transit (Pittsburgh / Bay Point BART),

Bike Connections: Bike access from the south side of MTZ via Berrellesa St (Class II, one-way from the station) & Alhambra Ave (Class III, one-way to the station), from the east side of MTZ via Marina Vista Ave (Class II, one-way to the station), and from the south-east side of MTZ via Pacheco Blvd (Class II, to/from station).

Trail Connections: Benicia – Martinez Bridge Trail (cyclist and pedestrian shared pathway) connecting active travelers north of the station in Benicia to downtown Martinez and the Amtrak station.

Existing Conditions

Access Mode Split – Both To & From Station



47 Rider Sample

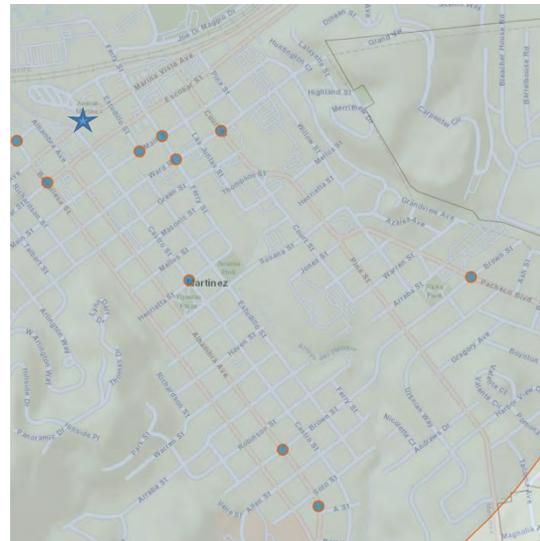
Data Collected from 2019 Capitol Corridor Station Access Survey

Land Use (1/2-mile MTZ station buffer)



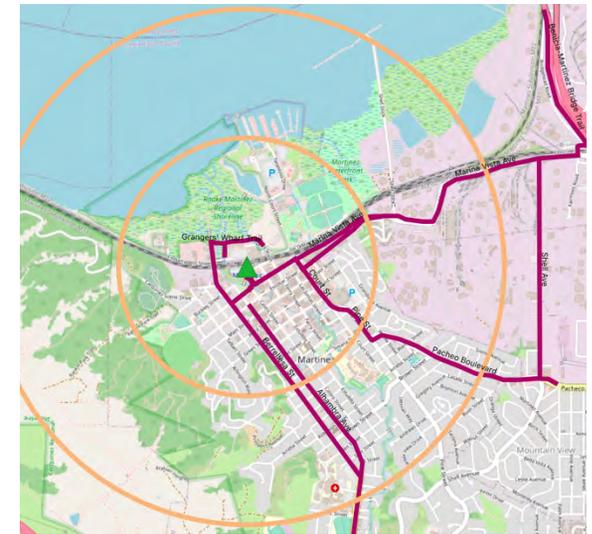
Primarily marshland / conserved areas to the north & west sides of MTZ, and government & local business to the south and east sides. Lack of residential streets in MTZ's immediate service area encourages high vehicle dependency for access.

Pedestrian & Bike Collisions (2017–18, 1-mile MTZ station buffer)



Collision data collected from UC Berkeley Transportation Injury Mapping System. 6 bike fatalities occurring at intersection crossings off of Alhambra Ave, Berrellesa St, Pacheco Blvd, & Court St bikeways. This may suggest the need for dashed channels where Class II side lanes intersect with streets (in areas where not currently present).

Existing Bikeways (1/2 mile, 1-mile MTZ station buffer shown)

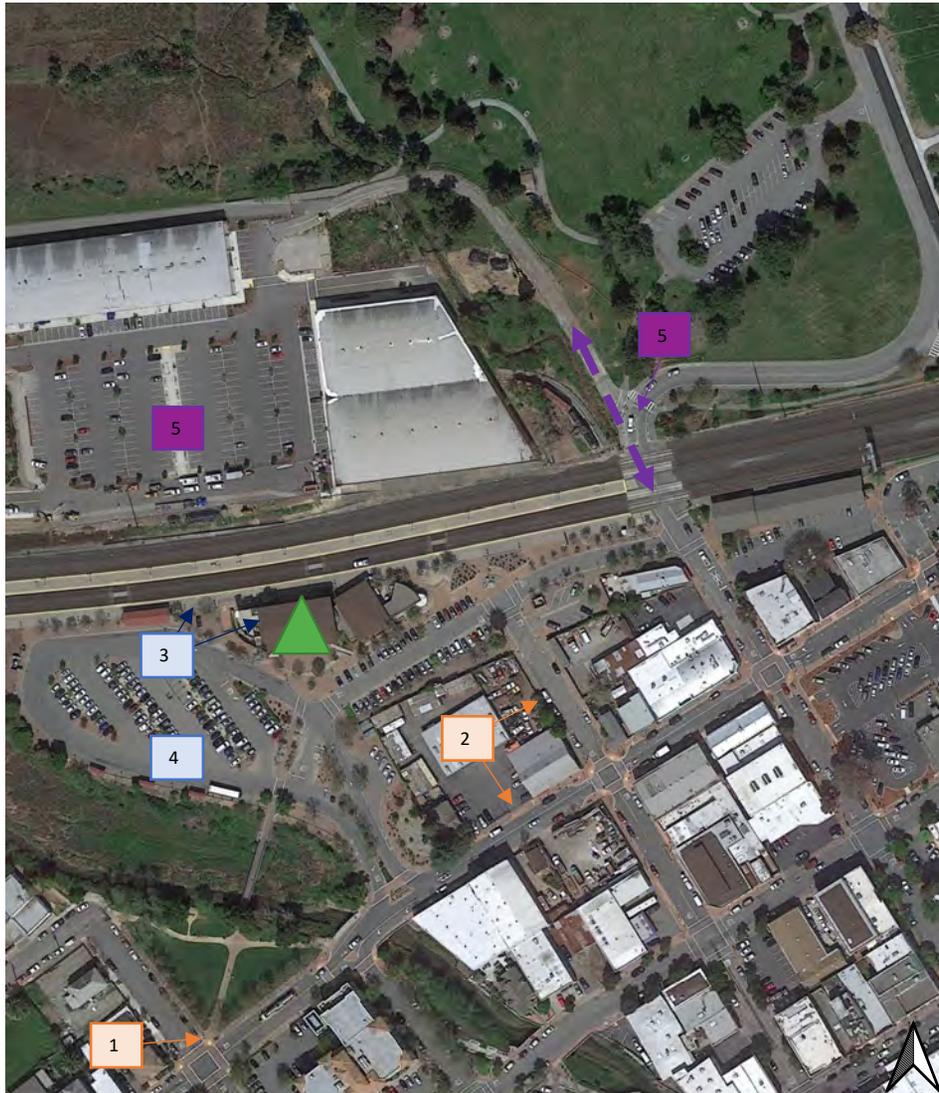


Bikeways connect the station to Mountain View and Muir neighborhoods, in addition to Benicia. Main improvements in bike access include implementing alternatives in areas where bikeways are one-way and connecting bike lanes continuously in few points where adjacent bikeways are disconnected.

Key

§ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation | % = City Plan

Immediate Station Vicinity Access Improvements



Pedestrian Safety and Access Improvements

1. **On edge of John Sparacino Park on the corner of Marina Vista Ave and Foster St, add pedestrian wayfinding signage directing walkers to take pathway cutting through the park to connect to the MTZ station.** Enhanced wayfinding signage here may encourage walkers to enter & exit the station via a safe vehicle-free pathway and improve the safety of multimodal station access through physical separation of station entry & egress by mode. #
2. **In the immediate MTZ station vicinity, remove obstacles and increase the width of sidewalks on Marina Vista Ave (sidewalk segments between Estudillo St & MTZ entry road) and Estudillo St (sidewalk segments between Marina Vista Ave and MTZ parking lot).** Parking meters installed into sidewalks, ramps for intersecting driveways, and narrow sidewalk strips all contribute to portions of sidewalks on these segments containing less than the ADA-compliant 36 inches of flat pathway required to meet universal accessibility standards. Fixing this may help make pedestrian access to the station more inclusive to a broader range of Capitol Corridor’s riders. #

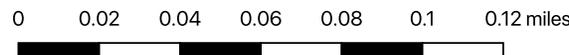
Public Transportation Access Improvements

3. **In the MTZ station building and on the central train platform, add maps to improve the connectedness of MTZ as an intermodal transit center showing the bus stop locations of all connecting public transit services (Amtrak Thruway, WestCat, County Connection, Tri-Delta Transit), in addition to the specific transit routes, bikeways, and downtown landmarks near the station.** With bus stops scattered around the perimeter of the station property and minimal wayfinding signage present on the main train platform, a map may help riders find appropriate bus stops and routes and promote more environmentally friendly modes of travel to connect to/from Amtrak trains. #
 4. **Work with County Connection to coordinate the arrival/departure times of busses from MTZ to match with the departure and arrival of Capitol Corridor and San Joaquin trains, arriving ~10-15 minutes before their departure** (rather than having consistent time arrival intervals that subsequently do not always align with trains). Many Capitol Corridor riders claimed they do not use public transit because of the irregularity and lack of flexibility existing with the current time intervals of busses servicing this station. Improved alignment of busses with trains may be able to fix this issue without needing to enhance the frequency of route services. *
- Note:** Suggestion aimed at County Connection, not the City of Martinez.

Driving / Parking Facilities Access Improvements

5. **For the series of directional cues leading from the main Amtrak MTZ lot at the station to the overflow parking lot on the opposite side of the tracks, directional cues for riders end at the Ferry St and Joe DiMaggio intersection. Add sign here directing riders to stay left on Ferry St and then label the public parking lot as a space where Amtrak users can park for the day.** This could help ensure that parking spaces are available and easy to find for riders at all points of the day. #
- Note:** A bridge currently in construction (and near completion) at MTZ will connect the overflow parking lot to the MTZ train platform via a pathway across the train tracks. This will significantly increase the convenience of using the overflow parking lot. %

 Martinez Station (MTZ)



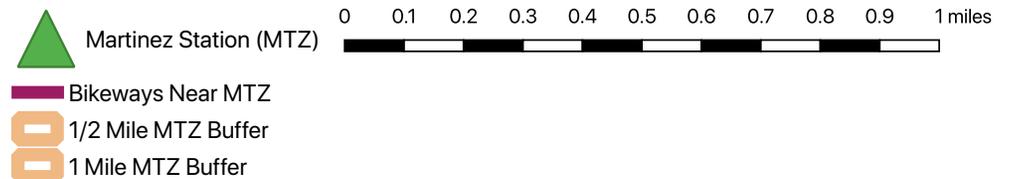
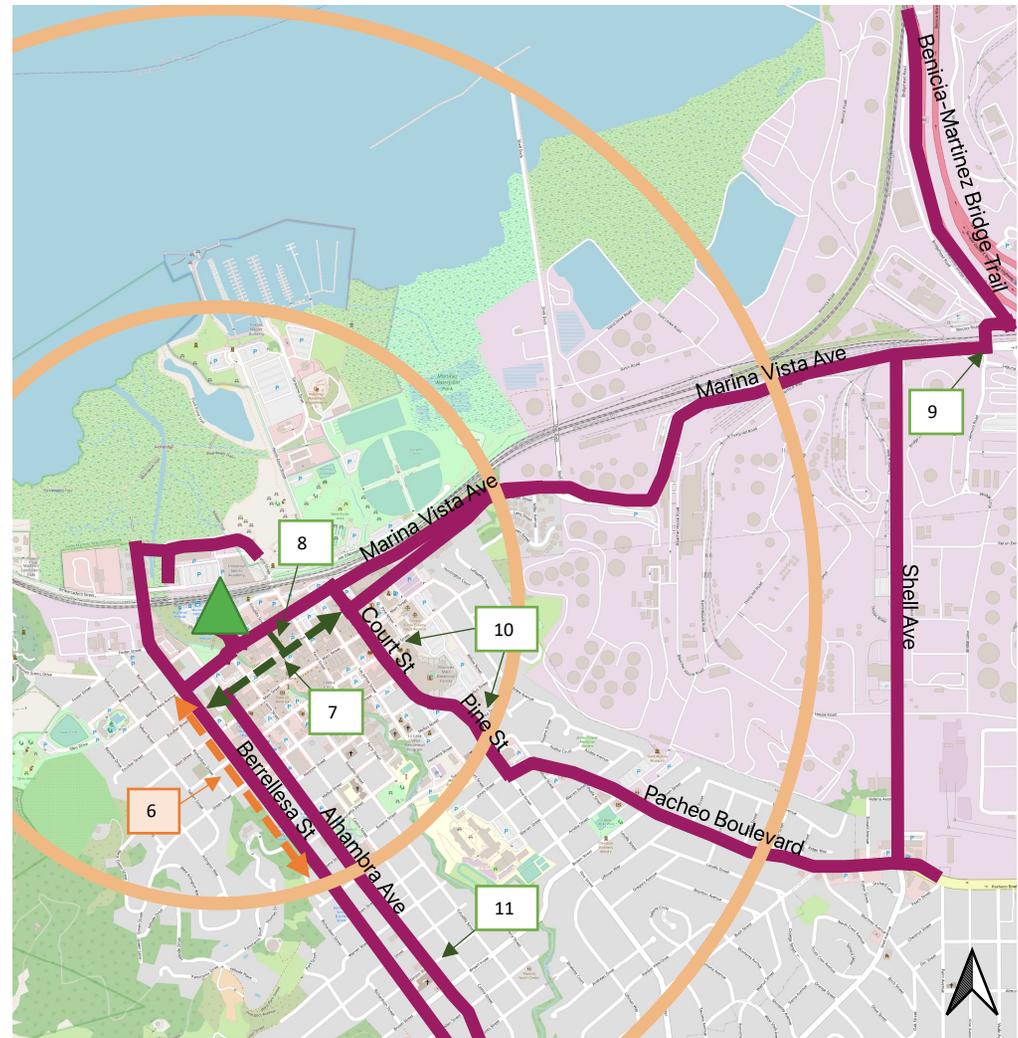
Access Improvements Outside Immediate Station Vicinity

Pedestrian Safety and Access Improvements

- On Alhambra Dr & Berrellesa St segments between Marina Vista Ave and Susana St, add typical striped crosswalks between sidewalks pathways in multiple places where sidewalk infrastructure is currently lacking or faded where roads cross over intersecting streets. These are two major access streets into town and connection points between downtown Martinez / MTZ and the City of Martinez government buildings, which should be connected via continuous safe pedestrian channels. #

Bike Safety and Access Improvements

- Similar to what is proposed in the Downtown Martinez Community Based Transportation Plan, redesign Escobar St between Court St and Berrellesa St into a Class III bikeway with bike and vehicle “sharrow” lane markings on the side of the road with traffic moving eastward. This will connect nicely to existing MTZ bike egress lanes and will provide a route from the station for cyclists traveling to locations east or southeast of downtown Martinez (existing Martinez Vista Ave Class II lane is one-way in downtown Martinez). % / #
- Create a Class III bikeway in both directions on Estudillo St between Marina Vista Ave & Escobar St with “sharrow” bike and vehicle lane markings. The addition of on-road bike infrastructure here could improve access from the south side of the station by providing a continuous bikeway connection from Class II lanes on Alhambra Ave and proposed Class III lane on Escobar St to main bike entry access point on Marina Ave (add cycling directional signage for appropriate turns to the station from Alhambra Ave) and allow a safe point to transition between westward bikeway (Marina Vista Ave) and proposed eastward bikeway (Escobar St). #
- On the corner of Mococo Rd & Marina Vista Ave, add cycling wayfinding signage directing riders to turn right onto Marina Vista Ave to reach downtown Martinez and the MTZ station (and include mileage estimate to station & downtown area). Similarly, add a bike route sign for riders to turn left onto Mococo Rd to access the cyclist/pedestrian bridge extending to Benicia. This could enhance the clarity of the cycling connection between the two cities and encourage a more geographically diverse range of cyclists to utilize existing bike infrastructure into downtown Martinez. #
- On Court St between Marina Vista Ave & Thompson St and on Pine St between Thompson St & Susana St, improve designation of roads as Class III bikeways by adding “sharrow” lane markings on these street segments. This suggestion is similar to findings in the Downtown Martinez Community-Based Transportation Plan, and may beneficially connect Class II bike infrastructure on Pine St & Jones St with downtown Martinez & Class II bikeway on Marina Vista Ave (serving as a primary MTZ bike access entry point). % / #
- On Alhambra Ave between Bertola St and Haven St, redesign one-directional Class III bikeway into a one-directional Class II bikeway to provide continuous separated bike access into downtown Martinez and the Amtrak station from the south. Roadways appear large enough here to place a full separated bike lane, which would provide a safer alternative to a Class III road with minimal “sharrow” lane markings (two bike collisions occurring on this segment of Alhambra Ave in 2017 & 2018 according to TIMS). #



Oakland Coliseum Station (OAC)

Oakland, California

Oakland Coliseum (OAC) is an auto-dependent station (estimated 50% of ridership) with an additional high percentage of public transit users (estimated 26%, but not accounting for game day ridership). The station is located immediately next to a sports stadium and event venue, which leads to higher ridership levels on select days. OAC serves as the BART connection for commuters coming from San Jose and Santa Clara but is not as popular of a connection as Richmond on the north end of the Capitol Corridor line due to other options to connect to BART from San Jose / the South Bay. OAK airport can also be accessed from OAC via connecting to the Coliseum BART station. Parking is free, which incentivizes some riders to utilize OAC over Oakland Jack London station. Primary access improvements at OAC include increasing the amount and connectivity of bike lanes in the station's service area, making connections between OAC and feeder transit services easier to navigate, and designating 73rd Ave as the main access road to the station. The City of Oakland has made plans recently to improve active travel solutions in East Oakland / Coliseum area, which are referenced in this report.

Characteristics

Daily Boardings: 115 riders **Daily Alightings:** 138 riders

Parking: 35 regular parking spaces & 2 accessible spaces in the Capitol Corridor Amtrak Lot owned by the City of Oakland and located adjacent to the station. Parking is free with no time restrictions and no permit required. The vast majority of surveyed riders say parking is always available when space is required in this lot, indicating current parking levels are adequate for demand (see 2019 Station Access Survey results).

Bikes: There are 4 bike rack spaces & 16 Bike Link eLockers available (but located only at the adjacent BART station).

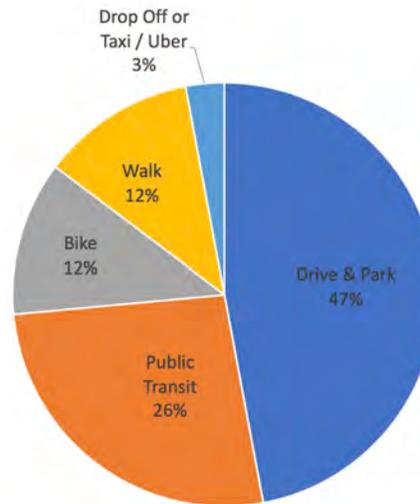
Public Transit: Serviced by BART (Oakland Airport Shuttle & standard Green, Orange, and Blue lines), AC Transit (RT 45, 46, 73, 98, & 805 to Oakland destinations including Foothill Sq., Eastmont Transit Center, Downtown Oakland, Oakland Airport, Oakland Zoo, & MacArthur Blvd).

Bike Connections: Bike access via continuous & safe pathways to the station is limited. 79th St serves as an immediate station access road for bikes, while 69th Ave and San Leandro St provide bike access from the northeast and southeast sides of the station respectively (though not continuously connected to OAC). Bike lanes also exist to the west of OAC on Edgewater Dr, but no existing connections of these lanes to the immediate station vicinity.

Trail Connection: Martin Luther King Jr Shoreline Path (cyclist & pedestrian shared pathway) connecting riders north and south on the west side of OAC to the immediate ½-mile station buffer zone & Arrowhead Marsh Trail (pedestrian pathway) connecting to MLK Jr Shoreline path from the southeast.

Existing Conditions

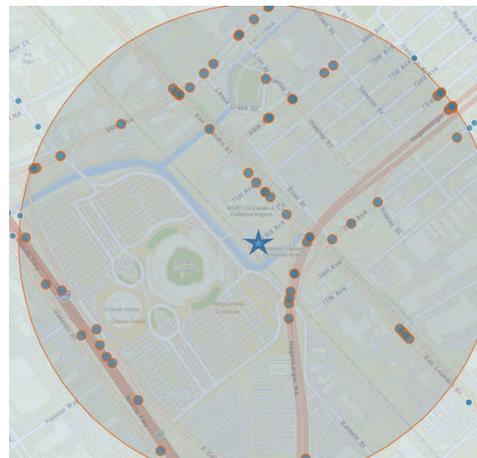
Access Mode Split – Both To & From Station



34 Rider Sample

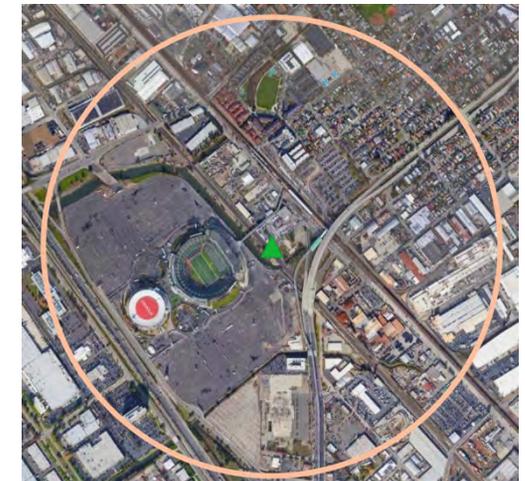
Data Collected from 2019 Capitol Corridor Station Access Survey

Pedestrian & Bike Collisions (2017–18, 1/2--mile OAC station buffer)



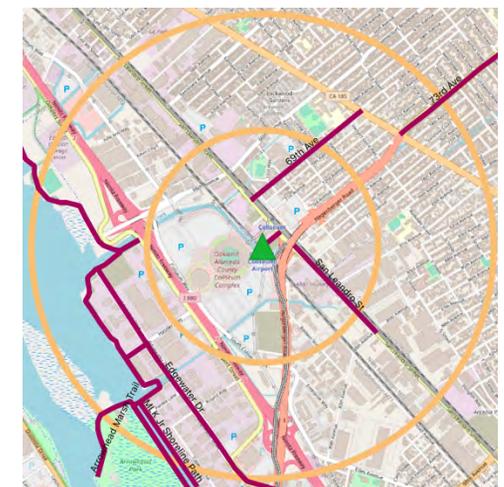
High quantity of pedestrian & bike collisions with vehicles in the ½ mile service area of OAC. The high number of collisions on San Leandro St near OAC & Coliseum Bart access points suggests the need for Class II lanes on both sides of the street. MLK Jr Regional Shoreline Trail Connector pathway on 66th Ave and improved/repainted “sharrow” lane markings on 69th Ave may also make active travel to OAC safer.

Land Use (1/2-mile OAC station buffer)



Mixed urban development separated by large freeways east of OAC and sports stadiums and parking facilities located to the west. Minimal amount of low-traffic volume streets and patterns of land use here not conducive to active travel.

Existing Bikeways (1/2 mile, 1-mile MTZ station buffer shown)



Bikeways exist to the east and west sides of OAC but are not connected to the immediate station access point. CCJPA supports the proposals in the City of Oakland's bike plan to improve bike connections to transportation services.

Key

§ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation | % = City Plan

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

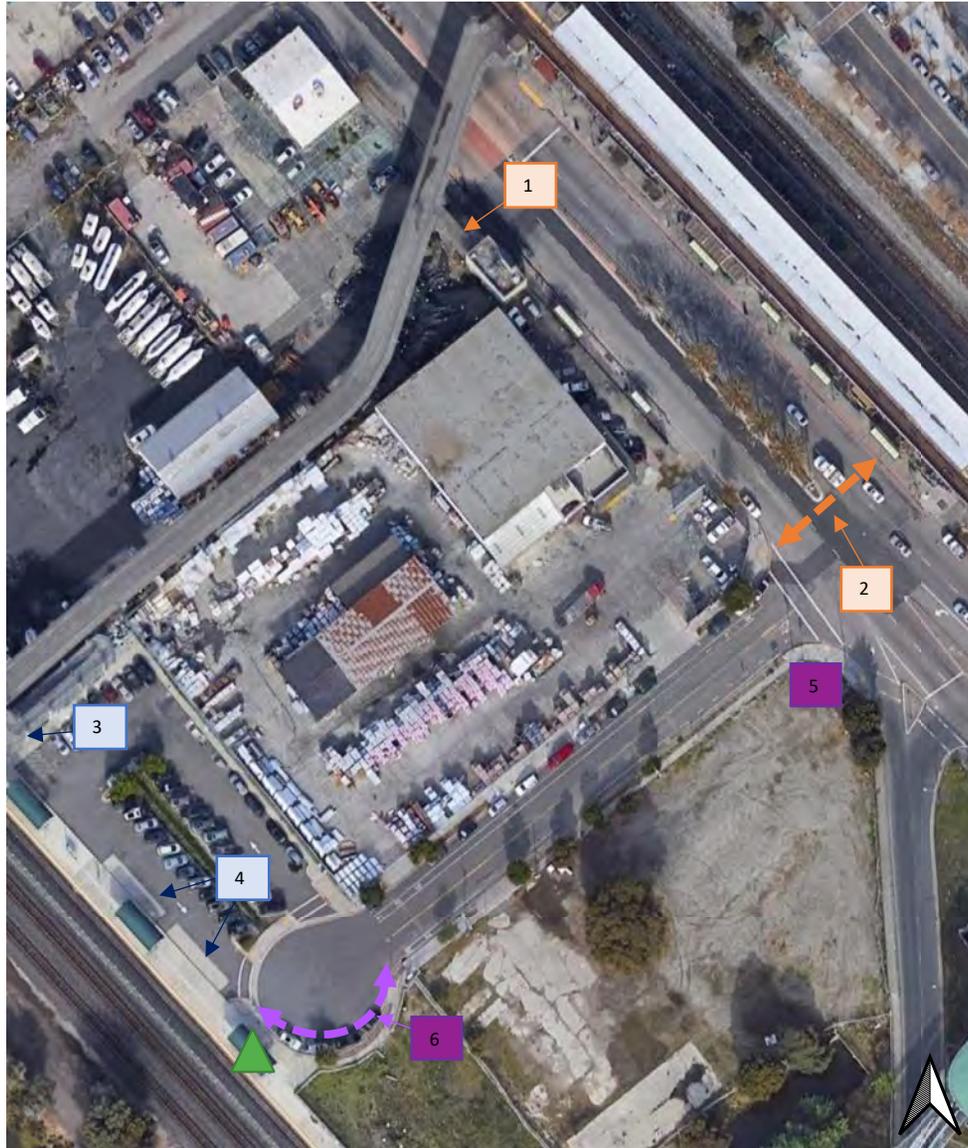
1. **On the side of the crosswalk opposite of the San Leandro St entrance to the Coliseum BART station, add a sign directing pedestrians to walk up the stairs leading to the overcrossing to reach the OAC station.** With most signage transitioning riders between BART and OAC, having directional cues at the sidewalk level will provide wayfinding alternatives that may be more useful for helping walkers use existing separated pedestrian infrastructure for reaching OAC. *
2. **If meets traffic safety codes, design a crosswalk on the corner of 73rd St and San Leandro St that extends across San Leandro St.** This crosswalk could connect the front of the OAC Amtrak station facility to AC Transit & BART stops in a way that makes transit connections easier for walkers and also could help pedestrians move between OAC and the bike & pedestrian shared-use path on San Leandro St. #

Public Transportation Access Improvements

3. **Add a directional cue for the Oakland Airport Connection Shuttle to the sign at the OAC station exit directing train riders to use the ramp up to the bridge to safely reach the entrances to BART & the Oakland Coliseum.** Not all riders may be aware that the shuttle to OAK airport is accessed from inside the BART station, which could make it important to specify how to reach the airport to prevent confusion for riders using this specific transit connection for the first time (especially since Capitol Corridor advertises the station as a connection point to OAK).*
4. **Instead of just labeling the two public transit bus stops parallel to the OAC station platform, specify the AC Transit routes that use each boarding zone space, add directional cues for walkers to reach additional AC Transit routes serviced on the corner of 73rd St & San Leandro St, and include maps next to each stop showing the time tables and stop locations of the route.** This enhanced information on transit connections may promote increased public transit use at the station and address riders' comments about there not being enough signs showing where to transfer at the station to other public transit services. §

Driving / Parking Facilities Access Improvements

5. **Add a sign at the corner of 73rd Ave and San Leandro St to designate the street as the vehicle entry point to the OAC Amtrak station.** This is the only station on the Capitol Corridor line without a sign for the station at the main access point for motorists, and a sign here may help decrease confusion related to the point of vehicle entry to OAC. **Note** Lack of signage here also a barrier to access for pedestrians, connecting public transit users, and cyclists, as there is no indicator that sidewalk & bike lane infrastructure on 73rd Ave leads to the OAC Amtrak station. #
6. **Redesign the traffic circle to the side of the main OAC parking lot into an official pick-up and drop-off zone with a green painted curbside and signage indicating that vehicles can park and wait up to 20 minutes for train riders on the curbside.** Making this area of OAC into a space for pick-ups & drop-offs may prevent cars from trying to pick-up riders in the spaces parallel to the train platform designated for busses and will enable riders to transition to/from the platform and their rides without moving off the sidewalk and being exposed to moving cars in the parking lot. #



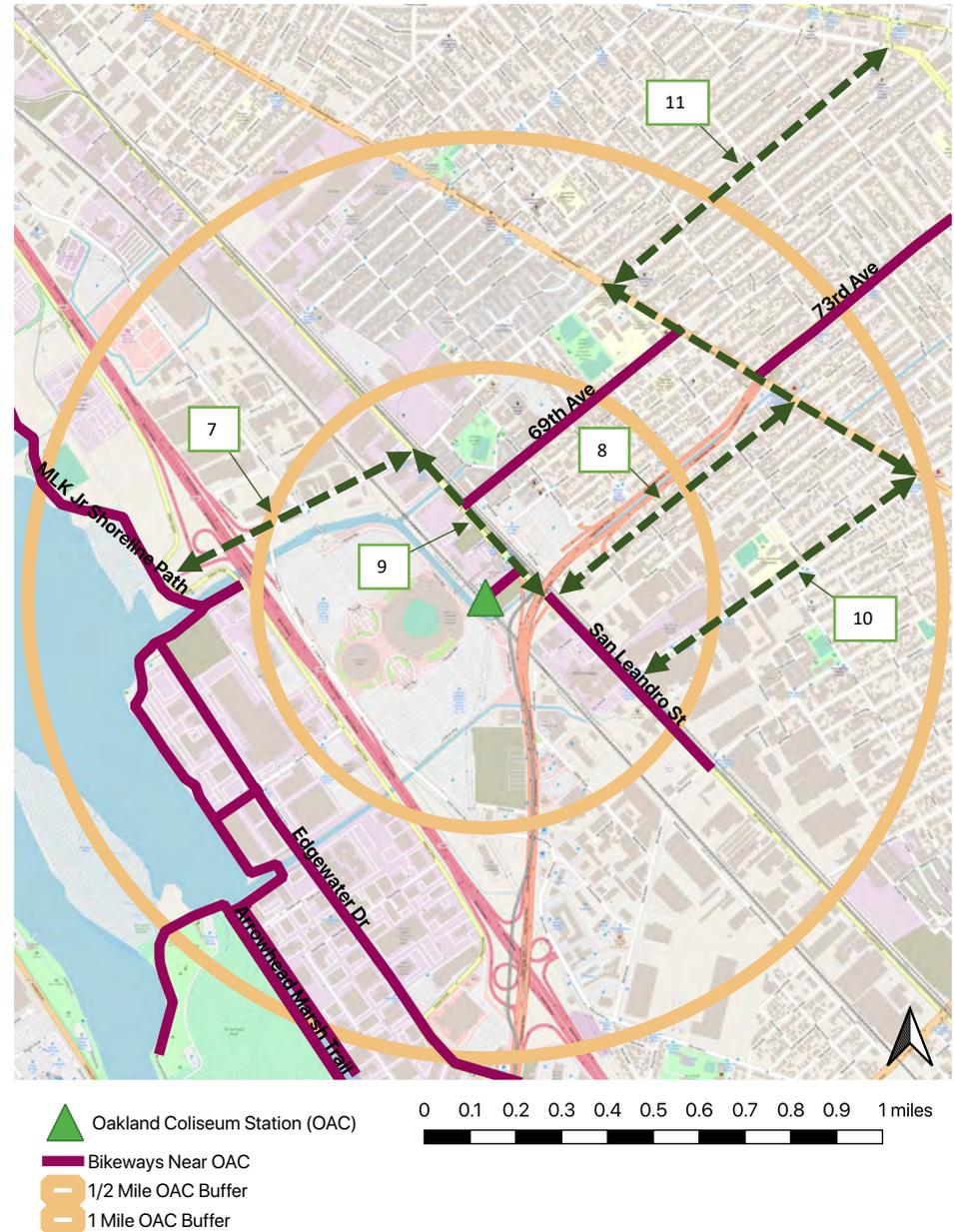
Oakland Coliseum Station (OAC)



Access Improvements Outside Immediate Station Vicinity

Bike Safety and Access Improvements

7. CCJPA supports Alameda County & the City of Oakland’s proposal to construct a Class I Coliseum Bart to Bay Trail Connector pathway for cyclists and pedestrians that would extend from Oakport St to San Leandro St and connect walkers & cyclists safely to BART & OAC Amtrak station. Riders who walk & bike to OAC mentioned in comments that they would like a connection point between the trails existing for most of their route to OAC along MLK JR Regional Shoreline and the San Leandro St access road. This project would address this by providing safe pedestrian and cyclist access over I-80 via Coliseum Way and 66th Ave active travel pathways. % / *
8. Similar to proposals in the City of Oakland’s 2019 Oakland Bike Plan, design Class III bikeway with “sharrow” bike and vehicle roadway markings in both directions on low trafficked 75th Ave. Combined with the proposal to add bike lanes on International Blvd, this will connect existing bike infrastructure on 73rd Ave to the station and provide safe access from northeast of the station via low-stress bikeways (as desired by OAC ridership). It will also connect OAC / BART to Eastmont Transit Center for cyclists and thus enable micro-mobility travel solutions between public transit connection points in East Oakland. % / *
9. On San Leandro St between 75th Ave and 66th Ave, add Class II side bike lanes to connect traffic moving in both directions (and all proposed and existing cycling lanes) to the BART & OAC stations. Having separated bike channels near OAC may help foster safer multimodal station access and is viewed by train riders using bikes to reach OAC as a vital safety step to enhance motorist awareness of cyclists in the BART / OAC Amtrak station area. % / *
10. CCJPA supports plans in the City of Oakland’s East Oakland Neighborhood Bike Route Project to construct a low-stress bike lane on 81st Ave between San Leandro St and Bancroft Ave. This would provide continuous bike access to OAC from the northeast side of the station via safe and newly paved bikeways and help meet CCJPA riders’ desires for smoother bikeways and additional bike infrastructure to increase motorist awareness of cyclists between East Oakland neighborhoods and the OAC Amtrak & BART stations. % / *
11. On Havenscourt Blvd between International Blvd and Bancroft Ave, construct Class II bike lanes for traffic moving in both directions. This portion of the City of Oakland’s bike plan to eventually connect San Leandro St to MacArthur Blvd may be best to prioritize, as this specific segment can connect to the already existing Class III bikeway on 69th St and provide a continuous route for bike access between OAC Amtrak & BART and the Havenscourt neighborhood. % / *



Fremont - Centerville Station (FMT)

Fremont, California

Fremont - Centerville is characterized as a suburban & auto-dependent station, with an estimated 78% of riders driving or being dropped-off at FMT. Better bike entry/egress to the station may be achieved via improving Fremont Blvd bikeway infrastructure/cycling safety, while basic station improvements including adding a stop sign for motorist egress, enhancing the safety of pedestrian crossings without traffic control, and adding signage for FMT station parking could advance safety and convenience of station access across multiple modes of travel. Concerns of Capitol Corridor riders related to multimodal access include the lack of on-street markings for streets labeled as bikeways near FMT by the City of Fremont and the time length of transit connections to/from FMT (making this option inconvenient). These are areas to focus station access improvement efforts on at FMT.

Characteristics

Daily Boardings: 69 riders **Daily Alightings:** 67 riders

Parking: 93 regular spaces, 4 accessible spaces, and 6 motorcycle spaces in Fremont Capitol Corridor Amtrak Lot (off of Peralta St) & 70 regular spaces and 3 accessible spaces in Centerville Capitol Corridor Amtrak Lot. Parking owned by City of Fremont and charged at \$3.00 for daily weekday parking. With the majority of surveyed riders always finding their needed parking space, total spaces appear adequate for current ridership levels (see 2019 Capitol Corridor Station Access Survey results).

Bikes: There are 6 bike rack spaces and 8 Bike Link eLockers / secure bike parking spaces available at FMT. Lockers are not owned by Capitol Corridor, so no data available to track overall daily locker usage. HOPR bike-share services have been deployed throughout the city of Fremont, with bike-share parking hubs located on both sides of the station exit (on Peralta Blvd & Fremont Blvd corner and in front of station entrance off of Walton Ave).

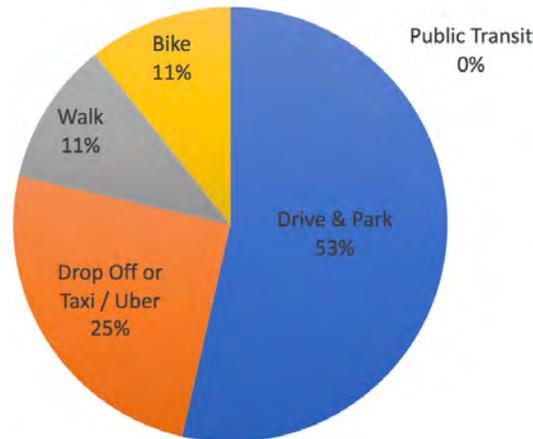
Public Transit: Serviced by AC Transit RT 99 (Hayward BART – Fremont BART), 210 (Union Landing Shopping Center – Ohlone College), 216 (Union City BART – Ohlone College), & U (Fremont BART – Stanford University) and by Altamont Corridor Express (east to Stockton).

Bike Connections: Bike access from the north side of FMT via Thornton Ave & Post St (Class II to Class III bikeways), from the east and west side of the station via Fremont Blvd (Class III shared roadways in immediate FMT vicinity with transitions to Class II bike lanes in both directions further from the station), & from the south side via Thornton Ave & Central Ave (Class II bikeways).

Trail Connections: Alameda Creek Trail (cyclist and pedestrian shared-use pathway) moving cyclists to/from locations north of the station.

Existing Conditions

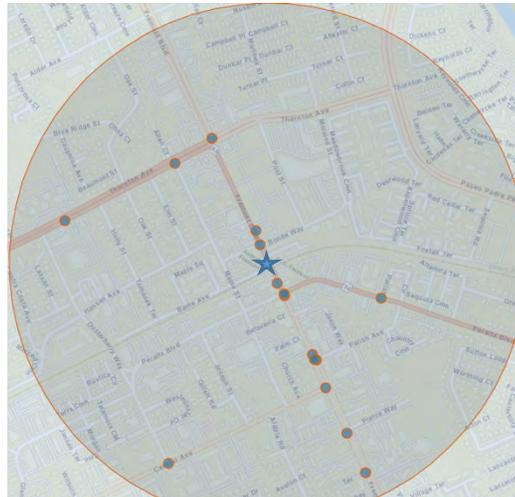
Access Mode Split – Both To & From Station



28 Rider Sample

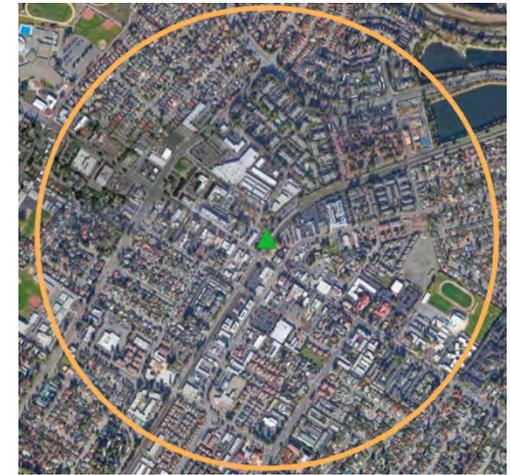
Data Collected from 2019 Capitol Corridor Station Access Survey

Pedestrian & Bike Collisions (2017–18, 1/2-mile FMT station buffer)



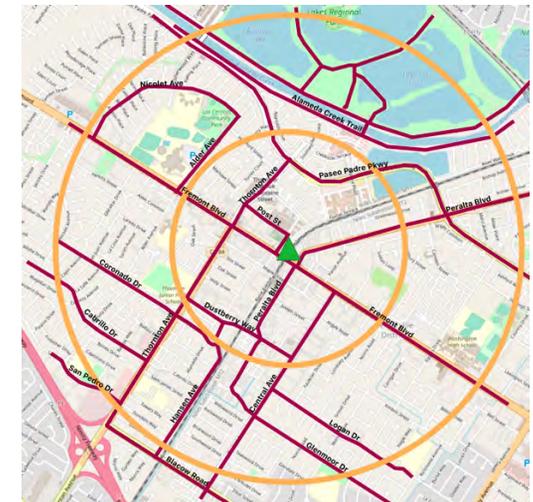
Fremont St (primary FMT access road) contained 12 of the 16 cyclist and pedestrian collisions with vehicles occurring within a 1/2 -mile service zone of the station in 2017 & 2018. Improving the safety of intersection crossings for pedestrians and cyclists & designing additional street segments with buffered or separated bike lanes on Fremont St may have the most positive impact on improving active travel safety in the FMT station area.

Land Use (1/2-mile FMT station buffer)



Mixed suburban development in immediate 1/2-mile station access buffer zone, with several residential streets, local businesses, and community parks/centers.

Existing Bikeways (1/2 mile, 1-mile FMT station buffer shown)



Bike networks surround FMT, but with varying degrees of traffic protection (riders do not perceive Fremont Blvd & Peralta Blvd bikeways as safe). FMT connections via Fremont Blvd, Peralta Blvd, Thornton Ave, & Post St.

Key

\$ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation
 | % = City Plan

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. **At the main station egress point for motorists on the corner of Fremont Blvd & Walton Ave, add a stop sign for vehicles so that they are forced to come to a stop at the sidewalk cutting across this station access point/street intersection (previous stop sign has been removed by someone and only the pole of the sign remains).** This is a replacement needed to reinforce the safety of existing multimodal station design, and a critical step towards continuing to safely separate entry and egress into FMT by travel mode. #
2. **At the intersection of Bonde Way and Fremont Blvd, add a pedestrian push button that triggers a newly implemented rapid flashing pedestrian crossing sign for the sidewalk extending across Fremont Blvd.** On the Fremont Blvd access road to the west of FMT, this is the main location for pedestrians to cross the street to move to/from the station. With night train arrivals and no vehicle traffic control (stop sign or stop light), lighting up the sign for Fremont Blvd motorists may help reduce risks for accidents related to pedestrian travel to/from FMT. #

Bike Safety and Access Improvements

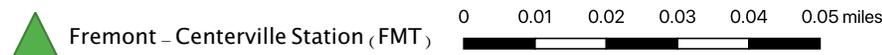
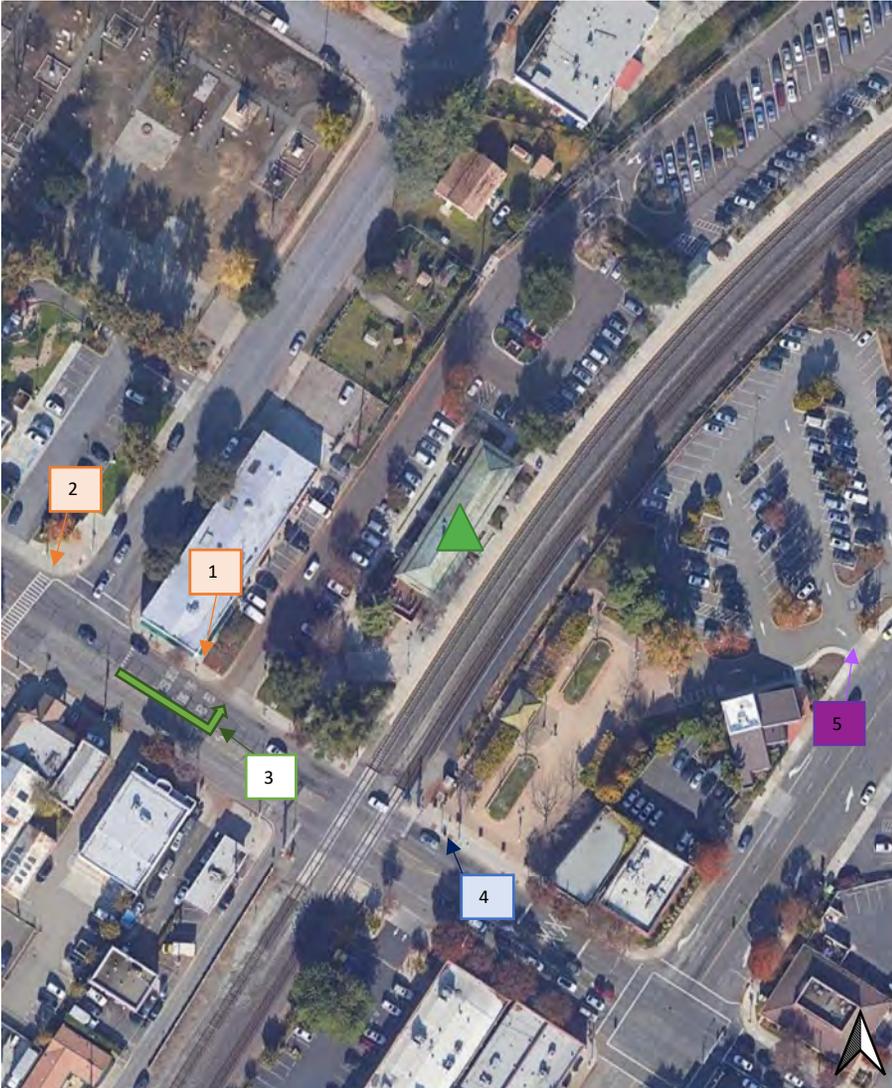
3. **Improve FMT entry for cyclists by redesigning Walton Ave entry turn lane for eastward-moving traffic on Fremont Blvd into a bike & vehicle shared use turn lane with green outlined “sharrow” lane markings.** This may help improve ease & safety of station access for cyclists by highlighting where to turn to enter FMT and increasing motorist awareness to the possibility of cyclists moving from the curbside of Fremont Blvd and across traffic to reach the turn lane. *

Public Transportation Access Improvements

4. **At the FMT station AC Transit bus stop on the side of Fremont Blvd, add a new map depicting the on-street routes and stop locations serviced by the various AC Transit routes that stop at FMT (99, 210, 216, & U).** This may improve the clarity of using public transit to connect to final destinations after arriving at FMT and could help ensure that riders know which bus to take upon arrival to get as close as possible to their end destination without researching their proper AC Transit connection before traveling. #

Driving / Parking Facilities Access Improvements

5. **Design signs on Peralta Blvd for motorists moving in both directions at the entrance point for the Fremont Capitol Corridor lot directing cars to turn into the lot for FMT Amtrak station customer parking.** Only the main Centerville Capitol Corridor Amtrak lot on the opposite side of the tracks has an entry point marked with wayfinding signage, and adding street signs for the additional lot may improve public perceptions related to the ease of finding their needed type of parking space at FMT. #



Access Improvements Outside Immediate Station Vicinity

Bike Safety and Access Improvements

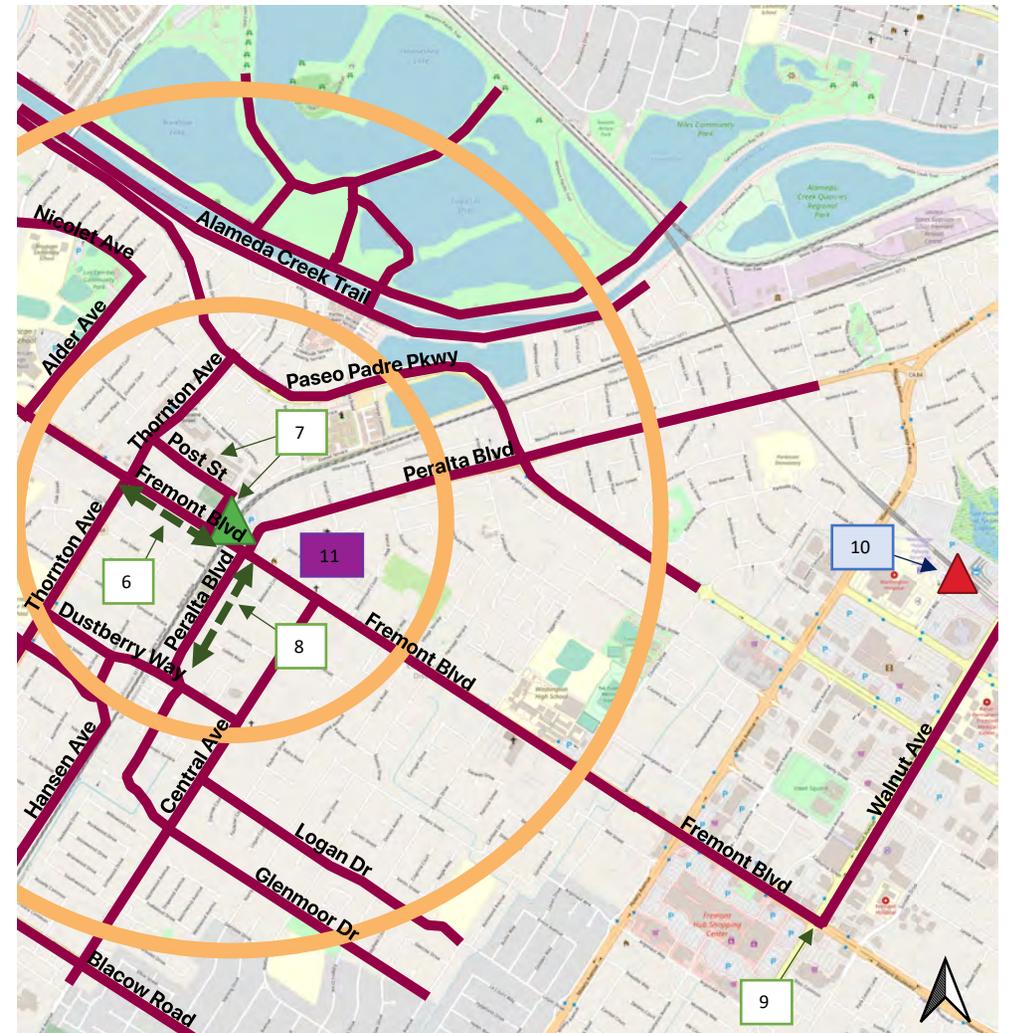
6. Add “sharrow” bike & vehicle use road markings to the outer traffic lanes on Fremont Blvd where road narrows and Class II lanes end on the street segment between Thornton Ave & Peralta Blvd. This street portion overlaps with the FMT station entrance and is labeled as a Class III bike route, but lacks any on-street markings to meet designation as a motorist & cyclist shared road. “Sharrow” markings on this road may be beneficial by alerting vehicles to the presence of cyclists moving to/from FMT and connecting Class II protected bike lanes on both sides of Fremont Blvd. *
7. Implement “sharrow” bike & vehicle use road markings for traffic flowing in both directions on Bonde Way between Fremont Blvd and Post St and on Post St between Bonde Way and Thornton Ave. This road is classified as a low-traffic shared bike & vehicle pathway connector between FMT and Thornton Ave but lacks on-street markings to support this designation as a Class III bike route. Adding “sharrow” lane markings may encourage riders to use these less busy side streets to reach FMT and encourage the separation of bike travel to the station from primary motorist travel avenues on Fremont Blvd. *
8. On the segment of Peralta Blvd between Dustberry St and Fremont Blvd, extend Class III side bike lanes or add “sharrow” markers on the side of the road to alert motorists of bicycles using this street as a connection point to FMT. Despite being labeled by the City of Fremont as a bikeway, this segment currently lacks any on-road bike infrastructure. “Sharrow” lanes or Class II lanes may be beneficial to add to connect already existing buffered side bike lanes on Peralta Blvd to FMT, in addition to connecting the street to bike infrastructure further north and east of this Peralta Blvd road segment. *
9. Enhance wayfinding and connectivity for cyclists moving between the FMT Amtrak & Fremont BART stations. This may include:
 - a. Adding signage on the corners of Walnut Ave & Fremont Blvd directing cyclists on proper movements between the two stations / major station access roads for cyclists. #
 - b. Design a protected bike intersection on the corner of Walnut Ave and Fremont Blvd to enable riders in the Fremont Blvd side bike lane to safely cross into Class I separated bike lanes on Walnut Ave via dashed green on-street bike crossings. This would enable smooth transitions from bikeway infrastructure moving away from FMT and bikeway infrastructure moving towards Fremont BART. #

Public Transportation Access Improvements

10. Work with AC Transit to add a shuttle moving between Fremont BART & the FMT station that goes directly between stations with no stops once during morning & evening commute hours. This could address riders’ concerns related to the length of time it takes to use transit to reach FMT and may encourage more use of AC Transit service to reach FMT. * **Note:** Suggestion aimed at AC Transit, not the City of Fremont.

Driving / Parking Facilities Access Improvements

11. Improve station wayfinding signage to help new riders approaching FMT from a multitude of directions reach the main station entrance. This could include adding a sign for cars moving eastward on Fremont Blvd to turn left on Walton Ave to reach station parking, adding a sign at the Center St & Fremont Blvd intersection directing motorists to turn left to reach the station, and adding a sign on Thornton Ave & Fremont Blvd directing motorists to turn eastward onto Fremont Blvd to reach FMT. #



Santa Clara - Great America Station (GAC)

Santa Clara, California

Santa Clara - Great America Station (GAC) is a combined suburban & special event venue station where travel to/from the station is split between use of bikes (estimated 38% of ridership) and use of cars (estimated 47% of ridership). Due to the station's position next to the Santa Clara Convention Center, Levi's Stadium, & Great America, GAC is characterized by high Capitol Corridor ridership as a destination/exit station and low ridership as an origin/entry station. Different access mode splits also exist by ridership use of GAC as a home station verse destination station. While good networks of bike and pedestrian shared-use trails and buffered bike lanes encourage high bike use at the station, existing secure bike parking demand currently exceeds eLocker capacity. Additional ways to improve multimodal access include improving the transition between Amtrak and VTA services and providing a better cyclist connection between Tasman Dr and GAC.

Characteristics

Daily Boardings: 268 riders **Daily Alightings:** 268 riders

Parking: 175 regular spaces and 8 accessible spaces in Capitol Corridor Amtrak & Ace Lot owned by the City of Santa Clara. Parking is free.

Bikes: 4 bike rack spaces, 36 secure bike lockers owned by VTA, and 12 Bike Link eLockers owned by Capitol Corridor are present at the GAC station. The average daily occupancy of the 12 eLockers for 2019 (total lockers rented / total lockers available at GAC) was 107%. Daily occupancy exceeded 100% on 190 out of 364 days. This daily occupancy level for GAC eLockers is off the charts in comparison to eLockers at other Capitol Corridor stations and is indicative of a need to add additional eLockers spaces in the near-term to adequately meet the demand for secure bike parking at the station (see figure on next page). Zagster bike share services have been deployed in the City of Santa Clara, but there has not been a station location introduced at or near GAC (introducing station here may alleviate existing pressures on eLockers).

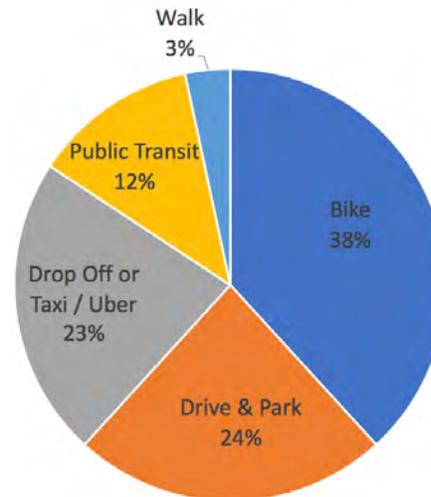
Public Transit: Served by VTA (RT 55, 57, 60, 121, 140, & 330), VTA Shuttles (RT 822, 823, 824, 825, 826, 827, 828, & 831), ACE (North to Stockton). & ACE Shuttles (Red, Orange, Yellow, Green, Purple, Violet, Grey, & Brown).

Bike Connections: Primary bike access via Stars and Stripes Blvd (Class I & Class II lanes) from west and south sides of GAC & Lafayette St (Class II lanes) from north and south sides of GAC. Tasman Dr has no immediate link to GAC roadways and is thus hard to use to connect to GAC via bike (walk with bike down the staircase leading to GAC).

Trail Connections: San Tomas Aquino Creek Trail (pedestrian & bike path) connecting points north and south to GAC on the west side of the station, Guadalupe River Trail (pedestrian & bike path) connecting points north and south to GAC on the east side of the station, & SF Bay Trail (pedestrian & bike path) northwest of GAC and connected to the station via bikeways.

Existing Conditions

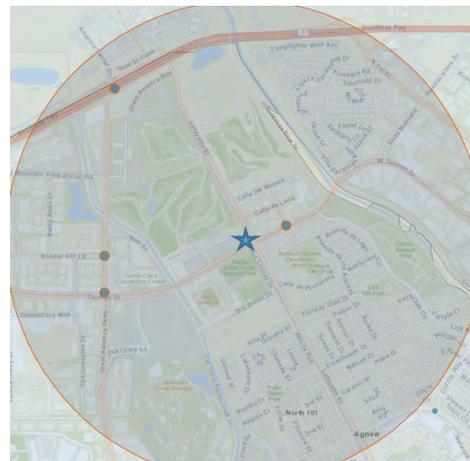
Access Mode Split – Both To & From Station



102 Rider Sample

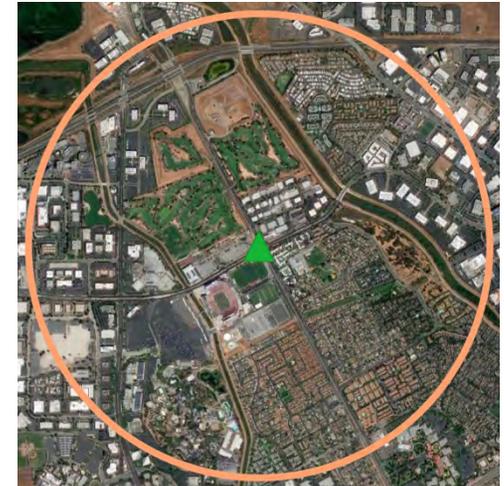
Data Collected from 2019 Capitol Corridor Station Access Survey

Pedestrian & Bike Collisions (2017–18, 1-mile GAC station buffer)



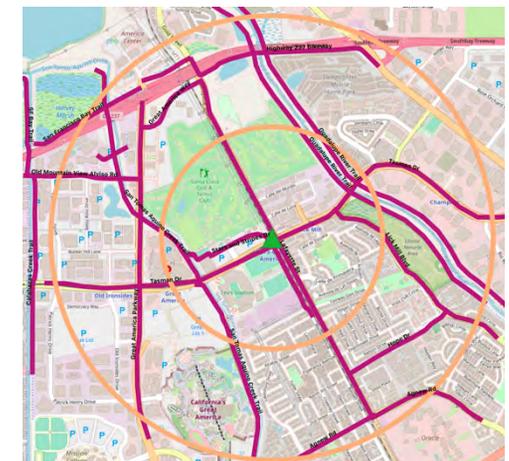
Limited pedestrian or bike collisions with vehicles occurring within a 1-mile buffer zone of GAC, and only occurring on heavily trafficked roadways with no immediate GAC connection (Tasman Dr). Safe active travel opportunities for accessing GAC is a result of the high investment in cyclist and pedestrian travel infrastructure surrounding the GAC station.

Land Use (1/2-mile GMT station buffer)



Mixed development types in GAC buffer zone with sports stadium, amusement park, & parking facilities to the south and west, golf course and conserved areas to the north, and residential communities to the east and south.

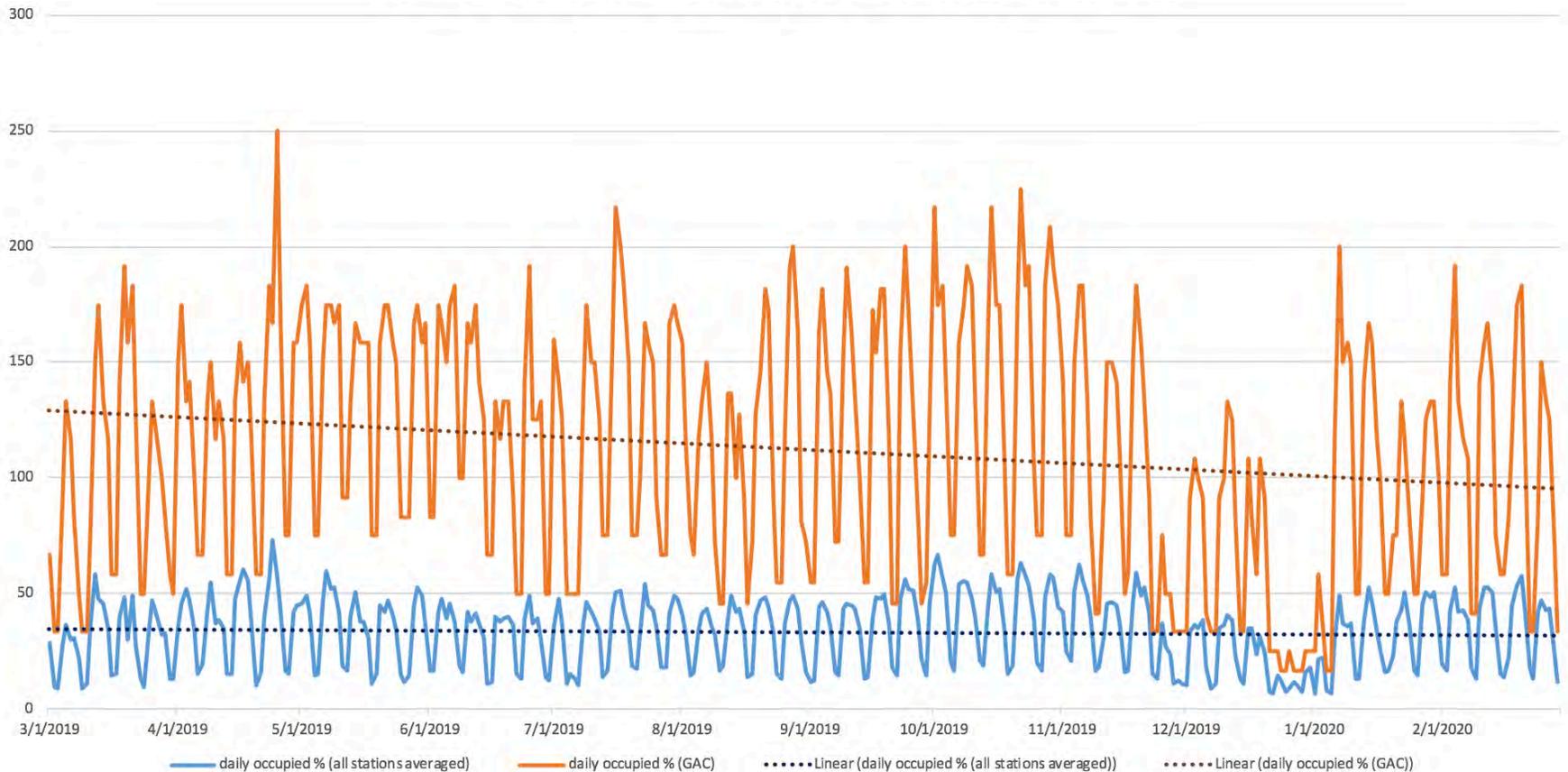
Existing Bikeways (1/2 mile, 1-mile GAC station buffer shown)



Extensive bike lane network surrounding GAC, with main access roads to the station via Lafayette St (Class II lanes) and Stars and Stripes Blvd (Class I & Class II lanes). Tasman Dr bike lane has no immediate connection point to GAC as lanes pass over Lafayette St access point.

Comparing Average Daily % Occupancy of eLockers (Total Daily Locker Rentals / Total Daily Lockers Available)

Great America Station (GAC) vs All Capitol Corridor Stations Averaged



All Stations – average for Berkeley, Auburn, Emeryville, Jack London, Hayward, Great America, Martinez, Roseville, Sacramento, Santa Clara, Suisun Fairfield, & Davis

A significant difference exists between the Daily Occupied % of eLockers at GAC (total lockers rented daily / total lockers available) and the Daily Occupied % of eLockers at all other Capitol Corridor stations averaged suggests that inadequate secure bike parking capacity is the primary existing barrier to multimodal station access at GAC. Lockers at GAC are also rented for significantly longer periods than at all other stations. As suggested below, adding additional lockers and/or limiting rental time to 24 hours or less at GAC could help decrease pressures on eLocker spaces.

Key

§ = Ridership Observation | # = Researcher Observation | * = Rider-Inspired Researcher Observation | % = City Plan

Immediate Station Vicinity Access Improvements

Pedestrian Safety and Access Improvements

1. Add wayfinding signage for pedestrians walking to Levi’s Stadium and Great America amusement park, in addition to the Guadalupe River Trail and San Tomas Aquino Creek Trail, with pathway directional cues and distance estimates for pedestrians exiting GAC station on Stars and Stripes Blvd. This will help guide a significant portion of ridership traveling to these two main attractions and help pedestrians avoid heavy traffic volumes on roadways by using traffic-free paths. #
2. At the Lafayette St pedestrian access ramp to the station, add either a crossing gate or sign with flashing lights and an alarm to warn pedestrians of when a train is arriving or moving through GAC. This may help reduce the risk of pedestrian accidents occurring while riders are crossing over the tracks on their ways to/from the station. #

Bike Safety and Access Improvements

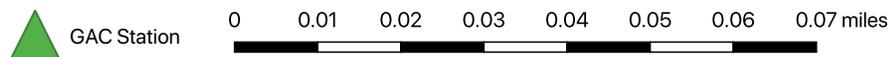
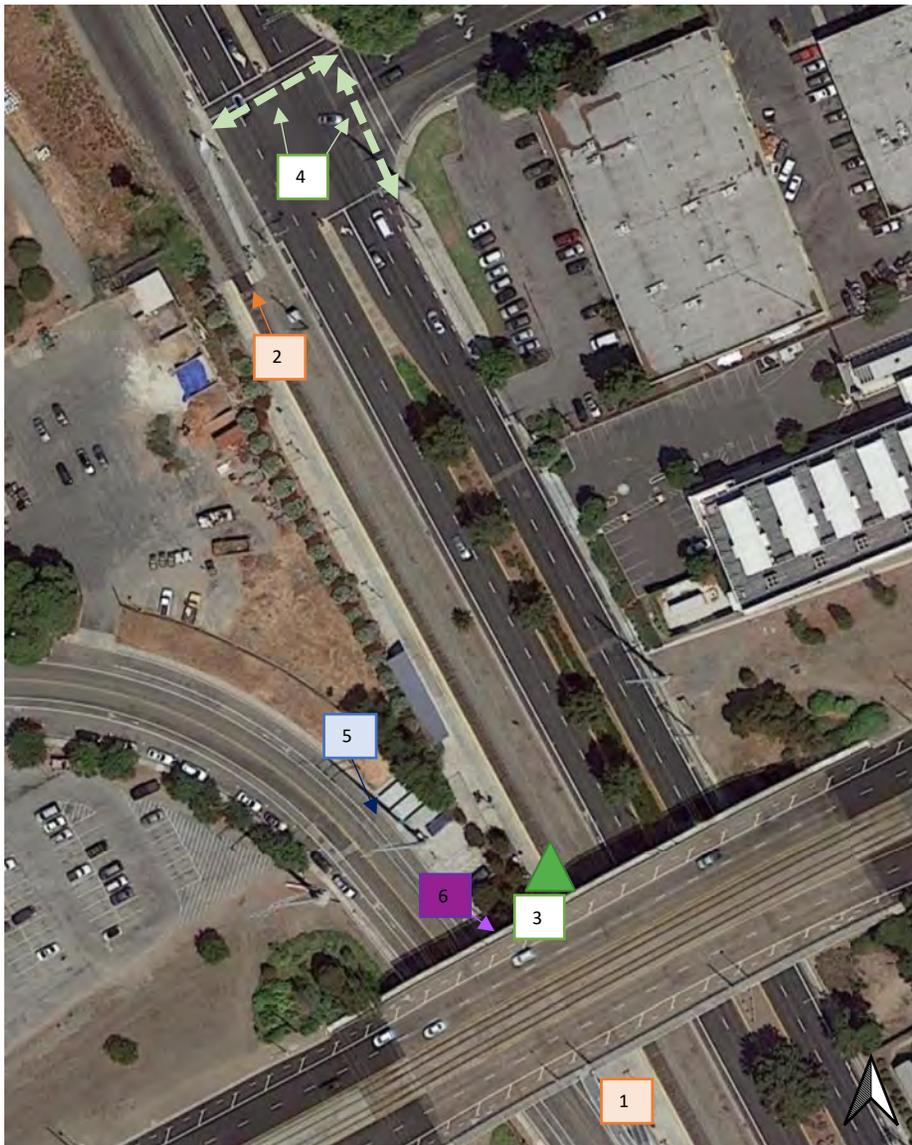
3. Add additional Bike Link eLockers and/or increase the hourly charge when bikes are left in the lockers by riders for a period exceeding 24 hours to help meet the demand for secure bike parking that is currently exceeding the capacity of the 12 Capitol Corridor eLockers at GAC. GAC is the only station on the Capitol Corridor line where locker spaces far outstrip demand. It is also the station with the largest percentage of its total rental periods exceeding 24 hours. *
4. At the GAC active travel station entrance ramp on the Lafayette St & Calle De Luna intersection, add a protected bike intersection, or more simply add a dashed green bike crossing running across Lafayette St and parallel to the existing pedestrian crosswalk, to enable cyclists to turn across multiple lanes of traffic while moving between the station and the Class II bike lanes on the opposite side of Lafayette St. It is potentially a dangerous area for cyclists to merge across multiple lanes of traffic to turn in and out of the station, and it may be made safer with a designated crossing point connected directly to Class II bike lane infrastructure for cyclists. #

Public Transportation Access Improvements

5. Redesign signage and curbside cues for connecting ACE & VTA shuttle surfaces located on the side of Stars & Stripes Blvd. This could include designing official bus shelters with route names, stops serviced, and timetables for connecting VTA & ACE shuttles, in addition to painting the curbside to designate the positions where shuttles officially stop. Clarifying stop locations may help decrease confusion related to existing shuttle stop signage, which riders view as providing poor directional cues. *

Driving / Parking Facilities Access Improvements

6. Designate an official pick-up and drop-off zone at GAC, with a green, painted curbside and signs permitting motorists to wait up to 20 minutes for station pick-ups, underneath the Tasman Dr overpass where the Stars & Stripes Blvd roadway widens and enables vehicles to be able to pull over without obstructing the street’s Class II bike lanes. This may have multiple benefits, including creating a clear connection point between the train and pick-ups location, in addition to separating pick-ups from bike infrastructure/bike station entry & egress by ensuring that lanes are not obstructed. #



Access Improvements Outside Immediate Station Vicinity

Bike Safety and Access Improvements

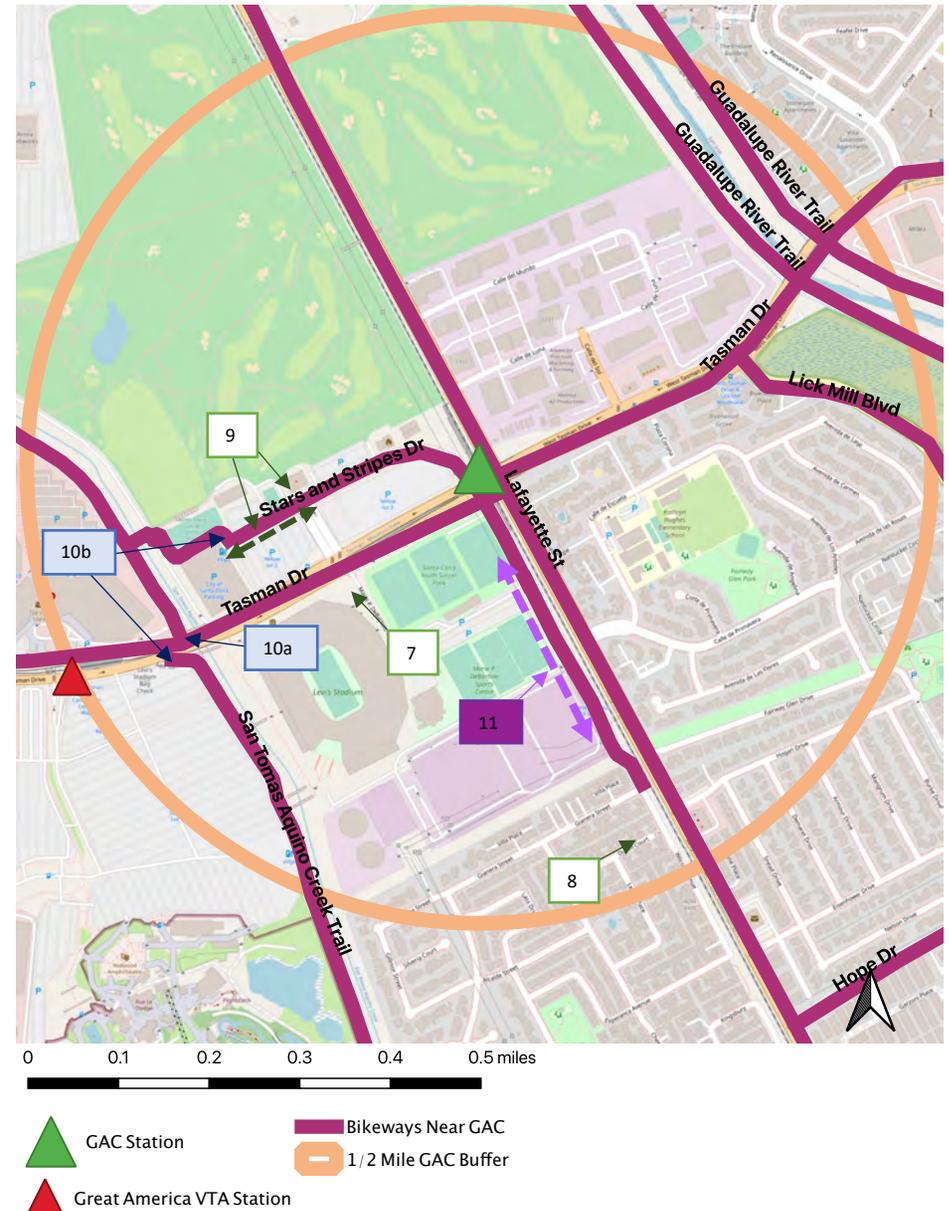
7. **On Tasman Drive in the direction of cyclist traffic flowing west, add wayfinding signage for cyclists to turn right onto Centennial Blvd connection road to reach Stars and Stripes Blvd and the GAC Amtrak station and add “sharrow” lane markings in the Tasman Dr turn lane emerging to the right side of the Class II bikeway to redesign the lane into a bike & vehicle shared-use turn lane.** This will help provide a connection point for cyclist infrastructure on Tasman Dr that runs over GAC station (with no direct connection point to a GAC access road) and thus improve bike access to the station from the east side. #
8. **At the beginning of the bike and pedestrian GAC connection pathway on the corner of Wilcox Ave & Gianera St, design new wayfinding signage to direct cyclists to use the pathway to reach GAC station and Stars and Stripes Blvd.** This may help ensure that cyclists new to traveling to GAC can identify the bikeway and enhance the clarity of accessing GAC by bike from neighborhoods located south of the station on the west side of the train tracks. #
9. **Enhance connectivity between the GAC bike entry/egress location and the trailhead entrance for the San Tomas Aquino Creek Trail by adding a sign directing riders exiting GAC to continue straight at the Stars & Stripes Blvd & Centennial Blvd intersection to reach the trail.** Also, paint sides of the road with “sharrow” lane markings between the end of Class II lanes at the intersection and the head of the trail to better link the bike trail to existing bikeways. This trail provides a safe and convenient Class I bikeway that connects points north and south on the western side of GAC to the station, which may make it important to indicate how to move between the trail and the station to ensure safe and convenient bike access. #

Public Transportation Access Improvements

10. **Improve connection and wayfinding signage for movement between the GAC Amtrak Station and the VTA Great America Light Rail Station** to enable cyclists to safely navigate heavy traffic streets while moving between the two stations and provide more seamless transit connections. This connection is perceived by Capitol Corridor riders as dangerous for cyclists and could be improved by:
 - a. **Adding protected cyclist intersections at Tasman Dr & Centennial Blvd** (running adjacent & parallel to sidewalk crossings) to enable traffic moving from the VTA station and towards the GAC Amtrak station to turn onto Centennial Blvd safely and without having to merge across three lanes of traffic. *
 - b. **At the trailheads for the San Tomas Aquino Creek Trail that empty near both GAC (Stars & Stripes Blvd) and the VTA Great America light rail station (Tasman Dr), add signage directing cyclists to use the protected bikeway to move between the two stations** (with wayfinding signage showing where to turn to move between the two stations at all points where pathways diverge on the trail). *

Driving / Parking Facilities Access Improvements

11. **Construct a sidewalk where shrubbery currently exists running parallel to the Amtrak & ACE parking lot to the east in order to create a continuous pathway to move riders exiting their cars to the GAC station platform.** Walking in the middle of the street through the parking lot, which is already occupied by motorists and bike lanes cutting through the center, could create a risk of collision for riders exiting their vehicles. Adding a pathway for motorists transitioning from the lot to the main Stars & Stripes Blvd pedestrian pathway connecting to the train platform may reduce this risk by providing an alternative to walking down the center of the parking lot. #



APPENDIX – 2019 CAPITOL CORRIDOR STATION ACCESS SURVEY RESULTS

SURVEY OBJECTIVES

The objectives of the 2019 Capitol Corridor Station Accessibility Survey are to:

- Increase ridership by identifying actions to improve intermodal accessibility at all Capitol Corridor train stations.
- Identify current shortcomings in walking, biking/scootering, and using feeder public transit systems to reach our stations to suggest improvements for stations and cities on the Capitol Corridor line that can generate positive environmental and health outcomes.
- Identify ways to enhance station safety and universal accessibility at all Capitol Corridor stations and present these findings to the cities that own our stations.

PARTICIPANTS

The total number of individuals (all 18 years old or above) who attempted the survey was **724**.

- Of those, **682** submitted complete responses (answered all questions that were asked)
- Completion rate was **94%**, average time to complete survey of participants was **5 mins**.
- The survey was distributed through anonymous channels and responses to all questions except those asking for a respondent's age group, home and destination stations, and mode of travel were optional to complete.

METHODOLOGY

The survey was administered between October 14th and October 25th, 2019 by using the Survey Monkey digital platform. The facilitators (SEI Climate Corps Fellows Aaron Rubin & Michael Alves) collected data using the following methods.

- ***On board train surveying:*** Asking riders on trains to complete our surveys on their mobile devices by scanning a QR code sending them to our digital survey platform. *Estimated 440 total responses.*
- ***Email list:*** An email was sent out to our subscriber list asking them to take the time to complete our survey. *Estimated 160 total responses.*
- ***Signage and Digital Promotion:*** Station Access Survey signs with a QR code were placed on the billboards of our stations to encourage riders to take the survey while waiting for the train. Similar advertisements with direct links to our digital

survey platform were posted on Capitol Corridor social media platforms (Facebook, Twitter, LinkedIn). *Estimated 125 total responses.*

Survey participants were asked to identify their home Capitol Corridor station (the one easiest to access from where they spent the night), their destination Capitol Corridor station, and to provide basic survey demographic information. Additional qualitative, quantitative, and geospatial data was collected from participants to help answer the questions asked in this study.

- **Quantitative:** Survey users were asked to provide ratings for the quality of specific safety, infrastructure, and time related factors for the mode of travel that they use to reach their home stations. Statistical analyses were run to determine how Capitol Corridor stations differed across these indicators and to identify potential places where accessibility can be improved at each station.
- **Qualitative:** Survey participants were asked to provide feedback on what they liked or disliked about using the mode of travel they took to their home station. Sentiment analysis was used to determine the rationales behind why riders liked or disliked their trips to the station.
- **Geospatial:** Survey participants were asked to optionally provide the street intersection and zip codes corresponding with the beginning and ending of their train trips. This data was uploaded into ArcMap and used to determine the size of Capitol Corridor station accessibility buffer zones for various modes of travel. This data was also used to generate an understanding for the direction and routes riders are likely to take as they approach each station.

Appendix A contains the complete list of questions that survey participants were asked. The questions participants completed were dependent on their mode of travel and other criteria related to the trip to their home station. This is indicated in the appendix.

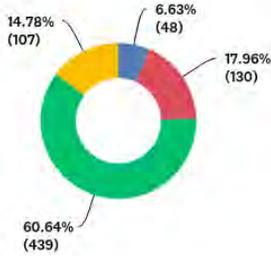
GENERAL RESULTS

The results of the survey are presented on the following pages. The general Station User Survey results from all 724 responses are summarized prior to assessing each station's unique multimodal access attributes as both a home and destination station for riders. The results conclude with a comparison showing how accessibility by different modes of travel varied across stations.

General Station User Quantitative Results

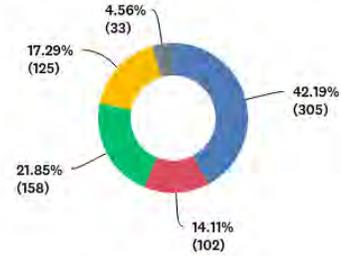
724 Total Responses

Mode of Station Travel



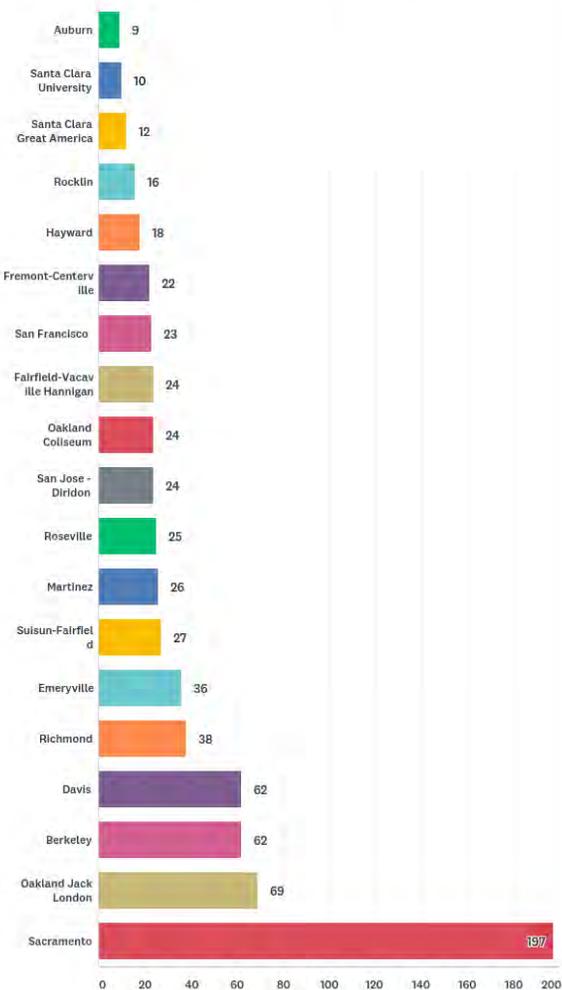
■ Walked ■ Biked / Used Scooter
■ Drove (parked, dropped-off, used Uber/Lyft or taxi, etc.) ■ Used Public Transit

Regularity of Station Use

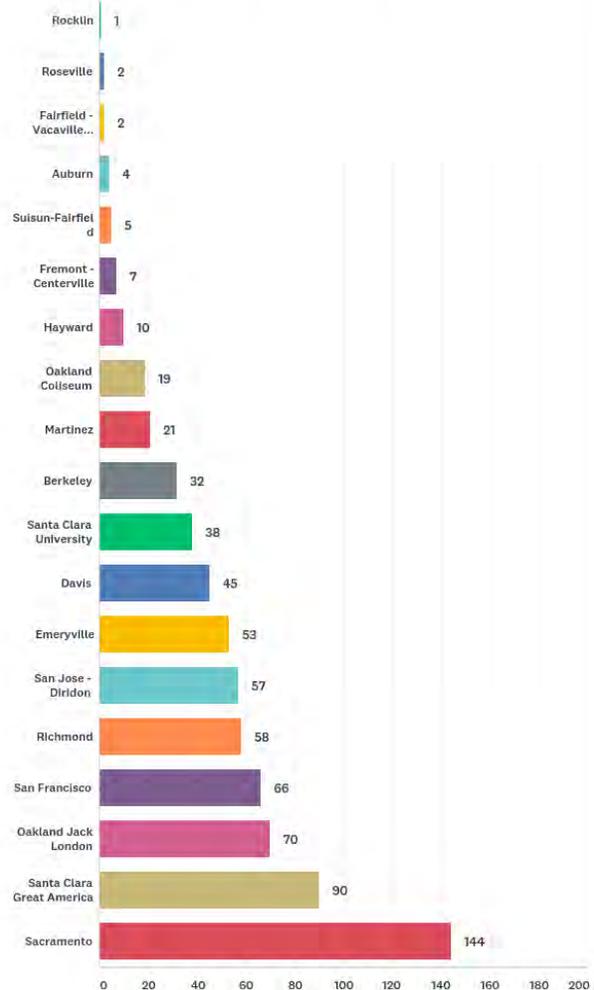


■ Regularly (3-5 times a week) ■ Sometimes (1-2 times a week)
■ Not Often (1-4 times a month) ■ Rarely (2-4 times a year) ■ First Time

Rider Home Stations



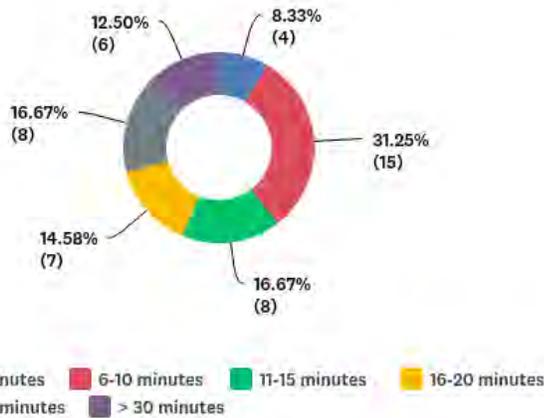
Rider Destination Stations



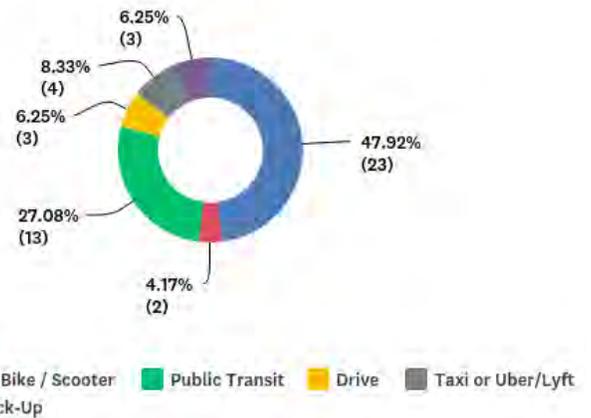
Pedestrian Station Access Summary

Results for ridership indicating that they walked to reach their home station on day of survey.

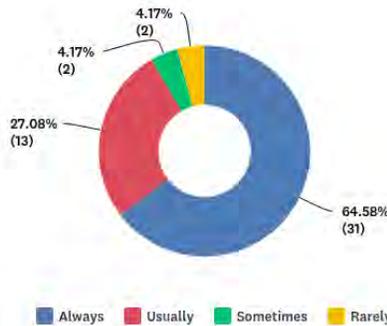
Duration of Walk



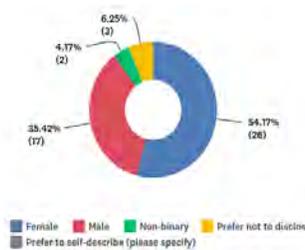
Destination Station → Final Location Travel Mode



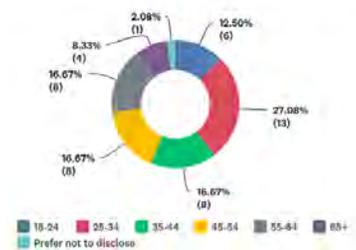
Walk to Home Station Frequency



Participant Gender



Participant Age



Most Common Alternative to Reach Home Station

1. Bike / Scooter – 23%
2. Drive / Dropped Off – 23%
3. Never Not Walked – 21 %
4. Public Transit - 17%
5. Uber/Lyft or Taxi – 17%

Home Stations with Highest % of Total Riders Walking to Station

1. Santa Clara University – 20%
2. Emeryville – 17%
3. Hayward – 17%

Home Stations with Lowest % of Total Riders Walking to Station

1. Fairfield – Hannigan – 0%
2. Roseville – 0%
3. Oakland – 0%

96% of walkers thought that the route they took to their home station was direct and convenient.

3.87 - On a scale of 1 (poor) to 5 (excellent), walkers on average rated the **quality of sidewalks** on the way to the station as a 3.87 out of 5.

3.40 - On a scale of 1 (high traffic) to 5 (low traffic), walkers on average rated **exposure to vehicles** on the way to the station as a 3.40 out 5.

Pedestrian Station Access Public Comments

Survey respondents who walked to their home station were asked the question “*What do you like and or dislike about your walk to the station?*” Respondents’ answers to this question were read through and coded for whether the respondents liked, disliked, or held neutral feelings about walking to the station. The specific rationales for respondents’ sentiments were coded into categories, with the most commonly liked and disliked components of walking to Capitol Corridor stations listed below.

Sentiment Analysis Results

48% - percent of walkers whose comments indicated they **liked** their trip to the station.

14% - percent of walkers whose comments indicated they **disliked** their trip to the station.

38% - percent of walkers whose comments indicated they were **neutral** towards their trip to the station.

Most Commonly Liked Features

1. Opportunity for relaxation or mediation
2. Live nearby / time-efficient
3. Exercise opportunity
4. Requires little planning time
5. Enjoyable natural environment / city setting
6. Direct line or path to station
6. Avoid parking / driving cost
8. Low traffic volume
8. Safe crosswalks
8. Wide & even sidewalks

Most Commonly Disliked Features

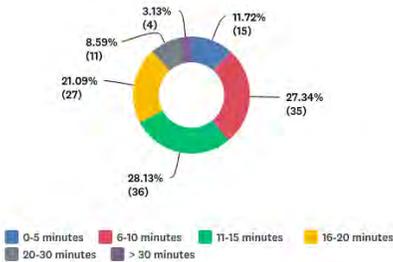
1. Loiters / homeless encampments near stations
2. Unsafe crosswalks
2. Chance of rain
4. Poor Sidewalk Lighting
5. Hazardous & Uneven Sidewalks
6. Takes a long time
7. No direct line or path to station
7. Too many traffic lights
7. Unclean sidewalks & city streets
7. Safety concern walking when dark
7. High traffic volume
7. Unsafe & unclean elevators

Note: Features are listed numerically based off of how many times they were mentioned in comments by respondents walking to Capitol Corridor stations. Only liked and disliked features that were listed by more than one responded are listed in the table.

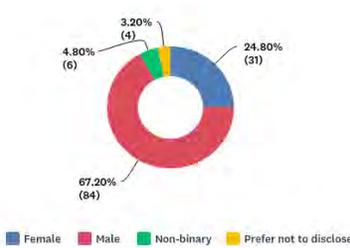
Bike / Scooter User Station Access Summary

Results for ridership indicating that they biked or scooted to reach their home station on day of survey.

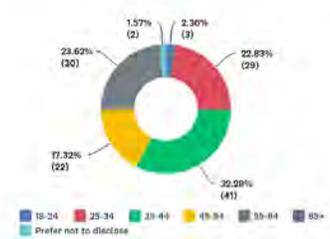
Duration of Bike / Scooter Ride



Participant Gender



Participant Age

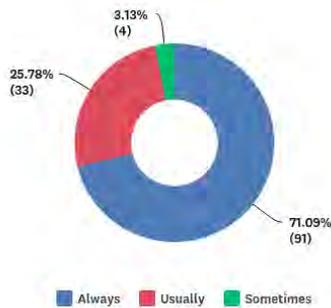


67% of bike / scooter users travel less than 15 mins.

67% of bike / scooter users identify as male.

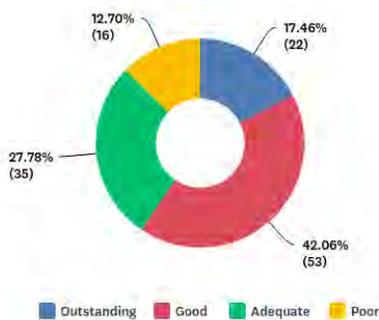
55% of bikers are between 25 and 44 years old.

Bike / Scooter to Home Station Frequency



97% of surveyed bike / scooter users always or usually bike to the station.

Safety & Convenience of Bike / Scooter Routes

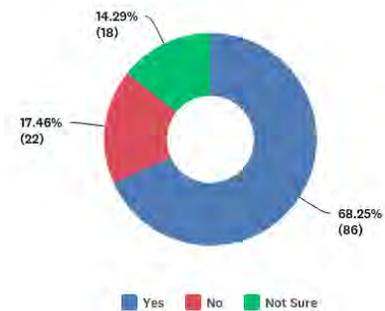


59% of bike/scooter users are satisfied with routes.

Most Common Alternative Used to Reach Home Station

1. Drive / Dropped-Off in Personal Vehicle – 31%
2. Walk – 20%
3. Never not Biked / Scootered – 18%
4. Uber / Lyft or Taxi Service – 17%
5. Public Transit – 14%

Bike or Scooter Share Near Home Station?



68% of participants know of a nearby bike/scooter share service.

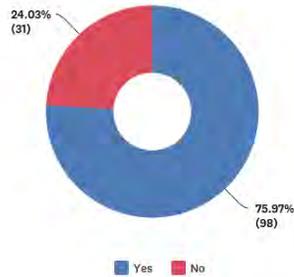
Home Stations with **Highest** % of Total Riders Biking/Scooter to Station

1. Emeryville – 42%
2. Oakland Jack London – 39%
3. Davis – 39%
4. Berkeley – 32%

Home Stations with **Lowest** % of Total Riders Biking/Scooter to Station

1. Auburn – 0%
2. Fairfield – Vacaville Hannigan – 0%
3. Santa Clara Great America – 0%
4. Suisun Fairfield – 4%

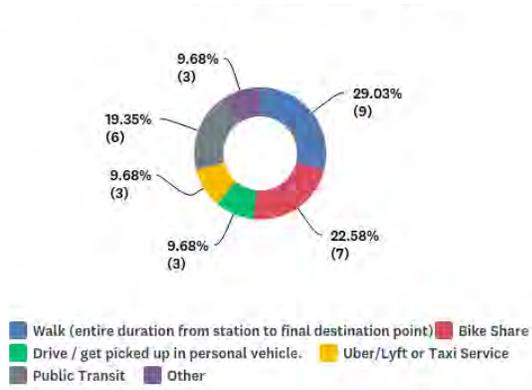
Brought Bike / Scooter on Train?



76% - riders who choose to bring their bike/scooter on the train

Riders Parking Bikes at Station

Destination Station → Final Location Travel Mode



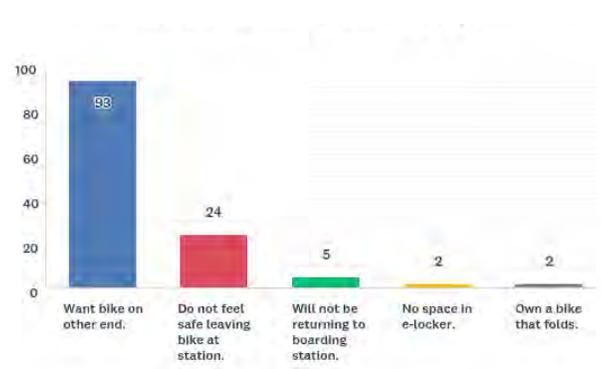
Bike Lockers / Parking

3.77 - On a scale of 1 (poor) to 5 (excellent), bike/scooter riders who parked at stations on average rated the **amount of secure bike parking** at their home station as a 3.77 out of 5.

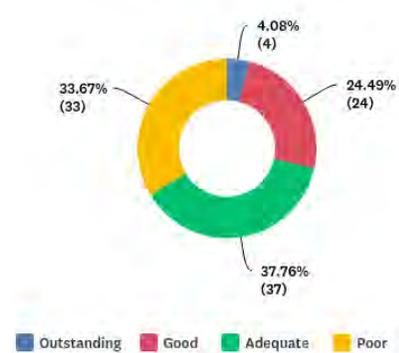
3.84 - On a scale of 1 (poor) to 5 (excellent), bike/scooter riders who parked at stations on average rated the **location of secure bike parking** at their home station as a 3.84 out of 5.

Riders Bringing Bikes on Trains

Rationale for Bringing Bike / Scooter on Train



Availability of bike rack space on train?



72% of riders who do not park their bikes are unsatisfied with the spaces available on trains.

Bike / Scooter User Station Access Public Comments

Q1. Survey respondents who biked or scooted to their home station were asked the question *“What do you like and or dislike about your bike ride to the station?”* Respondents’ answers to this question were read through and coded for whether a respondent liked, disliked, or was neutral (both liked and disliked components) about riding a bike or scooter to their home station. The rationales behind respondents’ sentiments were coded into categories, with the most commonly liked and disliked components about biking / scooting to reach Capitol Corridor stations listed below.

Sentiment Analysis Results

31% - percent of bike / scooter users who **liked** their trip to the station.

51% - percent of bike / scooter users who **disliked** their trip to the station.

18% - percent of bike / scooter users who were **neutral** towards their trip to the station.

Most Commonly Liked Features

1. Bike lanes for entirety or most of route
2. Quiet neighborhood roads & bicycle boulevards
2. Low traffic exposure
4. Bike / scooter lanes are buffered on street sides or on separate pathways exclusively for bikers, scooter users, & pedestrians
5. Wide / spacious bike & scooter lanes
6. Clear signage for bike / scooter routes
7. Live nearby / time efficient
8. Bringing bike / scooter on train
8. Separate station entrance for bikes / scooters

Most Commonly Disliked Features

1. Poor road surface (poorly paved, cracks, potholes, debris, etc.)
2. No / not enough defined bike lanes for route
3. High traffic exposure / busy roads
4. Dangerous when designated bike paths cross side streets and intersections without traffic control or with unreliable traffic sensors
5. Bad Drivers
6. Cars parking or stopping in bike lanes
6. No separation of bike lanes from traffic (through buffers, pylons, separate pathways, etc.)
8. No entrance / exit for bikes or scooters at stations separate from vehicles
8. Poor / confusing bike route signage
10. Poor lighting on route

Note: Features are listed numerically based off of how many times they were mentioned in comments by riders taking scooters and bikes to Capitol Corridor stations.

Q2. If survey respondents who biked or scootered to their home station indicated that they were aware of bikeshare services near their home station (see results on page 7), they were then asked the question *“Why do you choose to use and/or not use these services to get to and from Capitol Corridor stations?”* The rationales for using and not using bike or scooter share services were provided in comments by the 68% of individuals who knew of bikeshare services and coded into categories. The top reasons for using and not using bike and scooter share services are listed below.

Results

68% of participants knew of bike/scooter services.

Only **12%** of users who knew of shared bike & scooter services ever choose to use them.

Top Reasons for **Using**

1. Don't have to carry on own bike
2. Ideal for one-way trips
3. Motor assist feature of bikes / scooters
3. Don't have to worry about stolen bike
3. Better for transportation centers to help reduce parking needs

Top Reasons for **Not Using**

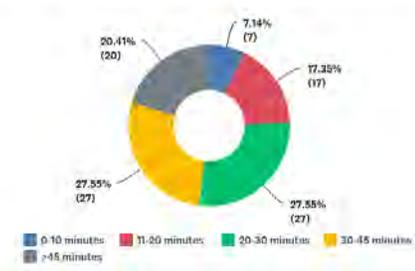
1. Prefer higher quality of own bike (lighter, faster, better optimized for individual needs, safety lights, better maintained, etc.)
2. More economical to use own bike and not rent
3. Too far or inconvenient to access from home
4. Reliability of access with bike / scooter share
5. No shared services near my destination location/station
6. Need bike on both ends
7. Not as time efficient to rent docked bikes or scooters
8. Dissatisfaction with share service operators (Lyft, Uber, Jump, Lyme)
9. Poor quality of bike / scooters through share services
10. Lockers at stations & bike racks on trains for personal bikes / scooter available

Note: Features are listed numerically based off of how many times they were mentioned in comments by riders aware of scooter and bike share services near their home station

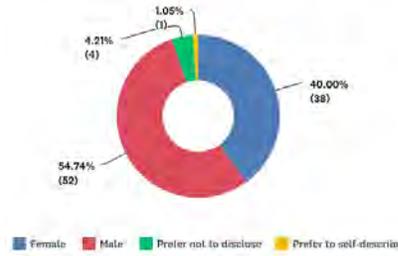
Public Transit User Station Access Summary

Results for ridership indicating that they used public transit to reach their home station on day of survey.

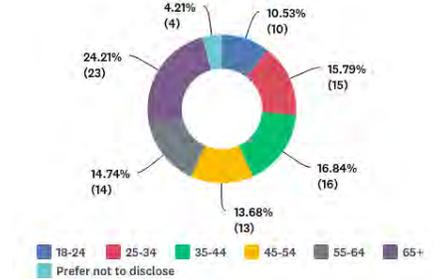
Duration of Public Transit Trip



Participant Gender



Participant Age

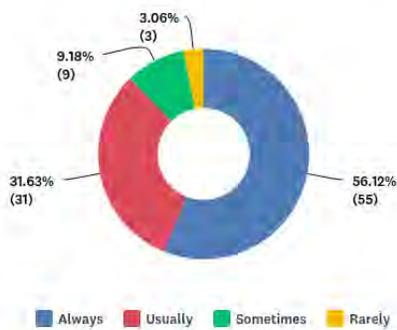


48% of public transit users travel more than 30 minutes

55% of public transit users identify as male.

24% of public transit users are more than 64 years old.

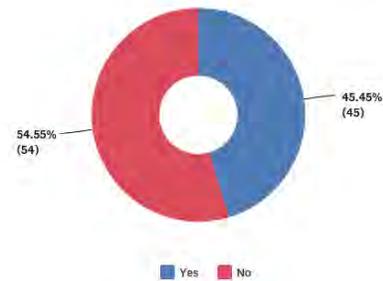
Public Transit to Home Station Frequency



Most Common Alternative to Reach Home Station

1. Never Not Used Public Transit – 29%
2. Uber / Lyft or Taxi Service – 28%
3. Drive / Get Dropped Off in Personal Vehicle – 22 %
4. Bike / Scooter - 10%
5. Walk - 7%
6. Car Share (Gig) – 4 %

Public Transit from Destination Station -> Final Location?



Alternative to Public Transit to Reach Final Destination

1. Walk – 46%
2. Drive / Get Picked Up in Personal Vehicle - 34%
3. Bike / Scooter – 11%
4. Uber / Lyft or Taxi Service - 9%

Home Stations with **Highest** % of Total Riders Taking Public Transit to Station

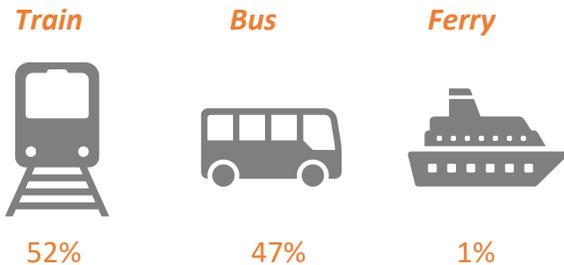
1. San Francisco – 61%
2. Richmond – 53%
3. Sacramento – 19%
4. Berkeley – 18%
5. Oakland Coliseum – 17%

Home Stations with **Lowest** % of Total Riders Taking Public Transit to Station

1. Auburn – 0%
2. Suisun Fairfield – 0%
3. Fairfield-Vacaville Hannigan – 0%
4. Hayward – 0%
5. Santa Clara Great America – 0%

Public Transit Servicing Capitol Corridor

Public Transit Travel Modes

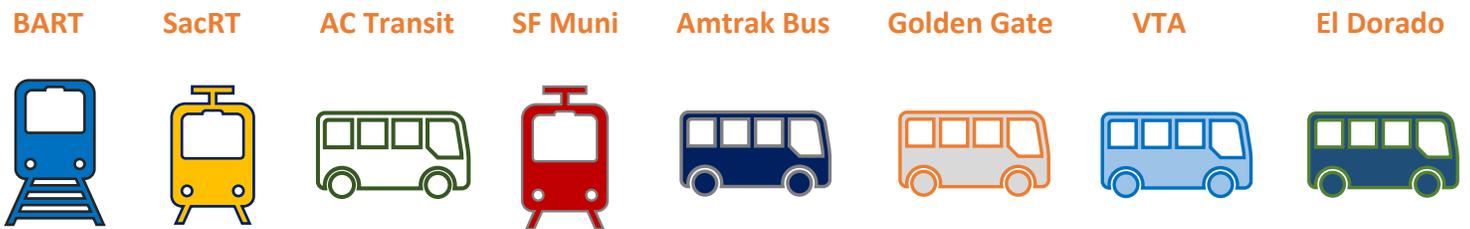


Ease of Reaching Station

3.17 - On a scale of 1 (not frequent enough) to 5 (very frequent), public transit users on average rated **departure time intervals** for public transit options that service their home station as a 3.17 out of 5.

4.09 - On a scale of 1 (not useful) to 5 (very useful), public transit users rated the **helpfulness of information on connecting to their home station** as a 4.09 out of 5.

Transit Systems



% of Total Transit Users Surveyed by Mode



Departure Intervals by Transit Mode— Mean ratings from 1 (headways not frequent enough) to 5 (headways very frequent)



Note on Statistical Significance: Variations in perceptions on transit system departure time intervals were statistically significant for the four main public transit systems used to reach Capitol Corridor. **BART** departure intervals are significantly better than **AC Transit** (T-Test, $p = .005$) & **SF Muni** (T-Test, $p = .025$) departure time intervals. **SACRT** time intervals also are significantly better than **AC Transit** departure intervals (T-Test, $p = .017$) & **SF Muni** departure intervals (T-Test, $p = .038$). There was no different between transit systems and the helpfulness of information on connection to home Capitol Corridor stations.

Most Common Sources Used to Plan Transit Connections to Capitol Corridor

1. Google Maps – 35%
2. Capitol Corridor Website – 31%
3. Amtrak App – 5%
4. Bart Website / App – 5%
5. 511 – 5%
6. Paper Timetable – 3%
7. Other transit apps (Transit, Routsey, City Map, Apple Maps) – 8%
8. AC Transit Website - 2%
9. Information from other Transit Users / Previous Travel - 2%

66% of riders who use public transit prefer Google Maps & the Capitol Corridor website for finding information on their connection. Comparison note: There was no statistically significant difference in helpfulness of information offered by Google Maps and the Capitol Corridor Website for learning connection information. Both had a mean rating of **3.9** out of 5 on helpfulness of information provided for connecting via public transit to home stations.

Public Transit User Station Access Public Comments

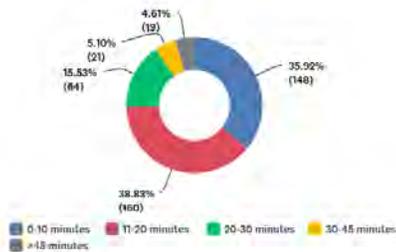
Survey respondents who used public transit to reach their home station were asked the question *“As a public transit user, what you like the least about using these services?”* Respondents’ answers to this question were read through and coded to identify the most liked elements of public transit systems by Capitol Corridor ridership across stations and modes.

1. Transit delays during trip to station – 19%
2. Takes too long – 16%
3. Infrequent departure time intervals – 15%
4. Capitol Corridor arrivals & departures not timed well with public transit schedules – 15%
5. Poor station infrastructure & signage – 9%
6. Distance from transit services / length of walk to nearest transit stop – 7%
7. Disruptive passengers onboard – 6%
8. Necessary transit transfers – 5%
9. Crowded / limited seat capacity – 5%
10. Safety concerns – 3%
11. Luggage space onboard – <1%

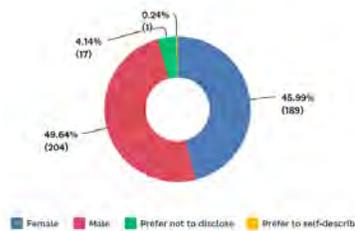
Vehicle User Station Access Summary

Results for ridership indicating that they drove or used a ride hailing service to reach their home station on day of survey.

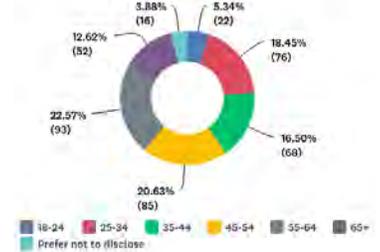
Duration of Drive



Participant Gender

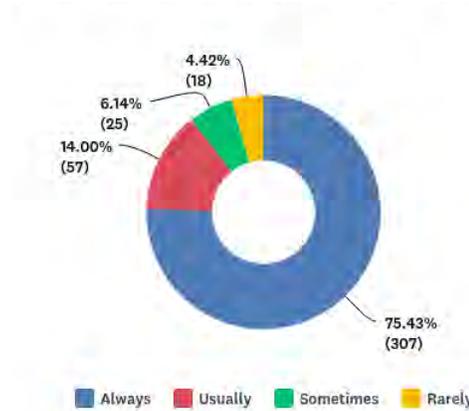


Participant Age

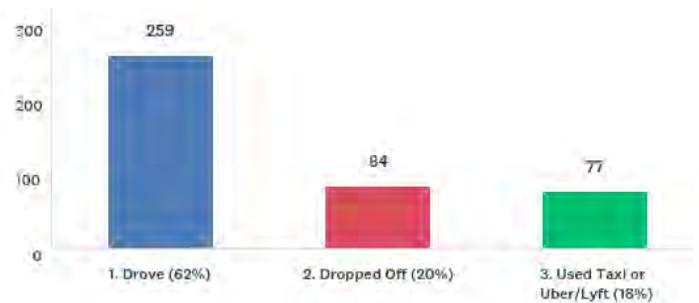


75% of station users who drove had trips under 20 minutes 50% of station users who drove identify as male 23% of station users who drove were 55-64 years old

Drive to Home Station Frequency



Type of Drive to Station



Note: 3 respondents indicating they carpooled were grouped into the "Drove" category on graph.

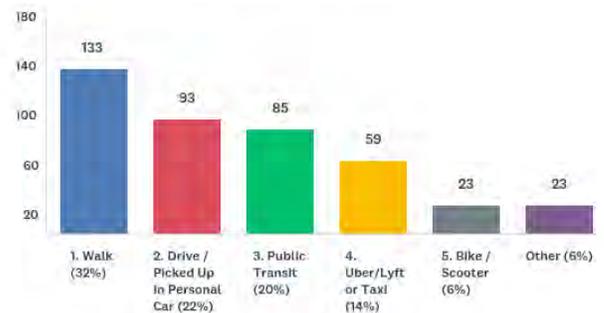
Most Common Alternative to Reach Home Station

1. Never Not Drove / Not Used Ride Hailing Service – 71%
2. Public Transit – 19%
3. Bike / Scooter - 10%

272 - respondents who had never not used a car to reach their home station



Destination Station → Final Location Travel Mode



Note: "Other" category comprises Company / Professional Shuttle Services & Amtrak Buses.

Home Stations with Highest % of Total Riders Driving to Station

1. Fairfield – Vacaville Hannigan – 100%
Suisun-Fairfield – 93%
2. Auburn – 89%
3. Fremont - Centerville – 82%

Home Stations with Lowest % of Total Riders Driving to Station

1. San Francisco – 17%
2. Emeryville – 33%
3. Richmond – 34%
4. Oakland Jack London – 39%

Parking

Questions answered only to portion of respondents who drove in a personal vehicle to reach their home station.



Cost of Parking

3.82 – On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at stations as a 3.77 out of 5.



Lighting in Lot

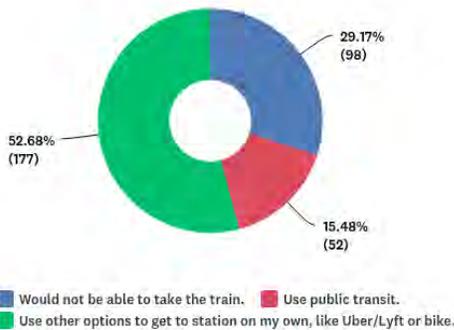
3.40 – On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots as a 3.40 out of 5.

Rating Distribution

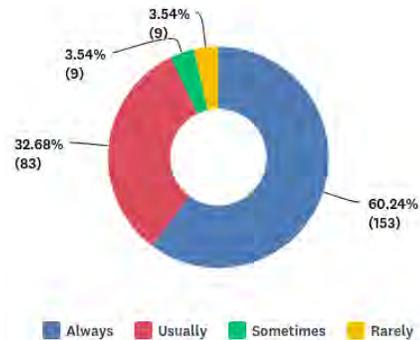


Note: Survey respondents were asked this question on a five – point rating scale as described above (numbers were converted into appropriate categorical headings in this final visualization. High amount of “NA” responses for parking is indicative of station parking lots that offer parking for free.

Respondent Behavior if No Access to a Personal Vehicle



Availability of Needed Parking Space Type



Parking Space Demand

93% of respondents looked to park in **regular parking spaces (> 2 hours)** at their home station.



7% of respondents looked for **alternative parking spaces** at their home station.



- a. Side of Street for Free – 2%
- b. Handicap Space – 2%
- c. Electric Vehicle Space – 1%
- d. Overnight Space – 1%
- e. Short Term Space (<2 hours) – 1%
- f. Motorcycle Space - < 1%

Vehicle User Station Access Public Comments

Survey respondents who drove, were dropped off, or used a riding hailing service to reach their home station were asked the question *“Why did you choose to drive or ride in a car to reach the station today?”* Respondents’ answers to this question were read through and coded to identify the top rationales riders identified for driving to the station.

443 Total Rationales for Driving to Station Provided by Respondents

1. Time Efficient / Most Convenient to Drive – 30%
2. Too Far to Walk or Bike – 27%
3. Inadequate or Limited Public Transit Alternatives – 20%
4. Free or Low Cost of Parking – 5%
5. Safety Concerns with Walking / Biking – 4%
6. Get Dropped Off / Carpool with Friends or Family on Way to Work - 3%
7. Errands or Tasks to Do on Way Home from Work – 3%
8. Challenges Associated with Early-Morning & Late-Night Travel – 2%
9. Items to Carry on Way to the Train – 1%
10. Bad Weather – 1%
11. Old Age – < 1%

77% of respondents answering this question chose to highlight one of just three reasons for driving to the station: time efficiency / convenience, too far to walk or bike, and inadequate public transit alternatives to driving.



Time
134 Respondents



Too Far to Walk / Bike
120 Respondents



Poor Public Transit
87 Respondents

Station Survey Response Comparisons

Variations at the Station Level in Multimodal Accessibility



Figure 1: Capitol Corridor Stations Categorized by Degree of Multimodal Access and Total Home Station Survey Respondents. Auto Dependent Stations are those where more than 50% of surveyed riders parked cars at the station, Intermodal Stations are those where between 25% and 50% of surveyed station riders parked cars at the station, and Urban Stations are those where under 25% of surveyed riders park cars at the station.

Variations at the Zip Code Level in Station Access

**Areas Served by Capitol Corridor
(Zipcodes Showing Sum of Origin and Destination Locations for all Surveyed Riders)
1343 Total Zip Codes Provided**

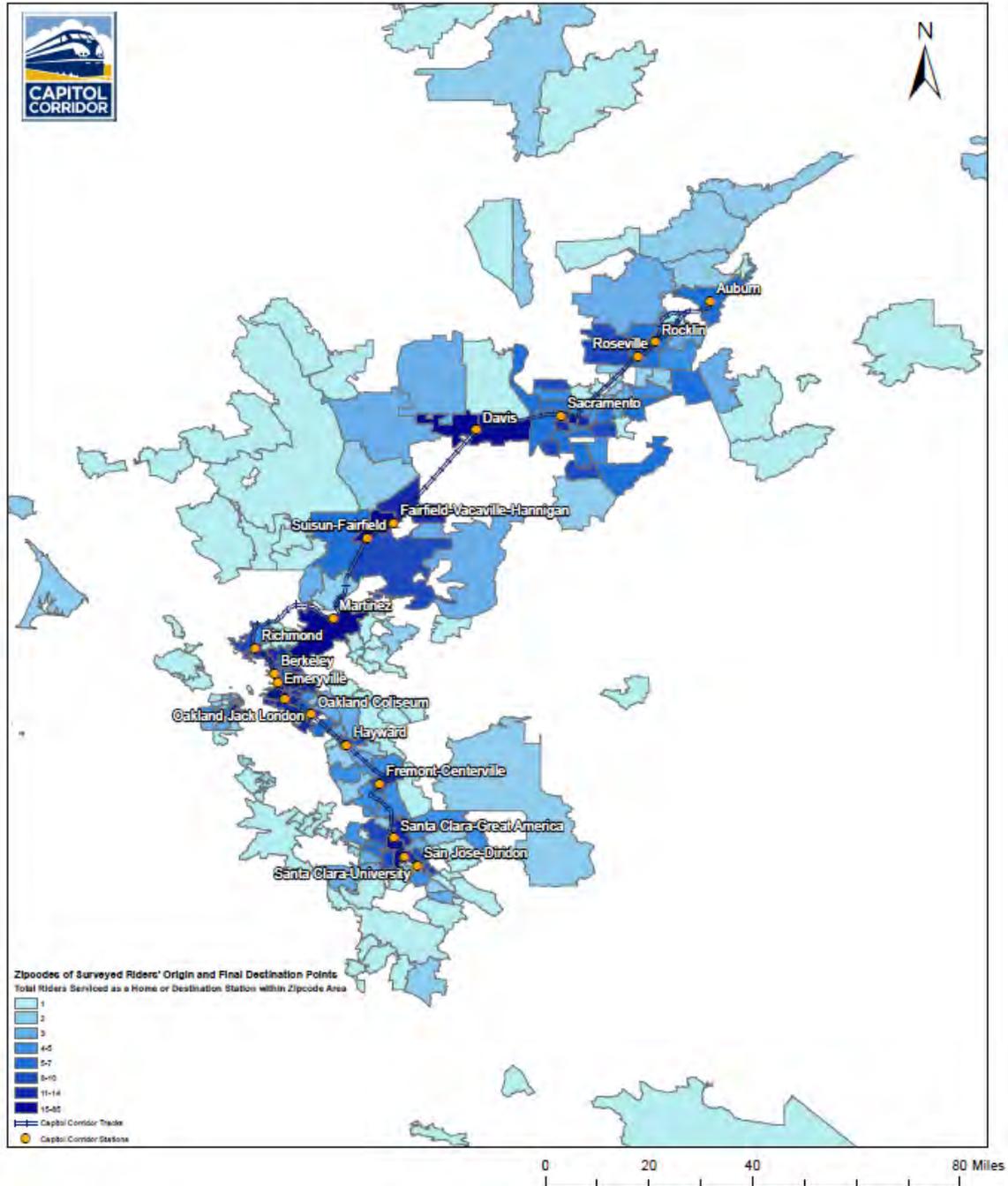
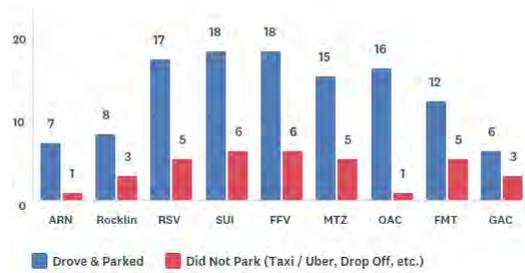
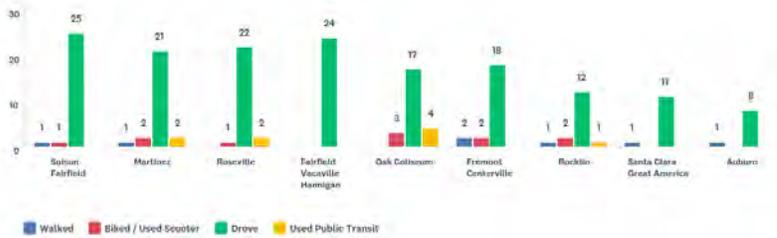


Figure 2: Zip Codes of Areas Servicing Capitol Corridor Stations. Zip codes colored on scale based off of number of riders who start their trip at an origin point or end their trip at a destination point within the boundaries of each zip code region. Darker colors indicate specific zip code regions where larger numbers of riders begin and end their trips.

Mode of Travel to Home Station

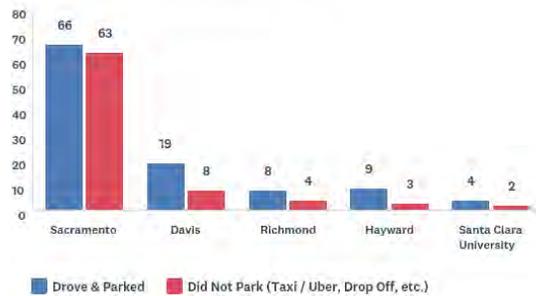
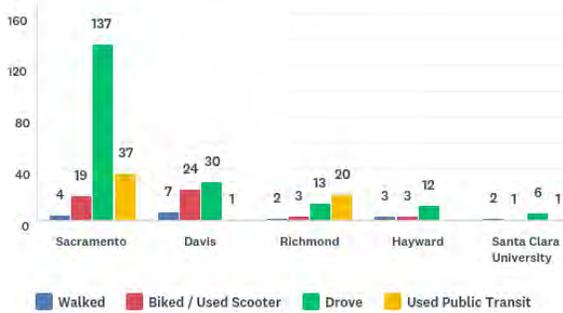
Auto Dependent Stations

Stations with 50% or more of respondents parking a car at the station



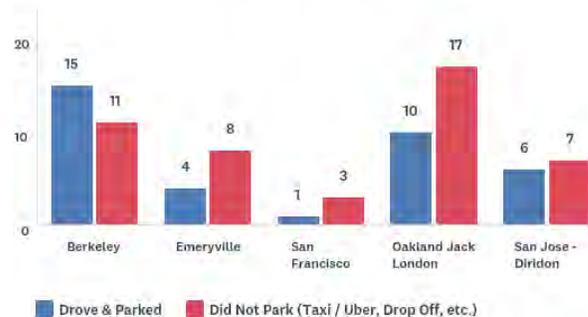
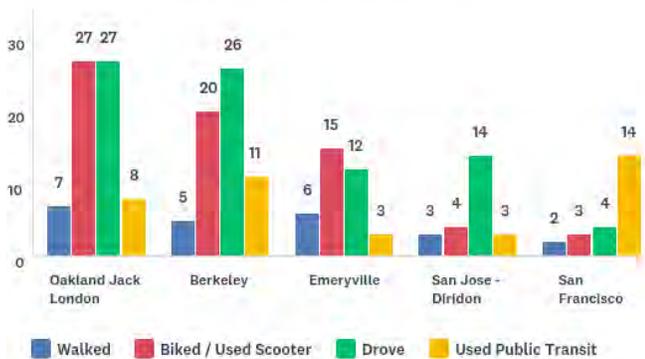
Intermodal Stations

Stations with between 25% and 50% of respondents parking a car at the station



Urban Stations

Stations with just 25% or less of respondents parking a car at the station



Station Survey Profiles – Measures of Multimodal Accessibility

This section contains results of the survey at the individual level for each Capitol Corridor station. Station maps are included for each home station that depict the origin locations of surveyed customers, with location points coded by mode of transportation used to reach the station. Pedestrians and bike users were also coded in the maps based off of whether they liked, disliked, or were indifferent about their trip to the station from a safety and convenience perspective.

Urban stations, intermodal stations, and auto-dependent stations are listed in order. Some stations (**Auburn, Santa Clara University, & Santa Clara Great America**) have limited home station information included in this section due to an inadequate sample size achieved over the survey period. A different group of stations (**Auburn, Rocklin, Roseville, Fairfield – Vacaville, and Suisun – Fairfield**) have limited destination station information included in this section due to an inadequate survey sample size. Responses for San Francisco and Emeryville station were grouped together in this section of the survey under the Emeryville station category since all San Francisco bus riders board the Capitol Corridor train in Emeryville.

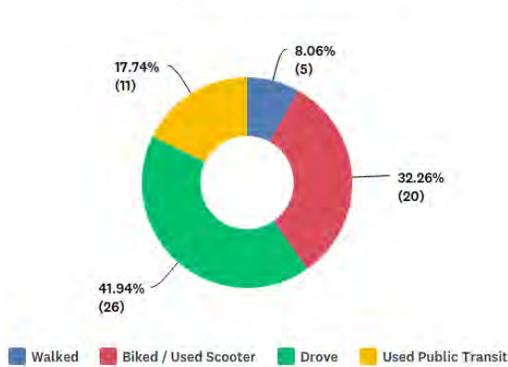
Stations categorized as urban, intermodal, and auto dependent are listed in order in this section. Within each of these categories, stations are listed based on where they reside along the Capitol Corridor Auburn to San Jose train line. Basic information related to characterizing each station's degree of multimodal accessibility is included in this section of the report such as:

- a. Customer details (age, gender, specific Capitol Corridor home station & destination station).
- b. Modes of access used by customers (home station & destination station breakdowns).
- c. Convenience and safety of accessing each home station by specific modes of travel, and accessibility comparisons across travel modes relative to other Capitol Corridor stations.
- d. Specific complaints or suggestions for improvements to increase accessibility left in public comments by survey respondents.
- e. Popular routes traveled to the station and estimated service area zones for each station.

Berkeley Station

Home Station Survey (62 Total Responses)

Mode of Station Access



15% more bikers & walkers and 20% less drivers at Berkeley than at all Capitol Corridor stations



Station Demographics

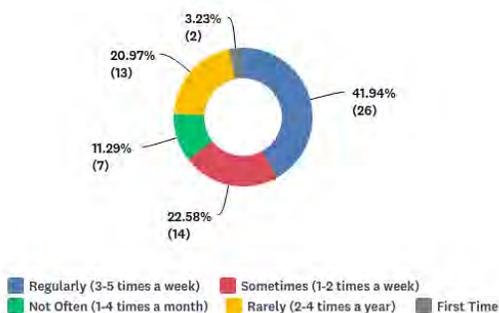
Gender

- Male – 70%
- Female – 30%

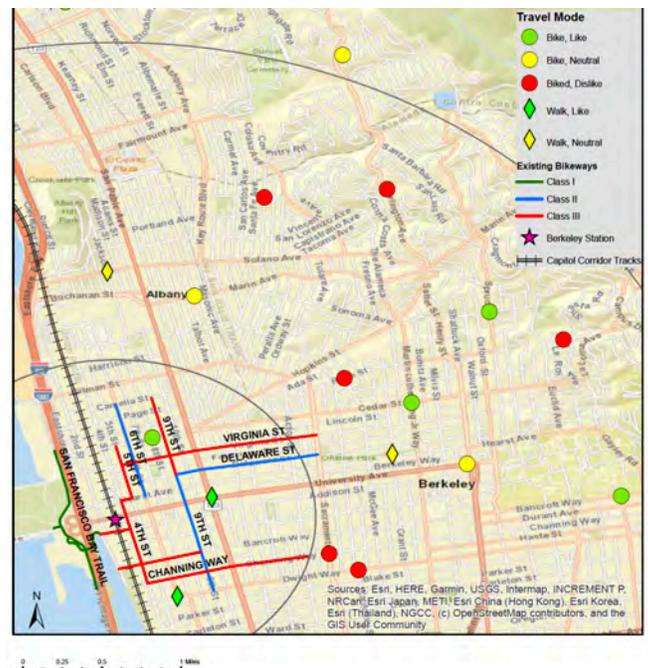
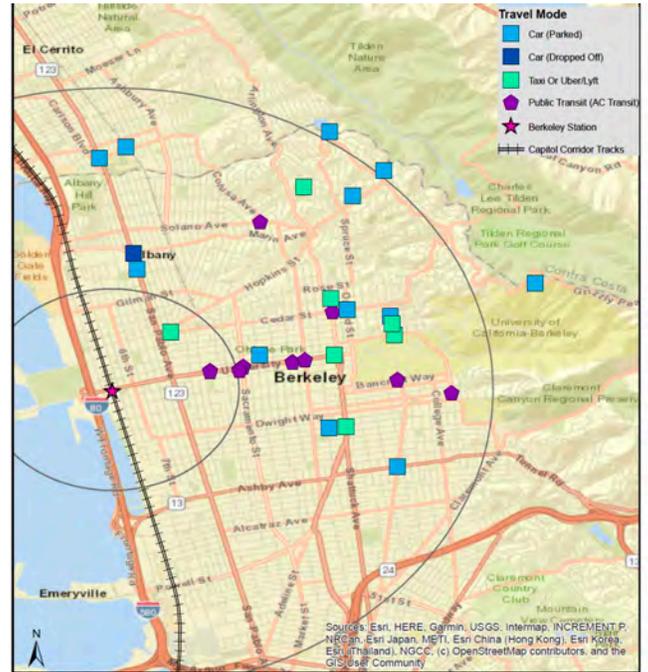
Age

- 18-24 – 15%
- 25-34 – 13%
- 35-44 – 25%
- 45-54 – 18%
- 55-64 – 22%
- 65+ – 7%

Regularity of Station Use



Origins and Access Maps



Note on figures: Surveys for bike users and pedestrians coded based on sentiments (liked, neutral, disliked) of travelling to the station. Rings represent one-mile and three-mile station buffer zones. One rider who drove to the station were located outside the map window range in San Francisco.

Pedestrian Berkeley Station Users

Ratings for Pedestrian Access

80% of walkers thought that the route they took to the Berkeley station was direct and convenient.

80% of riders who walked to the Berkeley station on the day of the survey **always** or **usually** walk to reach the station.

4.00 - On a scale of 1 (poor) to 5 (excellent), walkers on average rated the **quality of sidewalks** on the way to the Berkeley station as a 4.00 out of 5.

3.20 - On a scale of 1 (high traffic) to 5 (low traffic), walkers on average rated **exposure to vehicles** on the way to the station as a 3.20 out of 5.

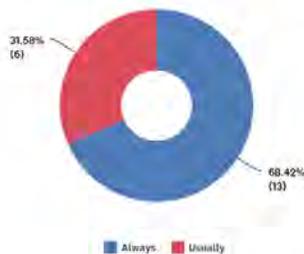
Comments Related to Pedestrian Station Access at Berkeley

What about your walk to the Berkeley station do you like and or what about your walk to the Berkeley station do you not like?

- 1 I happen to live about 5 blocks from the Berkeley station, so walking is the most reasonable. I could drive, but then I'd need parking all day which doesn't make sense for such a short walk.
- 2 Needed the exercise! Hazardous sidewalks. Berkeley needs to fix them!
- 3 Walking is nice in the morning, but distance I walk is a bit too far to be enjoyable.
- 4 Love to walk.

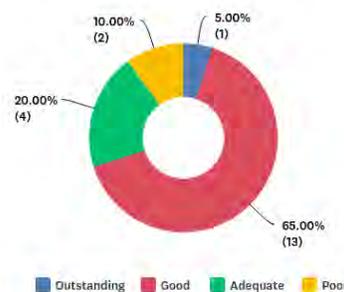
Bike / Scooter Berkeley Station Users

Bike / Scooter to Station Frequency



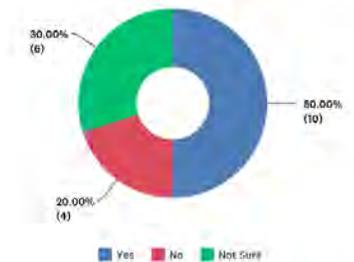
100% of respondents always or usually bike to the Berkeley station

Safety & Convenience of Routes



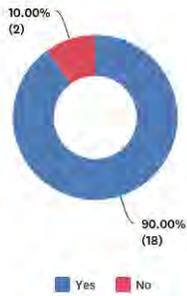
10% more riders found the safety & convenience of routes to be outstanding or good at Berkeley than at all Capitol Corridor stations averaged.

Bike / Scooter Share Near Station?

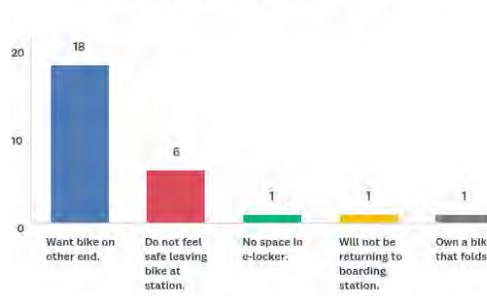


18% less riders knew of a bike or scooter share service near the Berkeley station than at all Capitol Corridor stations averaged.

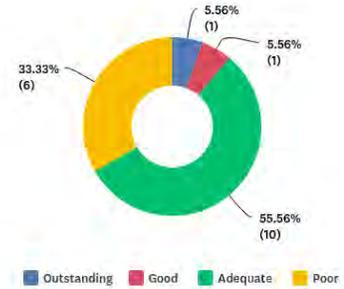
Brought Bike / Scooter on Train?



Rationale for Bringing on Train



Availability of Bike Rack Spaces on Train



Comments Related to Bike / Scooter Station Access at Berkeley

What about the current bike/scooter routes to your home station do you like and/or dislike?

1. quiet streets but no designated bike lanes.
- 2 Bicycle boulevards seem generally well suited to bikes by making them inefficient for cars, makes for a safer ride.
- 3 Like trails with just bikes and walkers/runners. Dislike poor quality of roads and distracted drivers.
- 4 I love the bike boulevard and take it daily. I dislike crossing San Pablo and Sixth where there aren't lights, and riding along cars on fourth street (I usually make extra efforts to avoid all the above but that makes the route more circuitous).
- 5 Dislike: Rough/potholed road surfaces Like: use mostly quiet roads.
- 6 Potholes & poor road surface. Thoughtless drivers.
- 7 Some streets are in very bad condition
- 8 Not too much traffic
- 9 Poorly paved and unprotected with lack of signals even on designated bike Blvd.
- 10 Gilman near Sacramento has really poor pavement.
- 11 I usually go on 4th in Berkeley, but the street itself is really bumpy/potholed. 6th is too busy. 8th is all right (lots of speed bumps though).
- 12 Crossing two busy streets
- 13 Not enough traffic lights for bike paths at large crossings
- 14 Crossing intersections is dangerous because drivers drive too fast (i.e. they speed), there are very few low-stress streets for bicyclists and even those cross major streets without traffic control.
- 15 In the morning/down-hill/before most commuters: I use major streets to facilitate high speeds without a lot of stops. Traffic is light, so it's okay to be on College, Ashby, Adeline, Stanford, Powell. In the afternoon/up-hill/evening traffic I use secondary, bike boulevard streets. I'm moving slower, so the many stop signs are not as big an inconvenience, and I don't have to deal with dense traffic whizzing by.
- 16 Crossing busy streets with no signal.
- 17 I take the Ohlone Greenway and then marked streets for the majority of the ride. Feels safe.

Additional suggestions you would make to improve the bike / scooter riding experience?

- 1 keep the transient population away from bike storage. it very quickly gets out of control and prevents people from using bike lock areas
- 2 Bike lanes are needed from Albany down to Berkeley train station
- 3 Add bike lane buffers on 4th st. Better visibility for crosswalks on San Pablo (there are crossings that are marked on the pavement but no flashing lights... makes for poor visibility after dark.)
- 4 Improve road surfaces. Improve street lighting
- 5 Permanent lockers, esp. at the great America station. I would keep a bike there.
- 6 Add bike lane buffers
- 7 repave and stripe bike blvds and create more fully protected bike paths particularly approaching Berkeley station

- 8 Repave Gilman
- 9 Repaving 4th St. would go a long way.
- 10 Bike lanes (east west)
- 11 Add more bike share stations closer to home.
- 12 Add lots of buffered bike lanes. Reduce traffic speeds and volumes on major streets like San Pablo Avenue, Dwight Way, and Sacramento Street and add traffic control at intersections with bike boulevards. Improve pavement quality.
- 13 It would be nice to have both up- and down-hill solutions that are mostly traffic free all day and have right-of-way most of the time. I don't use bicycle boulevards downhill, because I stop for stop signs and there is one every block or few on most of the boulevards. Roundabouts would be another solution, since bicycles usually travel at or around the regulation 15 mph at which you are supposed to navigate "yield" situations. One note: The new bicycle lanes between the parked cars and the sidewalk are a HORRIBLE idea. You can tangle with pedestrians and cars cannot see you at driveways and intersections. I think I have read that the majority of car-bicycle crashes are when the car is turning, so visibility and predictability are key, so that the automobile drivers expect and can see the cyclists. Hiding cyclists behind a wall of parked SUVs is not safe. I understand that inexperienced cyclist FEEL unsafe in traffic, but overtaking accidents, where a cyclist is hit from behind, are rare because they are extremely visible to the automobile driver's headlights, even at night and even if the cyclist (illegally) doesn't have their own lights.
- 14 More bike racks on trains, easier, faster access to bikes on and off trains

Public Transit Berkeley Station Users

Public Transit Travel Modes Serving Station

AC Transit



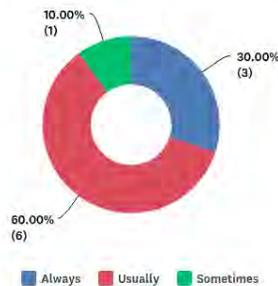
100%

Ease of Reaching Station

2.89 - On a scale of 1 (not frequent enough) to 5 (very frequent), public transit users on average rated **departure time intervals for public transit options that service the Berkeley station** as a 2.89 out of 5.

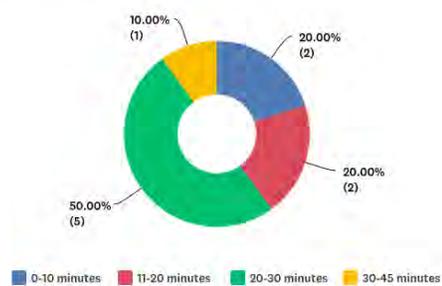
4.11 - On a scale of 1 (not useful) to 5 (very useful), public transit users rated the **helpfulness of information on connecting to the Berkeley station** as a 4.11 out of 5.

Public Transit to Station Frequency



90% of respondents always or usually take public transit to the Berkeley station

Duration of Trip to Station



40% of public transit users have trips to the Berkeley station that take less than 20 minutes.

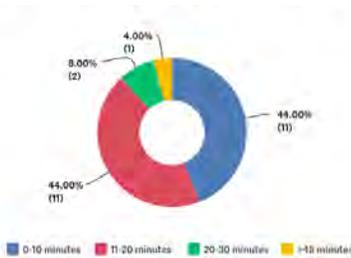
Comments Related to Public Transit Station Access at Berkeley

As a public transit user, what do you like the least about using these services?

1. Infrequent bus service (only every 1/2 hour)
2. Arrival times are not always predictable.
3. Too long to walk, not enough buses
4. Too long to walk, not enough buses
5. Train delays beyond last bus home.
6. Not sure how reliable service will be. It's possible the bus may leave a little early or be late, and you may miss the train.
7. Not always dependable
8. Having to wait on return trip / trains not immediately aligning with bus schedules
9. AC transit connection at BKY station not well timed for arrival of train #546 in the evening

Vehicle Berkeley Station Users

Duration of Drive



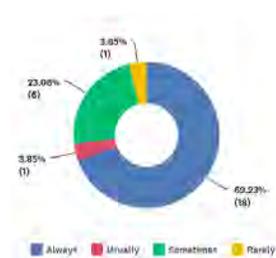
88% of drivers had trips under 20 minutes.

Type of Drive



58% of station users who used a vehicle to reach the station also parked at the station

Drive to Station Frequency



73% of drivers always or usually drive to reach the station.

Parking



Cost of Parking

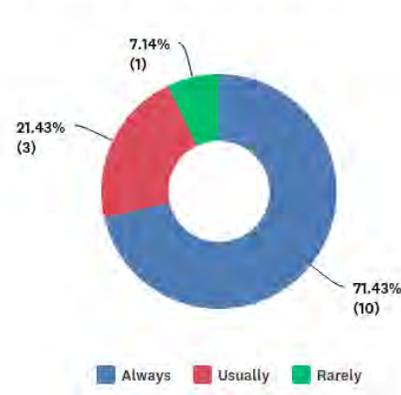
4.00 – On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at the Berkeley station as a 4.00 out of 5.



Lighting in Lot

3.00 – On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots at the Berkeley station as a 3.00 out of 5.

Availability of Needed Parking Space Type



93% of drivers can always or usually find their preferred type of parking space near the Berkeley station.

Comments Related to Vehicle Station Access at Berkeley

Why did you choose to drive or ride in a car to reach the station today?

- 1 Concerned about the safety of leaving my bike at Berkeley station for multiple days
- 2 Bus is very inconvenient. Not close to my home
- 3 Time efficient and affordable enough because I am travelling with my brother. If I were going alone I would normally use public transportation to go to the Richmond train station.
- 4 Live far away from the station
- 5 The bus was delayed by an accident; otherwise I would have taken it because it is free for me as a student
- 6 No easy public transportation
- 7 uber was cheap and i live too far to walk
- 8 Faster
- 9 Far enough away that it is the most time efficient
- 10 Live too far from station. Return trip is up a steep hill. Looked into bus but it would require one to two transfers and require easily double the time to get there. If I end up coming back too late (9pm) there won't be a return bus to my house.
- 11 I am elderly and would have to leave home very early to catch the bus to the station. I tried that many times and it is quite worse than driving the 15 minutes.
- 12 Bike etc are not safe during nighttime
- 13 Time efficient and parking is cheap
- 14 I live far away, but most importantly I have kids to drop off beforehand
- 15 Bus takes too long and only one run available to meet train.
- 16 Gig car share in the East Bay makes it easy to drive from the UC Berkeley area and park nearby the Berkeley Amtrak station
- 17 Public transportation is not reliable. It's convenient to drive and parking is free. When I return I can drive home quickly instead of waiting for a bus.
- 18 I live far from the station, and taking Lyft is time efficient.
- 19 I live far from the station
- 20 My return trip will be too late at night to drive home, I needed a car near the station to get there
- 21 I live 800 ft uphill from station
- 22 I live far from the station
- 23 Time
- 24 It is time efficient.
- 25 Dropped off by spouse on way to work.

Destination Station Survey (32 Total Berkeley Responses)

Response Summary for individuals noting Berkeley as being their destination station.

Destination Station -> Final Destination Travel Mode

- 1. Public Transit – 29% (9)
- 2. Walk – 23% (7)
- 3. Drive or Pick Up in a Personal Vehicle – 19% (6)
- 4. Bike / Scooter – 16% (5)
- 5. Taxi or Uber / Lyft – 13% (4)



Destination Station Demographics

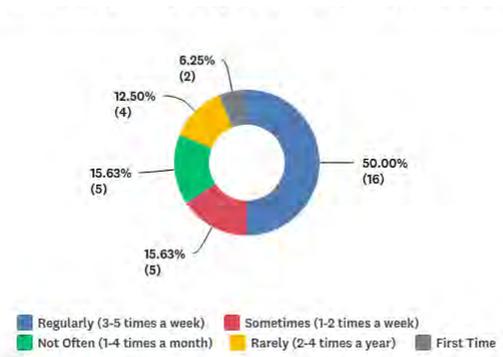
Gender

- Male – 52%
- Female – 48%

Age

- 18-24 – 8%
- 25-34 – 31%
- 35-44 – 12%
- 45-54 – 19%
- 55-64 – 19%
- 65+ – 12%

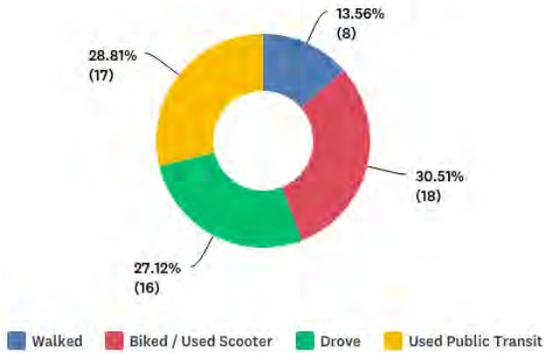
Frequency of Capitol Corridor Use



Emeryville Station

Home Station Survey (59 Total Responses)

Mode of Station Access



14% more public transit users, 23% more bikers, and 33% less drivers at Emeryville than at all Capitol Corridor stations averaged.



Station Demographics

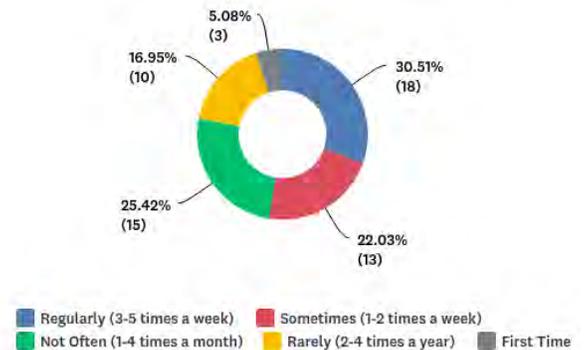
Gender

- Male – 66%
- Female – 34%

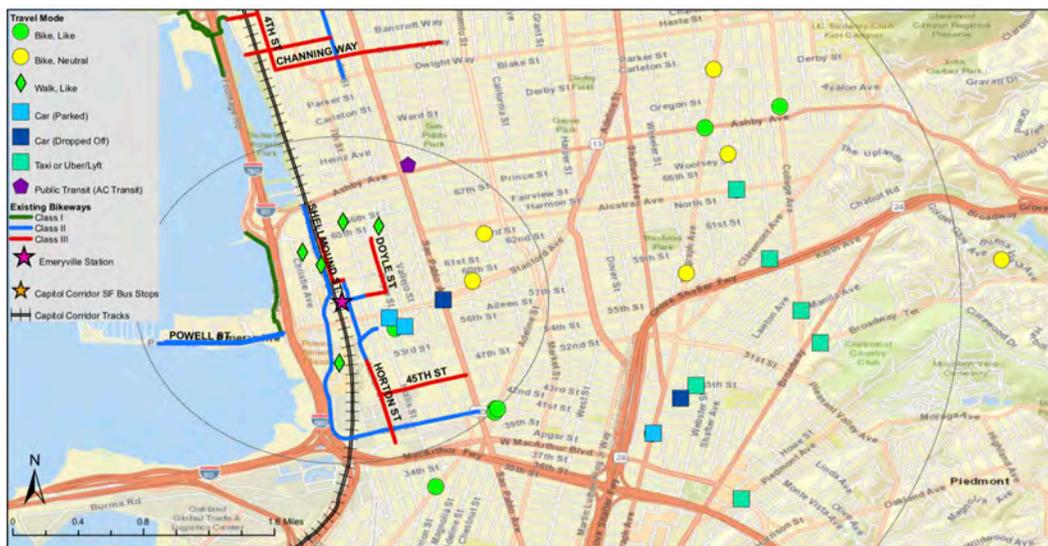
Age

- 18-24 – 5%
- 25-34 – 31%
- 35-44 – 18%
- 45-54 – 15%
- 55-64 – 22%
- 65+ – 9%

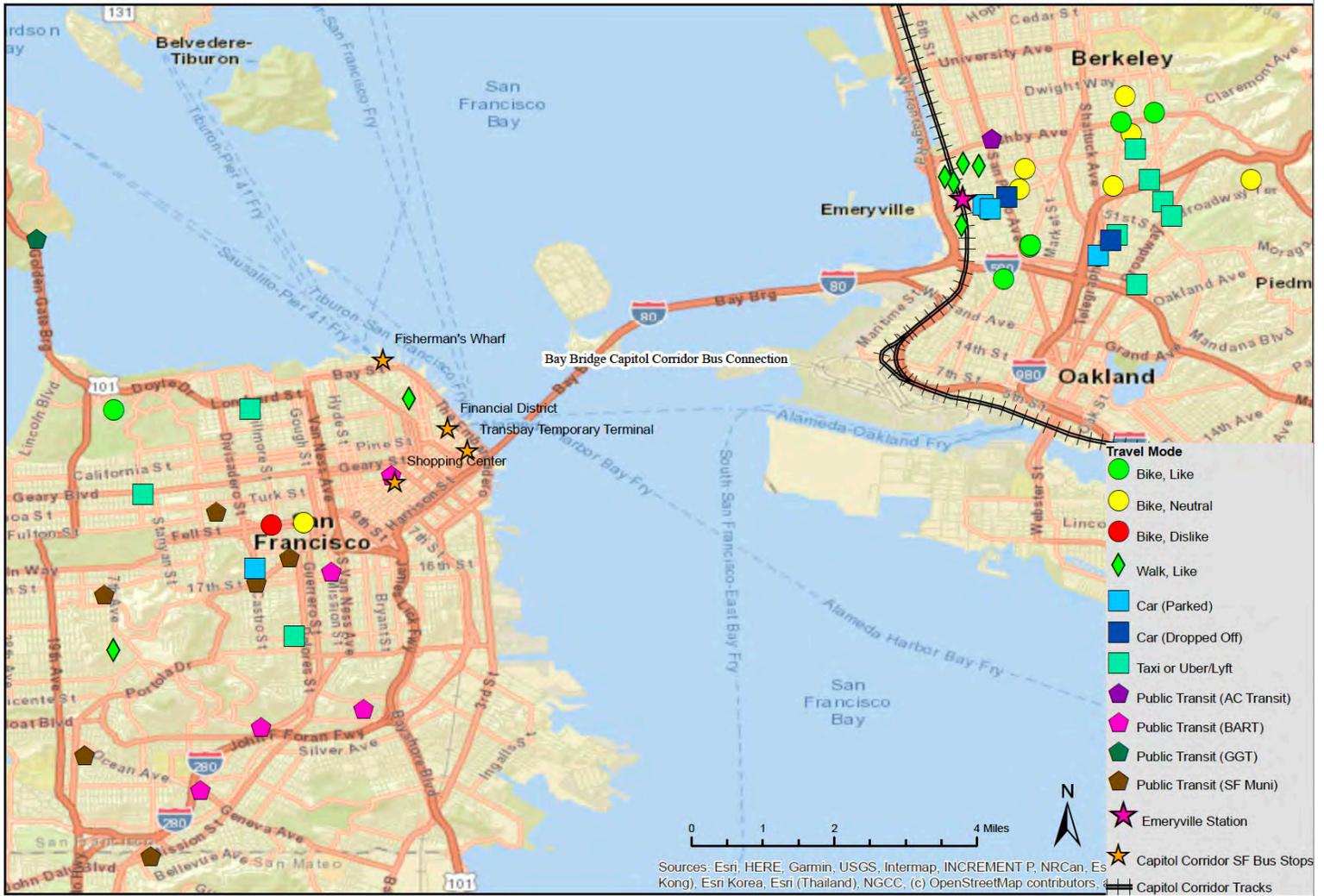
Regularity of Station Use



Origins and Access Maps (Emeryville Station Access Zoomed)



(All Emeryville Station Passengers - Including Access Capitol Corridor San Francisco Bus Connections)



Note on Access Mode figures: Surveys for bike users and pedestrians coded based on sentiments (liked, neutral, disliked) of passengers travelling to the station. Rings shown on the zoomed in Emeryville station map represent one-mile and three-mile station service area buffer zones. One public transit user (Golden Gate Transit) was excluded from the map window for the map that includes all Emeryville passengers surveyed. Public transit users are colored on the map based on the specific service that they used. Capitol Corridor San Francisco connecting bus stops to the Emeryville station are coded as orange stars on the map that includes all Emeryville station service.

Pedestrian Emeryville Station Users

Ratings for Pedestrian Access

100% of walkers thought that the route they took to the Emeryville station was direct and convenient.

87.5% of participants who walked to the Emeryville station on the day of the survey **always** or **usually** walk to reach the station.

4.13 - On a scale of 1 (poor) to 5 (excellent), walkers on average rated the **quality of sidewalks** on the way to the station as a 4.13 out of 5.

3.63 - On a scale of 1 (high traffic) to 5 (low traffic), walkers on average rated **exposure to vehicles** on the way to the Emeryville station as a 3.63 out of 5.

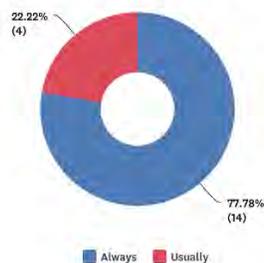
Comments Related to Pedestrian Station Access at Emeryville

What about your walk to the Emeryville station do you like and or what about your walk do you not like?

1. *The elevator of the crosswalk at the station is home of homeless. Piss smell and drawing. I have to carry my scooter up and down using the stairs.*
 2. *Not a clear, direct path*
 3. *it's good exercise.*
 4. *It's difficult when it rains.*
5. *Cleaner elevator at the station crosswalk. The elevator smells of urine*
6. *Safer and better elevator at the crosswalk at Emeryville station. Now I have to carry my scooter up and down three levels using the stairs just because the elevator is super dirty and feels homeless have lived there.*
7. *wider sidewalks; a covered bus shelter at the end of the walk to wait for the bus to the train*
 8. *It's just a usual walk*
 9. *Walking makes me fresh.*

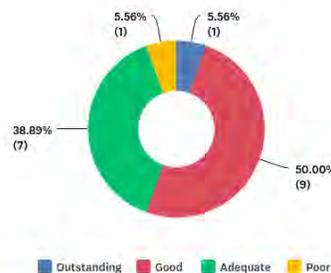
Bike / Scooter Emeryville Station Users

Bike / Scooter to Station Frequency



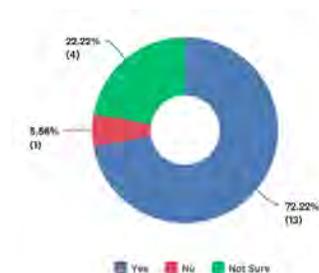
100% of respondents always or usually bike to the Emeryville station.

Safety & Convenience of Routes



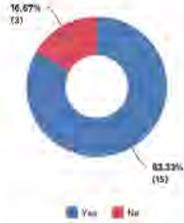
12% less respondents characterized the safety & convenience of bike / scooter routes as outstanding than at all Capitol Corridor stations averaged.

Bike / Scooter Share Near Station?

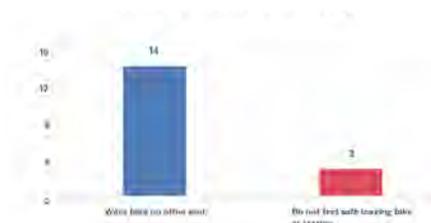


5% (12% less than all Capitol Corridor stations averaged) of bike riders said that they did not know of bike or scooter share service near the Emeryville station.

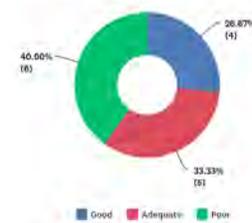
Brought Bike / Scooter on Train?



Rationale for Bringing on Train



Availability of Bike Rack Spaces on Train



Comments Related to Bike / Scooter Station Access at Emeryville

What about the current bike/scooter routes to the Emeryville station do you like and/or dislike?

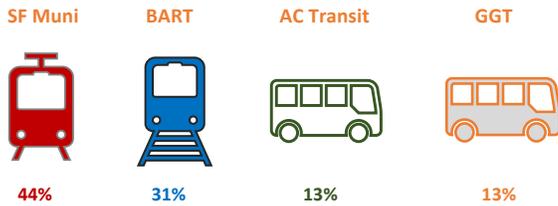
1. Getting to the station requires travel on San Pablo or Stanford, both busy 4-lane roads with no bike infrastructure.
2. sensor at 53rd and San Pablo is unreliable; crossing Stanford along Horton going north is visually obstructed for cars seeing bikes
3. Does not have bike lane the whole way
4. There a bike lane for 1/2 of the route, but it would feel safer as separated lane. There is no lane at all for the rest of the route and it can get scary.
5. bike lanes available but not well-separated; crowded area
6. Road construction near station is kind of dangerous. Cars stopping/parking in bike lanes is never enforced.
7. Good bike lanes missing
8. Need separated bike lanes
9. Bike lanes on both ends are not separated from traffic. In Emeryville on 40th (east of San Pablo) there are lots of cars moving quickly and the bike lane is a shared lane with cars. In San Jose there is a designated bike lane and usually not many cars on the road, but with all the new construction I assume that will change (for the worse for cyclists).
- 10 Smaller streets with limited car traffic good Too many stop signs though on cross streets leading up to station. Would be good for there to be a viable East-west route on east side of Emeryville station leading to station
- 11 Couldn't say, I've been doing it for years
- 12 There are a lot of potholes in the area. It feels unsafe on my bicycle.
- 13 Just need more protected bike lanes
- 14 on my most direct option bike lanes are not protected from traffic (which there is a lot of), although bikes are allowed to take up full lane. alternate routes encounter less cars, but roads are in bad condition and often require riding through homeless encampments.
- 15 Emeryville is easy to traverse on bike

Additional suggestions you would make to improve the bike / scooter riding experience?

1. Protected bike lanes on main thoroughfares.
- 2 put adults who care about the community in charge
- 3 As mentioned before, bike lanes need to be installed/upgraded. And Lyft really needs to reintroduce their e-bikes.
- 4 Remove the few parking spaces that require crossing over the bike lane 10/23/2019
- 5 More buses with racks.
- 6 Better bike lanes.
- 7 I usually take Bart to Richmond station which is easier than a bus in SF to the train, but you asked for station closest to home. I don't ever use that. The bus connection in auburn- I would prefer front mounted racks on the buses, like muni and golden gate transit. I don't like putting my bike under the bus in that compartment to roll around, so I rarely bring my bike to auburn. But I do bring my bike to Sac when I go there because I need it when I'm there.
- 8 East/west bike bike boulevards with few stop signs.
- 9 Bike activated stop lights at major street crossings (e.g. Shattuck, San Pablo)
- 10 Fix potholes in the area.
- 11 more bike lanes and better protection from cars on all bike lanes
- 12 Add more bike lane buffers - the few blocks closest to the station have them, but they do not go much further than that. Add more lighting to Horton St.
- 13 Just more spots to store bikes on trains

Public Transit Emeryville Station Users

Public Transit Travel Modes Serving Station

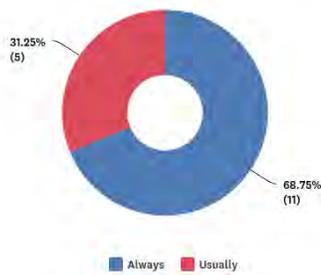


Ease of Reaching Station

2.93 - On a scale of 1 (not frequent enough) to 5 (very frequent), public transit users on average rated **departure time intervals for public transit options that service the Emeryville station** as a 2.93 out of 5.

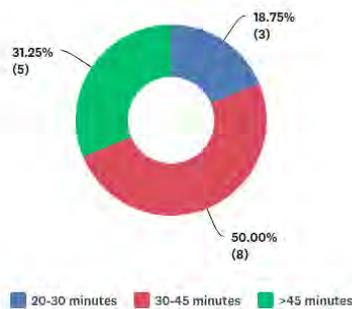
3.93 - On a scale of 1 (not useful) to 5 (very useful), public transit users rated the **helpfulness of information on connecting to the Emeryville station** as a 3.93 out of 5.

Public Transit to Station Frequency



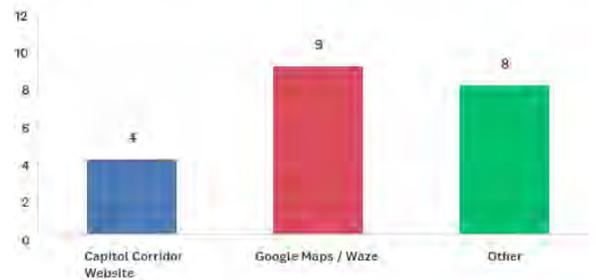
100% of respondents always or usually take public transit to the Emeryville station

Duration of Trip to Station



31% of respondents have public transit commutes of greater than 45 minutes to reach the Emeryville station.

Connection Information Source



Note: "Other" category includes sources such as City Mapper, Paper Timetables, Amtrak App, and Transit App.

Comments Related to Public Transit Station Access at Emeryville

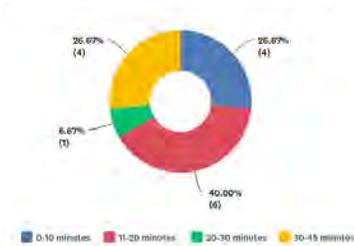
As a public transit user, what do you like the least about using these services?

- 1 Buses do not arrive at regularly scheduled times
- 2 Takes too long Lack of express train that stops at either of the Lawrence or Santa Clara stations
- 3 Distance from Service Takes too long Transfer Takes too long, have to walk between stops, have to transfer between stops
- 4 Infrequent Departures Service not running at enough intervals 10/19/2019 3:14 PM
- 5 Poor disability access Transfer Time too many transfers; plus, access for the disabled to Amtrak busses not always reliable.
- 6 Crowded
- 7 Crowded Disruptive Passengers Takes too long Time and train environment
- 8 Infrequent Departures Inadequate service levels
- 9 Infrequent Departures Takes too long Takes too long with wait time and systemic design prioritizing private cars over public transportation
- 10 Coordination with Amtrak sometimes I want/need to use public transit at night when it is not available.
- 11 Infrequent Departures Takes too long Takes too long, infrequent buses early in the morning, some buses stop before the terminal station leading to an even longer wait
- 12 Distance from Service Walking distance from Sacramento train stop to station, often with heavy luggage.
- 13 Coordination with Amtrak Poor coordination between CC and BART times at Richmond station
- 14 Poor Station Infrastructure.

15 The fact that Amtrak is not using the sf transit terminal but has to be boarded on the street with no shelter
 16 Not enough seating Takes too long Doesn't have enough seats, Takes too long on weekends

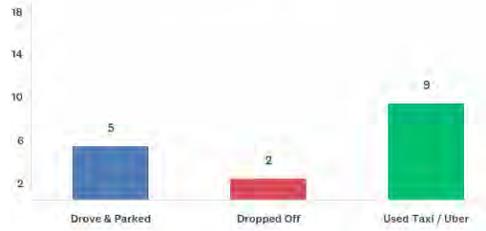
Vehicle Emeryville Station Users

Duration of Drive



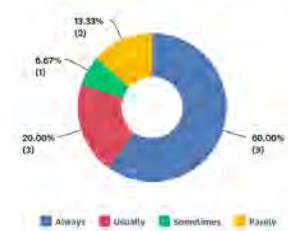
67% of drivers had trips under 20 minutes.

Type of Drive



31% of station users who used a vehicle to reach the station also parked at the station

Drive to Station Frequency



80% of drivers always or usually drive to reach the Emeryville station.

Parking



Cost of Parking

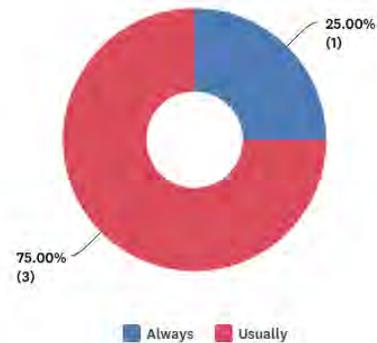
2.60 – On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at the Emeryville station as a 2.60 out of 5.



Lighting in Lot

3.20 – On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots at the Emeryville station as a 3.00 out of 5.

Availability of Needed Parking Space Type



Comments Related to Vehicle Transit Station Access at Emeryville

Why did you choose to drive or ride in a car to reach the station today?

- 1 Faster than public transportation
- 2 Lyft was faster than the bus and I was running behind.
- 3 It is dark and very early in the morning. I talk an Uber / Lyft
- 4 Boyfriend drops me off before going to work
- 5 Time efficient and parking is free if I get there early in the morning. The \$5 a day for the garage is too expensive to travel later.
- 6 Flat tire on my bike, and driving is also often shorter
- 7 Too far to walk Don't have car available so I take uber
- 8 safer
- 9 Uber makes the experience door to door and on time

- 10 Didn't want to pay for parking
- 11 It is the only way to get there fast
- 12 time efficiency
- 13 I live far from the station
- 14 There is no convenient public transportation to my home station from my home
- 15 Efficient, distance to public transit in Emeryville.

Destination Station Survey (118 Total Emeryville Responses)

Response Summary for individuals noting Emeryville as being their destination station.

Destination Station -> Final Destination Travel Mode

- 1. Walk – 44% (52)
- 2. Drive or Pick Up in a Personal Vehicle – 24% (28)
- 3. Public Transit– 23% (27)
- 4. Bike / Scooter – 6% (7)
- 5. Taxi or Uber / Lyft – 4% (5)



Note: Capitol Corridor connecting bus to San Francisco included in the public transit category.

Destination Station Demographics

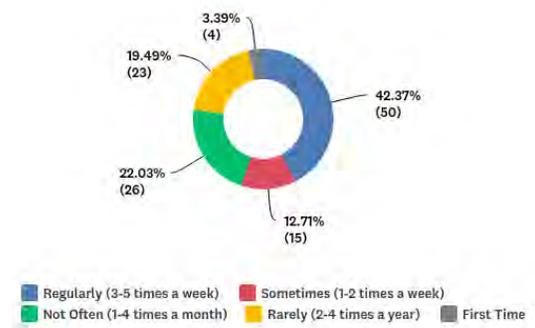
Gender

- Male – 51%
- Female – 49%

Age

- 18-24 – 3%
- 25-34 – 19%
- 35-44 – 19%
- 45-54 – 22%
- 55-64 – 23%
- 65+ – 15%

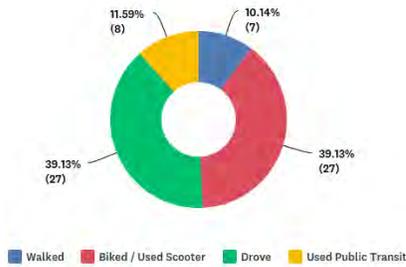
Frequency of Capitol Corridor Use



Oakland Jack London Station

Home Station Survey (69 Total Responses)

Mode of Station Access



21% more bikers and 21% less drivers at Oakland Jack London than at all Capitol Corridor stations averaged.



Station Demographics

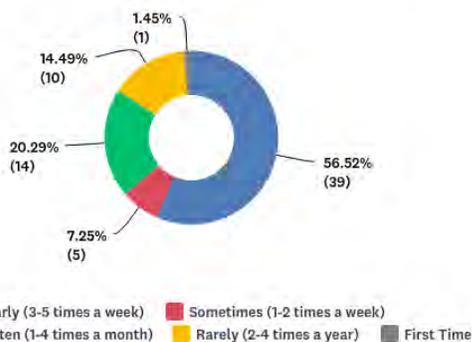
Gender

- Male – 70%
- Female – 30%

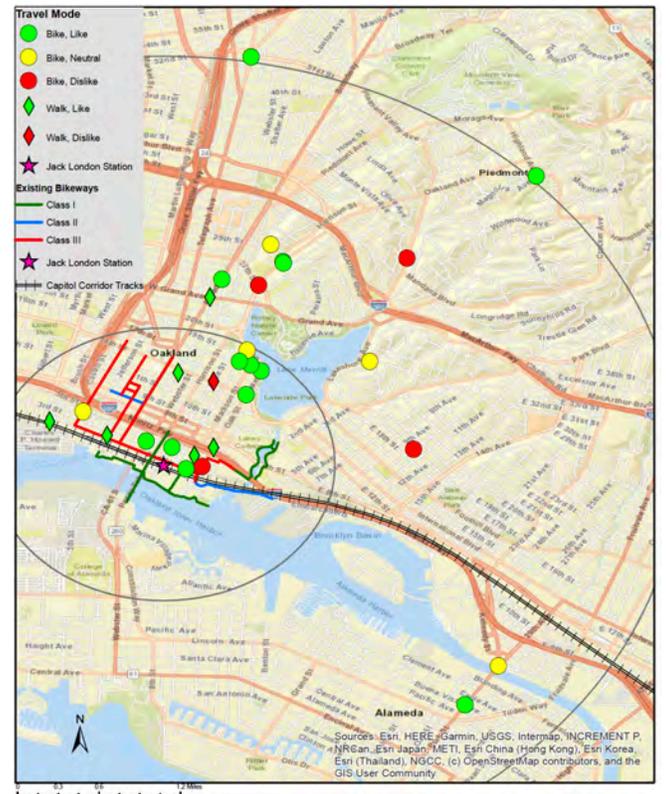
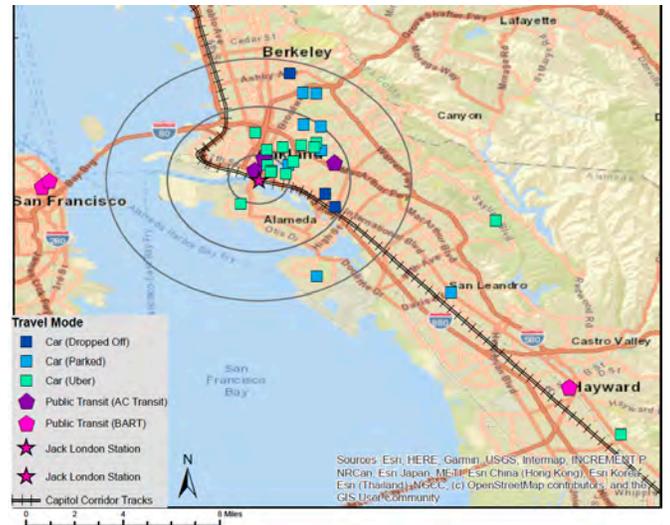
Age

- 18-24 – 0%
- 25-34 – 41%
- 35-44 – 31%
- 45-54 – 14%
- 55-64 – 13%
- 65+ – 1%

Regularity of Station Use



Origins and Access Maps



Note on figures: Surveys for bike users and pedestrians coded based on sentiments (liked, neutral, disliked) of travelling to the OKJ station. Rings represent one-mile, three-mile, and five-mile station buffer zones. Two public transit user and one driver who accessed the OKJ station were located outside the presented map window.

Pedestrian Oakland Jack London Station Users

Ratings for Pedestrian Access

86% of walkers thought that the route they took to the Oakland Jack London station was direct and convenient.

86% of participants who walked to the Oakland Jack London station on the day of the survey **always** or **usually** walk to reach the station.

3.14 - On a scale of 1 (poor) to 5 (excellent), walkers on average rated the **quality of sidewalks** on the way to the Oakland Jack London station as a 3.14 out of 5.

3.43 - On a scale of 1 (high traffic) to 5 (low traffic), walkers on average rated **exposure to vehicles** on the way to the Oakland Jack London station as a 3.43 out of 5.

Comments Related to Pedestrian Station Access at Oakland Jack London

What about your walk to the Oakland Jack London station do you like and or what about your walk do you not like?

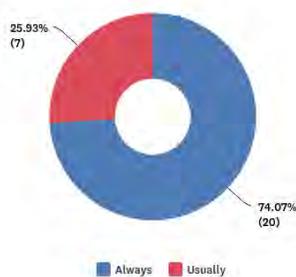
- 1 I can meditate and plan my day as I walk. I do not enjoy the walk when it's raining
- 2 I enjoy walking
- 3 Homeless, under bridges
- 4 I like walking
- 5 Too many traffic lights
- 6 Walk is one start straight line. No major traffic to navigate.
- 7 I like the cross walk. I don't like when there are loiterers around the station and outside benches leading up to the track and it's dark outside in am.

Additional suggestions you would make to improve the pedestrian experience?

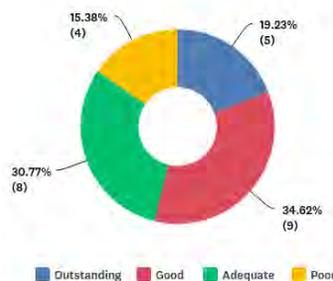
- 1. More lighting
- 2. Pedestrian walkway under the freeway so it can be car free to reduce accidents
- 3. Services such as a deli for coffee and breakfast sandwiches.
- 4. Walk signal at cross walk
- 5. Too many homeless people at Jack London (under bridges)
- 6. Remove urine smell from sidewalks in the area

Bike / Scooter Oakland Jack London Station Users

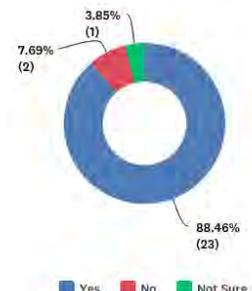
Bike / Scooter to Station Frequency



Safety & Convenience of Routes



Bike / Scooter Share Near Station?

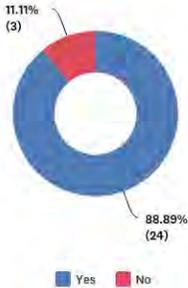


100% of respondents always or usually bike to the Oakland Jack London station

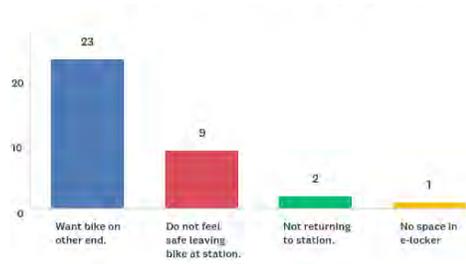
53% of respondents were satisfied with the safety & convenience of existing bike / scooter routes to the Oakland Jack London station.

8% (9% less than all Capitol Corridor stations averaged) of bike riders said that they did not know of bike or scooter share service near the Oakland Jack London station.

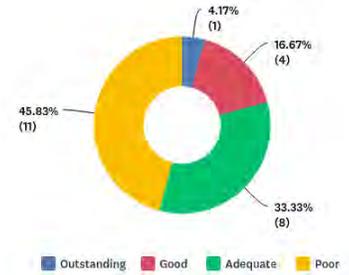
Brought Bike / Scooter on Train?



Rationale for Bringing on Train



Availability of Bike Rack Spaces on Train



Comments Related to Bike / Scooter Station Access at Oakland Jack London

What about the current bike/scooter routes to your home station do you like and/or dislike?

- 1 Broadway has no bicycle lanes and Harrison the bike lanes disappears twice north of 27th street. Both should have continuous protected bike lanes.
- 2 bike lanes almost all the way. Unfortunately, too many stop lights.
- 3 Hardly any protected bike lanes and lots of potholes
- 4 Good but people like to stop in them.
- 5 Like: Path is separate from the street near the lake, otherwise an adequate amount of space throughout my route Dislike: Poorly paved in some areas, lights often change with no cars in the other direction
- 6 The bike quantity and question around adequate spaces really depends on the volume of riders. I see what a difficult aspect to assess it is. Sometimes it's crazy with bikes stacked everywhere like a playground. Sometimes there's exactly the number of bikes per spaces. Maybe move more to a Cal train approach and have a big open cab where bikes are just loaded in without racks? Either way I love Amtrak, can't thank you enough for a good solid daily commute...keep doing great!
- 7 Most have bike lanes.
- 8 Road quality extremely poor, especially on 4th west of MLK. City promised to repave (in 5 year plan) but then reneged on promise to repave rich neighborhoods instead (Lakeshore repaved 3x in last 5 years)
- 9 Intersections can be dangerous because of bad drivers
- 10 There are good bike routes in my neighborhood, but once I get downtown there is construction, highway ramps and lots of traffic. No bike infrastructure downtown except near Lake Merritt... The bike lanes on Telegraph Ave are used as parking spots very frequently and the City does not ticket drivers for this.
- 11 Like: new separated bike lanes at Lake Merritt, and regular bike lanes for the rest of the route Dislike: lights are poorly timed for bikes so I hit pretty much every red. Cars in bike lanes
- 12 Streets are incredibly poorly paved (full of massive, bone-jarring potholes) and some are unsafe in terms of car traffic. Also the route is convoluted and dedicated bike paths are an option for only a small portion of the route.
- 13 Bike lanes exist the whole way, but getting across 880 from Downtown Oakland to Jack London Square is dangerous at almost every crossing because of the large number of cars entering/exiting the freeway.
- 14 I don't like that the station that was planned to be located at the Jack London Station never happened and I have to walk from a few blocks away.
- 15 There are a few intersections that are not bike friendly.
- 16 No protected lanes, a few spots without lanes.
- 17 CARS! It's not as much of a problem in the mornings (because I leave so early), but especially during rush hour on my way home, the cars are bad. There is one section where even though there is a bike lane, there are so many cars trying to turn right when I am trying to go straight that it always feels unsafe. I have had a couple of close calls there. Secondary to the cars, there are places where the road quality is really bad.

- 18 It's still dangerous to cross streets without lights
- 19 Very dangerous. I nearly get hit by a car EVERY DAY. I bike through Downton Oakland, and I often feel like cars drive dangerously on purpose around bikers. It is so infuriating and there have been days that I didn't ride Amtrak solely because I was too afraid to bike there. That means Amtrak is losing money because it is too dangerous to get to station.
- 20 Dedicated bike lanes
- 21 I take Broadway, it's okay
- 22 Oakland has improved bike routes significantly, guarding the route near the Lake Merritt station, but pavement quality is still poor, and cars drive too fast on narrow roads.
- 23 Short ride, wide streets with bike lanes

Additional suggestions you would make to improve the bike / scooter riding experience?

- 1 Protected bicycle lanes and protected intersections
- 2 Protected bike lanes would be great
- 3 My route is pretty good, but I know others have issues with lane separation between them and motor vehicles. In some places paths could use a little TLC but on the most part they are fine.
- 4 Bike lane buffers, petition to improve pavement on all bike paths
- 5 Better lighting
- 6 More bike cars!
- 7 We need more protected lanes
- 8 Anything to make it safer to get from City Hall to the station, down Telegraph Ave, would be wonderful!
- 9 Bike lane buffers
- 10 Make all the bike lanes separated
- 11 PAVE OAKLAND STREETS. Some basic bike infrastructure (bike lanes, etc.) would be great too. But mostly they just have to pave the damn streets.
- 12 Request a Bay Wheels dock right at the station. The nearest dock is close, but those extra 3 blocks of walking add unnecessary friction. Considering the issues with bike capacity on trains, this seems like it could be an easy win.
- 14 Move station.
- 15 A second pathway through the Posey Tube would be nice.
- 16 More protected lanes
- 17 Protected bike lanes and/or bike/ped only blvds.
- 18 More bike racks on train. Better car drivers.
- 19 Amtrak should be involved in advocating for safer roads so that more people can bike to the train. I know people who love the train for the sole purpose that they can transport their bikes on it, so I feel that train ridership would go up if people could actually get ride bikes to the train without risking their lives.
- 20 Improve pavement quality

Public Transit Oakland Jack London Station Users

Public Transit Travel Modes Serving Station

Ease of Reaching Station

BART



57%

AC Transit



29%

Amtrak Bus

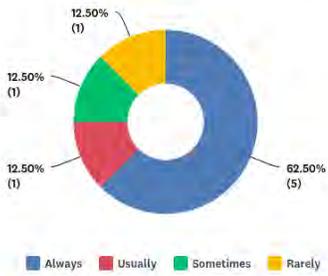


14%

3.50 - On a scale of 1 (not frequent enough) to 5 (very frequent), public transit users on average rated **departure time intervals for public transit options that service the Oakland Jack London station** as a 3.50 out of 5.

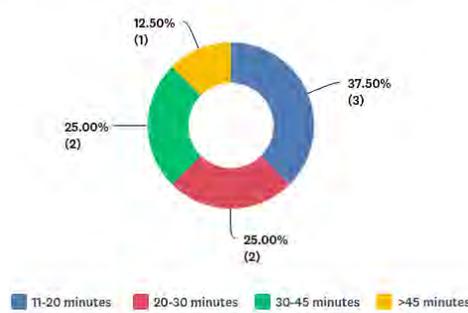
4.25 - On a scale of 1 (not useful) to 5 (very useful), public transit users rated the **helpfulness of information on connecting to the Oakland Jack London station** as a 4.25 out of 5.

Public Transit to Station Frequency



25% of respondents who used public transit to reach the Oakland Jack London station indicated that they only **sometimes** use or **rarely** use public transit services to reach the station.

Duration of Trip to Station



63% of respondents have public transit commutes of less than 30 minutes to reach the Oakland Jack London station.

Connection Information Source



Note: Other" category includes services like the BART & Routsey apps.

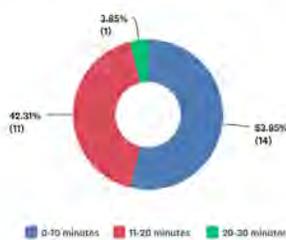
Comments Related to Public Transit Station Access at Oakland Jack London

As a public transit user, what do you like the least about using these services?

- 1 Must walk 10 minutes from Lake Merritt BART Station to Oakland – Jack London Square Amtrak station
- 2 Poor connection going home
- 3 There is always the possibility for delays on public transit. This made me miss my Amtrak train once before.
- 4 Not frequent enough. Frequency is not bad, but I can walk the distance easily enough and it would have to come very frequently to justify my using it (because if it came very frequently, it would consistently save me time as opposed to walking the entire distance).
- 5 Transfers from BART are long walks or multiple BART transfers, especially with BART's pretty bad off-hour schedules now. Those services really can't account for a bike as a transfer mode, so I do the calculations in my head on when to leave.

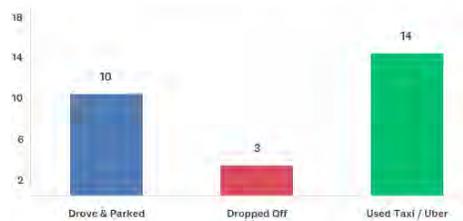
Vehicle Oakland Jack London Station Users

Duration of Drive



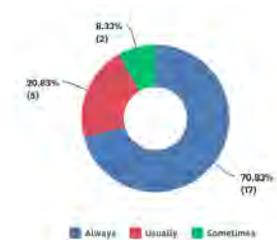
95% of drivers had trips under 20 minutes.

Type of Drive



37% of station users who used a vehicle to reach the station also parked at the station

Drive to Station Frequency



92% of drivers always or usually drive to reach the Emeryville station.

Parking



Cost of Parking

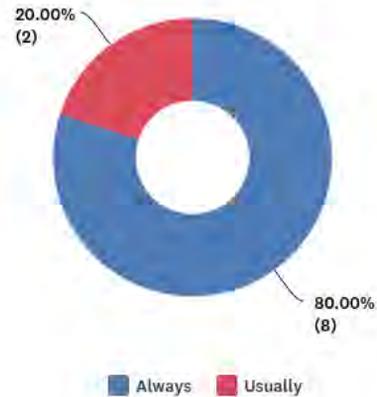
3.11 — On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at the Oakland Jack London station as a 3.11 out of 5.



Lighting in Lot

3.60 — On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots at the Oakland Jack London station as a 3.60 out of 5.

Availability of Needed Parking Space Type



Comments Related to Vehicle Transit Station Access at Oakland Jack London

Why did you choose to drive or ride in a car to reach the station today?

- 1 Convenience
- 2 Wasn't sure how I would be getting home and didn't want to have my bike today in San Jose.
- 3 Bus schedules can be unpredictable, and I didn't have time for that variability.
- 4 Easy and cheap
- 5 Couldn't walk with the baggage we had
- 6 there is no other efficient option. I would rather take a shuttle but it adds too much time to my commute
- 7 I'd rather take AC transit #12 but it's not frequent enough or it's not timed with the train. it doesn't work.
- 8 I don't live within walking distance of the station and public transit to station is not safe and not reliable
- 9 I can drive in 15 minutes. I have to allow at least 45 minutes for public transit and that assumes the connections work
- 10 Time efficient and flexible
- 11 It is faster but more importantly the bus is not reliable. I would have to allow 1 hour or more to get to the station on time
- 12 Time issues.
- 13 I use Uber so I don't need to park
- 14 I ride a motorcycle. Your survey should definitely include motorcycles and scooters as a mode of transportation. I ride to the station because I live far from the station, it is time efficient and I can park the motorcycle for free next to the station (although it would be great if you provided some dedicated motorcycle parking at Jack London.
- 15 secure parking
- 16 there is a lack of convenient transit connection
- 17 Only way
- 18 Baggage carrying, Walk is long enough to be inconvenient
- 19 Convenience
- 20 Convenience
- 21 Not a safe walk
- 22 Work pays for it & it's faster than the bus so I can sleep longer.
- 23 No Public transit to take me there.
- 24 Early morning
- 25 It's not safe to bike in Oakland to reach Amtrak station

Destination Station Survey (70 Total Oakland Jack London Responses)

Response Summary for individuals noting Oakland Jack London as being their destination station.

Destination Station -> Final Destination Travel Mode

1. Walk – 47% (33)
2. Bike / Scooter – 22% (15)
3. Drive or Pick Up in a Personal Vehicle – 12% (8)
4. Taxi or Uber / Lyft – 12 (8)
5. Public Transit – 7% (5)



Note: Ferry service from Oakland to San Francisco included in the public transit category.

Destination Station Demographics

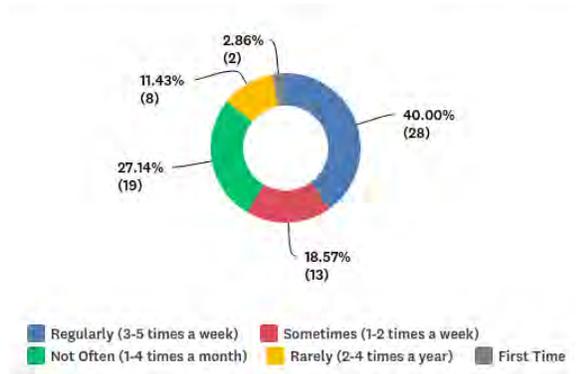
Gender

- Male – 52%
- Female – 48%

Age

- 18-24 – 2%
- 25-34 – 24%
- 35-44 – 21%
- 45-54 – 21%
- 55-64 – 24%
- 65+ – 9%

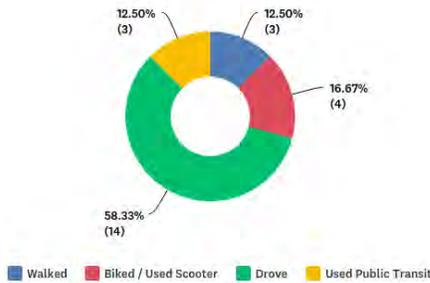
Frequency of Capitol Corridor Use



San Jose – Diridon Station

Home Station Survey (24 Total Responses)

Mode of Station Access



6% more walkers than at all Capitol Corridor stations averaged.



Station Demographics

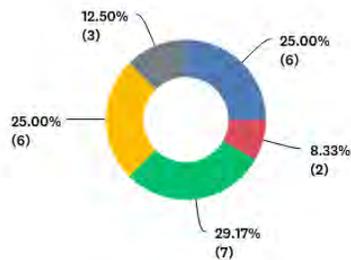
Gender

- Male – 57%
- Female – 43%

Age

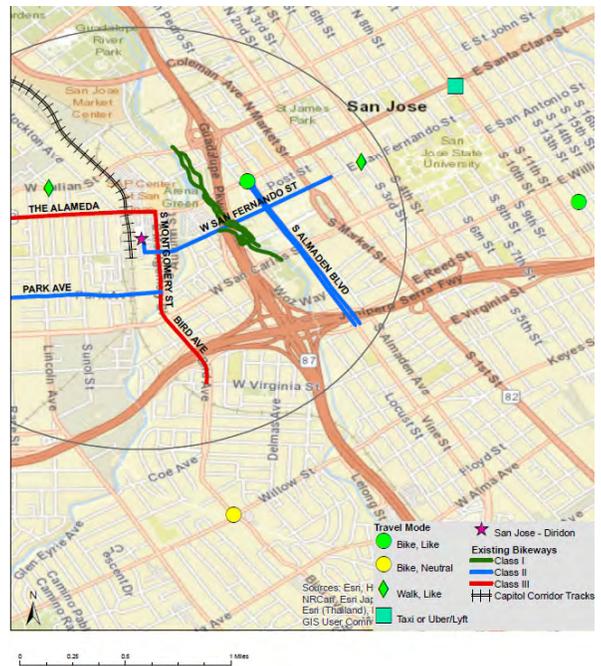
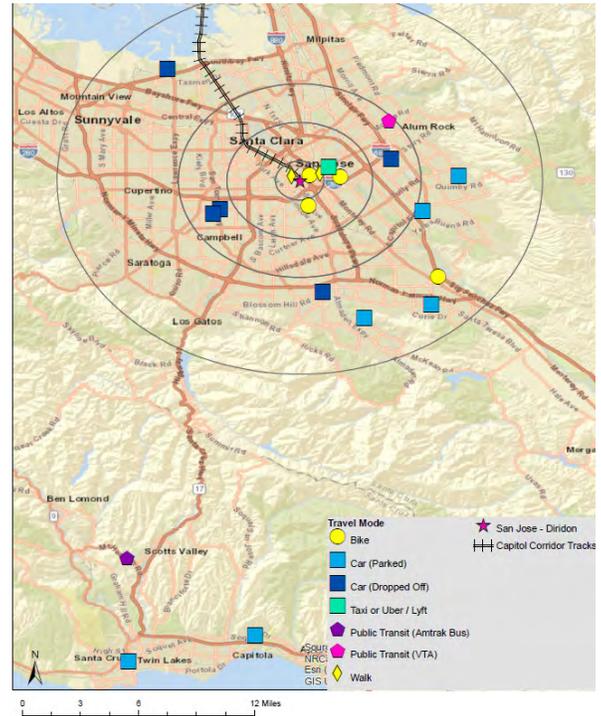
- 18-24 – 14%
- 25-34 – 19%
- 35-44 – 24%
- 45-54 – 14%
- 55-64 – 14%
- 65+ – 14%

Regularity of Station Use



■ Regularly (3-5 times a week)
 ■ Sometimes (1-2 times a week)
 ■ Not Often (1-4 times a month)
 ■ Rarely (2-4 times a year)
 ■ First Time

Origins and Access Maps



Note on figures: Surveys for bike users and pedestrians in zoomed in map coded based on sentiments (liked, neutral, disliked) of travelling to the San Jose – Diridon station. One bike rider (who disliked) was geocoded outside the map window. Rings represent one-mile, three-mile, five-mile, and ten-mile station buffer zones.

Pedestrian San Jose – Diridon Station Users

Ratings for Pedestrian Access

100% of walkers thought that the route they took to the San Jose – Diridon station was direct and convenient.

100% of participants who walked to the San Jose – Diridon station on the day of the survey **always** walk to reach the station.

4.33 - On a scale of 1 (poor) to 5 (excellent), walkers on average rated the **quality of sidewalks** on the way to the San Jose – Diridon station as a 4.33 out of 5.

3.67 - On a scale of 1 (high traffic) to 5 (low traffic), walkers on average rated **exposure to vehicles** on the way to the San Jose – Diridon station as a 3.67 out of 5.

Comments Related to Pedestrian Station Access at San Jose – Diridon

What about your walk to the San Jose - Diridon station do you like and or what about your walk do you not like?

1 The walk is pleasant with many businesses, a generally wide sidewalk, and trees. It's just the right distance where I don't mind walking vs biking.

2 Homeless people

3 Get some exercise in the morning

Bike / Scooter San Jose – Diridon Station Users

50% of respondents always ride their bike when they need to get to the San Jose – Diridon station.

67% of respondents thought that bike / scooter paths to and from the San Jose – Diridon station are outstanding.

100% of respondents new of bike / scooter share services existing near the San Jose – Diridon station.

Comments Related to Bike / Scooter Station Access at San Jose – Diridon

What about the current bike/scooter routes to your home station do you like and/or dislike?

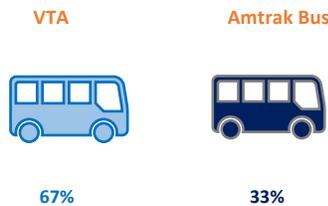
- 1 Bike lanes are blocked by parked cars and dumpsters
- 2 For much of my ride, the bike lanes are wide, but the road narrows down to 1 lane and I have to share space with cars where the bike lanes end.
- 3 Entire route has buffered bike lanes

Additional suggestions you would make to improve the bike / scooter riding experience?

- 1 We have new bike lanes, but the road does narrow a lot. There are also on-ramps to freeways, which can be hazardous to bicyclists
- 2 Add Bike Station to provide additional services and secure bike parking

Public Transit San Jose – Diridon Station Users

Public Transit Travel Modes Serving Station



Ease of Reaching Station

- 2.33** - On a scale of 1 (not frequent enough) to 5 (very frequent), public transit users on average rated **departure time intervals for public transit options that service the San Jose – Diridon station** as a 2.33 out of 5.
- 4.67** - On a scale of 1 (not useful) to 5 (very useful), public transit users rated the **helpfulness of information on connecting to the San – Jose Diridon station** as a 4.67 out of 5.

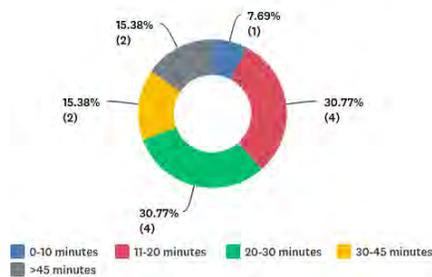
Comments Related to Public Transit Station Access at San Jose – Diridon

As a public transit user, what do you like the least about using these services?

- 1 Pretty satisfied.
- 2 Takes too long, waiting from the station takes forever.
- 3 Public transit need to be cleaner, San Jose Diridon Station needs to clean their site WAY BETTER.

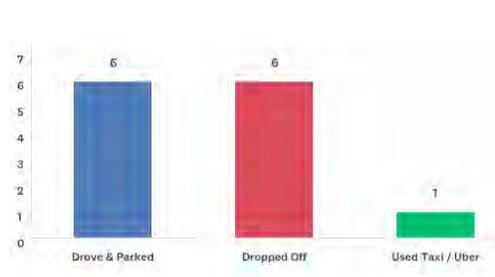
Vehicle San Jose – Diridon Station Users

Duration of Drive



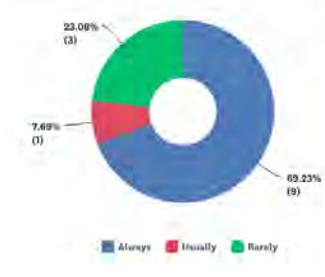
62% of drivers had trips over 20 minutes long.

Type of Drive



46% of station users who used a vehicle to reach the station also parked at the station

Drive to Station Frequency



77% of drivers (12% less than average of all Capitol Corridor stations) always or usually drive to reach the San Jose – Diridon station.

Parking



Cost of Parking

4.20 – On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at the San Jose - Diridon station as a 4.20 out of 5.



Lighting in Lot

3.67 – On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots at the San Jose – Diridon station as a 3.67 out of 5.

Comments Related to Vehicle Transit Station Access at San Jose - Diridon

Why did you choose to drive or ride in a car to reach the station today?

- 1 Convenience
- 2 Wasn't sure how I would be getting home and didn't want to have my bike today in San Jose.
- 3 Bus schedules can be unpredictable, and I didn't have time for that variability.
- 4 Easy and cheap
- 5 Couldn't walk with the baggage we had
- 6 there is no other efficient option. I would rather take a shuttle but it adds too much time to my commute
- 7 I'd rather take AC transit #12 but it's not frequent enough or it's not timed with the train. it doesn't work.
- 8 I don't live within walking distance of the station and public transit to station is not safe and not reliable
- 9 I can drive in 15 minutes. I have to allow at least 45 minutes for public transit and that assumes the connections work
- 10 Time efficient and flexible
- 11 It is faster but more importantly the bus is not reliable. I would have to allow 1 hour or more to get to the station on time
- 12 Time issues.
- 13 I use Uber so I don't need to park
- 14 I ride a motorcycle. Your survey should definitely include motorcycles and scooters as a mode of transportation. I ride to the station because I live far from the station, it is time efficient and I can park the motorcycle for free next to the station (although it would be great if you provided some dedicated motorcycle parking at Jack London.
- 15 secure parking
- 16 there is a lack of convenient transit connection
- 17 Only way
- 18 Baggage carrying, Walk is long enough to be inconvenient
- 19 Convenience
- 20 Convenience
- 21 Not a safe walk
- 22 Work pays for it & it's faster than the bus so I can sleep longer.
- 23 No Public transit to take me there.
- 24 Early morning
- 25 It's not safe to bike in Oakland to reach Amtrak station

Destination Station Survey (57 Total San Jose – Diridon Responses)

Response Summary for individuals noting San Jose – Diridon as being their destination station.

Destination Station -> Final Destination Travel Mode

1. Public Transit – 30% (17)
2. Bike / Scooter – 21% (12)
3. Drive or Pick Up in a Personal Vehicle – 20% (11)
4. Walk – 16% (9)
5. Taxi or Uber / Lyft – 13% (7)



Destination Station Demographics

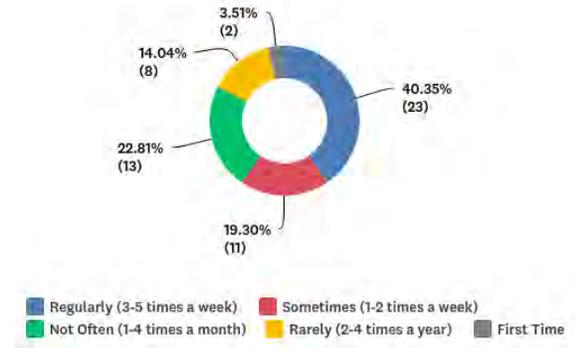
Gender

- Male – 72%
- Female – 28%

Age

- 18-24 – 9%
- 25-34 – 15%
- 35-44 – 28%
- 45-54 – 17%
- 55-64 – 17%
- 65+ – 13%

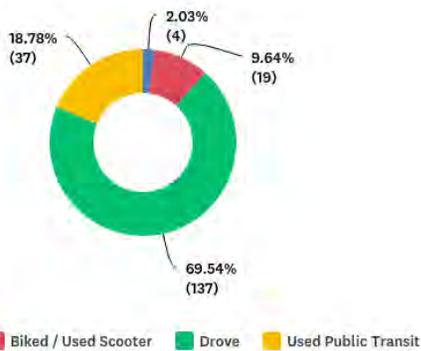
Frequency of Capitol Corridor Use



Sacramento Station

Home Station Survey (197 Total Responses)

Home Station Mode of Station Access



10% more drivers and 8% less bikers at Sacramento than at all Capitol Corridor stations averaged.



Home Station Demographics

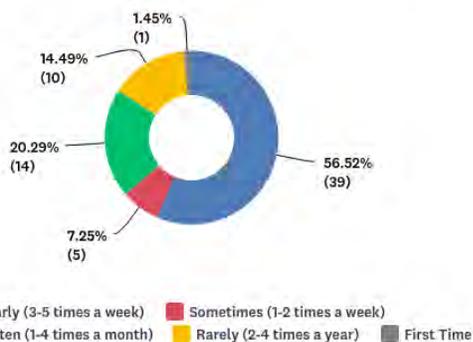
Gender

- Male – 45%
- Female – 55%

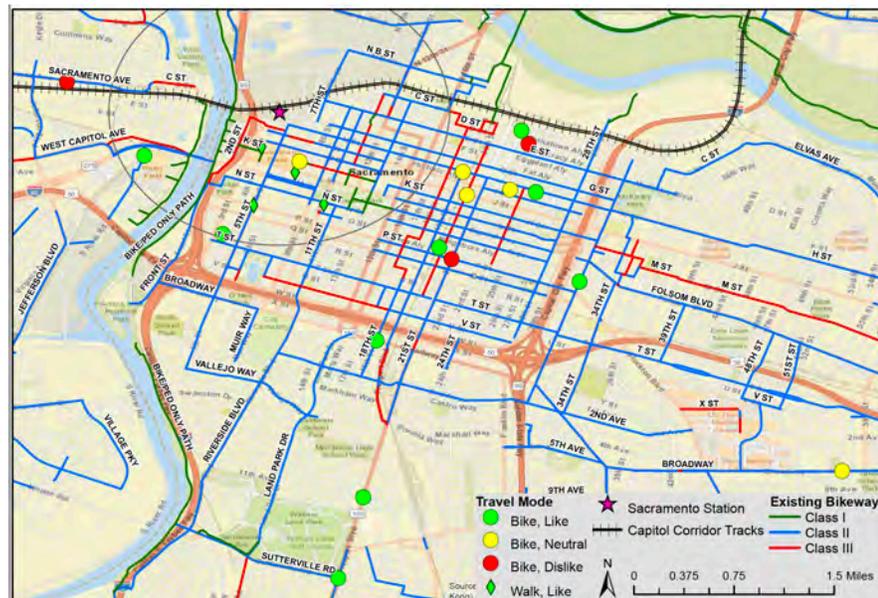
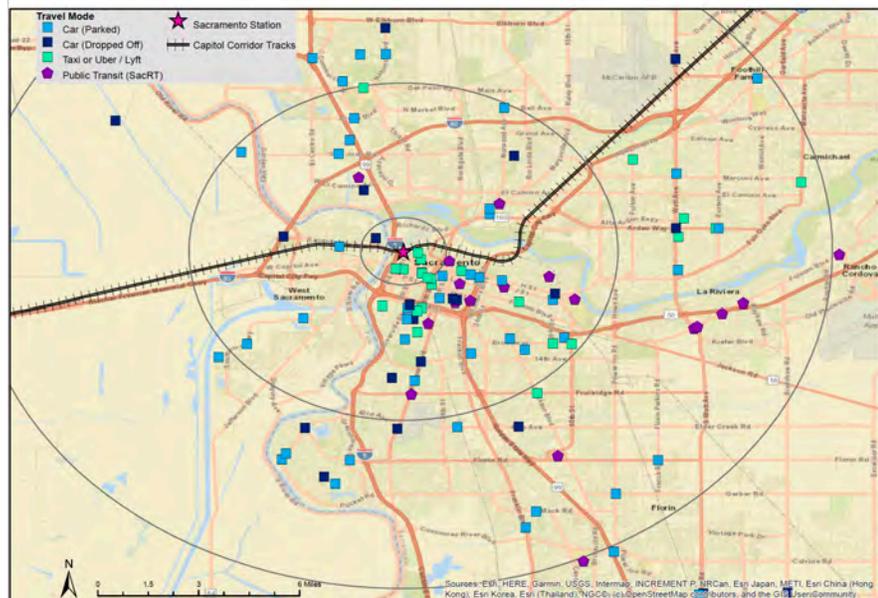
Age

- 18-24 – 2%
- 25-34 – 19%
- 35-44 – 19%
- 45-54 – 23%
- 55-64 – 23%
- 65+ – 14%

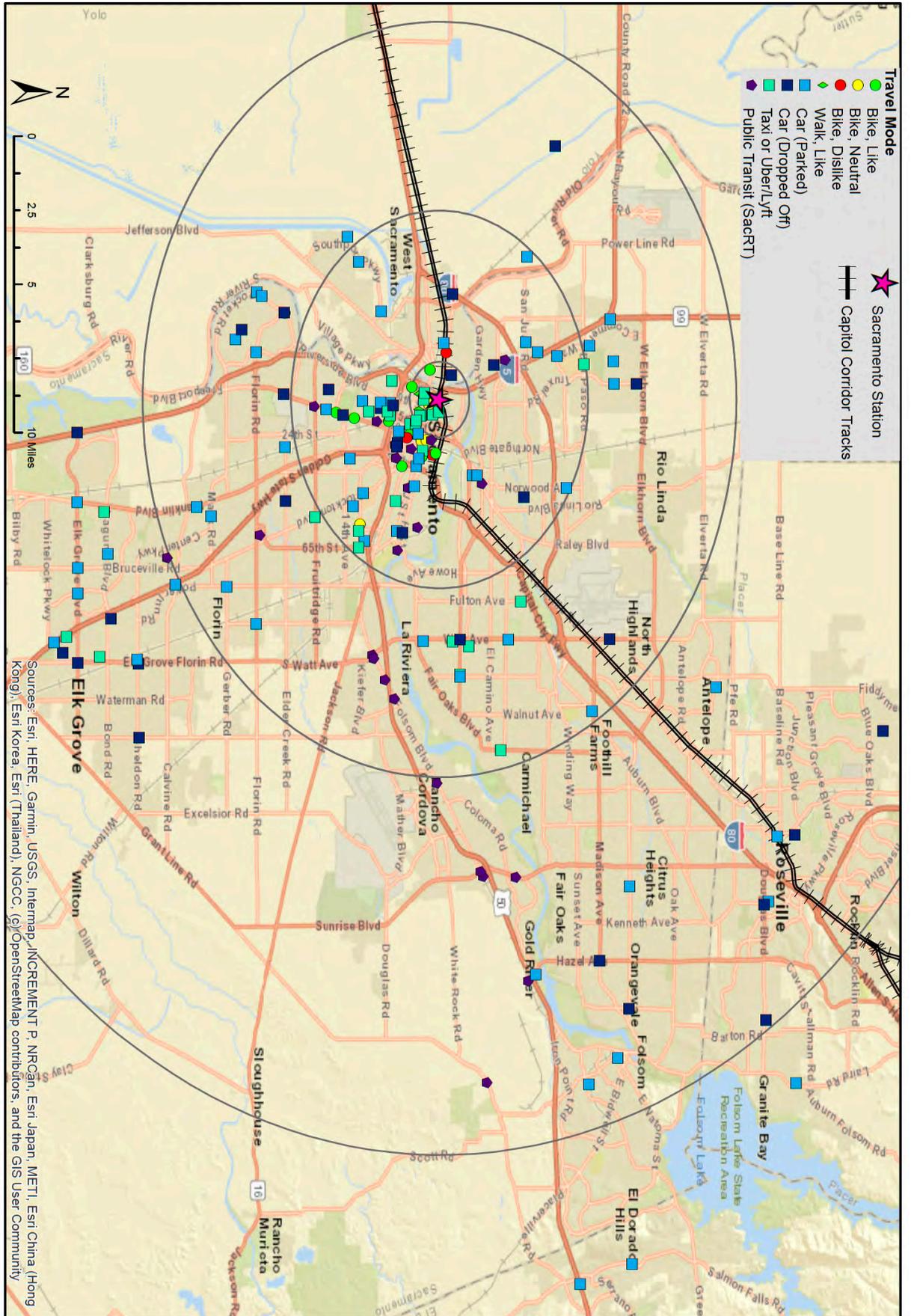
Home Station Regularity of Station Use



Origins and Access Maps



Note on figures: These two maps are zoomed in to show areas with the highest density of passengers traveling to the Sacramento station. Surveys for bike users and pedestrians in map coded based on sentiments (liked, neutral, disliked) of travelling to the Sacramento Station. One bike rider (who liked ride) was geocoded outside the map window. Rings represent one-mile, five-mile, and ten-mile station buffer zones. Bike and walk travel mode map window zoomed in to only show one-mile station buffer ring.



Note on figure: This map shows nearly the full extent of passengers accessing the Sacramento station. Bike users and pedestrians in map coded based on sentiments (liked, neutral, disliked) of travelling to the OKI station. Two drivers were excluded from the map due to desire to limit map extent. Buffer rings show one-mile, five-mile, ten-mile, and twenty-mile station buffer zones.

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c)OpenStreetMap contributors, and the GIS User Community

Pedestrian Sacramento Station Users

Ratings for Pedestrian Access

100% of walkers thought that the route they took to the Sacramento station was direct and convenient.

100% of participants who walked to the Sacramento station on the day of the survey **always** or **usually** walk to reach the station.

3.75 - On a scale of 1 (poor) to 5 (excellent), walkers on average rated the **quality of sidewalks** on the way to the Sacramento station as a 3.75 out of 5.

3.75 - On a scale of 1 (high traffic) to 5 (low traffic), walkers on average rated **exposure to vehicles** on the way to the Sacramento station as a 3.75 out of 5.

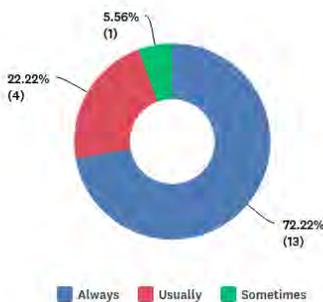
Comments Related to Pedestrian Station Access at Sacramento

What about your walk to the Sacramento station do you like and or what about your walk do you not like?

- 1 Too many stop lights; it's nearby.
- 2 I live close by Amtrak
- 3 Walking is stress free and relaxing
- 4 There is a construction on-going, making it somewhat hard to walk. The rest part is easy.
- 5 Once the construction is done, the sidewalks will be accessible to pedestrians. It will be very easy to walk.
- 6 Safer crossings

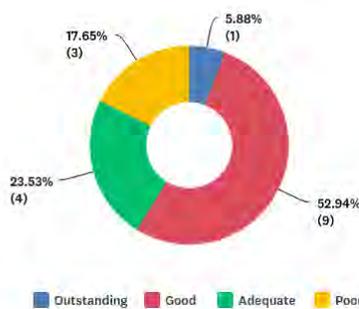
Sacramento Bike / Scooter Station Users

Bike / Scooter to Station Frequency



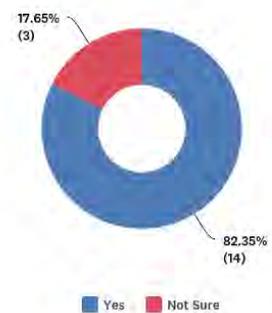
94% of respondents always or usually bike to the Sacramento station

Safety & Convenience of Routes



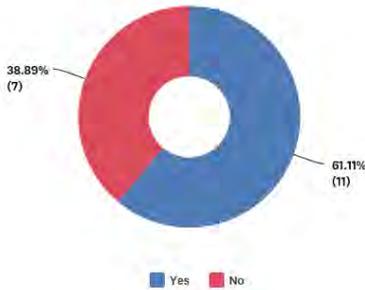
59% of respondents were satisfied with the safety & convenience of existing bike / scooter routes to the Sacramento station.

Bike / Scooter Share Near Station?

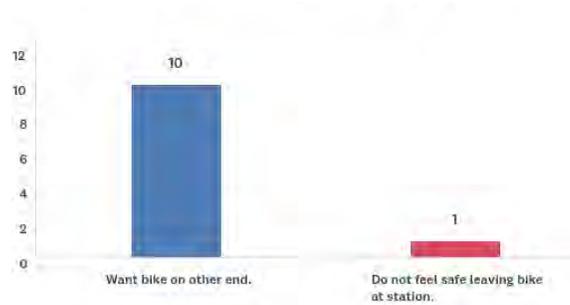


0% (17% less than all Capitol Corridor stations averaged) bike riding respondents said that they did not know of bike or scooter share service near the Sacramento station.

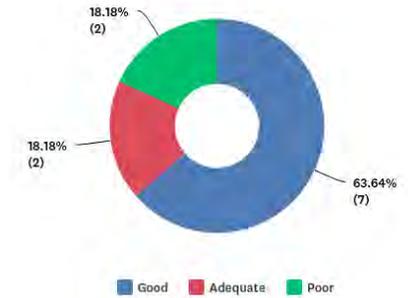
Brought Bike / Scooter on Train?



Rationale for Bringing on Train



Availability of Bike Rack Spaces on Train



Bike Lockers / Parking

4.00 - On a scale of 1 (poor) to 5 (excellent), bike/scooter riders who parked at stations on average rated the **amount of secure bike parking** at the Sacramento station as a 4.00 out of 5.

3.29 - On a scale of 1 (poor) to 5 (excellent), bike/scooter riders who parked at stations on average rated the **location of secure bike parking** at the Sacramento station as a 3.29 out of 5.

Comments Related to Bike / Scooter Station Access at Sacramento

What about the current bike/scooter routes to your home station do you like and/or dislike?

- 1 Bike lanes not defined on roads that I use. I frequently go against traffic because there is no bike lane on one road. Homeless people sleeping in bike lanes
- 2 Lighting needs to be better along the route.
- 3 I ride early in the morning before too many cars. In the return home from the station, there is much more auto traffic, but it moves slower to not very much faster than myself. I am also in a bike lane on the one-way street on the way home, so I generally feel safe enough.
- 4 Lane commitment
- 5 fantastic: "bike" entrance, at the back of Sacramento Station, is separate from main parking lot car traffic-- this is a huge plus. bike lanes along route are ok, not great.
- 6 Sac.Valley station still has A LONG WAY to go toward making bike access to the site convenient and safe. Planned re-orientation, expansion, re-routing, RT track move, etc. CAN'T HAPPEN TOO SOON!!!
- 7 I hate the traffic roundabouts on H Street.
- 8 Bicycle access to the Sacramento station platforms is poorly designed. The bicycle ride to/from the station is good. Levee mixed use path most of the way.
- 9 I just deal with it
- 10 Traffic moves to fast, lanes to narrow, to close to cars. In some areas, no bike lane at all.
- 11 Likes: There are a several route options to reach the station by bike. Bike lane and pedestrian access to the station has generally improved over time. Dislikes: Negotiating with vehicle traffic can be a challenge sometimes especially during busier times along wide streets and intersections.
- 12 Getting to the train station from G street is very confusing. There is a sign saying bike route on f street but that ends in a dead-end industrial lot. Going straight on g street runs into rail slots and one-way streets.
- 13 There are adequate bike lanes, no hills, low traffic
- 14 Not all streets have a bike lanes downtown Sac and I also have navigated around the light rail tracks. On the Vacaville side, conditions for bikers are very poor. The platform is very nice, but there are little to no bike lanes and no curbs on the streets. Also, lots of debris on the road. Cars also speed often. Not the safest.

Additional suggestions you would make to improve the bike / scooter riding experience?

- 1 Add a bike lane on a flat road. Sacramento bike lanes near station are going uphill. There is a flat road with no bike lane.

- 2 The one-way streets into/out of Sacramento station are vastly different making access to the station poor with it much better leaving the station.
- 3 Bike lane buffers would be amazing.
- 4 Move the bike facilities closer to the platform.
- 5 Sac Valley IS SO BEHIND THE URBAN CURVE on multi-modality... and now w the (ticking money pit of waste) Railyards adjacent futbol stadium being rushed into existence here...
- 6 Parking garage for bikes and scooters that is safe
- 7 Formally allow bicycle access along road from by the bus terminal. Allow people to ride bicycles to the platforms during off peak times.
- 8 universal traffic law enforcement: cars, bikes, pedestrians
- 9 Bike lane buffers, and more available rental equipment
- 10 Signage making it clear the best way to ride to the station
- 11 Move the bike parking/storage to the train track platforms. It's like a 5-minute walk. Don't understand why train station is so far from tracks
- 12 I would suggest allowing the bikers ride the path the station tram takes to get to the platform. This will eliminate the bikes in the same path as the walking passengers. Safer for all.

Public Transit Sacramento Station Users

Public Transit Travel Modes Serving Station

Sac RT



95%

El Dorado Transit



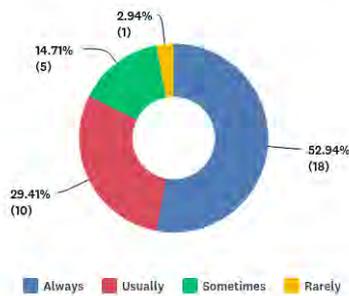
5%

Ease of Reaching Station

3.54 - On a scale of 1 (not frequent enough) to 5 (very frequent), public transit users on average rated **departure time intervals for public transit options that service the Sacramento station** as a 3.54 out of 5.

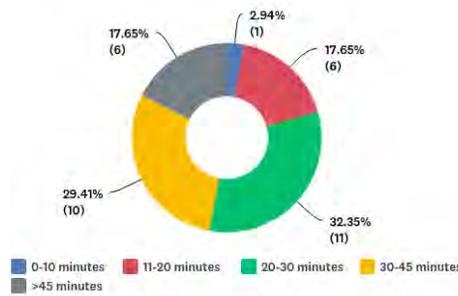
4.18 - On a scale of 1 (not useful) to 5 (very useful), public transit users rated the **helpfulness of information on connecting to the Sacramento station** as a 4.18 out of 5.

Public Transit to Station Frequency



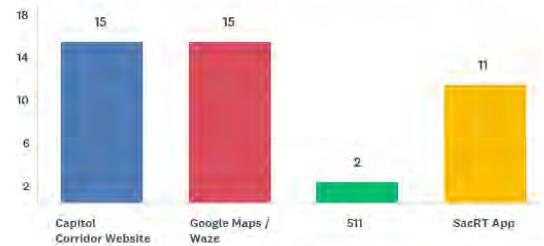
82% of respondents who used public transit indicated that they **always** or **usually** use public transit services to reach the station.

Duration of Trip to Station



45% of respondents have public transit commutes of more than 30 minutes to reach the Sacramento station.

Connection Information Source



70% of respondents use the Capitol Corridor website or Google Maps / Waze to figure out their connection to the Sacramento Station.

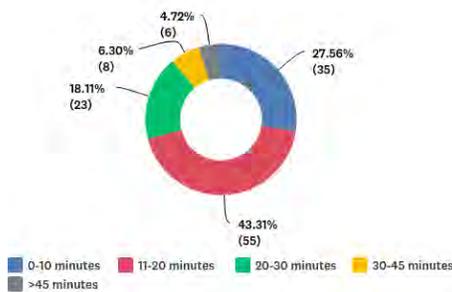
Comments Related to Public Transit Station Access at Sacramento

As a public transit user, what do you like the least about using these services?

1. Sometimes unpredictable timing/delays. Crowded train cars. Sometimes other passengers are loud.
- 2 Cleanliness
- 3 Too many delays
- 4 Safety in public and community is important
- 5 Rude passengers (loud music, disruptive behavior, etc.)
- 6 Evening wait times are ridiculous, often the last 2 miles can take 40 minutes because of poor scheduling.
- 7 It is very simple using transit.
- 8 Station clientele sometimes.
- 9 Low frequency, no timed connection for Sac Valley Station, long walk from the bus to the station
- 10 Nothing - it's great!
- 11 no room for luggage
- 12 Don't always feel safe and waiting area.
- 13 1) Sac RT recently truncated the schedule for the 21 bus. Now it's not possible to catch the Capitol Corridor at 7:30 am or earlier by taking the bus from my home. I have to get to the light rail station via alternate method (bike, drop-off, or Lyft). 2) The train is not timed with public transit at all. I got to Sac Valley Station at 8:42 am the other day, just in time to see the 8:46 am train depart.
- 14 Public transit is not readily available in Downtown Sacramento for the last arriving Capitol Corridor Eastbound Train.
- 15 Sometimes there are delays, and there is no information disseminated to passengers.
- 16 Frequency of bus
- 17 delays, RT did have unclear frequency information for weekends, also wish Capitol Corridor ran more frequently on weekends and weekdays—trains are always crowded
- 18 Not a thing
- 19 Takes longer than driving, but worth it
- 20 takes too long, drivers are surly, other riders smell bad because they are homeless, seats are dirty this is in reference to SACRT not AC Transit
- 21 If the bus is 5 minutes late, the next train is an hour later.
- 22 I love BART. Wish it went to more places. I wish Sacramento had more frequent buses
- 23 All good
- 24 Sometimes late
- 25 Insecurity about getting there in a timely manner
- 26 The Train arriving late at the Emeryville Station
- 27 The transit doesn't run that frequently from the train station to other destinations
- 28 Long walk from train track to Sacramento station

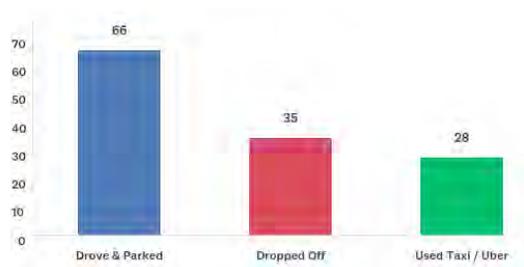
Vehicle Sacramento Station Users

Duration of Drive



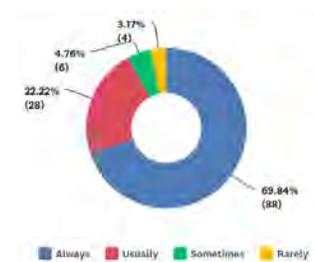
71% of drivers had trips under 20 minutes.

Type of Drive



51% of station users who used a vehicle to reach the station also parked at the station

Drive to Station Frequency



92% of drivers always or usually drive to reach the Sacramento station.

Parking



Cost of Parking

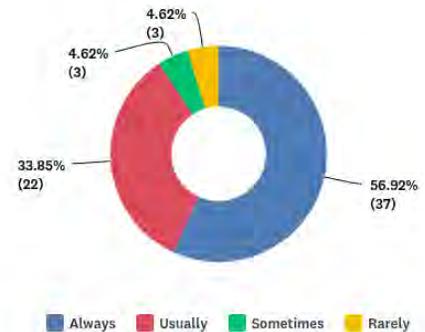
2.82 – On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at the Sacramento station as a 2.82 out of 5.



Lighting in Lot

3.23 – On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots at the Sacramento station as a 3.23 out of 5.

Availability of Needed Parking Space Type



9% of drivers who park only sometimes or rarely find their necessary parking space type at the Sacramento station.

Comments Related to Vehicle Transit Station Access at Sacramento

Why did you choose to drive or ride in a car to reach the station today?

- 1 It is easier than any other way
- 2 I drive from elk grove to land park, then Jump bike from land park to Sac station
- 3 No reliable, safe or timely option available.
- 4 Public Transit is unreliable. Not enough SAFE parking in Roseville to use the Bus.
- 5 Do not want to be tethered to public transit
- 6 I didn't want to pay for parking today so I was dropped off by my spouse
- 7 I had bags. Challenging to take the bus
- 8 time efficient to be dropped off
- 9 Too far for public transit
- 10 Time efficient
- 11 I live far and get up early
- 12 Cannot always find parking in the station lot and alternative parking is even more expensive. Plus, if I am flying out of SFO, I won't want to leave my car for multiple days.
- 13 Public transit takes double long than drive to station
- 14 Takes too long to ride light rail
- 15 Early trip, so I didn't want to take the extra time required for public transit via Light Rail train.
- 16 Time efficient, too far to bike or walk
- 17 Unsafe to walk under bridge near Sacramento Amtrak Station alone in the dark; difficult to bike across I Street bridge; prefer getting a ride from my partner to leaving house 30 mins earlier in the early morning to bike across Tower Bridge (safe route but out of the way)
- 18 home too far to always bike
- 19 I leave at 3:30 am so there is no public transportation service
- 20 I leave early in the morning and it is too far.
- 21 Time efficient
- 22 I need my car to pick up kids at the end of the day

- 23 Time efficient, flexibility in errands or kid pick up upon returning
- 24 My house is far from the station and I don't want to pay to leave my car downtown.
- 25 I live far from station
- 26 Close and convenient
- 27 I live far from the station and it's faster to get there on my car rather than on a bus
- 28 Too early in the morning to get there any other way
- 29 It's about a mile away and Sacramento is hot. To take public transit, I would have to transfer to another light rail line.
- 30 Family member drops me at the station then another at their work then they go to work
- 31 High heels
- 32 It was too dark outside to bike
- 33 I live far from the station
- 34 Too cold
- 35 I live far away
- 36 I live far from another station
- 37 I take the earliest train and at that time the uber drivers take too long to pick me up.
- 38 It's faster if I drive myself and pay the parking charges.
- 39 Only realistic way to get there
- 40 I live far from the station.
- 41 Live outside public transit.
- 42 Quick and convenient, and I can get reimbursed for parking.
- 43 It's early, dark, affordable to park.
- 44 The office is just a bit too far to walk.
- 45 Easier from Elk Grove
- 46 Too far to walk but faster to drive than use other public transit options
- 47 I live over 80 miles from station
- 48 Time efficiency
- 49 No public transit to Station from Elk Grove to catch the 523 at 5:35 am
- 50 Only reasonable fast service at that time of the morning
- 51 No good public transportation in Sacramento.
- 52 The bike path is not great, and I have to leave early and come home late. I love to bike, I'd much rather do that if the path was better or time was more convenient!
- 53 Convenient
- 54 Easy to get there
- 55 Usually I have lots of luggage and or boxes
- 56 I live too far from the station
- 57 errands on way
- 58 I live far from the station, and public transit is not available at 4:30 am.
- 59 Inadequate public transit, too far to walk, too unsafe to bike
- 60 \$5 parking and 10 min drive home
- 61 Lyft was quick and easily.
- 62 time efficient, accessibility, parking fee reasonable
- 63 I drive in Sacramento because the buses don't run on a schedule that makes sense. Once I'm in Oakland I take public transit.
- 64 My husband drops me off on his way to work.
- 65 I live from the station

- 66 My child is dropped off in the morning. Also, I have a long commute day and the trouble it saves by not having to take additional forms of public transportation to Amtrak saves on "mental health points."
- 67 Live far from station
- 68 Easy to get a ride w/ husband as he is going to work
- 69 The 62 bus and Blue Line light rail both run by my house, but neither has timed connections with Capitol Corridor and both are a few blocks from the station, making them pretty useless as last mile connection to the train. Biking in Sac feels too dangerous for me currently as a commute option. I would much rather take bus/light rail or ride my bike, but neither are good enough options at this point. The combined time between the train ride and the transit ride to the station would take too long.
- 70 I had errands to run this morning
- 71 Too far for public transport.
- 72 Only way to get there quickly
- 73 Generally for lectures at Berkeley, and there is no public transportation available when returning on either the 6:00 p.m. or 8:00 p.m. arrivals at the Sacramento Valley Station
- 74 I would prefer to use RT bus, but no direct service from Arden area to SVS, or too infrequent, so when I have time I use bike, when not, I use taxi, sadly
- 75 I always get a ride work in Oakland live in Sacramento
- 76 No public transportation available in the early am.
Transit in my area does not run that early, and I had to first go to my office (four blocks from the SAC station), then walk to the station.
- 77 Transit takes longer and concerned about returning too late
- 78 Time efficient
- 79 Light rail doesn't connect w trainyard. And, NO, parking is not cheap nor even available
- 80 9 miles from the station, no nearby public transportation
- 81 No public transportation at that time of morning.
- 82 I live in Redding, CA and use the amtrak connector buses to reach Sacramento station. To reach the local RABA center I either drive/park or have someone drop me off.
- 83 Sporting event
- 84 Time efficient
- 85 I live far from the station and it works for me to drive to the station and park my car, even though parking is expensive at the Sacramento station.
- 86 I am forced to get a ride share because parking at the station is horrific. There is never parking available. The station is a disaster between this and the long walk after the track was located.
- 87 I live far from the station
- 88 it is time efficient and parking is cheap (only if don't get ticket for parking in handicap parkingI put up my handicap hanger and still got a ticket for \$47.50!!) This happened at Sacramento Amtrak Station.
- 89 My husband drops me off on his way to work because we only have one car. I am considering biking to the station but am concerned about bike safety since it is so dark into the mornings
- 90 Personal preference
- 91 There are not any trains that commute to San Jose from Roseville
- 92 t's a long drive from Plymouth to the parking deck in old sac
- 93 It's the only way there at the time I go
- 94 It's the fastest way for me to get to the station
- 95 Sac RT is too much of a hassel and I would never make the train in time.
- 96 Fastest option
- 97 Quickest
- 98 Not efficient to take public transportation
- 99 Because bus service is literally non-existent from home.
- 100 too far from station
- 101 Far from station, mobility issues
- 102 Driving was easier and quicker than taking Amtrak bus from Roseville.
- 103 I live far from the station

- 104 No other way to get there
- 105 Time efficient/safer
- 106 No other option
- 107 Distance
- 108 I live far from station
- 109 There is no public transportation where I live.
- 110 I live fairly close to the station, and at 4:00 in the morning there are no viable public transit options for me to take.
- 111 No other way there
- 112 I live in the suburbs of Sac and there is no reliable public transportation
Walking/Biking on the route from my house feels unsafe, there are many homeless encampments and I've been harassed/threatened.
- 113 Time efficient
- 114 Easy way to get to the station.
- 115 Too far to walk
- 116 Only logical way
- 117 Live far from station
- 118 was not feeling well this morning. Normally, I would have walked or taken a Jump bike to the station.
- 119 The station is too far for me to walk or bike.
- 120 Time of day and time to station
- 121 Not bus transportation this way to sac from up north of cali

Destination Station Responses (144 Total Sacramento Responses)

Response Summary for individuals noting Sacramento as being their destination station.

Destination Station -> Final Destination Travel Mode

1. Walk – 37% (53)
2. Public Transit – 19% (27)
3. Drive or Pick Up in a Personal Vehicle – 18% (26)
4. Bike / Scooter – 15% (22)
5. Taxi or Uber / Lyft – 11% (16)



Destination Station Demographics

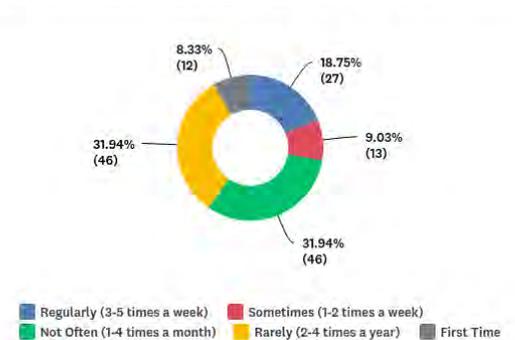
Gender

- Male – 53%
- Female – 47%

Age

- 18-24 – 9%
- 25-34 – 21%
- 35-44 – 13%
- 45-54 – 15%
- 55-64 – 22%
- 65+ – 20%

Frequency of Capitol Corridor Use

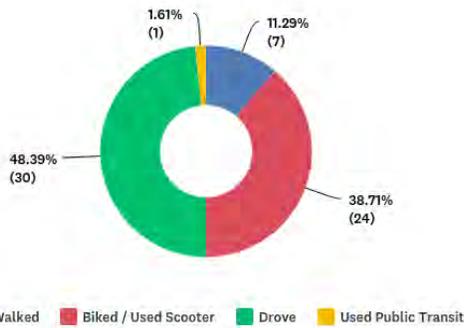


Davis Station

Home Station Survey (62 Total Responses)

Note: Not enough respondents for specific survey result section on Davis public transit users.

Mode of Station Access



20% more bikers 13% less public transit users, and 12% less drivers at Davis than at all Capitol Corridor stations averaged.



Station Demographics

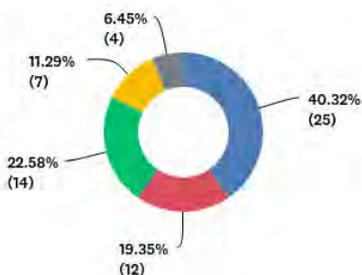
Gender

- Male – 61%
- Female – 39%

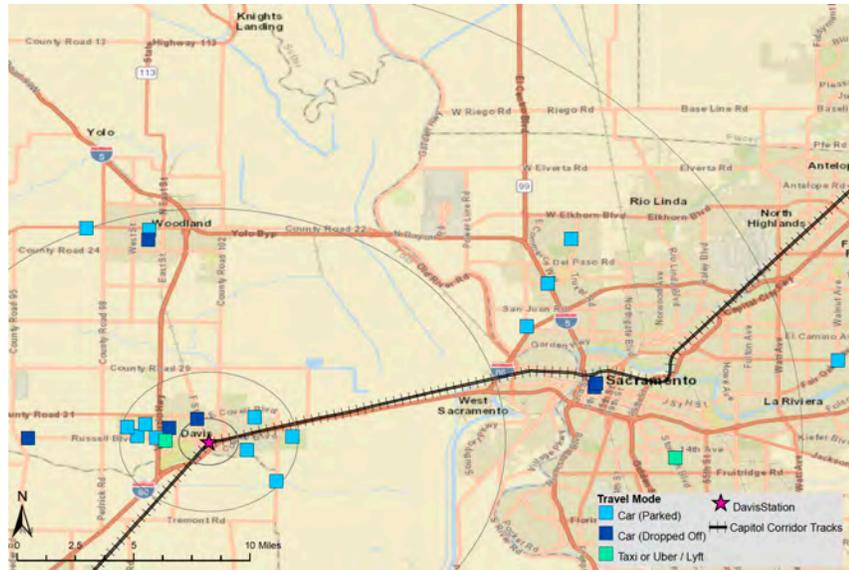
Age

- 18-24 – 14%
- 25-34 – 18%
- 35-44 – 16%
- 45-54 – 21%
- 55-64 – 23%
- 65+ – 9%

Regularity of Station Use



Origins and Access Maps



Note on figures: Surveys for bike users and pedestrians in map coded based on sentiments (liked, neutral, disliked) of travelling to the Davis Station. One bike rider (who liked ride) was geocoded outside the map window to the left-hand side and two drivers were geocoded north of the presented map windows. Rings represent one-mile, five-mile, ten-mile, and twenty-mile station buffer zones. Only one-mile and five-mile buffer zones shown in extent window of map showing bikers and walkers.

Pedestrian Davis Station Users

Ratings for Pedestrian Access

100% of walkers thought that the route they took to the Davis station was direct and convenient.

85% of participants who walked to the Davis station on the day of the survey **always** or **usually** walk to reach the station.

4.29 - On a scale of 1 (poor) to 5 (excellent), walkers on average rated the **quality of sidewalks** on the way to the Davis station as a 4.29 out of 5.

3.33 - On a scale of 1 (high traffic) to 5 (low traffic), walkers on average rated **exposure to vehicles** on the way to the Davis station as a 3.33 out of 5.

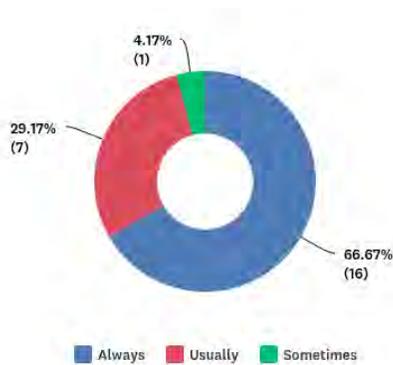
Comments Related to Pedestrian Station Access at Davis

What about your walk to the Davis station do you like and or what about your walk do you not like?

- 1 It is easy*
- 2 Straight forward.*
- 3 Can walk through arboretum and/or shop downtown.*
- 4 I enjoy the exercise, except on days when it's really raining hard.*
- 5 Very safe, all sidewalks. Nothing to dislike.*
- 6 It's a way to unwind and get exercise after work. On hard rain changes the walk.*
- 7 it's close and easy*
- 8 Better street lighting in East Davis.*

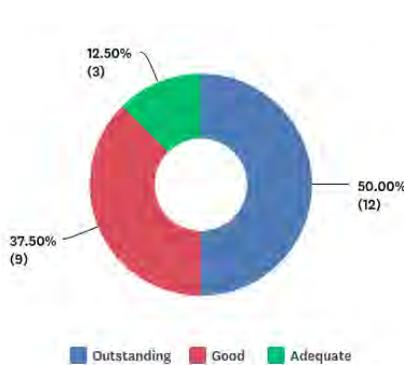
Bike / Scooter Davis Station Users

Bike / Scooter to Station Frequency



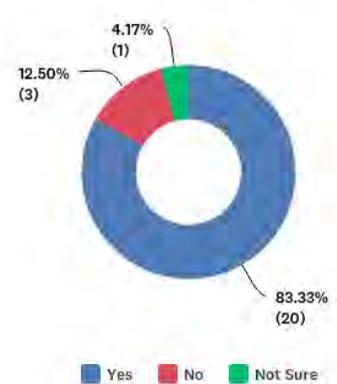
96% of respondents always or usually bike to the Davis station

Safety & Convenience of Routes



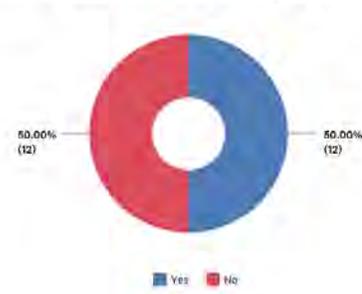
78% of respondents were satisfied with the safety & convenience of existing bike / scooter routes to the Davis station.

Bike / Scooter Share Near Station?



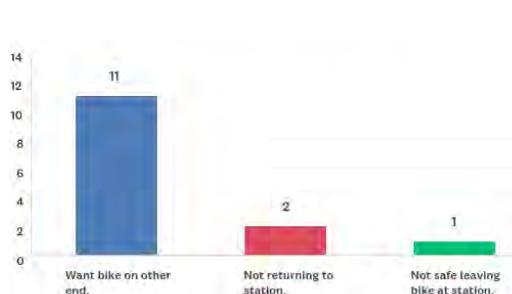
12.5% of bike riding respondents said that they did not know of bike or scooter share service near the Davis station.

Brought Bike / Scooter on Train?

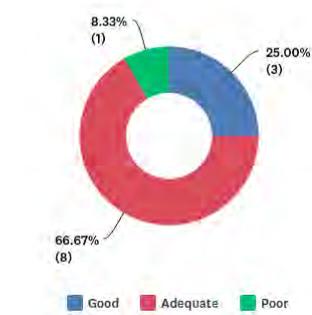


25% more respondents parked their bikes at the Davis station than at all Capitol Corridor stations averaged.

Rationale for Bringing on Train



Availability of Bike Rack Spaces on Train



75% of respondents were dissatisfied with the availability of bike rack spaces on the train.

Bike Lockers / Parking

4.17 - On a scale of 1 (poor) to 5 (excellent), bike/scooter riders who parked at stations on average rated the **amount of secure bike parking** at the Davis station as a 4.17 out of 5.

4.42 - On a scale of 1 (poor) to 5 (excellent), bike/scooter riders who parked at stations on average rated the **location of secure bike parking** at the Davis station as a 4.42 out of 5.

Comments Related to Bike / Scooter Station Access at Davis

What about the current bike/scooter routes to your home station do you like and/or dislike?

- 1 Lots of cars during evening rush hour. No separate bike exit.
- 2 Davis has good bike lanes, so no surprise it is a fine ride.
- 3 Local roads (no highways), but during rush hour traffic.
- 4 Bike lanes.
- 5 Poor roads would like better separation (pylons) to divide lanes.
- 6 Bike paths would be even better. Most of the way is with bike lanes, which is Davis are quite spacious
- 7 Bike lanes and slow traffic
- 8 Poor quality pavement.
- 9 No physically separated / protected Class IV bike lanes
- 10 Good bike lanes, cracks in the side streets are a nuisance
- 11 Easy and safe.
- 12 Wide bike lanes for most of the ride but some are not clearly marked or cluttered, making it inconvenient
- 13 Distracted drivers make me nervous
- 14 Plenty of well-marked bike lanes in Davis
- 15 Davis is a great place to bicycle. The area right near the train station has a lot of car traffic, but is still generally safe
- 16 Bike lanes the whole way
- 17 Bike lanes are wide
- 18 Excellent lane markings and motor vehicles move at a safe speed ~25 mph or less.
- 19 Not enough Jump bikes available. Had to walk/ run to closest one so I could make train.

Additional suggestions you would make to improve the bike / scooter riding experience?

- 1 There is sometimes poor etiquette among some riders to take their bike down from rack early and block access to other bikes. Not as a one off, but as common practice, something they do every time. This can also have the effect of blocking walkways. Some signage could help improve this.

situation. Perhaps they can wait till the train stops? Or not block pathways? May seem like a small quibble, but moving through train can be challenging sometimes. Also, other bike signage is somewhat poor and inconsistent. Some signs say to hang bikes alternating pattern front wheel up then back wheel up?

2 More protected lanes

3 Bike Lane buffers, improve roads, track crossing platform on the east side of the Davis station that is close to the bike link lockers.

Lots of people cross the tracks and get yelled at sometimes.

4 In addition to separated infrastructure, well-designed intersections....

5 Patch cracks

6 protected bike lanes

7 There's very little time to board the train and if the limited bike spaces are taken then one must offboard and quickly get to the next car which hopefully is not the Commissary car.

8 as bicycling goes, Davis is pretty excellent, so no. I *would* make a million improvements to the Berkeley half of my commute.

Roads are in bad condition, few bike lanes, lots of cars.

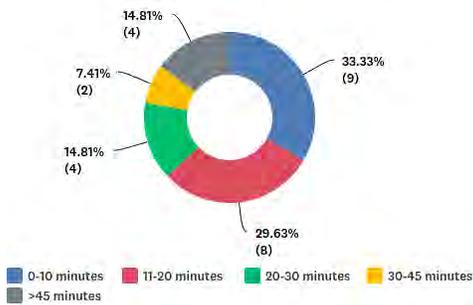
9 Improve station security! Bike theft is an issue.

10 More available in South Davis.

11. It's more an issue when I arrive in Davis - the transit doesn't run that frequently from the train station to other destinations

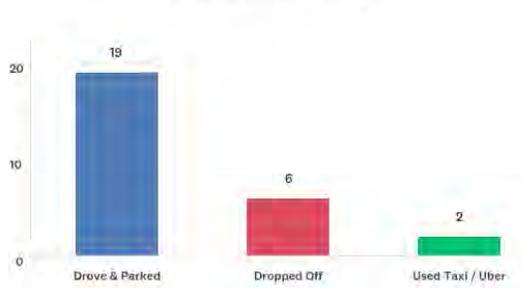
Vehicle Davis Station Users

Duration of Drive



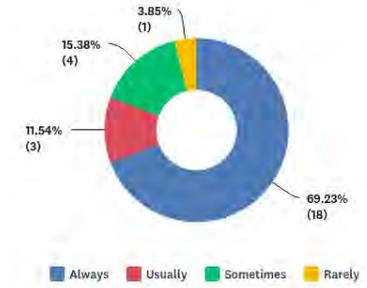
63% of drivers had trips under 20 minutes to the Davis station.

Type of Drive



70% of station users who used a vehicle to reach the Davis station also parked at the station

Drive to Station Frequency



80% of drivers always or usually drive to reach the Davis station.

Parking



Cost of Parking

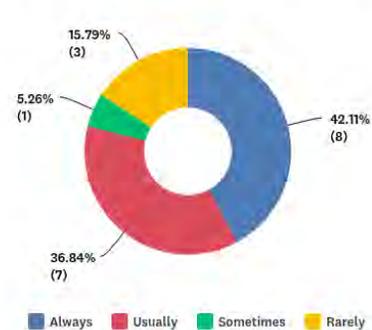
4.23 – On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at the Davis station as a 4.23 out of 5.



Lighting in Lot

3.79 – On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots at the Davis station as a 3.79 out of 5.

Availability of Needed Parking Space Type



22% of drivers who park only sometimes or rarely find their necessary parking space type at the Davis station.

Comments Related to Vehicle Transit Station Access at Davis

Why did you choose to drive or ride in a car to reach the station today?

- 1 7-minute trip and simple because little traffic
- 2 I live far from Davis station; I prefer the Davis train station area set-up and parking over Sacramento station.
- 3 I live in a rural area, too far to walk or bike that early in the morning.
- 4 Because there are no stations near my town. This is the closest station with free parking.
- 5 I live far from the station
- 6 I had a heavy suitcase and my boyfriend drove me. there was also possibly a bus available, but we decided to go for the car because it was more convenient
- 7 I live about 10 minutes away by car
- 8 Too far to walk
- 9 faster than public transport options
- 10 I live far from the station and it is the most cost-effective method.
- 11 Most convenient.
- 12 Too far to walk, etc. Bus takes too long
- 13 Convenience
- 14 Distance. No choice. Wish there were more options out of Auburn/Roseville to reach Hayward
- 15 weather
- 16 I live far from the station
- 17 First off, my home station would be Sacramento. However, Davis was more convenient considering the early morning, and ability to park train side for free. If I'm riding the Capitol Corridor, I'll usually go to Davis. However, if I'm taking the Coast Starlight, I'll usually park and ride from Sacramento.
- 18 When I drive to the station usually I have things to carry
- 19 Convenient
- 20 live far from station
- 21 No Public transportation
- 22 Time of departure time of arriving
- 23 My children go to school in Davis, so we drive from our residence in Sacramento to Davis, and I board Amtrak at the Davis station to reach my work destination in Oakland.
- 24 Time of the morning I have to get on train
- 25 Most effective
- 26 Efficiency

Destination Station Responses (45 Total Davis Responses)

Response Summary for individuals noting Davis as being their destination station.

Destination Station -> Final Destination Travel Mode

- 1. Walk – 33% (15)
- 2. Bike / Scooter – 33% (15)
- 3. Drive or Pick Up in a Personal Vehicle – 20% (9)
- 4. Public Transit– 9% (4)
- 5. Taxi or Uber / Lyft – 4% (2)



Destination Station Demographics

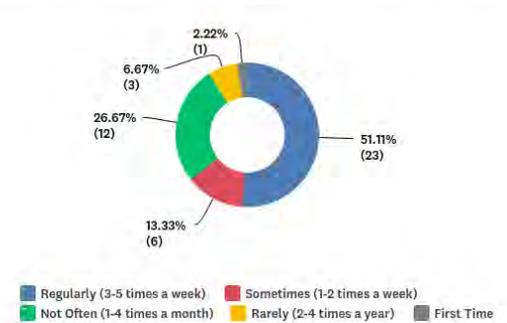
Gender

- Male – 46%
- Female – 54%

Age

- 18-24 – 16%
- 25-34 – 21%
- 35-44 – 16%
- 45-54 – 9%
- 55-64 – 28%
- 65+ – 9%

Frequency of Capitol Corridor Use

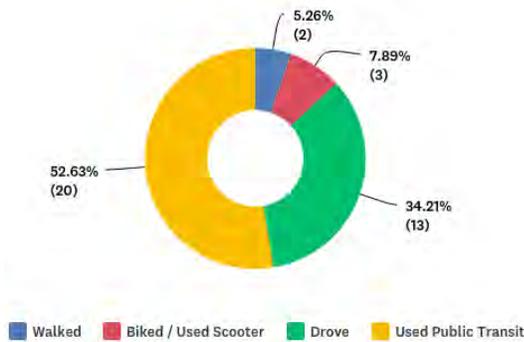


Richmond Station

Home Station Survey (38 Total Responses)

Note: Car and public transit user heavy station. Not enough walkers and bikers amongst survey respondents for a full result section on these two access modes.

Mode of Station Access



38% more public transit users and 26% less drivers at Richmond than at all Capitol Corridor stations averaged.



Station Demographics

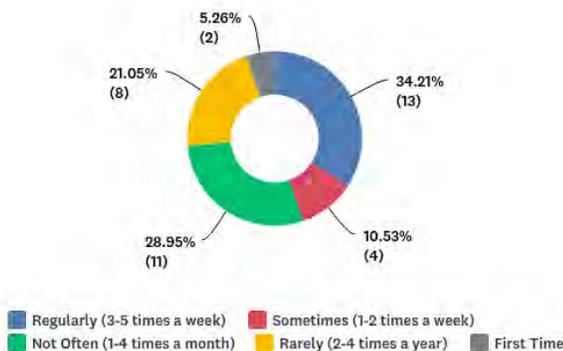
Gender

- Male – 45%
- Female – 55%

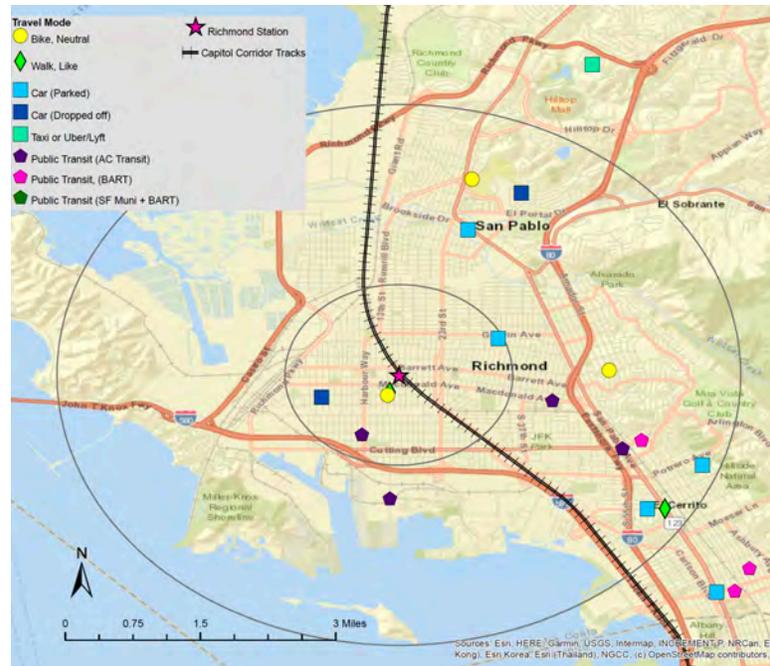
Age

- 18-24 – 6%
- 25-34 – 9%
- 35-44 – 24%
- 45-54 – 21%
- 55-64 – 18%
- 65+ – 21%

Regularity of Station Use



Origins and Access Maps



Note on figures: Maps show zoomed in and zoomed out extents of locations from which passengers travel to reach the Richmond station. Surveys for bike users and pedestrians in map coded based on sentiments (liked, neutral, disliked) of travelling to the Richmond Station. One public transit user (BART) in Millbrae and one driver (parked) in Santa Rosa were geocoded outside the map window. Rings represent one-mile, three-mile, and ten-mile station buffer zones. Only one-mile and three-mile buffer zones shown in map with zoomed in extent.

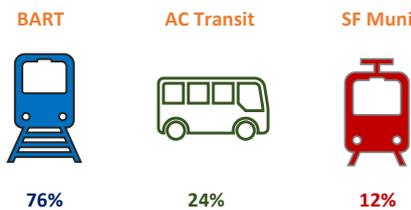
Comments Related to Walking & Biking Station Access at Richmond

What about your walk or bike ride to the Richmond station do you like and or what about it do you not like?

- 1 I use Ohlone green way to walk home, which is pretty safe.
- 2 Walk clears my head.
- 3 Garbage
- 4 Vehicles entering exiting from side streets ignore bicycles too often or pull into cross walks without looking both ways for pedestrians or bicycles
- 5 Most of the ride has bike lanes. I don't like where the bike lanes disappear on Barrett so I take Nevin which doesn't have bike lanes but is a quieter street. Drivers aren't great about letting me in though for the left turn off Barrett.
- 6. Add more bike lanes. Bike lanes could be cleared of broken glass as well

Public Transit Richmond Station Users

Public Transit Travel Modes Serving Riders

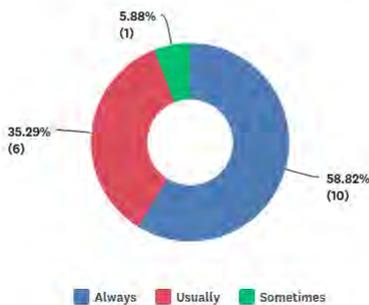


Note: All riders who used SF Muni also had to use BART to reach the Richmond station.

Ease of Reaching Station

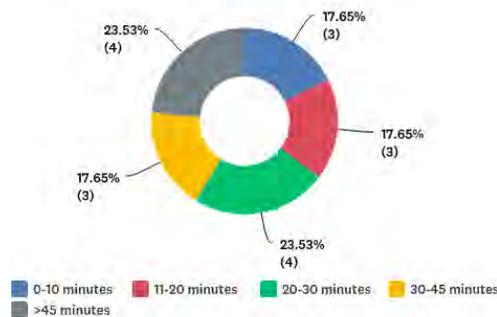
- 2.88** - On a scale of 1 (not frequent enough) to 5 (very frequent), public transit users on average rated **departure time intervals for public transit options that service the Richmond station** as a 2.88 out of 5.
- 4.18** - On a scale of 1 (not useful) to 5 (very useful), public transit users rated the **helpfulness of information on connecting to the Richmond station** as a 4.18 out of 5.

Public Transit to Station Frequency



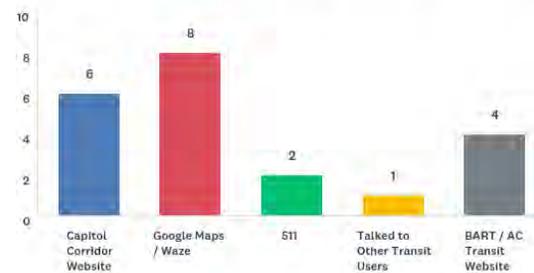
94% of respondents who used public transit indicated that they **always** or **usually** use public transit services to reach the Richmond station.

Duration of Trip to Station



41% of respondents have public transit commutes of more than 30 minutes to reach the Richmond station.

Connection Information Source



67% of respondents use the Capitol Corridor website or Google Maps / Waze to figure out their connection to the Richmond Station.

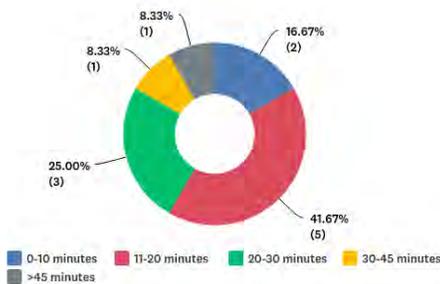
Comments Related to Public Transit Station Access at Richmond

As a public transit user, what do you like the least about using these services?

- 1 Street people sleeping on train, dirty trains
- 2 Wait times due to transfers always have to pad my transfer times in case of potential delays which ends in lots of waiting time.
- 3 Usually late
- 4 Takes too long
- 5 If transit is late, I miss my Capitol Corridor connection and there isn't another Capitol Corridor train for 2 hours. But BART tends to be close to on time almost always.
- 6 Transfer times and fear of missing a connection
- 7 Lack of clean restrooms and working elevators or escalators at BART stations.
- 8 Lack of clean restrooms
- 9 Not within walking distance of home.
- 10 Infrequent Cap Corridor Service
- 11 homeless/mentally ill people on BART
- 12 Lack of shade and protection from rain.
- 13 The bus doesn't always come in time.
- 14 BART is a tired, old system. Needs more signage.
- 15 Have to get to BART on Muni or ride to get to the Richmond Station
- 16 Takes too long, delays, no access to bathrooms
- 17 Have an earlier bus that arrives at home station 10-15 min. BEFORE the train is SCHEDULED rather than an hour before or half hour after.

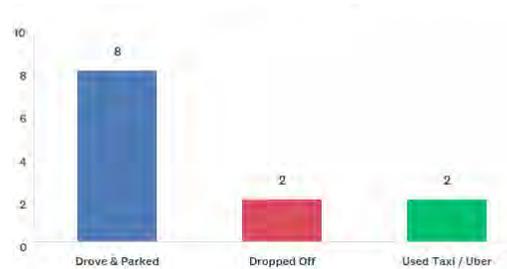
Vehicle Richmond Station Users

Duration of Drive



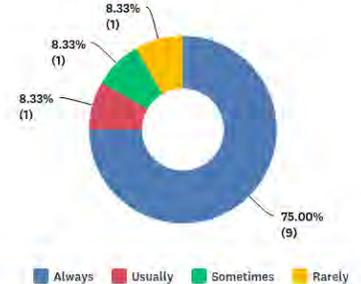
71% of drivers had trips under 20 minutes.

Type of Drive



51% of station users who used a vehicle to reach the station also parked at the station

Drive to Station Frequency



83% of drivers always or usually drive to reach the Richmond station.

Parking



Cost of Parking

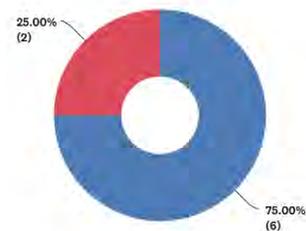
3.00 – On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at the Richmond station as a 3.00 out of 5.



Lighting in Lot

4.17 – On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots at the Richmond station as a 4.17 out of 5.

Availability of Needed Parking Space Type



100% of drivers who park always or usually find their necessary parking space type at the Richmond station.

Comments Related to Vehicle Station Access at Richmond

Why did you choose to drive or ride in a car to reach the station today?

- 1 Public transport schedule is unreliable. Bus is never on time. And the same is when i return. In the afternoon. Frequently I had to wait up to 20 min for the bus.
- 2 Easier for me
- 3 I live far away from the station
- 4 I have kids to drop off beforehand
- 5 No direct public transport. Driving is the fastest option.
- 6 Speed.
- 7 Faster than public transit.
- 8 There is only one bus an hour that goes across the Richmond San Rafael Bridge and the last time I checked it went to the San Pablo Del Norte BART. There are a lot of people who commute from Marin to Davis. It would be great if there was a bus that ran every 30 minutes from the San Rafael Transit Center to the Richmond Bart.
- 9 They go when I need to leave.
- 10 Cross a bridge that doesn't allow cyclists. Also, too far to cycle.
- 11 I'm sort of far from the station and it is time efficient
- 12 Distance & convenience

Destination Station Responses (58 Total Richmond Responses)

Response Summary for individuals noting Richmond as being their destination station.

Destination Station -> Final Destination Travel Mode

- 1. Public Transit – 60% (33)
- 2. Drive or Pick Up in a Personal Vehicle – 18% (10)
- 3. Taxi or Uber / Lyft – 9% (5)
- 4. Walk – 7% (4)
- 5. Bike / Scooter – 5% (3)



Destination Station Demographics

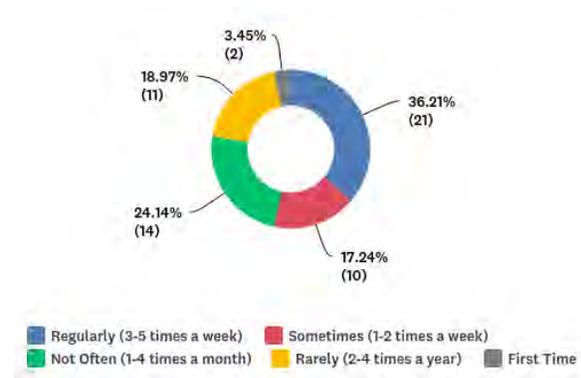
Gender

- Male – 49%
- Female – 51%

Age

- 18-24 – 4%
- 25-34 – 17%
- 35-44 – 20%
- 45-54 – 24%
- 55-64 – 22%
- 65+ – 13%

Frequency of Capitol Corridor Use

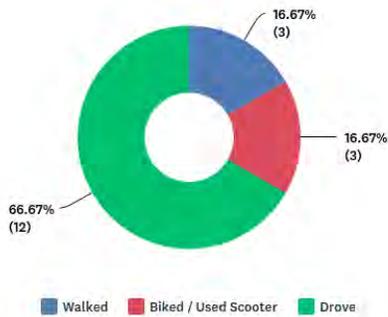


Hayward Station

Home Station Survey (18 Total Responses)

Note: Car user heavy station. Not enough responses to generate specific report sections on alternative modes at the station.

Mode of Station Access



16% more drivers and 14% less public transit users at Hayward than at all Capitol Corridor stations averaged.



Station Demographics

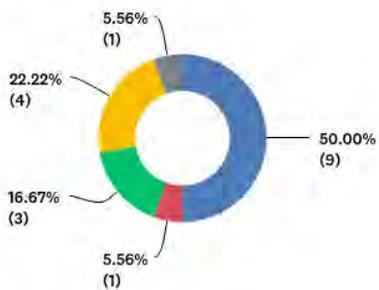
Gender

- Male – 44%
- Female – 56%

Age

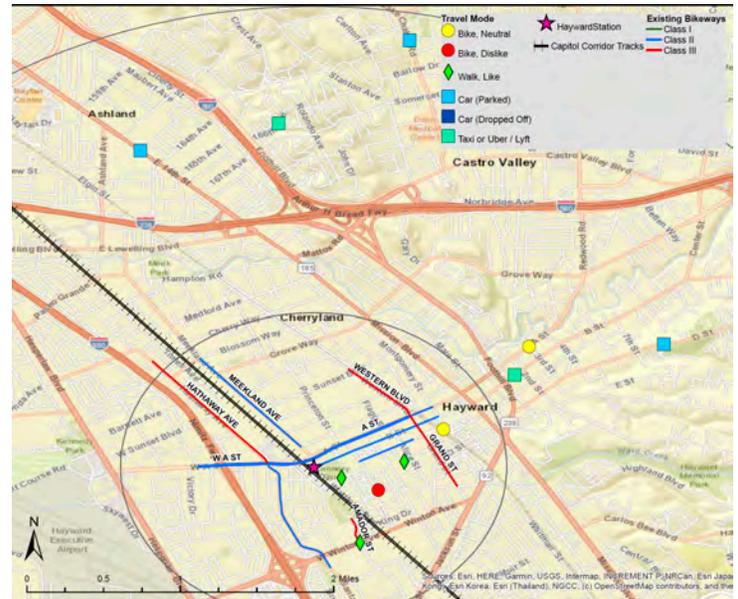
- 18-24 – 6%
- 25-34 – 41%
- 35-44 – 6%
- 45-54 – 12%
- 55-64 – 29%
- 65+ – 6%

Regularity of Station Use



- Regularly (3-5 times a week)
- Sometimes (1-2 times a week)
- Not Often (1-4 times a month)
- Rarely (2-4 times a year)
- First Time

Origins and Access Maps



Note on figures: Maps show zoomed in and zoomed out extents of locations from which passengers travel to reach the Hayward station. Surveys for bike users and pedestrians in map coded based on sentiments (liked, neutral, disliked) of travelling to the Hayward station. Rings represent one-mile, three-mile, and ten-mile station buffer zones. Only one-mile and three-mile buffer zones shown in map with zoomed in extent.

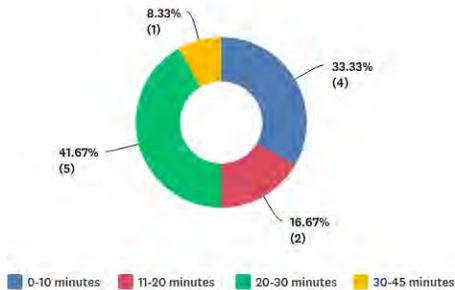
Comments Related to Pedestrian & Bike / Scooter Station Access at Hayward

What about the walk or bike / scooter route to your home station do you like and/or dislike?

- 1 Being able to listen to audiobooks. I don't dislike anything.
- 2 Too much broken glass and thorns at Hayward station
- 3 Heavy traffic downtown. Not enough bike lanes.
- 4 Too few bike lanes in Castro Valley and Hayward.
- 5 Clean broken glass in parking lots and on station decks.
 - 6 More protected bike lanes.
 - 7 More bike lanes.

Vehicle Hayward Station Users

Duration of Drive



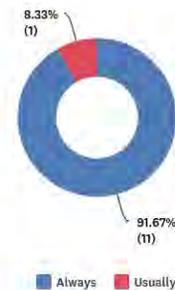
50% of drivers had trips under 20 minutes to the Hayward station.

Type of Drive



75% of station users who used a vehicle to reach the Hayward station also parked at the station

Drive to Station Frequency



100% of drivers always or usually drive to reach the Hayward station.

Parking



Cost of Parking

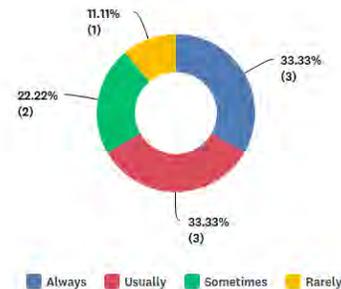
4.80 – On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at the Hayward station as a 4.80 out of 5.



Lighting in Lot

3.00 – On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots at the Hayward station as a 3.00 out of 5.

Availability of Needed Parking Space Type



33% of drivers who park just sometimes or rarely are able to find their needed parking space type at the Hayward station .

Comments Related to Vehicle Station Access at Hayward

Why did you choose to drive or ride in a car to reach the station today?

- 1 Time efficiency
- 2 I live about 3 miles from the station
- 3 It is dark at this time of the day and uphill when time to go home.
- 4 It's fastest, most convenient and cost effective.
- 5 The public transit across the bridges is terrible and driving is much faster. Seems like parking at this station is even free?
- 6 No personal car or transit options, so I Uber
- 7 I live far from station
- 8 No public transit access close to home
- 9 I live far from the station
- 10 I live far from the station
- 11 Time efficient. Too far to walk.

Destination Station Responses (10 Total Hayward Responses)

Response Summary for individuals noting Hayward as being their destination station.

Destination Station -> Final Destination Travel Mode

- 1. Drive or Pick Up in a Personal Vehicle – 50% (5)
- 2. Taxi or Uber / Lyft – 30% (3)
- 3. Bike / Scooter – 10% (1)
- 4. Walk – 10% (1)
- 5. Public Transit – 0% (0)



Destination Station Demographics

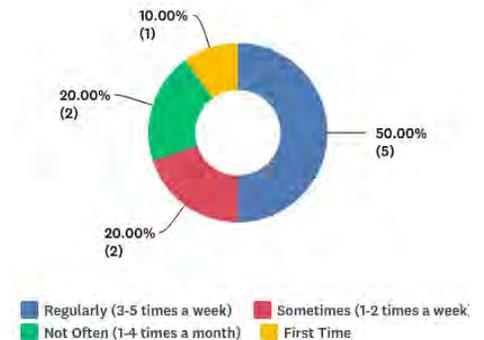
Gender

- Male – 37%
- Female – 63%

Age

- 18-24 – 11%
- 25-34 – 44%
- 35-44 – 0%
- 45-54 – 22%
- 55-64 – 22%
- 65+ – 0%

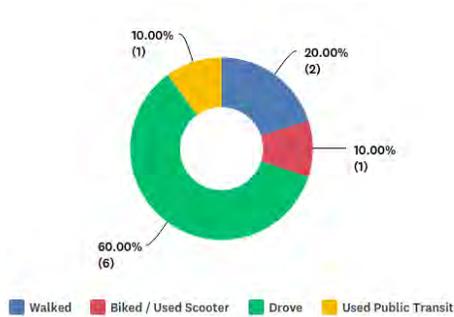
Frequency of Capitol Corridor Use



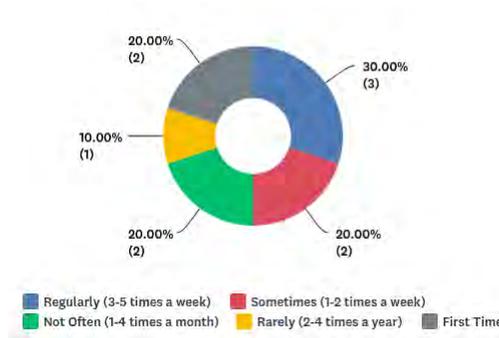
Santa Clara – University Station

Home Station Survey (10 Total Responses)

Mode of Station Access



Regularity of Station Use



Comments Related to Pedestrian & Bike / Scooter Station Access at Santa Clara – University

What about the walk or bike / scooter route to your home station do you like and/or dislike?

1. It's pretty direct and a short distance
2. Good exercise, almost carbon neutral.
3. There are no separate trails for bikes. Bikes already go slow and with the traffic lights and just sharing the road with vehicles makes it worse.
4. There will always be space along the train tracks. If we can build bike trails in parallel with train tracks, it would be easy for the commuters to use bikes to reach out to train stations. It will also minimize the traffic on the road. It would be great for the bikers too as it will be a smooth ride without any traffic lights.

Comments Related to Driving Access at Santa Clara – University

Why did you choose to drive or ride in a car to reach the station today?

1. Visiting family each week
2. I drive and park at my son's house the night before and walk to the station in the morning to avoid needing to get up 45min earlier.
3. Raining
4. Commuter reimbursement.

Destination Station Responses (38 Total Santa Clara University Responses)

Response Summary for individuals noting Santa Clara University as being their destination station.

Destination Station -> Final Destination Travel Mode

1. Bike / Scooter – 31% (11)
2. Public Transit – 28% (10)
3. Walk – 25% (9)
4. Drive or Pick Up in a Personal Vehicle – 8% (3)
5. Taxi or Uber / Lyft – 8% (3)



Destination Station Demographics

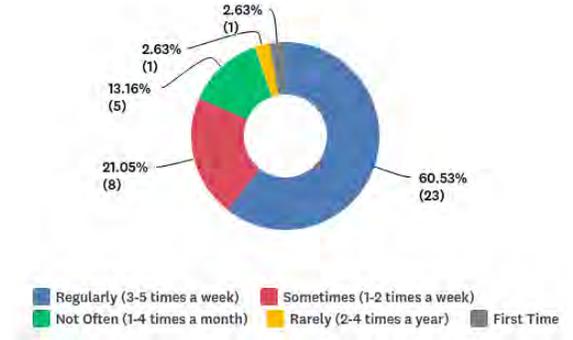
Gender

- Male – 61%
- Female – 39%

Age

- 18-24 – 9%
- 25-34 – 12%
- 35-44 – 32%
- 45-54 – 21%
- 55-64 – 24%
- 65+ – 3%

Frequency of Capitol Corridor Use

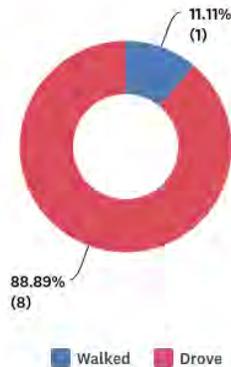


Auburn Station

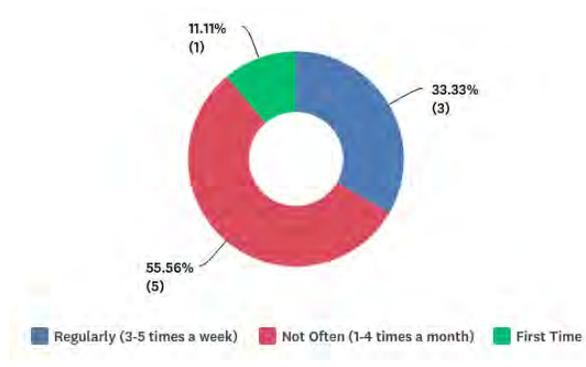
Home Station Survey (9 Total Responses)

Note: Only survey comments provided due to limited survey responses.

Mode of Station Access



Regularity of Station Use



Comments Related to Pedestrian Access at Auburn

What about the walk or bike / scooter route to your home station do you like and/or dislike?

- 1 Sidewalks are uneven and poorly lit
- 2 I usually take BART to Richmond station which is easier than a bus in SF to the train, but you asked for station closest to home. I don't ever use that. The bus connection in auburn- I would prefer front mounted racks on the buses, like muni and golden gate transit. I don't like putting my bike under the bus in that compartment to roll around, so I rarely bring my bike to auburn. But I do bring my bike to Sac when I go there because I need it when I'm there.

Comments Related to Driving Access at Auburn

Why did you choose to drive or ride in a car to reach the station today?

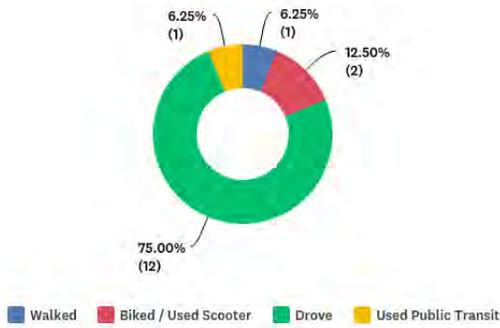
- 1 Free parking and lack of safe bike lanes in my city
- 2 No timely public transit option and I live far from the station.
- 3 More time to spend with my sister
- 4 No transit options exist
- 5 Saves time
- 6 I live in a rural area too far to ride a bike or walk
- 7 Train gets back too late at night for bus.
- 8 I live far from the station

Rocklin Station

Home Station Survey (16 Total Responses)

Note: Auto-dependent station. Not enough responses to generate specific report sections on alternative modes at the station.

Mode of Station Access



15% more drivers and 9% less public transit users at Rocklin than at all Capitol Corridor stations averaged.



Station Demographics

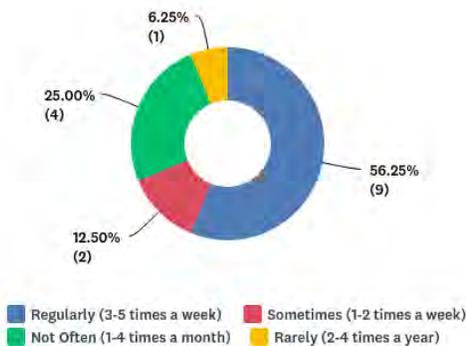
Gender

- Male – 50%
- Female – 50%

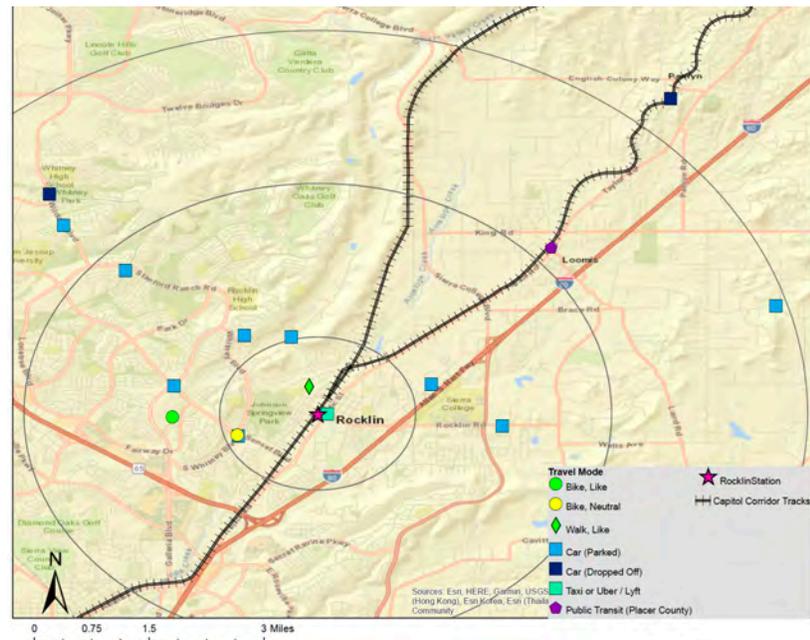
Age

- 18-24 – 0%
- 25-34 – 14%
- 35-44 – 7%
- 45-54 – 21%
- 55-64 – 43%
- 65+ – 14%

Regularity of Station Use



Origins and Access Maps



Note on figures: Maps show zoomed in and zoomed out extents of locations from which passengers travel to reach the Rocklin station. Surveys for bike users and pedestrians in map coded based on sentiments (liked, neutral, disliked) of travelling to the station. Rings represent one-mile, three-mile, and five-mile station buffer zones. Only one-mile buffer zone shown in map with zoomed in extent.

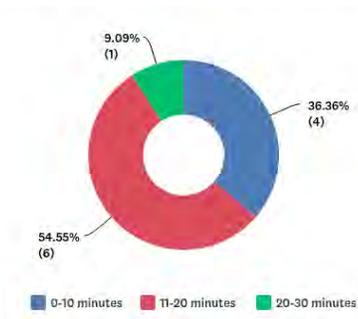
Comments Related to Pedestrian & Bike / Scooter Station Access at Rocklin

What about the walk or bike / scooter route to your home station do you like and/or dislike?

- 1 The walk from the station to the trains is really long and not convenient
- 2 Hills, even though the route avoids the biggest ones. A few years ago, I would not have been strong enough for the ride.
- 3 Generally, bike lane or residential. Sometimes right around parked cars on Argonaut.

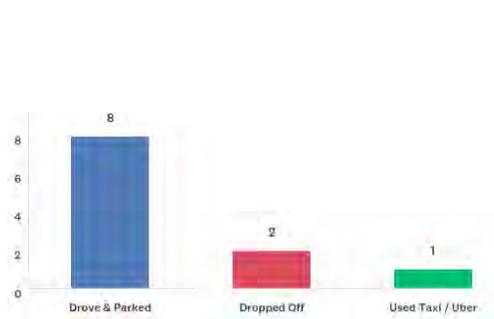
Vehicle Rocklin Station Users

Duration of Drive



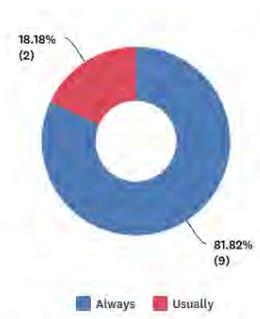
91% of drivers had trips under 20 minutes to the Rocklin station.

Type of Drive



73% of station users who used a vehicle to reach the Rocklin station also parked at the station

Drive to Station Frequency



100% of drivers always or usually drive to reach the Rocklin station.

Parking



Cost of Parking

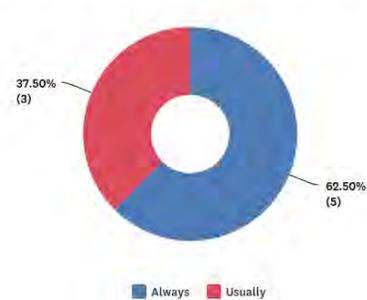
4.75 – On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at the Rocklin station as a 4.75 out of 5.



Lighting in Lot

3.57 – On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots at the Rocklin station as a 3.57 out of 5.

Availability of Needed Parking Space Type



100% of drivers who park always or usually are able to find their needed parking space type at the Rocklin station.

Comments Related to Vehicle Station Access at Rocklin

Why did you choose to drive or ride in a car to reach the station today?

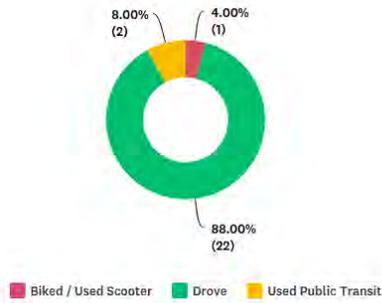
- 1 No public transport option. Free parking.*
- 2 No train station nearby*
- 3 time efficient and parking is cheap*
- 4 It was most convenient*
- 5 Only way to get there*
- 6 It's too far to walk.*
- 7 Either I drive myself or I have to pay for a ride.*
- 8 Fastest way there*
- 9 No other way to get there*
- 10 Too far to walk. Don't want to take additional public transportation.*
- 11 Live far away*

Roseville Station

Home Station Survey (25 Total Responses)

Note: Auto-dependent station. Not enough responses to generate specific report sections on alternative modes at the station.

Mode of Station Access



17% more drivers and 14% less bikers at Roseville than at all Capitol Corridor stations averaged.



Station Demographics

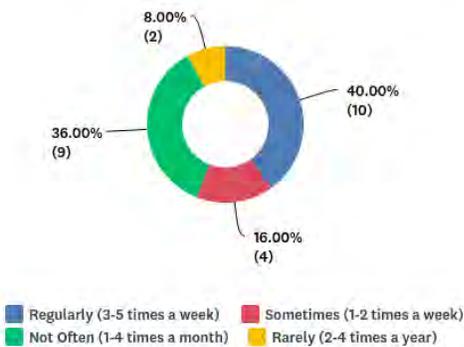
Gender

- Male – 45%
- Female – 55%

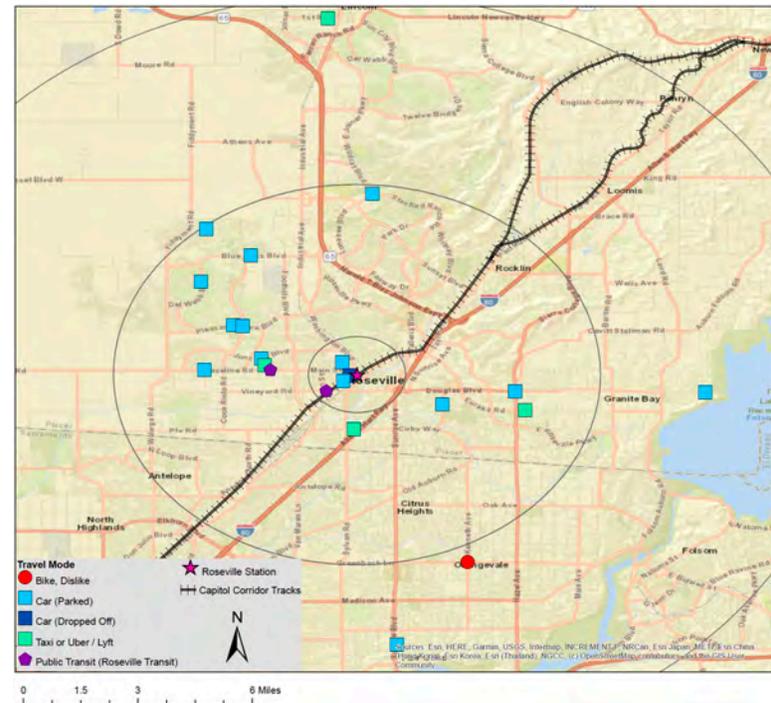
Age

- 18-24 – 0%
- 25-34 – 5%
- 35-44 – 23%
- 45-54 – 23%
- 55-64 – 23%
- 65+ – 27%

Regularity of Station Use



Origins and Access Maps



Note on figures: Maps show zoomed in and zoomed out extents of locations from which passengers travel to reach the Roseville station. Surveys for bike user in map coded based on sentiment (liked, neutral, disliked) of travelling to the station. One driver north of the station was not included within the extent window of either map. Rings represent one-mile, five-mile, and 10-mile station buffer zones. Only one-mile buffer zone shown in map with zoomed in extent.

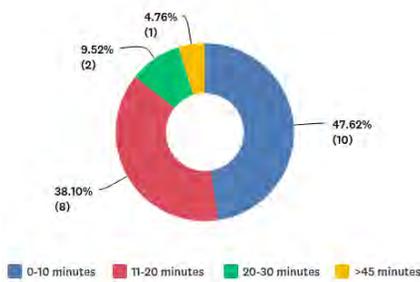
Comments Related to Bike / Scooter Station Access at Roseville

What about the walk or bike / scooter route to your home station do you like and/or dislike?

1 too many cars traveling fast and don't provide required distance, bike lanes not available entire trip, contain significant debris and in poor condition

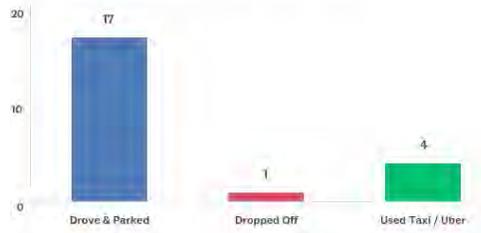
Vehicle Roseville Station Users

Duration of Drive



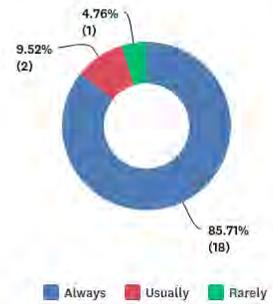
52% of station users who used a vehicle to reach the Roseville station drove for longer than 10 minutes.

Type of Drive



77% of station users who used a vehicle to reach the Roseville station also parked at the station.

Drive to Station Frequency



95% of drivers always or usually drive to reach the Roseville station.

Parking



Cost of Parking

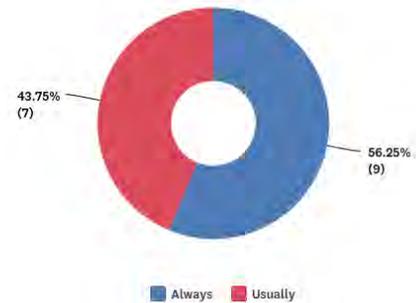
4.50 – On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at the Roseville station as a 4.50 out of 5.



Lighting in Lot

3.64 – On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots at the Roseville station as a 3.64 out of 5.

Availability of Needed Parking Space Type



100% of drivers who park always or usually are able to find their needed parking space type at the Roseville station.

Comments Related to Vehicle Station Access at Roseville

Why did you choose to drive or ride in a car to reach the station today?

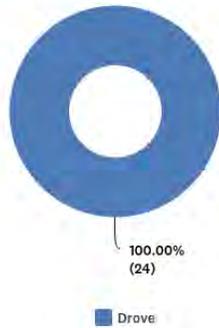
- 1 I usually go to SF overnight and do not want to leave my car overnight on the street near the train station, that's why I take UBER*
- 2 Station is close to home and parking is free*
- 3 It is far and is time efficient*
- 4 Too dark to walk.*
- 5 I don't live close*
- 6 Time efficient*
- 7 Too far too walk. Traveling with luggage.*
- 8 Too early for other options*
- 9 Public transit not available/not efficient*
- 10 Dropped off the dog and it's close*
- 11 I never drive to a station. I use Lyft outbound and inbound when returning home. I have someone pick me up at the outbound destination and return me there after I am done conducting business.*
- 12 no public transportation*
- 13 Public transit is not an option from my home, and it is too far for me to walk*
- 14 My husband usually drops me off because parking is sometimes full and then I don't have to leave my car in a lot overnight.*
- 15 I live 8 to 9 miles from station*
- 16 It's 35 miles - too far to walk.*
- 17 Faster and feels safer*
- 18 Efficient*
- 19 Live far*
- 20 Time efficient & free parking*
- 21 I live far from the station*
- 22 It is time efficient. No public transportation option available.*

Fairfield – Vacaville Hannigan Station

Home Station Survey (24 Total Responses)

Note: Auto-dependent station. Not enough responses to generate specific report sections on alternative modes at the station.

Mode of Station Access



39% more drivers, 15% less public transit users, and 18% less bikers at Fairfield – Vacaville Hannigan than at all Capitol Corridor stations averaged.



Station Demographics

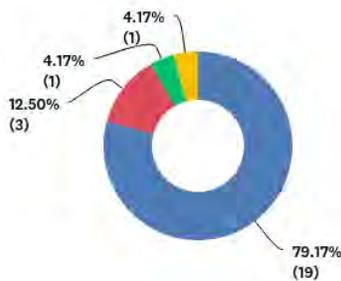
Gender

- Male – 64%
- Female – 36%

Age

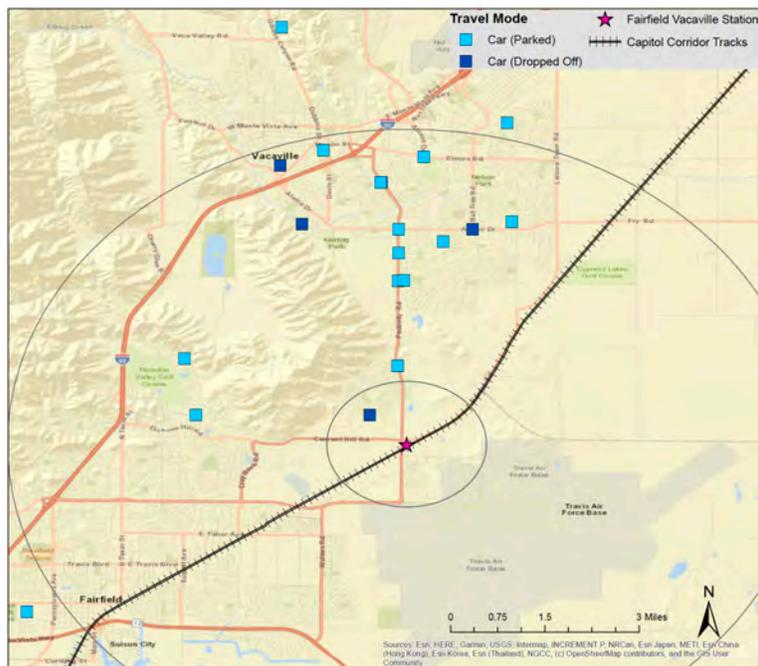
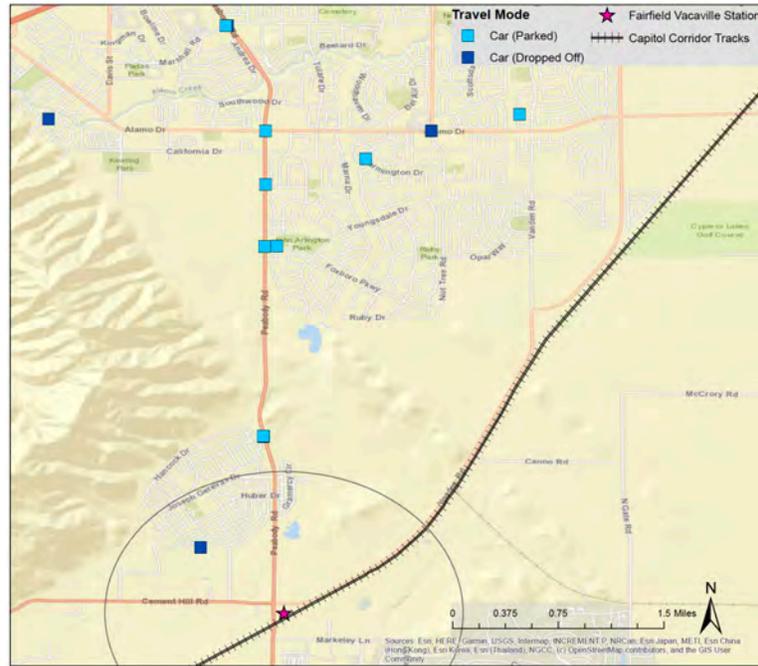
- 18-24 – 4%
- 25-34 – 13%
- 35-44 – 29%
- 45-54 – 33%
- 55-64 – 21%
- 65+ – 0%

Regularity of Station Use



■ Regularly (3-5 times a week)
 ■ Sometimes (1-2 times a week)
 ■ Not Often (1-4 times a month)
 ■ Rarely (2-4 times a year)

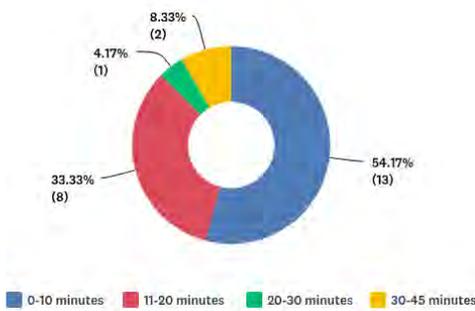
Origins and Access Maps



Note on figures: Maps show zoomed in and zoomed out extents of locations from which passengers travel to reach the Fairfield – Vacaville Hannigan station. Rings represent one-mile, and 5-mile station buffer zones. Only one-mile buffer zone shown in map with zoomed in extent.

Vehicle Fairfield – Vacaville Hannigan Station Users

Duration of Drive



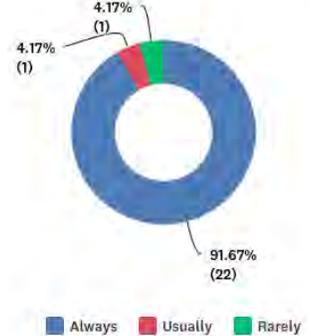
78% of drivers had trips under 20 minutes to the Fairfield – Vacaville Hannigan station.

Type of Drive



75% of station users who used a vehicle to reach the Fairfield – Vacaville Hannigan station also parked at the station

Drive to Station Frequency



96% of drivers always or usually drive to reach the Fairfield – Vacaville Hannigan station.

Parking



Cost of Parking

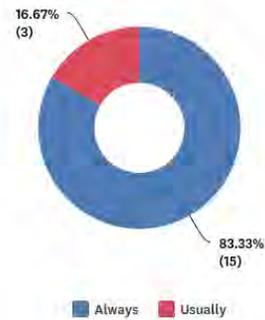
5.00 – On a scale of 1 (poor) to 5 (excellent), 18 drivers rated the cost of parking at the Fairfield – Vacaville Hannigan station as a 5 out of 5.



Lighting in Lot

3.81 – On a scale of 1 (poor) to 5 (excellent), 18 drivers rated the quality of lighting when dark in parking lots at the Fairfield – Vacaville Hannigan station as a 3.81 out of 5.

Availability of Needed Parking Space Type



100% of drivers who park always or usually are able to find their needed parking space type at the Fairfield - Vacaville Hannigan station.

Comments Related to Vehicle Station Access at Fairfield – Vacaville Hannigan

Why did you choose to drive or ride in a car to reach the station today?

- 1 Convenient
- 2 Public transportation changed times of bus
- 3 Time & live far.
- 4 Distance
- 5 No other reasonable way
- 6 The distance would be difficult on a bike at 5am. There are no other services to the train station at 5am

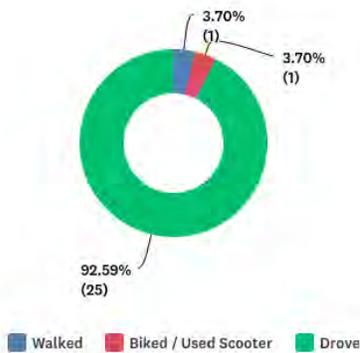
- 7 This is the best way for me to get to work sooner. If not, it will take me 30 to 45 minutes to get to the job versus 15 minutes when I drive.
- 8 I live far from the station and it is remote.
- 9 I live far from the station and there is no public transit that follows my route at that time
- 10 There are no sidewalks to connect me to the station from my house. I would walk (as it is less than a mile away), but will not walk on busy, dangerous roads. We need more sidewalks.
- 11 Live far from the station, no public transportation at a walking distance from home with frequent and reliable stops
- 12 Too far to ride bike
- 13 I live 4 miles from the station and I can get dropped off by family.
- 14 It is 4 miles, it is dark, and safety.
- 15 I live far from the station, only method to reach the station on-time.
- 16 Public Transportation does not serve my neighborhood.
- 17 Have to pick up my kids after work.
- 18 Because there are no public transportation options and if traveling with luggage you must hire a car. Please advocate for public transportation options to the train station.
- 19 I live too far to walk to station
- 20 Because the road is too dangerous to ride a bike now.
- 21 Time efficient and free parking.
- 22 Extremely limited public transit from Rio Vista to other public transit options (including Amtrak).
- 23 Convenient.

Suisun – Fairfield Station

Home Station Survey (27 Total Responses)

Note: Auto-dependent station. Not enough responses to generate specific report sections on alternative modes at the station.

Mode of Station Access



32% more drivers, 15% less public transit users, and 14% less bikers at Suisun – Fairfield than at all Capitol Corridor stations averaged.



Station Demographics

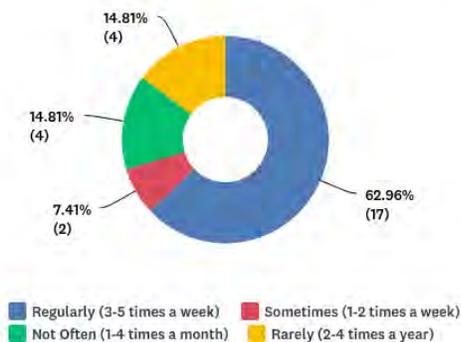
Gender

- Male – 31%
- Female – 69%

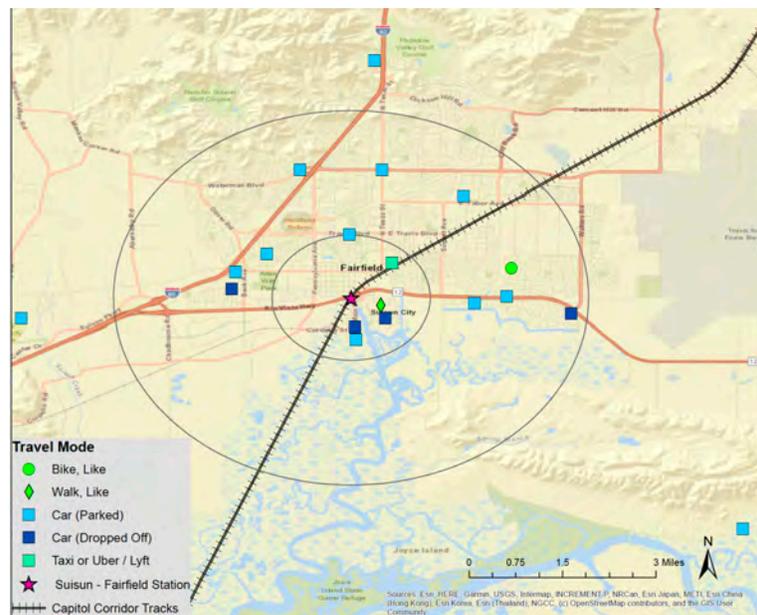
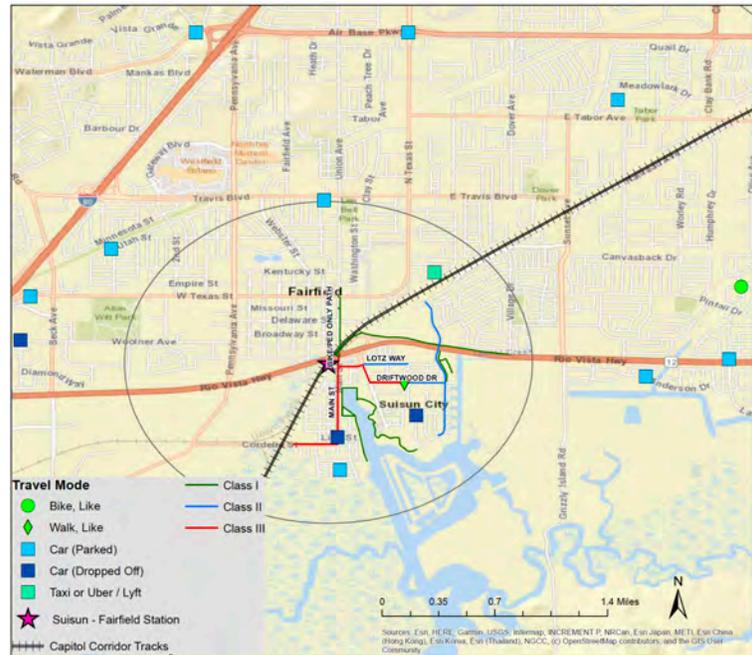
Age

- 18-24 – 4%
- 25-34 – 20%
- 35-44 – 16%
- 45-54 – 16%
- 55-64 – 28%
- 65+ – 16%

Regularity of Station Use



Origins and Access Maps



Note on figures: Maps show zoomed in and zoomed out extents of locations from which passengers travel to reach the Suisun - Fairfield station. Surveys for pedestrians and bike users in map coded based on sentiment (liked, neutral, disliked) of travelling to the station. Rings represent one-mile, and three-mile station buffer zones. Only one-mile buffer zone shown in map with zoomed in extent.

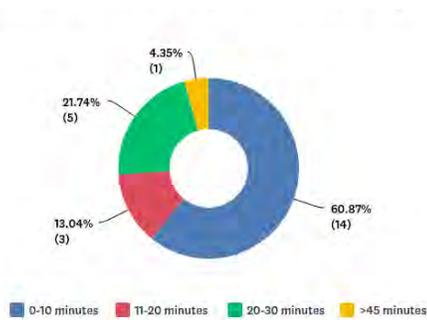
Comments Related to Pedestrian and Bike / Scooter Station Access at Suisun - Fairfield

What about the walk or bike / scooter route to your home station do you like and/or dislike?

- 1 Nice to walk by the harbor. Too much trash can make the walk unpleasant.
- 2 Dedicated and separate bike path most of the way is very good. Has some dark areas where transients stay, but I've not been bothered so far.
- 3 Local government need to keep fences intact (transient folk open them up) and consider better lighting in very dark areas.

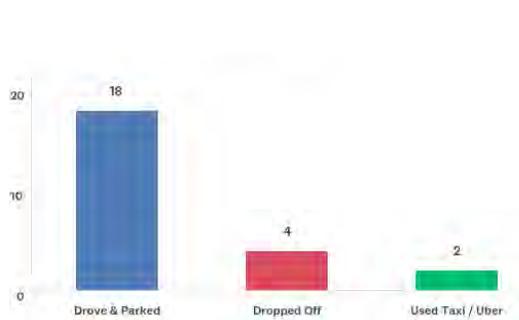
Vehicle Suisun – Fairfield Station Users

Duration of Drive



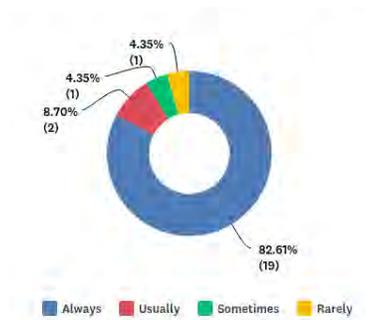
74% of drivers had trips under 20 minutes to the Suisun - Fairfield station.

Type of Drive



75% of station users who used a vehicle to reach the Suisun - Fairfield station also parked at the station

Drive to Station Frequency



91% of drivers always or usually drive to reach the Suisun – Fairfield station.

Parking



Cost of Parking

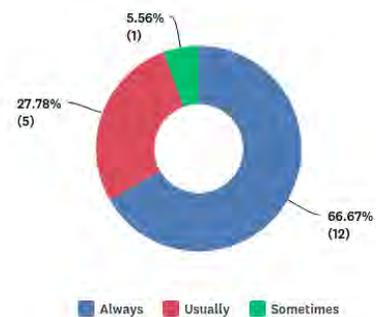
4.83 – On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at the Suisun – Fairfield station as a 4.83 out of 5.



Lighting in Lot

3.07 – On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots at the Suisun – Fairfield station as a 3.07 out of 5.

Availability of Needed Parking Space Type



94% of drivers who park always or usually are able to find their needed parking space type at the Suisun - Fairfield station.

Comments Related to Vehicle Station Access at Suisun – Fairfield

Why did you choose to drive or ride in a car to reach the station today?

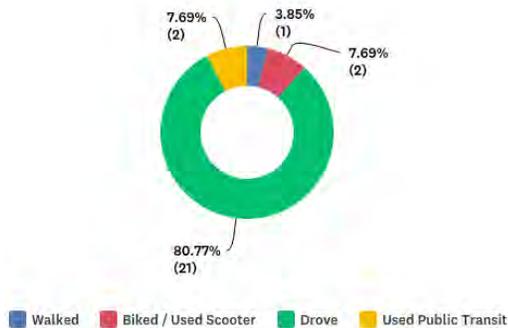
- 1 Station is not within walking distance*
- 2 I can get there within 5 minutes and parking is free*
- 3 The bike path is poorly lit, and the homeless scare me.*
- 4 distance - far from station*
- 5 driving is faster than taking public transportation*
- 6 Fastest option*
- 7 Husband wanted to drive me*
- 8 Bus from Fairfield Transportation Center does not align with train schedule (i.e. bus arrives a few minutes after or right when train comes...)*
- 9 Due to early train and lack of bus service at my location at that time of hour*
- 10 Easier*
- 11 Too far to walk*
- 12 Easiest to drive to the station.*
- 13 Less than 2-minute drive*
- 14 Easiest*
- 15 Time efficient*
- 15 The bus from Napa leaves early and does not match with my return schedule*
- 16 Parking is free*
- 17 Work far from station plus super early commuter*
- 18 Its time efficient, it's not walkable. I think would take too long on bike. I don't trust the bus times from station*
- 19 My schedule did not permit me to take the Thruway bus from Santa Rosa today.*
- 20 I live far from the station*

Martinez Station

Home Station Survey (26 Total Responses)

Note: Auto-dependent station. Not enough responses to generate specific report sections on alternative modes at the station.

Mode of Station Access



20% more drivers and 10% less bikers at Martinez than at all Capitol Corridor stations averaged.



Station Demographics

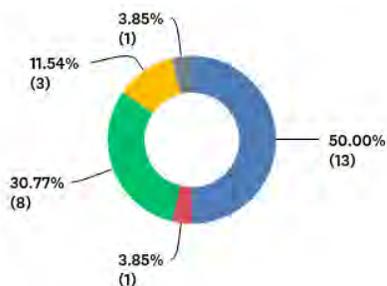
Gender

- Male – 65%
- Female – 35%

Age

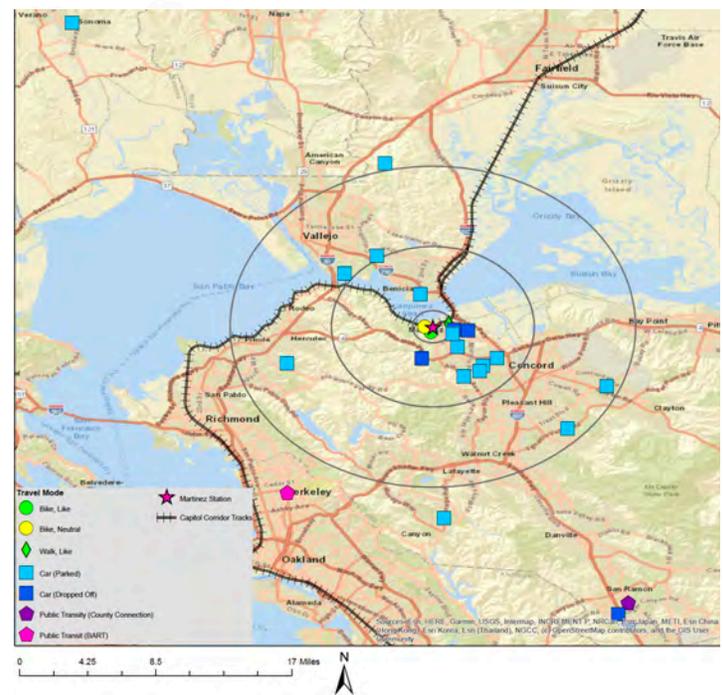
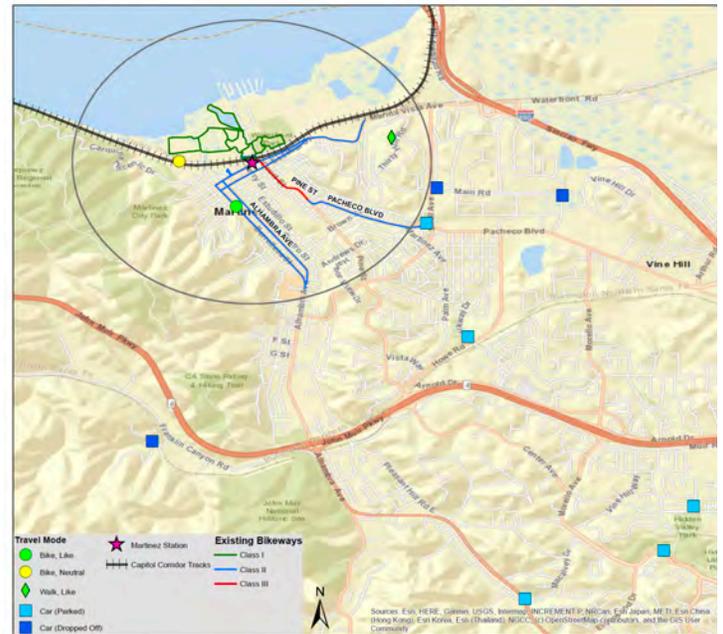
- 18-24 – 10%
- 25-34 – 5%
- 35-44 – 0%
- 45-54 – 19%
- 55-64 – 33%
- 65+ – 33%

Regularity of Station Use



■ Regularly (3-5 times a week)
 ■ Sometimes (1-2 times a week)
 ■ Not Often (1-4 times a month)
 ■ Rarely (2-4 times a year)
 ■ First Time

Origins and Access Maps



Note on figures: Maps show zoomed in and zoomed out extents of locations from which passengers travel to reach the Martinez station. Surveys for pedestrians and bike users in map coded based on sentiment (liked, neutral, disliked) of travelling to the station. Rings represent one-mile, five-mile, five-mile, and ten-mile station buffer zones. Only one-mile buffer zone shown in map with zoomed in extent.

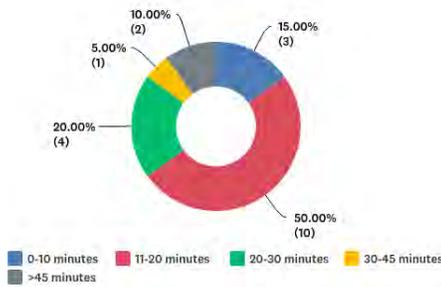
Comments Related to Bike / Scooter Station Access at Martinez

What about the bike / scooter route to your home station do you like and/or dislike?

- 1 Lack of bike lanes for part of the route.
- 2 No traffic, pathways.

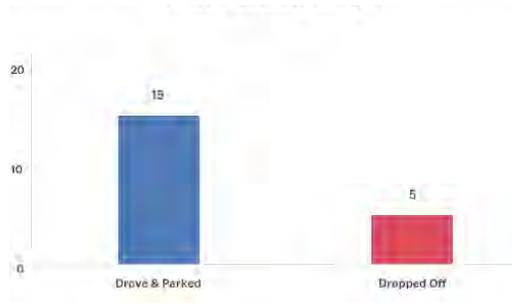
Vehicle Martinez Station Users

Duration of Drive



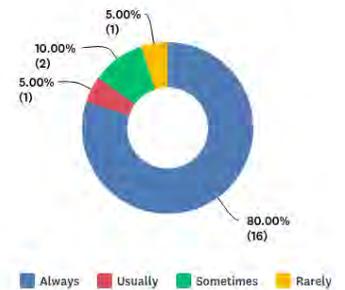
65% of drivers had trips under 20 minutes to the Martinez station.

Type of Drive



75% of station users who used a vehicle to reach the Martinez station also parked at the station

Drive to Station Frequency



85% of drivers always or usually drive to reach the Martinez station.

Parking



Cost of Parking

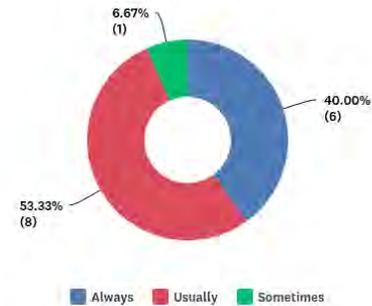
4.64 – On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at the Martinez station as a 4.64 out of 5.



Lighting in Lot

3.73 – On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots at the Martinez station as a 3.73 out of 5.

Availability of Needed Parking Space Type



93% of drivers who park always or usually are able to find their needed parking space type at the Martinez station.

Comments Related to Vehicle Station Access at Martinez

Why did you choose to drive or ride in a car to reach the station today?

- 1 Home destination too far to walk
- 2 I live far from the station, and it is the fastest way to my destination.
- 3 There is no other alternative
- 4 Bus transportation not flexible enough; too far to walk or bike
- 5 Dark/too early in morning to walk from home to station.
- 6 Convenient and good train station parking
- 7 no other viable public transit option
- 8 I live far from the station and there is no efficient transit access.
- 9 I live far from the station. It's really early and not practical to take public transit to get to Martinez
- 10 Only convenient method to reach the Amtrak station
- 11 Fastest
- 12 Public transit involves many transfers and so much time it would make trip impossible
- 13 No reasonable public transit exists to departure station.
- 14 time efficient as public transport irregular, and parking is free
- 15 Time efficient and the parking is free
- 16 To home station - it's the only viable option. From destination station to work: most time efficient.
- 17 Quicker.

Destination Station Responses (21 Martinez Responses)

Response Summary for individuals noting Martinez as being their destination station.

Destination Station -> Final Destination Travel Mode

- 1. Drive or Pick Up in a Personal Vehicle – 33% (7)
- 2. Walk – 19% (4)
- 3. Bike / Scooter – 19% (4)
- 4.) Public Transit – 19% (4)
- 5. Taxi or Uber / Lyft – 10% (2)



Destination Station Demographics

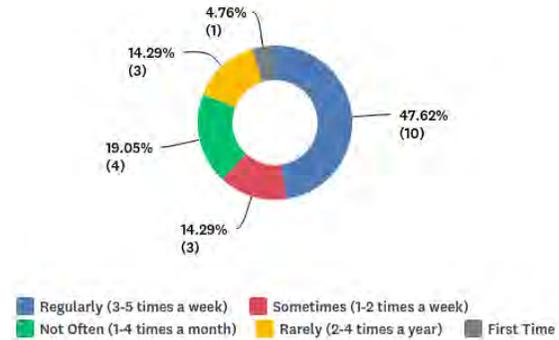
Gender

- Male – 33%
- Female – 67%

Age

- 18-24 – 11%
- 25-34 – 6%
- 35-44 – 28%
- 45-54 – 17%
- 55-64 – 28%
- 65+ – 11%

Frequency of Capitol Corridor Use

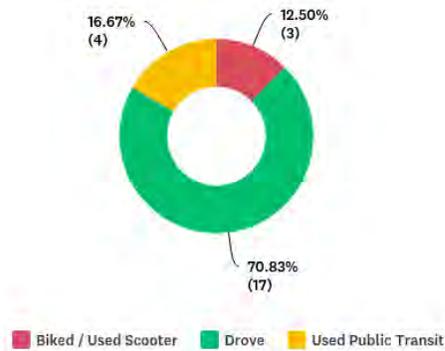


Oakland Coliseum Station

Home Station Survey (24 Total Responses)

Note: Auto-dependent station. Not enough responses to generate specific report sections on alternative modes at the station.

Mode of Station Access



10% more drivers at Oakland Coliseum than at all Capitol Corridor stations averaged.



Station Demographics

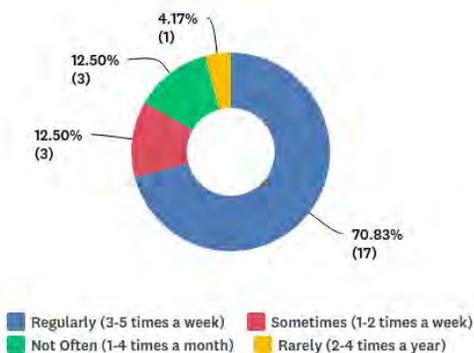
Gender

- Male – 81%
- Female – 19%

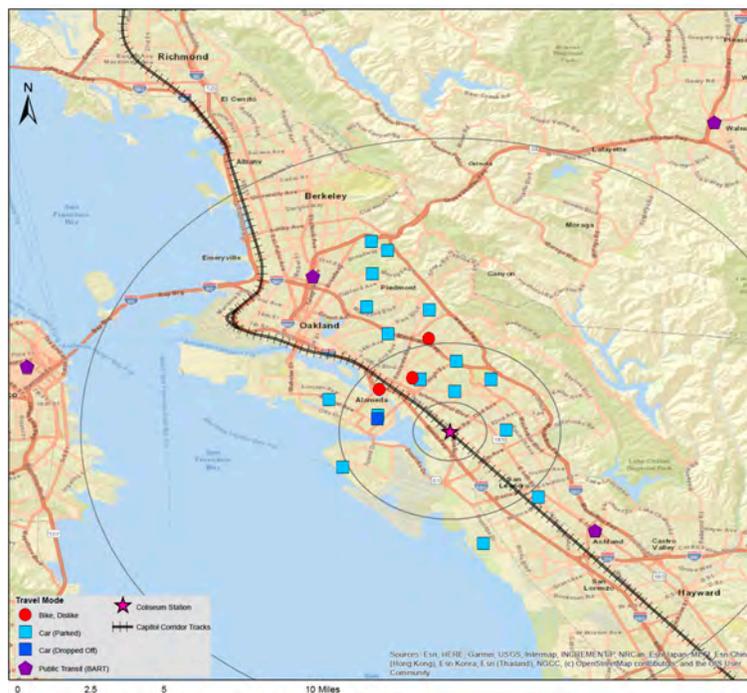
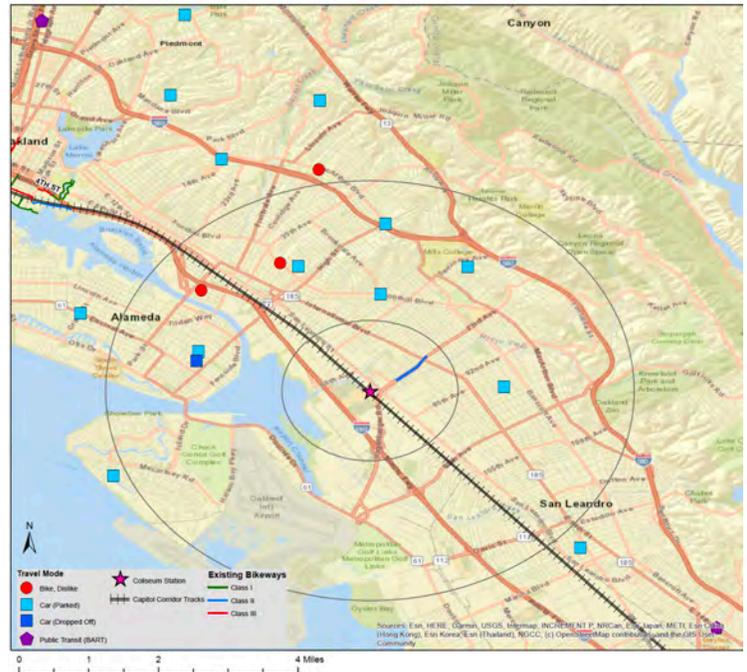
Age

- 18-24 – 5%
- 25-34 – 23%
- 35-44 – 18%
- 45-54 – 27%
- 55-64 – 23%
- 65+ – 5%

Regularity of Station Use



Origins and Access Maps



Note on figures: Maps show zoomed in and zoomed out extents of locations from which passengers travel to reach the Oakland Coliseum station. Locations for bike users in map coded based on sentiment (liked, neutral, disliked) of travelling to the station. Rings represent one-mile, three-mile, and ten-mile station buffer zones. Only one-mile and three-mile buffer zones shown in map with zoomed in extent.

Comments Related to Bike / Scooter Station Access at Oakland Coliseum

What about the bike / scooter route to your home station do you like and/or dislike?

- 1 Mostly on a bike trail
- 2 Poorly maintained streets with inadequate and/or non-existent bike infrastructure
- 3. No bike lanes on many streets. Quality of roads is very poor (lots of potholes, cracks). Drivers are not careful of bicyclists in this area.
- 4 Not enough bike cars on train.
- 4 Improve poor path conditions. Add parking-protected buffered bike lanes.

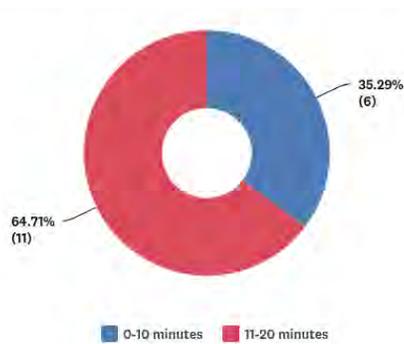
Comments Related to Public Transit Access at Oakland Coliseum

What do you like the least about the public transit options servicing your Capitol Corridor home station?

- 1 The surrounding neighborhood
- 2 Evening services south of Jack London are few and spread out infrequently
- 3 There are no signs which show you where to go if you want to transfer at the station between different services (BART to Amtrak).
- 4 Amtrak delays: work not located on a public transportation line.

Vehicle Coliseum Station Users

Duration of Drive



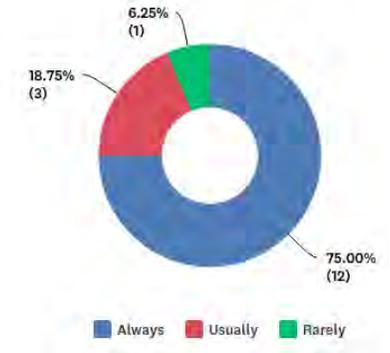
100% of drivers had trips under 20 minutes to the Oakland Coliseum station.

Type of Drive



94% of station users who used a vehicle to reach the Oakland Coliseum station also parked at the station

Drive to Station Frequency



94% of drivers always or usually drive to reach the Oakland Coliseum station.

Parking



Cost of Parking

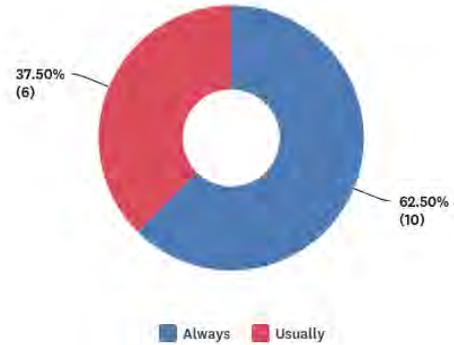
5.00 — On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at the Oakland Coliseum station as a 5.00 out of 5.



Lighting in Lot

2.40 — On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots at the Oakland Coliseum station as a 2.40 out of 5 (the lowest of all Capitol Corridor stations).

Availability of Needed Parking Space Type



100% of drivers who park always or usually are able to find their needed parking space type at the Oakland Coliseum station.

Comments Related to Vehicle Station Access at Oakland Coliseum

Why did you choose to drive or ride in a car to reach the station today?

- 1 Fastest way to get to the train. Free parking
- 2 I have kids to drop off and it is too dark in the winter to bike.
- 3 Live far
- 4 Distance to/from station; flexibility; safety
- 5 I live far from the station
- 6 Convenient
- 7 Public transit takes too long
- 8 I live far from the station and public transportation is inconvenient and takes too long in the AM.
- 9 Lack of safe bike lanes and poor pavement condition along streets makes biking from home unsafe for me.
- 10 I live in the hills and would prefer to bike to the station, but the uphill ride home is too much for me. I drive to Coliseum because the parking is free, even though the station and lot are disgusting.
- 11 Time efficient & safer than public transit & walking between stations in the dark.
- 12 It is time efficient and parking is cheap
- 13 Quicker than taking several public transit options
- 14 Public transit from Alameda to the train station is both time-inefficient and expensive (AC Transit and BART).
- 15 There's no convenient and timely public transportation from my home to the station.
- 16 Have to carry my bike, unsafe to ride from home to OAC station. Also, faster and free parking is nice.

Destination Station Responses (17 Oakland Coliseum Responses)

Response Summary for individuals noting Oakland Coliseum as being their destination station.

Destination Station -> Final Destination Travel Mode

1. Public Transit – 56% (9)
2. Walk – 25% (4)
3. Bike / Scooter – 6% (1)
4. Drive or Pick Up in a Personal Vehicle – 6% (1)
5. Taxi or Uber / Lyft – 6% (1)



Destination Station Demographics

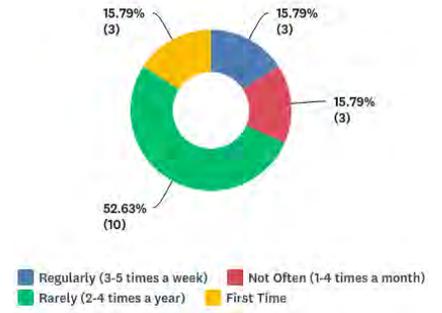
Gender

- Male – 50%
- Female – 50%

Age

- 18-24 – 0%
- 25-34 – 19%
- 35-44 – 12%
- 45-54 – 38%
- 55-64 – 12%
- 65+ – 19%

Frequency of Capitol Corridor Use

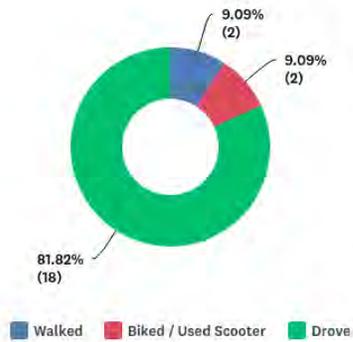


Fremont – Centerville Station

Home Station Survey (22 Total Responses)

Note: Auto-dependent station. Not enough responses to generate specific report sections on alternative modes at the station.

Mode of Station Access



10% more drivers at Fremont - Centerville than at all Capitol Corridor stations averaged.



Station Demographics

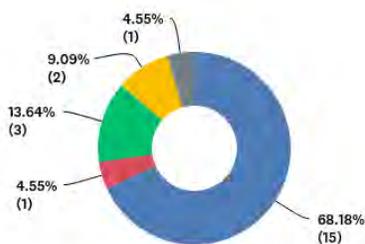
Gender

- Male – 74%
- Female – 26%

Age

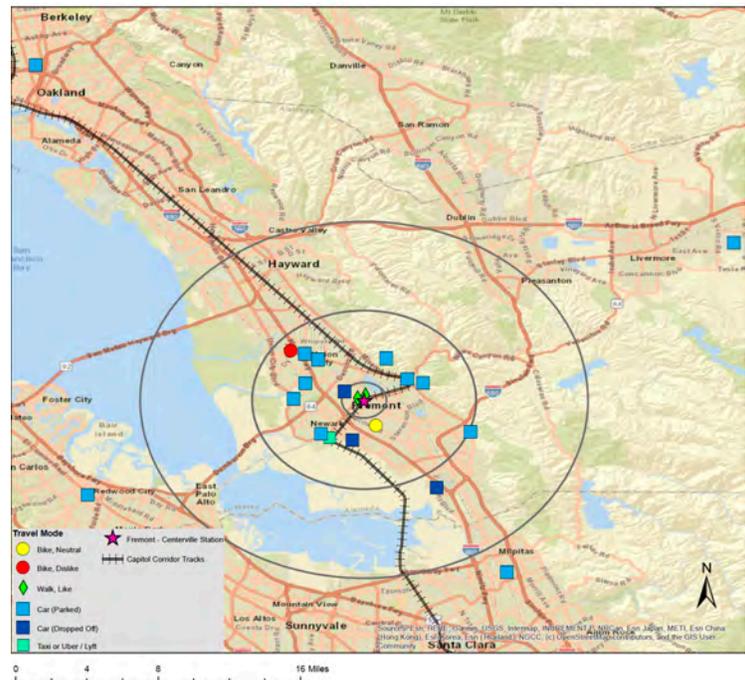
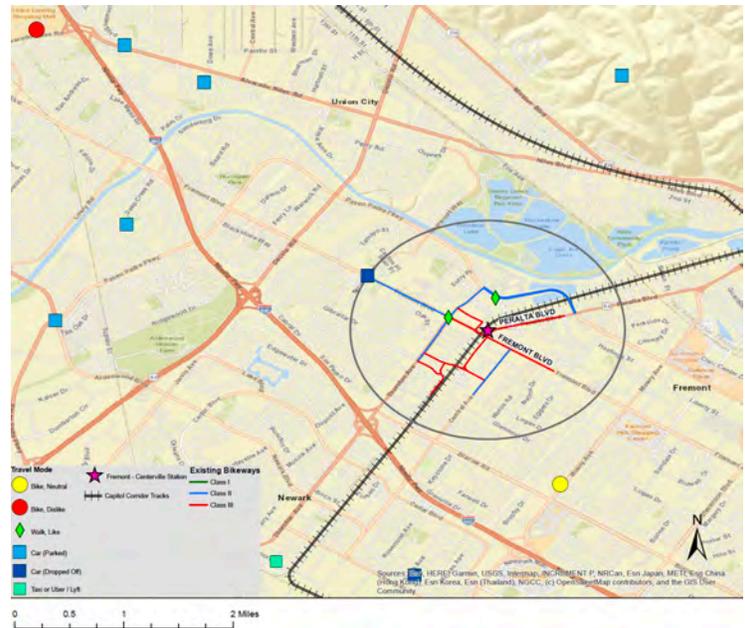
- 18-24 – 20%
- 25-34 – 15%
- 35-44 – 35%
- 45-54 – 10%
- 55-64 – 15%
- 65+ – 5%

Regularity of Station Use



Legend for Regularity of Station Use:
 Regularly (3-5 times a week) (Blue), Sometimes (1-2 times a week) (Red), Not Often (1-4 times a month) (Green), Rarely (2-4 times a year) (Yellow), First Time (Grey)

Origins and Access Maps



Note on figures: Maps show zoomed in and zoomed out extents of locations from which passengers travel to reach the Fremont - Centerville station. Locations for pedestrians and bike users in map coded based on sentiment (liked, neutral, disliked) of travelling to the station. Rings represent one-mile, five-mile, and ten-mile station buffer zones. Only one-mile buffer zone shown in map with zoomed in extent.

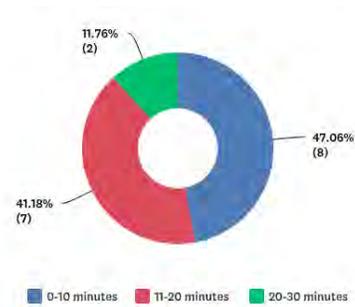
Comments Related to Pedestrian & Bike / Scooter Station Access at Fremont – Centerville

What about the walk or bike / scooter route to your home station do you like and/or dislike?

- 1 Walking is just convenient as I live extremely close. Once I got an electric scooter however I have started using it more often to get home, yet I sometimes walk for the exercise. I don't like to walk sometimes as I get to the station early when I walk and if the train is delayed that's more time wasted at the station.
- 2 That it's a short walk and not worth driving to. I don't like having to cross the train tracks to get to my platform.
- 3 A level crossing between the short side track and station side track at the Fremont station would be life changing.
- 4 Many Fremont streets are not yet bike safe, including Central, Peralta, and Fremont Blvd.
- 5 A lot of traffic parking or stopping in the bike lanes, no bike lanes in many places
- 6 Parked cars on Fremont Blvd force bikes into 40 mph traffic. Some parts are too narrow for bikes and cars.

Vehicle Fremont – Centerville Station Users

Duration of Drive



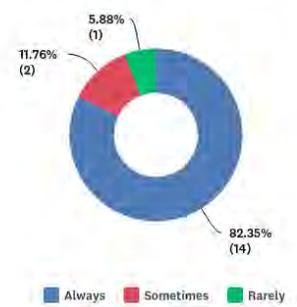
88% of drivers had trips under 20 minutes to the Fremont – Centerville station.

Type of Drive



71% of station users who used a vehicle to reach the Fremont - Centerville station also parked at the station.

Drive to Station Frequency



94% of drivers always or usually drive to reach the Fremont – Centerville station.

Parking



Cost of Parking

3.71 – On a scale of 1 (poor) to 5 (excellent), drivers rated the cost of parking at the Fremont – Centerville station as a 3.71 out of 5.



Lighting in Lot

3.55 – On a scale of 1 (poor) to 5 (excellent), drivers rated the quality of lighting when dark in parking lots at the Fremont – Centerville station as a 3.55 out of 5.

Availability of Needed Parking Space Type



100% of drivers who park always or usually are able to find their needed parking space type at the Fremont – Centerville station.

Comments Related to Vehicle Station Access at Fremont – Centerville

Why did you choose to drive or ride in a car to reach the station today?

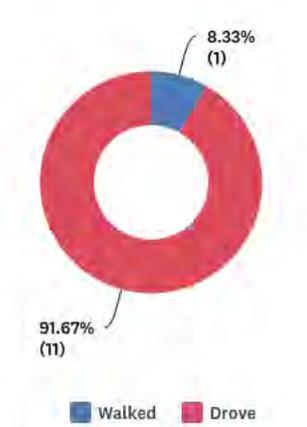
- 1 Only choice, public transit will take too long when considering transfers
- 2 Our hotel was too far to walk to.
- 3 It's a far walk, and the drive would make things easier.
- 4 Because I don't have a night meeting that goes beyond the last train ride out. I take the train when I don't have night meetings or events (2 times a week), and I take it because traffic here is awful. The worst I have ever experienced.
- 5 Faster
- 6 I live far from the station
- 7 I live too far to bike or walk
- 8 Most convenient
- 9 Had someone to drop off
- 10 Live far from the station
- 11 Live too far
- 12 No public transportation alternative
- 13 Too far from the station.
- 14 Time efficient
- 15 I get dropped off, and it is quick and easy.
- 16 No bus stop near my home that takes me to the station.
- 17 It's 3 miles and I don't want to get sweaty

Santa Clara Great America Station

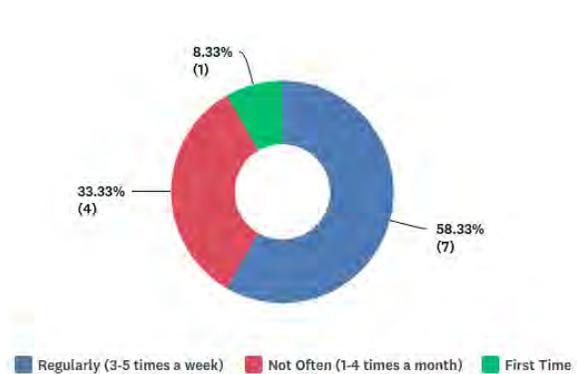
Home Station Survey (12 Total Responses)

Note: Auto-dependent station. Not enough responses to generate specific report sections on alternative modes at the station.

Mode of Station Access



Origins and Access Maps



Comments Related to Pedestrian Access at Santa Clara Great America

What about the walk or bike / scooter route to your home station do you like and/or dislike?

- 1 Lafayette St is fine during daylight hours; unsure about after dark
- 2 cars drag race on Lafayette after dark
- 3 The transition from Amtrak to VTA is horrible (heavy traffic) and an accident waiting to happen at the Great America station.

Comments Related to Vehicle Station Access at Santa Clara Great America

Why did you choose to drive or ride in a car to reach the station today?

- 1 There are no public transportation available, even if it is available it takes close to 75 minutes to get to the station
- 2 My boyfriend dropped me off on his way to work.
- 3 No public transit alternatives that work
- 4 my husband insists he drive me
- 5 Time and easy
- 6 No other choice
- 7 time efficient and free parking
- 8 I live far from the station and the train leaves very early. It's not practical for me to take public transportation.
- 9 My roommate can drop me off before he gets to work.

Destination Station Responses (90 Santa Clara Great America Responses)

Response Summary for individuals noting Santa Clara Great America as being their destination station.

Destination Station -> Final Destination Travel Mode

1. Bike / Scooter – 46% (41)
2. Taxi or Uber / Lyft – 19% (17)
3. Drive or Pick Up in a Personal Vehicle – 14% (13)
4. Public Transit – 13% (12)
5. Walk – 8% (1)

Destination Station Demographics

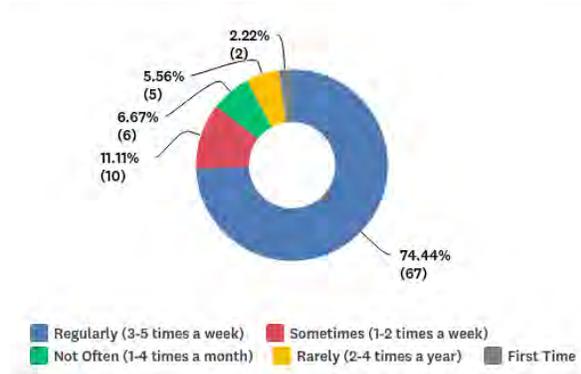
Gender

- Male – 75%
- Female – 25%

Age

- 18-24 – 1%
- 25-34 – 26%
- 35-44 – 28%
- 45-54 – 20%
- 55-64 – 22%
- 65+ – 2%

Frequency of Capitol Corridor Use



APPENDIX – SURVEY QUESTIONS

Questions written and sorted in the order that they were asked to survey participants falling under each mode of station access.

Questions Asked to All Survey Respondents

Q1: How frequently do you use Capitol Corridor stations?

Q2: Please provide the zip codes for the origin point and final destination point of your trip today. An example of an origin point (where you travelled from to reach your home station) could be a home and a destination point (where you travelled to after reaching your arrival station) could be an office.

Q3: Please select your Capitol Corridor home station/stop from the dropdown. Your home station is the station closest to or most convenient to reach from where you live, or closest to where you spent the previous night.

Q4: Please select your Capitol Corridor destination station/stop from the dropdown. Your destination station is the station you travelled to today from your home station.

Q5: At approximately what time did you depart by train from your Capitol Corridor home station today?

Q6: How did you get to your Capitol Corridor home station today?

Questions Asked to Individuals Who Walked to Their Home Stations

Q7: How often do you choose to walk to your home station when you ride Capitol Corridor?

Q8: When you choose not to walk, which alternative do you use most often to reach your home station?

Q9: Optional Response: What is the location from which you began the walk to your home station? Please provide a nearby street intersection.

Q10: How many minutes did it take for you to walk to your home station today?

Q11: When you offboard at your Capitol Corridor destination station, how do you get to your final destination?

Q12: Do you feel like your walk to your home station was direct and convenient?

Q13: What about the walk to your home station do you like, and/or what about your walk do you not like? Please describe in the comment box below. E.g. walking clears my head, there is a particularly difficult intersection to cross at...., etc.

Q14: Sidewalks: On a scale of 1 (worst) to 5 (best), rate the quality of sidewalks for your walk to your home station.

Q15: Vehicles on road: On a scale of 1 (high traffic volume) to 5 (low traffic volume), rate your exposure to vehicles (cars, bikes, and scooters) on the route you took to your home station?

Q16: Are there any additional suggestions you would make to improve the walking experience to your home station? E.g. safer or longer street crossings, wider sidewalks near the station, etc.

Q17: What is your gender?

Q18: What is your corresponding age group?

Q19: Would you like to be added to Capitol Corridor's email list?

Questions Asked to Individuals Who Biked / Scootered to Reach Their Home Stations

Q20: How often do you choose to bike or scooter to your home station when you ride Capitol Corridor?

Q21: When you choose not to bike or scooter, the most common alternative mode of travel that you use to reach your home station is to:

Q22: Optional Response: What is the location from which you begin your bike/scooter ride? Please provide a nearby street intersection.

Q23: How many minutes did it take for you to bike to your home station today?

Q24: Did you (or will you) choose to bring your bike or scooter on board to get to your final destination after exiting the train?

Q25: What is your reason for bringing your bike or scooter on board the train today? Please check all boxes which apply.

Q26: How is the quantity of bike rack spaces available on the train?

Q27: When you offboard at your Capitol Corridor destination station, how will you reach your ultimate destination point?

Q28: On a scale of 1 (bad) to 5 (great), please rate both the amount and location of long-term secure bike or scooter parking (bike e-lockers or Bike Secure Parking Areas) at your home station on the below scale:

Q29: Bike Routes: From a traffic safety and convenience perspective, how would you rate the bike or scooter routes on city streets and/or pathways you took to reach your home station?

Q30: What about the current bike/scooter routes to your home station do you like and/or dislike? Please describe in the comment box below. E.g. there were too many cars, bike lanes were wide and well separated from traffic, traffic moves too fast, etc.

Q31: Are there bike share or scooter share services available in the neighborhood surrounding your home station?

Q32: Are there any other suggestions you would make to improve the biking or scooter riding experience to your home station? E.g. improve poor path conditions, add bike lane buffers, etc.

Q33: What is your gender?

Q34: What is your corresponding age group?

Q35: Would you like to be added to Capitol Corridor's email list?

Questions Asked to Individuals Who Got Dropped Off / Drove to Their Home Stations

Q36: How often do you choose to drive or use a ride hailing service to reach your home station when you ride Capitol Corridor?

Q37: When you choose not to drive or use a ride hailing service to reach your home station, which alternative do you use most often?

Q38: Optional Response: What is the location from which you began your drive or ride? Please provide a nearby street intersection.

Q39: How many minutes did it take for you to drive/ride to your home station today?

Q40: When you offboard at your destination Capitol Corridor station, how will you reach your final destination?

Q41: Why did you choose to drive or ride in a car to reach the station today? Please type in the comment box below. E.g. I live far from the station, it is time efficient and parking is cheap, I have errands to run or kids to drop off beforehand, etc.

Q42: Please indicate the type of car trip best characterizing how you reached your home station today:

Q43: Please indicate your required type of parking space in the comment box below. E.g. regular parking space (> 2 hr.), short-term parking space (< 2 hr.), electric vehicle space, motorcycle space, etc.)

Q44: How often are you able to find this kind of parking space at your home station?

Q45: On a scale of 1 (poor) to 5 (excellent), please rate both the cost of parking and the quality of lighting at night in the lot at your station.

Q46: What would you do if you did not have a personal vehicle to use to reach your home station?

Q47: What is your gender?

Q48: What is your corresponding age group?

Q49: Would you like to be added to Capitol Corridor's email list?

Questions Asked to Individuals Who Used Public Transit to Reach Their Home Stations

Q50: How often do you use a public transit service to reach your home station when you choose to ride Capitol Corridor?

Q51: When you choose not to use public transit to reach your home station, which do you use most often?

Q52: Optional response: What is the location from which you began your public transit commute to the station? Please provide a nearby street intersection.

Q53: How many minutes did it take for you to reach your home station using public transit today? Consider total time from origin point to your home station.

Q54: Please provide the public transit mode, name of the public transit system, and route that you took to get to your home station.

Q55: When you offboard Capitol Corridor at your destination station, do you also use public transit to reach your final destination?

Q56: What travel mode will you (or did you) use instead of public transit to reach your final destination?

Q57: How often do you use public transit to get to your home station?

Q58: On a scale of 1 (not frequent enough) to 5 (very frequent), how would you rate the frequency of departure time intervals for public transit options that service your home station:

Q59: What information source(s) did you use to plan your connection to your Capitol Corridor home station? Please check all boxes that apply.

Q60: On a scale of 1 (not useful) to 5 (very useful), how helpful was the information you found on how to connect to your home station via public transit?

Q61: As a public transit user, what do you like the least about using these services? Please write below. E.g. takes too long, have to walk to stops, etc.

Q62: What is your gender?

Q63: What is your corresponding age group?

Q64: Would you like to be added to Capitol Corridor's email list?