# **APPENDIX E**

Station Access Profile - Downtown San José

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VTA's BART Silicon Valley Phase II Extension Project Transit Oriented Comunities Strategy Study Downtown Station Profile





Solutions that move you

Final Report August 2019 DRAFT



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# **Downtown Station Profile**

The Santa Clara Valley Transportation Authority's (VTA) BART Silicon Valley Extension project includes a 16-mile, six-station extension of the existing San Francisco Bay Area Rapid Transit District (BART) system into Silicon Valley. The extension is being constructed in two phases. Phase I (Berryessa Extension) is the first 10 miles which includes two stations and is currently planned to open in 2019. Phase II is a 6-mile extension, which includes four stations: Alum Rock/28th Street, Downtown San José, Diridon, and Santa Clara.

As part of VTA's BART Silicon Valley Phase II Extension Project (Phase II), VTA and its partner agencies initiated the *Transit Oriented Communities Strategy Study* (TOCs Strategy Study) to plan and subsequently implement access improvements in the Station Areas to enhance multimodal access to the stations.

The station access planning effort includes four phases: **1**) **background conditions assessment, 2**) **identification of opportunities and gaps within the transportation network, 3**) **recommendation of access improvement projects and on-site station requirements, and 4**) **implementation and next steps**. The station access effort is being undertaken in conjunction and close coordination with a Transit Oriented Development (TOD) element of the study that is funded by the Federal Transit Administration (FTA) to identify opportunities and policies to promote transit-oriented development in the Station Areas and along the project corridor. These efforts will also inform subsequent development of station access designs. This station profile document will be expanded through each of the phases of project development. This version of the station profile document reflects completion of the final phase of the station access planning and background conditions assessment.

# Summary of Existing and Planned Transportation Network

Downtown San José is a fast-growing, mixed-use environment. A variety of transportation connections are available in downtown, including VTA Light Rail Transit (LRT), Bus Rapid Transit (BRT), and bus. The urban core of San José currently has adequate pedestrian facilities and the City is working to improve the bicycle facilities through the Better Bikeways project. The focus for the Downtown Station Area is integrating all modes into a unified network through seamless transit connections and enhanced wayfinding, while optimizing curb management practices to promote station access.







# I. Background Information

### A. Station Description and Location

VTA'S BART Silicon Valley Phase II Extension Project Downtown Station is located on E. Santa Clara Street between Market Street and 3rd Street in San José, California. The Downtown Station will be the fourth station on the extension and the second of Phase II. The Downtown Station is located approximately 1.6 miles west of the Alum Rock/28th Street Station and 0.8 miles east of Diridon Station, as shown in **Figure 1**. The Downtown Station is planned to include the BART platforms and mezzanine, BART station entrances, and bicycle parking. No parking structure or pick-up/drop-off facilities are proposed for the station as part of the station facilities. The station is located in close proximity to nearby light rail and bus stations that will provide connections to the greater transit network. Station entrances may be located within or adjacent to the E. Santa Clara Street right-of-way and are not yet finalized. Potential station location entrances are identified in the *Final Subsequent Environmental Impact Report* (SEIR, 2018) and are reflected on **Figure 2.** The boarding platforms and station mezzanine will be located below ground. Vertical circulation elements including elevators, escalators and stairs will be at station portal entrances providing pedestrian access to the boarding platforms. The station will have a minimum of two entrances. Elevators will be provided at each of the entrances. The station entrances will be finalized during further design and will be based on BART Facilities Standards and ridership projections. **Figure 3** shows the preliminary station plan from the SEIR.

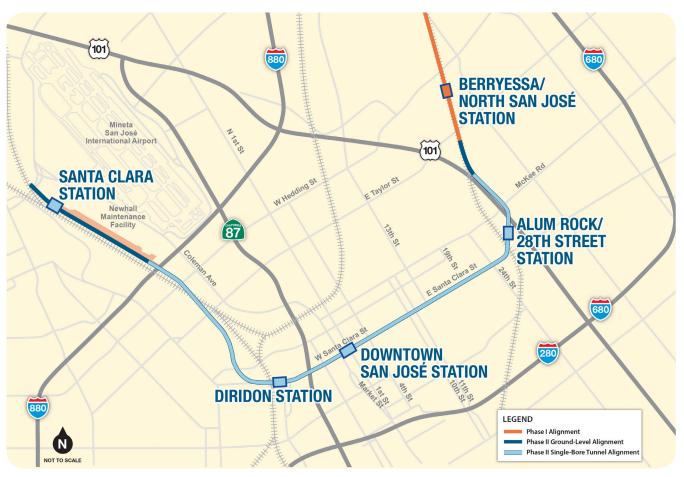
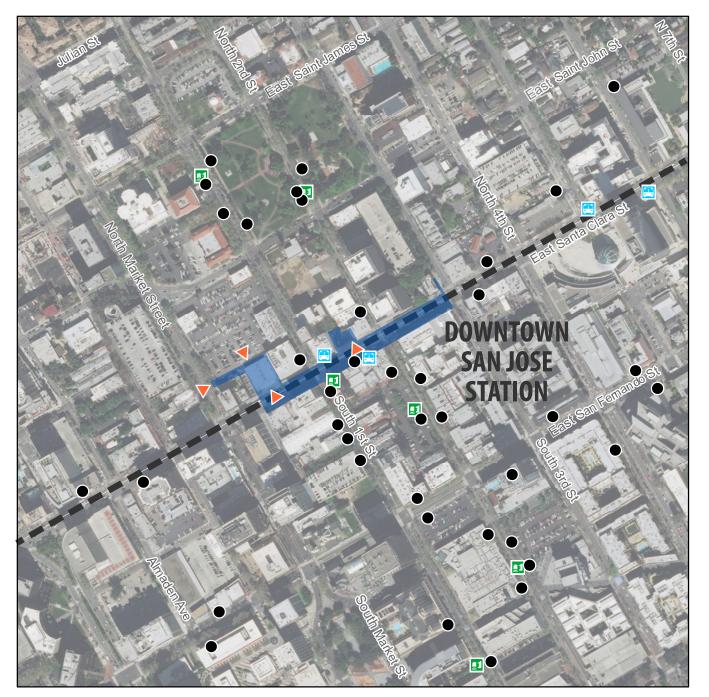


Figure 1: BART Silicon Valley Phase II Extension





### Legend

- A Potential Station Entrance
- 📇 🛛 Existing VTA BRT Stop
- Existing VTA LRT Stop
- Existing VTA Bus Stop
- VTA's BART Phase II Extension Alignment

0 125 250 375 500



Figure 2: Station Area

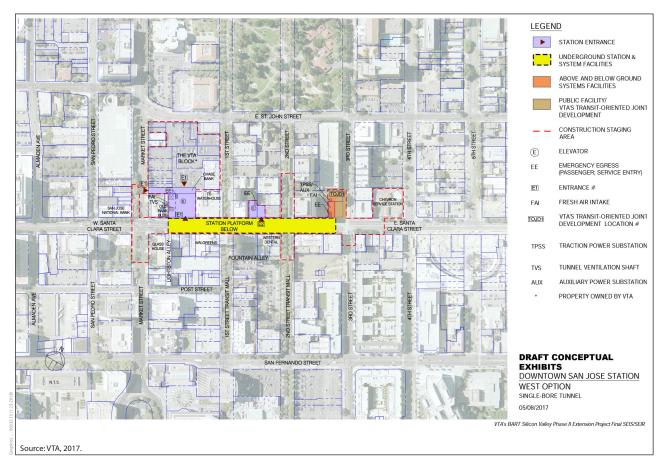


Figure 3: Downtown Station Plan from SEIR







# **B. Background Conditions**

#### **1. Previous Planning Efforts**

Numerous planning efforts have been completed within the Downtown Station Area. The documents summarized below were reviewed and incorporated into the station access planning effort where applicable.

#### BART Station Access Planning Final Report (City of San José, 2016)

The San José BART Station Access Planning Final Report discusses Station Area planning and transportation connectivity improvements for the Downtown San José and Alum Rock/28th Street BART stations. The report details existing conditions at both station locations, including land use, circulation, traffic, parking, pedestrian and bicycle access, and transit access. It also provides recommendations for station entrance locations, transit-priority routes, and bicycle, pedestrian, parking, and wayfinding improvements. Within the Downtown Station Area, the report recommends designating Santa Clara Street, 1st Street, and 2nd Street as transit-priority routes. It also recommends assessing the potential for a center-running transit lane on E. Santa Clara Street between 1st Street and 3rd Street.

#### Bike Plan 2020 (City of San José, 2009)

The *San José Bike Plan 2020* recommends policies, programs, and action items that defines a network of on- and off-street bikeways in San José with a goal of making bicycling in San José more safe, convenient, and common. The plan states that, by 2020, it aims to complete 500 miles of bikeways, achieve a mode share of 5% for all trips taken by bike, reduce the bicycle collision rate by 50%, add 5,000 bike parking spaces, and achieve Gold-level Bicycle Friendly Community status. *Bike Plan 2020* identifies a 500-mile bikeway network, bike parking, support facilities, and rideshare program to implement, and provides recommendations on ways to combine travel via bike and transit as well as best practices and education and enforcement strategies. The plan identifies action items that should be taken to expand and connect the existing network, eliminate barriers and gaps for bicyclists, provide bicycle-friendly signals and pavement markings, and maintain bicycle facilities. The plan provides a comprehensive list of proposed bikeway projects, organized by implementation priority as well as a map of existing and proposed bicycle facilities. The City is currently in the process of updating this document. Within the Downtown San José Station Area, the Bike Plan recommends Class II bike facilities on Market Street, William Street, and Reed Street.

#### Better Bikeways (City of San José, Ongoing)

The City of San José is rapidly implementing better bikeways throughout the City through this plan. The City is using protected bike lanes and calm streets to create a better bikeways network by the end of 2019. Within the Downtown San José Station Area, the Better Bikeways project recommends enhanced bike facilities on 2nd Street, 3rd Street, 4th Street, San Fernando Street, and Saint John Street as 2018 projects.

#### Park Paseo (City of San José, 2017)

The City of San José's Office of Economic Development set a goal to revitalize the Paseo de San Antonio, which provides a pedestrian link from San José State University to Cesar Chavez Park through the heart of downtown, and to extend the pedestrian experience along Park Avenue to Guadalupe River Park. Community outreach occurred from November 2016 to February 2017 through a community stakeholder workshop, individual stakeholder meetings, and presentations of recommendations to the executive committee and community stakeholders. The Plan recommended design elements for Park Avenue Park, Cesar Chavez Park, and the Paseo de San Antonio.





#### Envision 2040 General Plan (City of San José, 2018)

The City's General Plan, which is currently being updated, includes transportation network designations and transportation policies. One of its major strategies is designing streetscapes for people, which includes turning seven streets into "Grand Boulevards" to connect neighborhoods and contribute to the City's identity through their design. The seven boulevards are N. 1st Street/Monterey Highway, Capitol Avenue/Capitol Expressway, Alum Rock Avenue/Santa Clara Street/The Alameda, San Carlos Street/Stevens Creek Boulevard, Meridian Avenue, Winchester Boulevard, and Saratoga Avenue. Transit service will be a primary mode on Grand Boulevards. Transportation policies outlined in the General Plan include working toward a balanced transportation system, increasing the focus on walking and bicycling, maximizing public transit usage, improving vehicular circulation, and improving parking and intelligent transportation systems (ITS).

#### Pedestrian Master Plan (City of San José, 2008)

The San José Pedestrian Master Plan is a companion document to the ADA Transition Plan Update for Sidewalks. The Plan compiles and recommends additions/changes to the City's pedestrian standards, policies, procedures and practices. Key recommendations as they relate to the Access Planning Study for the Downtown and Alum Rock/28th Street BART Station Areas are summarized below:

- Convert one-way streets to two-way in downtown
- Continue traffic calming program
- Consider additional car free downtown streets
- Continue the City's Safe Street Initiative
- Develop methodology for prioritizing pedestrian infrastructure improvements
- Incorporate pedestrian needs into the City's development review process
- Provide walking maps of San José's neighborhoods
- Install wayfinding signage in areas with high pedestrian activity

The document largely outlines policies and procedures, rather than providing specific pedestrian and accessrelated project recommendations.

#### Complete Streets Design Standards & Guidelines (City of San José, 2018)

The San José Complete Streets Design Standards & Guidelines have been developed as a guide for the design of San José streets to be safe, efficient, and convenient for users of all modes of travel and all abilities and were adopted as part of the city's transportation planning and policies in 2018. San José complete streets have a goal of being people-oriented, connected, and resilient. As shown in **Figure 4**, the document provides example cross-sections based on street type and details the street design process from identifying and designing for target speed, design hour, year, vehicle, and prioritizing modes by street type. **Figure 4** also depicts the cross-section of a typical Grand Boulevard, which is the designated classification of Santa Clara Street. This document details specific design elements of mixed flow travel lanes, various bicycle facilities, sidewalks, transit facilities, on-street parking facilities, traffic calming measures, stormwater facilities, and green infrastructure elements. Intersection design principles, sidewalk and walking design principles, and bikeway design principles are also detailed in this document. The *Complete Streets Design Standards & Guidelines* should be referenced for specific dimensions of multimodal complete streets within San José.





SAN JOSÉ COMPLETE STREETS GUIDELINES

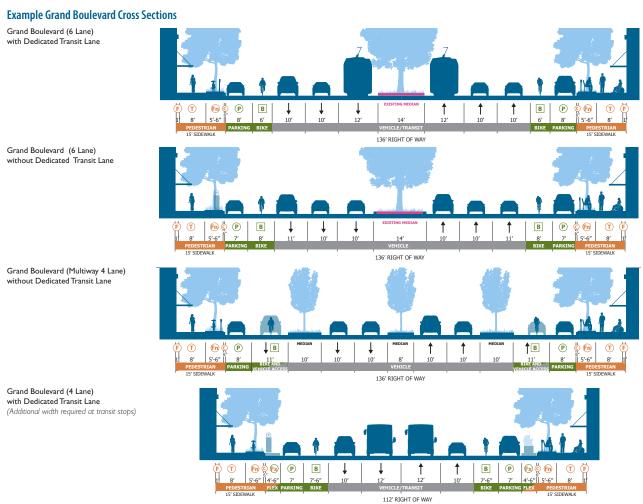


Figure 4: Example Cross-section from Complete Street Guidelines

#### Countywide Bike Plan (VTA, 2018)

The purpose of the VTA *Countywide Bike Plan* is to create a countywide bicycle network that is safe, convenient, and connected – enabling people of all ages and abilities to easily bike to work, school, shopping, transit, and elsewhere. The plan updates the 2008 *Countywide Bicycle Plan* and expands the network of Cross County Bicycle Corridors (CCBCs) to include low-stress bikeways, describes a vision of ten connected bicycle superhighways, updates the list of Across Barrier Connections (ABCs), and prioritizes CCBCs and ABCs using criteria approved by the VTA Board of Directors. The CCBCs provide access to major employment centers such as Downtown San José. The CCBCs identified in the study area are: 3rd/4th Street, St. John Street, 10th/11th Street, and San Fernando Street.





#### Pedestrian Access to Transit Plan (VTA, 2017)

VTA's *Pedestrian Access to Transit Plan* aims to "improve the safety, comfort, and convenience of the walking environment for VTA's customers." The plan integrates recommendations and guidelines from local plans and aims to address the gaps in planning efforts to connect pedestrians to transit. The plan identifies 12 focus areas, as can be seen in **Figure 5**, of which Downtown San José (Focus Area H) is related to the Downtown Station of the TOCs Strategy Study.

The following project recommendations in particular were identified as being within one of the access routes to the Downtown San Station José (described in Chapter IV below).

- Add pedestrian crossing on north leg of N. Market Street/W. St James Street, add curb extension on southwest corner into Market Street
- Pedestrian crossing improvements at southbound U-turn through Cesar Chavez Park triangle
- Consider signalizing 8th Street to allow crossing of E. Santa Clara Street

#### 2019 New Transit Service Plan (VTA, 2019)

VTA has engaged in a years-long process to improve its transit network and effectively connect with Phase I of the BART Silicon Valley Extension. The 2019 New Transit Service Plan (known earlier as Next Network) is expected to be implemented when Phase I begins operation. The Transit Service Plan:

- Increases service levels in high-ridership areas and decreases service levels in low-ridership areas;
- Increases frequencies on many routes;
- Expands the number of Rapid Routes;
- Increases the number of residents and jobs with access to frequent service by 150,000 and 160,000, respectively; and
- Extends service later in the evening on many routes and adds more service on weekends.

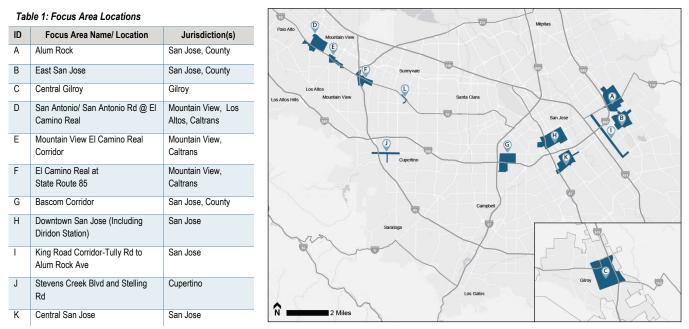


Figure 5: Pedestrian Access to Transit Plan Focus Areas



#### Valley Transportation Plan 2040 (VTA, 2014)

The Valley Transportation Plan 2040 (VTP) is the long-range transportation plan for Santa Clara County. The objectives of the VTP are: (1) to facilitate the creation and support of an integrated multimodal transportation system that serves all socio-economic groups efficiently and sustainably; (2) to pursue, develop, and implement advances in technology, management practices, and policies; and (3) to be the region's foremost advocate for transportation projects, programs, and funding. The VTP identifies 21 transit capital projects for implementation.

Multimodal Transportation Investments (MTI) are also included in the *Valley Transportation Plan 2040*. MTI includes projects from Transportation Systems Operations and Management (TSOM), Bicycle Expenditure Program (BEP), streetscape components, pedestrian improvements, and Community Design and Transportation (CDT) Program. The BEP includes over 120 projects, of which the following are related to TOCs Strategy Study:

- Hedding Street Bikeway from Park Avenue to 17th Street. On-street bikeway (Project B24)
- Enhanced on-street cross-town bikeways along Park Avenue/San Fernando Street/San Antonio corridor (Project B32)

#### Caltrans District 4 Bike Plan (Caltrans, 2018)

Freeways and state highways play a substantial role in the comfort and ease of bicycling, given that they are difficult to either ride on or to cross. With nearly 1,400 miles of state highway facilities in District 4, Caltrans is responsible for ensuring that its facilities do not present significant barriers for those choosing non-auto modes. The Caltrans District 4 Bike Plan analyzes existing conditions and proposes a list of improvements, categorized by priority, that would lead to greater rider comfort and safety while using or crossing state-owned highway facilities.

Within the station area, the Bike Plan recommends replacing free-flow highway on- and off-ramps with stopcontrolled ramps and providing Class I or IV protected bike lanes through the following interchanges:

• I-280 and Almaden Boulevard

• SR-87 and Julian Street

• SR-87 and W. San Carlos Street

#### FAST Transit Program (VTA, Ongoing)

VTA's Fast Transit Program identifies several strategies that will be considered by VTA and by the Cities of San José and Santa Clara to improve transit vehicle speeds and reduce passenger delay. Those that could be enacted by VTA include allowing boarding at all bus doors, converting to a headway-based rather than time-based schedule to reduce delay for passengers on ahead-of-schedule buses, and expanding market penetration of Clipper cards among the system's most active riders.

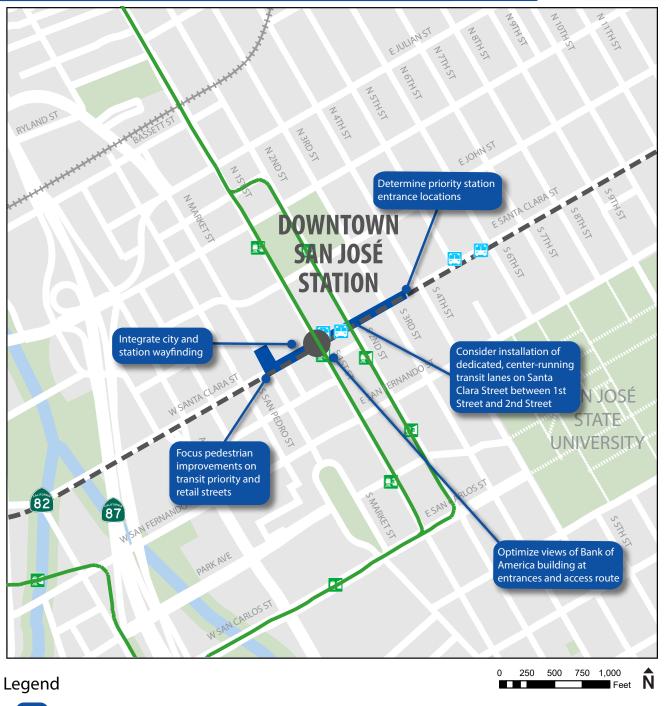
Strategies that could be undertaken by the cities, or with collaboration between the cities and VTA are: the implementation of transit signal priority; consolidation or elimination of redundant stops, with a minimum stop spacing of 800'; installation of bus boarding islands; and piloting of tactical transit lanes, which are bus lanes used over short segments of road for a pre-determined amount of time.

Figure 6 shows a summary of the previous planning efforts.



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Downtown Station Profile



Recommendation from Station Access Planning Report

- Existing VTA BRT Stops
- Existing VTA LRT Stops
- Existing VTA LRT
- VTA's BART Phase II Extension Alignment

Sources: City of San José, Santa Clara County, VTA

Figure 6: Previous Planning Efforts Summary





#### 2. Agency Policies

VTA, the City of San José, and BART have developed policies and guidelines that are summarized below, which were reviewed and incorporated into the station access planning effort where applicable.

#### Station Access Policy (BART, 2016)

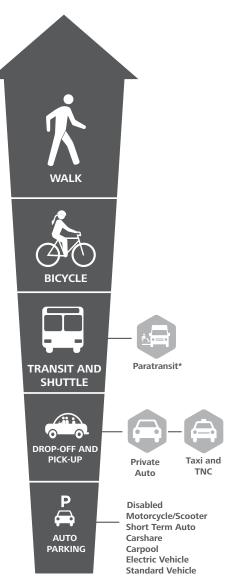
The *BART Station Access Policy* is designed to support the broader livability goals of the Bay Area, reinforce sustainable communities, and enable riders to get to and from stations safely, comfortably, affordably, and cost-effectively. Goals of the *Station Access Policy* are to increase safety, cost efficiency, and public health, and reduce greenhouse gas and pollution emission through improvement of station access, particularly by sustainable modes of transportation. The *Station Access Policy* establishes strategies for systemwide access mode shift to reduce drive alone rates, invest in pedestrian and bicycle assets with a focus on BART property,

partner to advance projects off BART property, and plan all BART facilities to be accessible to all users, including users with disabilities. The TOCs Strategy Study serves as the framework to achieve these established goals.

# Multimodal Access Design Guidelines (BART, 2017)

The BART Multimodal Access Design Guidelines (MADG) aims to provide easy-to-use guidance and recommended standards for pedestrian, bicycle, transit, and vehicle access planning within BART's Station Areas. The goals are to generate more riders, promote healthy communities, increase efficiency and productivity, provide a better passenger experience, provide equitable service, and be an innovation leader. BART station access design hierarchy, is shown in **Figure 7**.

The MADG includes design standards for sidewalk zones, accessible paths, bikeways, adjacent network connections, station entrance and exit, bus stops, passenger pick-up and drop-off - parallel curbside, and angled loading zones. The document summarizes the dimensions for pedestrian facilities, bicycle facilities, bus facilities, street facilities, and parking facilities. The Downtown Station is anticipated to be an Urban station type, as it will not have parking and will be served primarily by walking and bicycle trips. The BART Station Access Framework is shown in **Figure 8.** The MADG will be an input to guide the design of pedestrian and bicycle facilities within the Station Area.



\*All stations must be paratransit accessible

Figure 7: BART Access Hierarchy



STATION TYPE	PRIMARY INVESTMENTS	SECONDARY INVESTMENTS	ACCOMMODATED	NOT ENCOURAGED
URBAN	K &	Transit and	Taxi and Drop-Off	Auto
	Walk Bicycle	Shuttle	TNC and Pick-Up	Parking*
URBAN WITH PARKING	K Š	Fransit and Shuttle	Taxi and Drop-Off and Pick-Up	Auto Parking*
BALANCED	K ŠT.	Transit and	Tasi and Auto	
INTERMODAL	Walk Bicycle	Shuttle Pick-Up	TNC Parking*	
INTERMODAL/	اللہ	Bicycle Drop-Off Transit and	Taxi and	
AUTO RELIANT	Walk	Pick-Up	TNC Parking*	
AUTO DEPENDENT	<b>اللہ</b> walk	Bicycle         Dirop-Off         Auto         Transit and and Parking'           Pick-Up         Parking'         Shuttle	Taxi and TNC	

Figure 8: BART Station Access Investment Framework

#### Vision Zero (San José, 2015)

San José's Vision Zero uses the 4E's (engineering, enforcement, education, and evaluation) approach to achieving their goal of zero traffic fatalities. The engineering highlights that are most relevant to the Access Planning Study include:

- Install 20 enhanced crosswalks annually on major streets with pedestrian-activated flashing beacons and with center safety islands or curb extensions to decrease street crossing widths
- Construct major "complete street" improvements along Park Avenue, St John Street, San Carlos Street, The Alameda, and Taylor Street (at route 87)
- Install 70 miles of new and enhanced bikeways to assist in the goal of completing an interconnected 500-mile bikeway network by 2020
- Consider road diets along Camden Avenue, Lincoln Avenue, Moorpark Avenue, 2nd Street, and 3rd Street, and others





#### VTA Complete Streets Policy (VTA, 2017)

Adopted in 2017, VTA's Complete Streets Policy formalizes the Complete Streets approach in the planning and delivery of VTA's future transportation infrastructure projects. As defined by VTA, a Complete Streets approach requires the following aspects:

- 1. Serve all users of the roadway, including pedestrians, bicyclists, and transit riders
- 2. Use context-sensitive design
- 3. Maintain or enhance network connectivity
- 4. Incorporate technology to improve operations and enhance safety of all roadway users
- 5. Are consistent with adopted plans
- 6. Maintain transportation infrastructure
- 7. Seek and respond to public input
- 8. Integrate Complete Streets infrastructure into transportation projects
- 9. Design using best practice guides and standards



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Downtown Station Profile

# C. Land Use Context

Downtown San José currently comprises office, commercial, hotel, residential, and public service uses. It has some of the tallest buildings in the area ranging from 25 feet to over 140 feet. In immediate proximity to the Station Area, commercial office and retail uses line Santa Clara, 1st, and 2nd Streets, along with several large parking structures. Several entertainment, historical and cultural uses are located in the Plaza de Cesar Chavez and San Pedro Square areas.

The General Plan designates the Downtown and Downtown Commercial as special land uses, characterized by higher intensities for commercial, residential, and mixed uses. The Downtown land use plan accommodates a mix of uses including office, retail, service, residential, and entertainment. Commercial and mixed use corridors extend north along 1st Street and east along E. Santa Clara Street. Beyond these mixed-use areas lie Residential Neighborhood uses.



Figure 9: Planned Station Area Land Use





## **D. Downtown Station Ridership Forecasts**

VTA uses a four-step travel demand model, called the C/CAG-VTA Model, that is optimized for the counties of Santa Clara and San Mateo and accounts for transportation impacts from neighboring counties and regional commute shed. The model is based on the BAYCAST-90 travel forecasting system used by the Metropolitan Transportation Commission (MTC).

The travel demand model provides mode of access and egress at each station. The modes of access vary at each station; at the Downtown Station, riders will arrive by foot, bicycle, local bus, BRT, or auto. The model assumes that there is no specific auto pick-up/drop-off at the Downtown Station. Those arriving by auto will utilize the grid network to be picked up or dropped off near the station. The model forecasts transfers between each of the modes of access.

The number of passengers by mode of access is shown in **Table 1** and **Figure 10**. The figure depicts the directional transfers during the morning period. The number of directional transfers for the afternoon period is assumed to be the reverse of the morning period.

The Downtown Station catchment area is primarily occupied by downtown office uses, with a mix of residential and retail to support the office use. This station serves primarily as an inbound station for downtown workers and visitors.

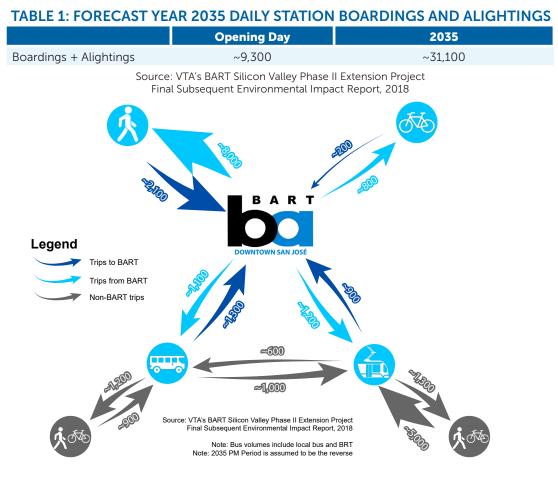


Figure 10: Forecast 2035 AM Period Station Boardings and Alightings





# II. Existing and Planned Transportation Network

# A. Auto

Parking and pick-up/drop-off facilities are not planned for the Downtown San José Station. However, there may be some vehicle pick-up/drop-off activity. Santa Clara Street and 1st Street will serve the station as Grand Boulevards. SR-87 and I-280 will provide highway access. There is an existing interchange with SR-87 at W. Julian Street/Saint James Street. On- and off-ramps exist in each direction at the interchange. There is an existing northbound SR-87 off-ramp to access W. Santa Clara Street. **Figure 11** shows the existing roadway network.

### **B. Transit**

#### **Existing Transit Network**

VTA operates an extensive light-rail and bus network that is centered on Downtown San José. The 902/ Green (Winchester/Mountain View) and 901/Blue (Santa Teresa/Alum Rock) light-rail lines operate through the Downtown study area along 1st Street. The closest LRT stops are Saint James, Santa Clara, and Paseo de San Antonio. The existing east-west Bus Rapid Transit Route (BRT) Route 522 corridor along Santa Clara Street connects to the light-rail network. There are existing BRT stops at Alamaden Street at W. Santa Clara Street; 1st Street and E. Santa Clara Street: and 7th Street and E. Santa Clara Street within the study area. The existing BRT and LRT stops within the study area have enhanced amenities such as benches, shelters, trash cans, pedestrian lighting, and route information. The vicinity of the Downtown Station is served by existing local bus routes 22, 63, 64, 65, 66, 72, and 82. Figure 12 shows the existing transit network.

#### **Planned Transit Network**

The 2019 New Transit Service Plan plan will increase service levels in high-ridership areas, decrease service levels in low-ridership areas, and increase frequencies on many routes. The plan, which will be implemented in conjunction with BART SIlicon Valley Extension Phase I, will also extend service later in the evening on many routes and add more service on weekends. It is anticipated that additional system restructuring will occur in conjunction with VTA's BART Phase II at the time of the project opening. **Table 2** summarizes the 2019 New Transit Service Plan changes affecting routes that serve the Downtown Station. **Figure 13** shows the planned transit network.





Existing transit stop near San José State University

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**Downtown Station Profile** 

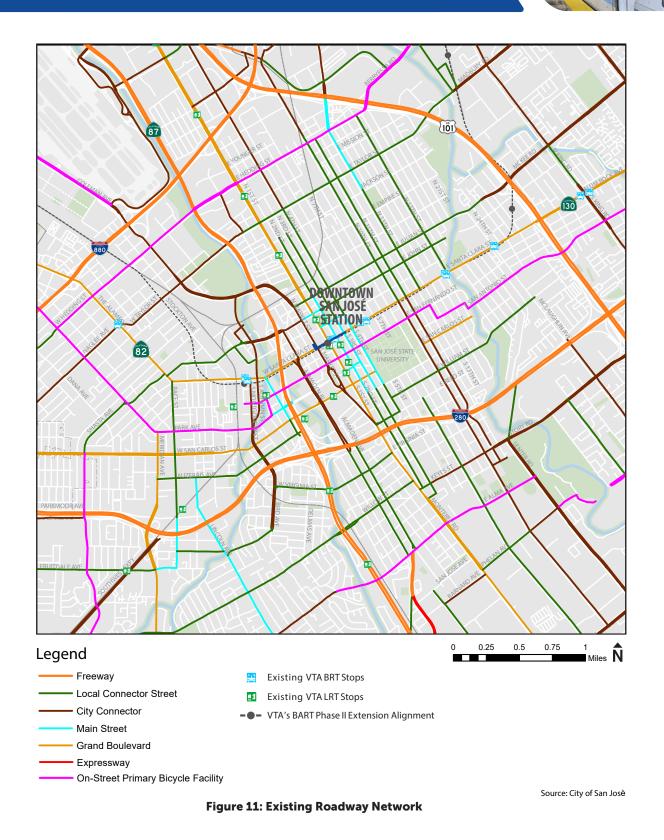


#### **TABLE 2: PLANNED SERVICE CHANGES**

Route	Current Frequency	Planned Frequency	Planned Change (current service vs. final plan)
63	45 mins	N/A	Combine with Route 64 as Route 64
64	15 mins	15 mins	Merge with Route 63 to create Route 64a and Route 64b. Routes would share alignment east of Diridon Station at 15-minute frequency. South of Diridon Route 64a would serve Almaden, Oakridge, and Ohlone/Chynoweth stations. Route 64b would replace Route 63.
65	45 mins	N/A	Discontinue route.
66	20 mins	15 mins	Change alignment to serve Milpitas BART Station; weekday frequency changes by segment; move to 10th/11th Streets from 1st Street.
68	20 mins	15 mins	Decrease midday frequency south of Santa Teresa Light Rail Station; increase midday frequency north of Santa Teresa light rail station.
72	15 mins	15 mins	Decrease frequency on weekday and Saturday evenings.
73	20 mins	15 mins	Change southern end from Capitol Expressway/Snell to Monterey Road/ Branham Road; decrease evening frequency.
82	30 mins	N/A	Discontinue; some segments of route replaced with Routes 56, 66, and 68.
181	15 mins	N/A	Discontinue due to extension of BART to Santa Clara County.
500	15 mins	7.5 mins	Replaces DASH shuttle; connects Diridon Station to Downtown San José, San José State University, and Berryessa BART Station.
523	N/A	15 mins	Create new Route 523 which connects Lockheed Martin Transit Center, Downtown Sunnyvale (Caltrain), De Anza College, Vallco, Valley Fair, Santa- na Row, Downtown San José, Mexican Heritage Plaza and Berryessa BART Station.

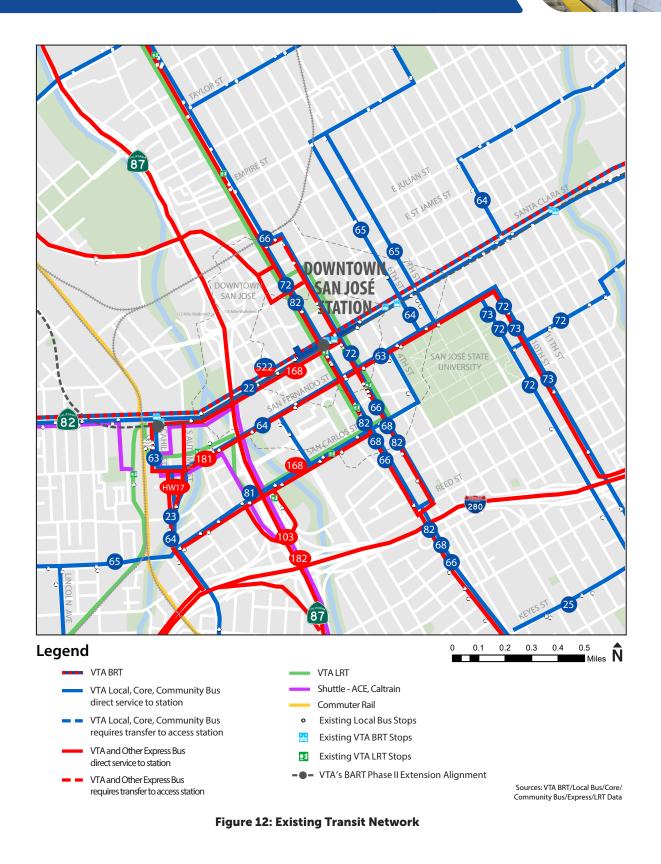
Source: VTA's 2019 New Transit Service Plan



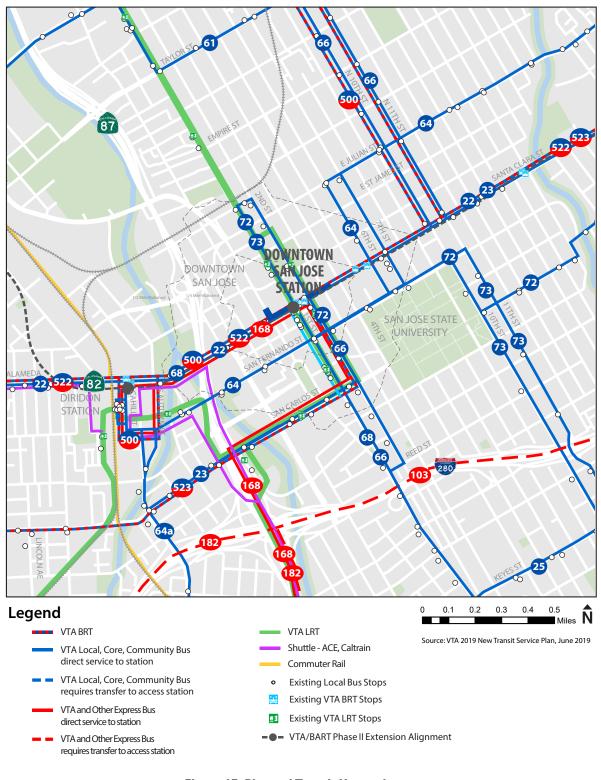


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b

Figure 13: Planned Transit Network





## C. Bicycle

#### **Existing and Planned Bicycle Network**

The existing bicycle network was analyzed within a 1.5 mile access area (bikeshed), equivalent to 10-minute or less bike ride. The City of San José has recently constructed several Class II bike lane facilities and some Class III bike route facilities within the bikeshed. The primary existing bicycle corridors throughout the study area are 2nd Street, 3rd Street, 4th Street, San Fernando Street, and Saint John Street. Saint John Street is currently a Class III bike route facility. Both the City of San José and VTA have identified future bike facilities within the study area.

The City of San José has one of the largest urban trail networks, with 60 miles developed and open to the public. The network's 35 trail systems provide off-street connections to major employment and residential centers throughout the City. The Guadalupe River Trail is on the west side of Downtown San José and has connections to W. Julian Street, W. Saint John Street, W. Santa Clara Street, W. San Fernando Street, Park Avenue, and W. San Carlos Street.

San José has taken the initiative to focus on first mile/last mile solutions through projects such as Better Bikeways for San José. The project is rapidly implementing a network of better bikeways that will transform San José's streets. Within the study area, the Better Bikeways project has recently improved the bike facilities on 2nd Street, 3rd Street, 4th Street, San Fernando Street, and Saint John Street. Existing and planned bicycle facilities are shown in **Figure 14**.

#### **Bicycle Level of Traffic Stress**

Bicycle level of traffic stress (LTS) is a way to assess the comfort and connectivity of bicycle networks. It analyzes how much stress is experienced by bicyclists throughout a bicycle network. LTS is ranked from 1 to 5, with Level 1 being the least stressful and 5 being the most stressful. An example of an LTS 1 facility is a Class I bikeway that is off-street and an LTS 5 facility is a busy arterial without a bike lane. VTA provided 2015/2016 LTS data for Santa Clara County from 2015 TomTom Streets and 2016 OpenStreetMap data. Some cities, including San José, have significantly upgraded their network since then.

The Downtown Station Area is served by LTS 3, 4, and 5 facilities. 3rd Street serves the station as an LTS 3 facility. E. Santa Clara Street, the primary east-west access to the station, is LTS 5. The recently implemented Better Bikeways project should reduce the LTS on 3rd Street, 4th Street, San Fernando Street, and E. Saint John Street. The existing Bicycle Level of Traffic Stress is shown in **Figure 15**.



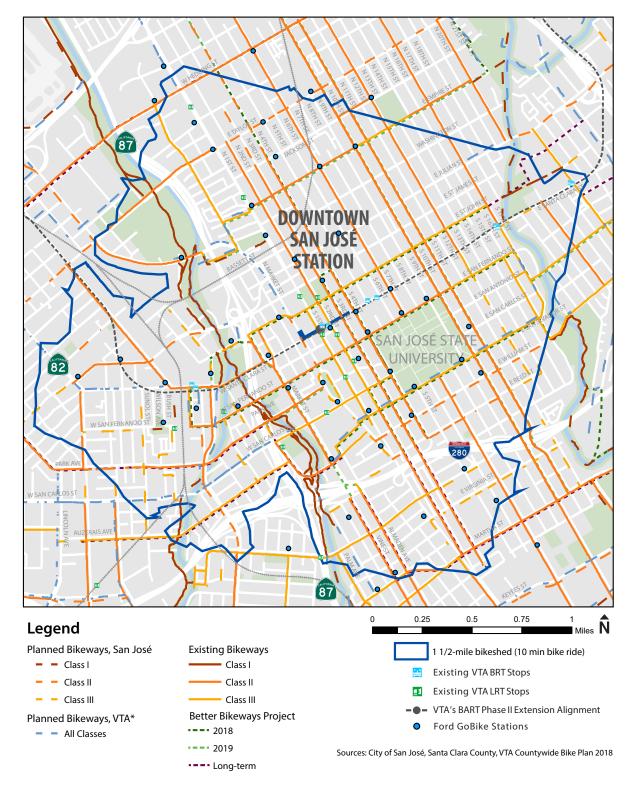


Figure 14: Existing & Planned Bicycle Facilities



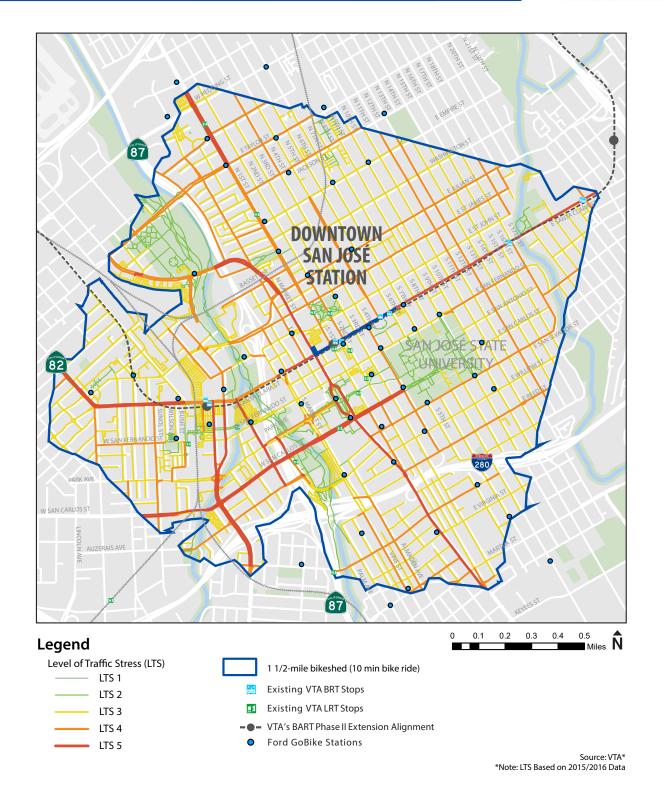


Figure 15: Existing Bicycle Level of Traffic Stress





# **D. Pedestrian**

#### **Existing Pedestrian Network**

The existing pedestrian network was analyzed within a ½-mile access area (walkshed), equivalent to a 10-minute or less walk. The downtown grid street network allows for a uniform walkshed. There are minimal gaps and missing sidewalk connections within the walkshed network. Signalized intersections and protected

pedestrian crossings exist throughout the study area, with a few intersections lacking controlled pedestrian crossings. The intersection of 8th Street and Santa Clara Street operates as two-way stopcontrolled with no marked crosswalks across Santa Clara Street.

The existing sidewalks within the study area are generally adequate in width and in good condition, but lack additional pedestrian amenities such as buffers from busy arterials and uniform streetscapes. Most intersections have accessible ramps and detectable warnings. **Figure 16** shows the existing pedestrian network.

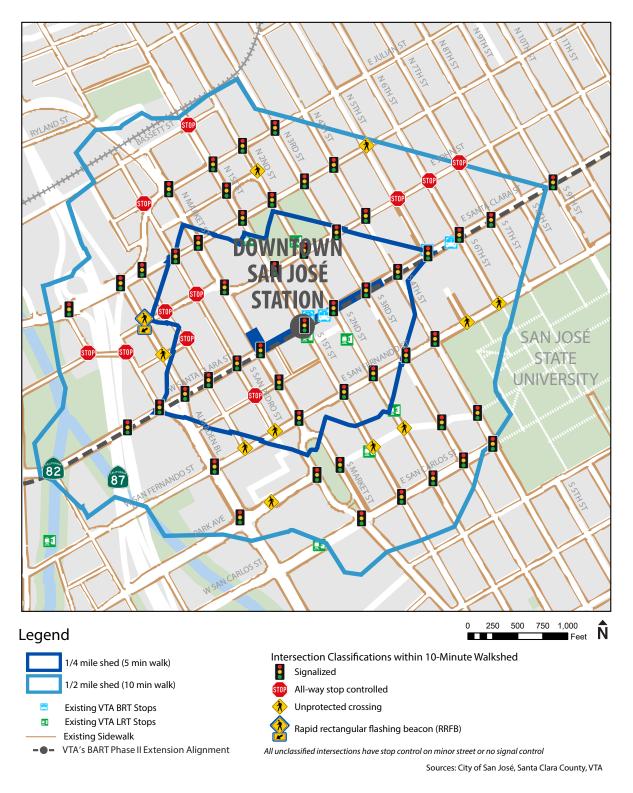


Existing signalized pedestrian crossing

#### **Bicyclist and Pedestrian-Involved Collisions**

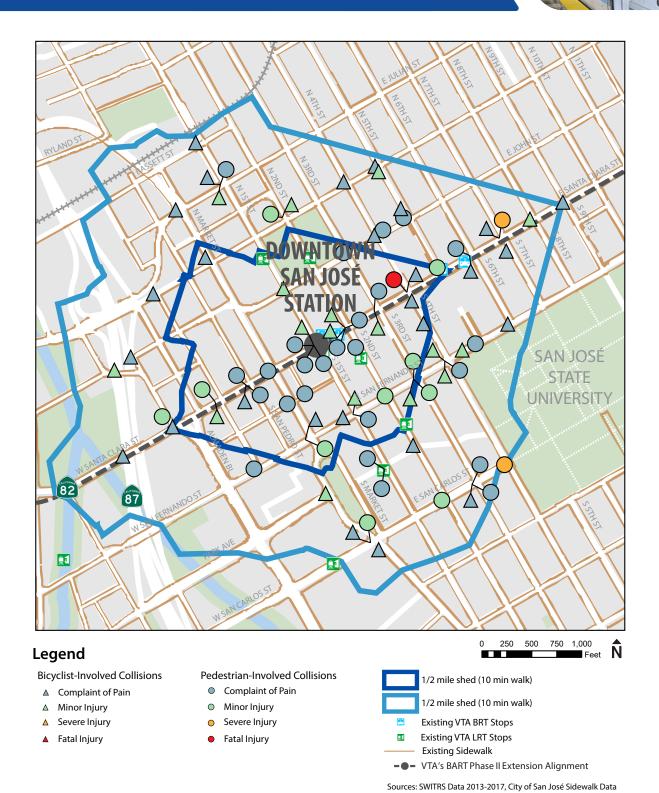
**Figure 17** shows fatalities, severe injury, and minor injury bicyclist and pedestrian collisions that occurred within the <sup>1</sup>/<sub>2</sub>-mile shed. There have been numerous pedestrian- and bicyclist-involved collisions within the study area between 2013 and 2017. There have been two severe pedestrian-involved collisions and one pedestrian fatality. The two severe pedestrian-involved collisions occurred at S. 4th Street and E. San Carlos Street, and at the intersection of 7th Street and E. Santa Clara Street. The pedestrian fatality occurred at 4th Street and E. Santa Clara Street.





**Figure 16 Existing Pedestrian Facilities** 





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Figure 17: Bicyclist and Pedestrian-Involved Collisions Map



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### E. Mobility Services

Mobility services includes Transportation Network Companies (TNCs), carshare, bikeshare, scootershare, and

private shuttles. Mobility services provide a variety of options that complement transit networks by addressing the first mile/last mile challenge.

TNCs, including Lyft and Uber, have notably changed the way people travel. Cell phone apps allow users to hail a ride nearly anywhere in urban and suburban environments. Users are charged per ride based on the distance of the trip and the overall demand for rides; as such, rides are more expensive during peak demand periods. With respect to transit stations, TNCs have introduced the need to implement curbside management policies to efficiently and effectively manage passenger pick-up/drop activities while not impacting the flow of traffic in travel lanes.



Cyclist riding LimeBike through Downtown

Carshare is an alternative to car ownership or traditional rental car service. Cell phone apps allow users to locate available cars nearby to rent for a specific amount of time. Several carshare vehicles are available in the access planning area, including those from Zipcar and Getaround. Getaround is a peer-to-peer model which assumes that the person to whom the car belongs has a pre-arranged parking stall. In contrast, Zipcar relies on a public parking space designated for Zipcar parking.

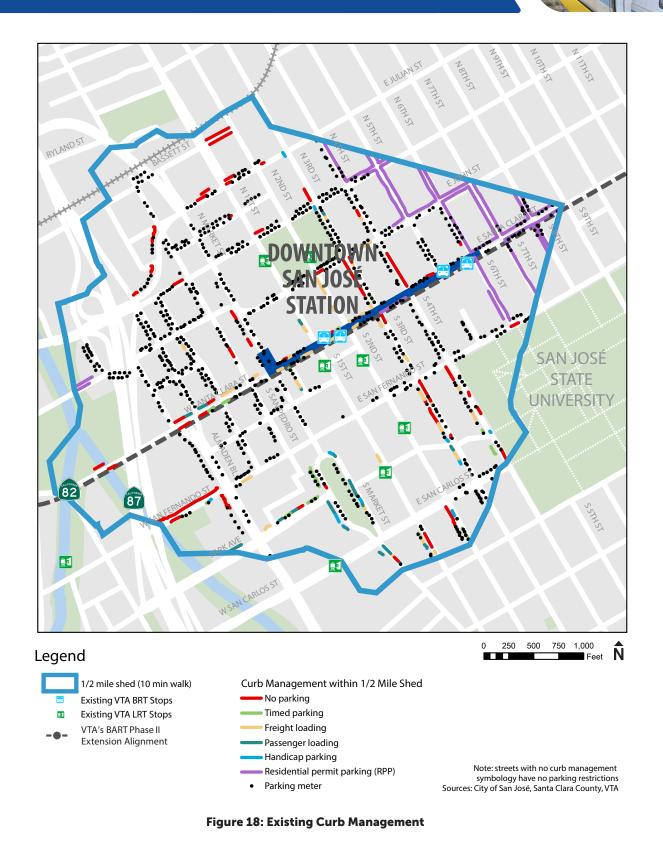
Bikeshare programs in San José include Ford GoBike and LimeBike. Ford GoBike is a bikeshare program based in the Bay Area with stations located in Downtown San José. Ford GoBike stations are located around the Diridon and Tamien Stations. Ford GoBike bikes need to be docked at defined stations and allows users to locate stations via a cell phone app. The Ford GoBike bikes have different pricing and pass options from Single Ride to Annual Membership. LimeBike is a dockless bikesharing model that removes the need for bike station infrastructure in the study area. LimeBikes are priced based on the time the bike is used.

Dockless rental electric scooter sharing programs are being launched in most major cities. The companies that currently operate in San José and the Bay Area are LimeBike, Bird, and Spin. Similar to dockless bikesharing, the scooters are priced based on the time the scooter is used, and station infrastructure is not necessary. As dockless bikeshare and scootershare programs become more prevalent, policy and strategies are necessary to preserve the public right-of-way.

Private shuttles, operated by major employers or universities such as Google and Stanford, provide door-todoor shuttle services between employment campuses and regional transportation hubs or other destinations. Private shuttles can range in size, from vanpool to coach buses. Accommodating pick-up/drop-off for private shuttles at transit stations is important to manage conflicts with public buses and other motorists.

**Figure 18** shows the existing curb management regulations of the Station Area. There is Residential Permit Parking (RPP) available to the east of the station. Metered and timed parking can also be found throughout Downtown San José.









# **III. Opportunities and Access Routes**

# A. Auto

While most users will access the Downtown San José Station via modes other than automobile, there is highway access via SR-87 and I-280 and arterial access via Santa Clara Street and 1st Street. It is expected that a large portion of pick-up/drop-off activity associated with the greater downtown area will be destined to Diridon Station; however, some of that activity is anticipated to occur at the Downtown Station. The downtown grid street network allows for multiple pathways to access the station. Since there is no parking or designated pick-up/drop-off area at the station, curb management strategies adjacent to station entrances will be important for effective vehicular circulation around the station. **Figure 19** shows key auto opportunities and access routes.

## **B. Transit**

VTA has existing light rail and bus routes within a short walk of the Downtown Station. While the Downtown Station will primarily be a destination station for downtown workers, the bus network is expected to be a primary mode to access BART for nearby residents. While bus stops and light rail stations are in close proximity to the station entrances, in many cases they are one to three blocks away and distributed in different directions from the entrances. Because there are multiple transit options to connect with BART, wayfinding and real-time signage for all transit activity should be provided throughout the Station Area.

Similar to the 2019 New Transit Service Plan system redesign that coincides with BART Silicon Valley Phase I's opening, VTA anticipates further studying transit improvements to better serve the BART Silicon Valley Phase II Project. It is not anticipated that significant additional feeder service will be necessary for the Downtown station.

**Table 3** summarizes the changes that were incorporated into the project's travel demand model. **Figure 20** shows key transit opportunities and access routes.

Route	Changes Implemented in 2035 Model
22	Connection created to Downtown San José Station; headways increased to 15 mins from 12 mins
23	Connection created to Downtown San José Station; headways increased to 30 mins from 12 mins
64	Connection created to Downtown San José Station; no change from existing headways
66	Connection created to Downtown San José Station; no change from existing headways
72	Connection created to Downtown San José Station; no change from existing headways
73	Connection created to Downtown San José Station; no change from existing headways
168	Connection created to Downtown San José Station; no change from existing headways
522	Connection created to Downtown San José Station; headways decreased to 10 mins from 15 mins
523	Connection created to Downtown San José Station; headways changed to 10 mins
	Courses V/TA 2075 For ville views - SV/V

#### **TABLE 3: SUMMARY OF CHANGES**

Source: VTA 2035 Equilibrium - SVX



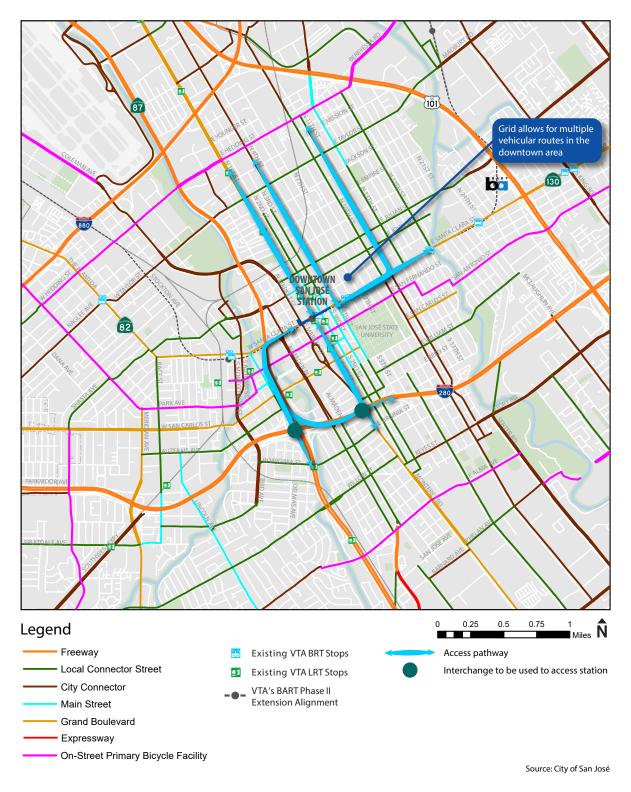
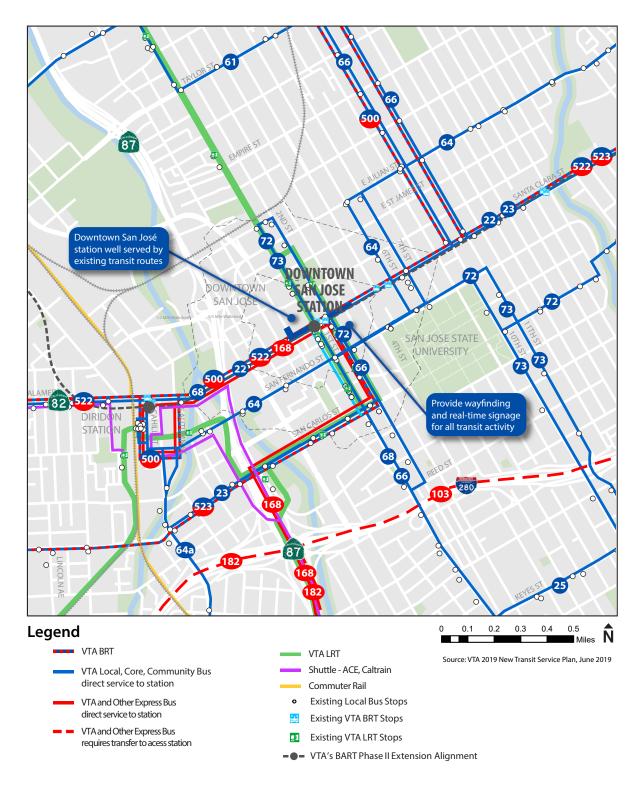


Figure 19: Auto Opportunities & Access Routes





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Figure 20: Transit Opportunities & Access Routes



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### C. Bicycle

Planned bikeways and the Better Bikeways project will improve the bicycle network with Class IV bike facilities and better connections across barriers like Coyote Creek and SR-87.

San Fernando Street has been prioritized as an east-west bicycle corridor through downtown and connecting to the surrounding neighborhoods. The existing bike facilities on the corridor include both buffered bike lanes and striped bike lanes. The Better Bikeways project has provided vertical separation elements to better separate and protect the bike facility.

The Guadalupe River Trail provides north-south bicycle access along the west side of Downtown San José. The trail has at-grade intersections with W. Julian Street and W. Saint John Street within the study area. Consideration should be given to provide protected at-grade trail crossings.

Key destinations within the Downtown San José Station bikeshed include City Hall, San José State University, Cesar Chavez Park, and Guadalupe River Trail. The main corridors that connect these destinations are E. Santa Clara Street, E. San Fernando Street, the Park Paseo, and 3rd/4th Street. Bike facilities exist on these corridors except for E. Santa Clara Street, which has been prioritized for transit. The Park Paseo is intended more for pedestrian use, but bicyclists may walk their bikes through a low-stress environment.

Figure 21 shows key bicycle opportunities and access routes.

### **D. Pedestrian**

Pedestrian connections are critical for successful station access. Everyone is a pedestrian at some point in their trip, whether walking directly to the station, riding/parking a bicycle, taking a bus or shuttle, or driving/parking a car. The Downtown San José Station will primarily be served by pedestrian trips. City and station wayfinding should be integrated to provide direction to pedestrians to the various downtown destinations.

Key destinations within the Downtown San José Station walkshed include City Hall, San José McEnery Convention Center, San José State University, San Pedro Square, Cesar Chavez Park, the Park Paseo, Saint James Park, San José Museum of Art, The Tech Museum of Innovation, Montgomery Theater, and the California Theater. The main corridors that connect these destinations are E. Santa Clara Street, the Park Paseo, Market Street, and 1st Street. Sidewalks exist on all of these corridors and improvements are planned for the Park Paseo.

Figure 22 shows key pedestrian opportunities and access routes.



Existing pedestrian crossing near San José City Hall



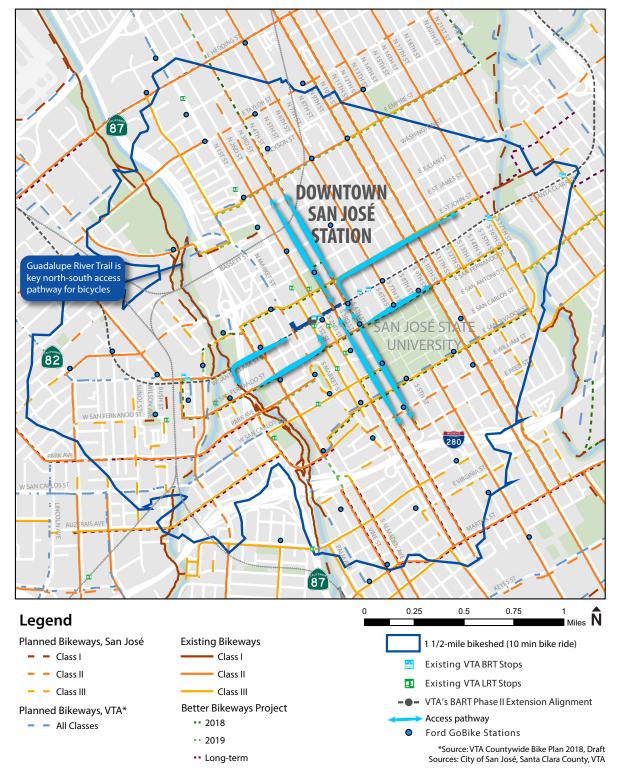


Figure 21: Bicycle Opportunities & Access Routes





Figure 22: Pedestrian Opportunities & Access Routes





# IV. Primary Station Access Routes and Recommended Improvements

This section of the profile identifies primary, multimodal access routes to the Downtown San José Station. These access routes may not be the only pathways that passengers use to arrive at the station, but represent corridors that both serve the majority of the station catchment area and have or are proposed to have the infrastructure to best serve multiple access modes. Access routes are defined for the area within a 10-minute bike ride (1.5 mile bikeshed) and 10-minute walk time (0.5 mile walkshed). The report identifies recommended improvements along each access route, referencing both previously planned improvements and new improvements consistent with VTA and local agency goals. Recommendations are intended to close gaps in the transportation network that could inhibit multimodal access and circulation to the station. Wayfinding will direct users to the primary access routes and key destinations along them.

Figure 23 depicts the primary station access routes identified. Figures 24 through 26 depict the recommended improvements on each access route.



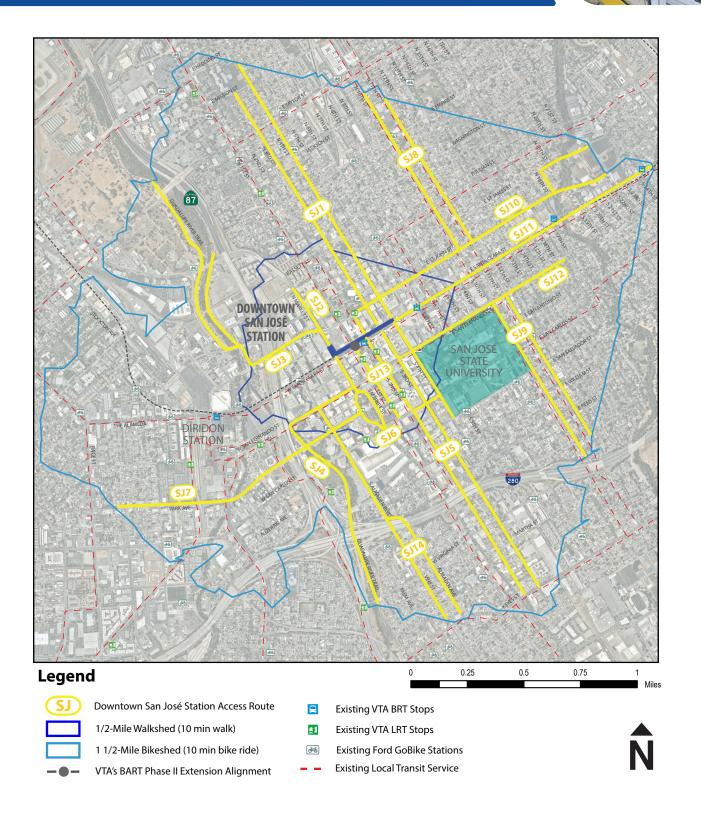
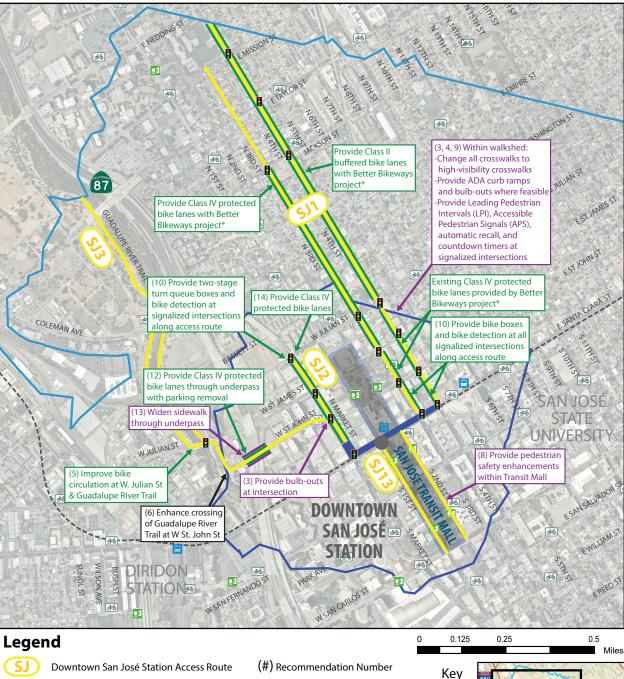


Figure 23: Downtown San José Station Primary Access Routes





- 1/2-Mile Walkshed (10 min walk)
- 1 1/2-Mile Bikeshed (10 min bike ride)
- VTA's BART Phase II Extension Alignment
- Existing Signalized Intersection
- Existing VTA BRT Stops
- Existing VTA LRT Stops
- Existing Ford GoBike Stations

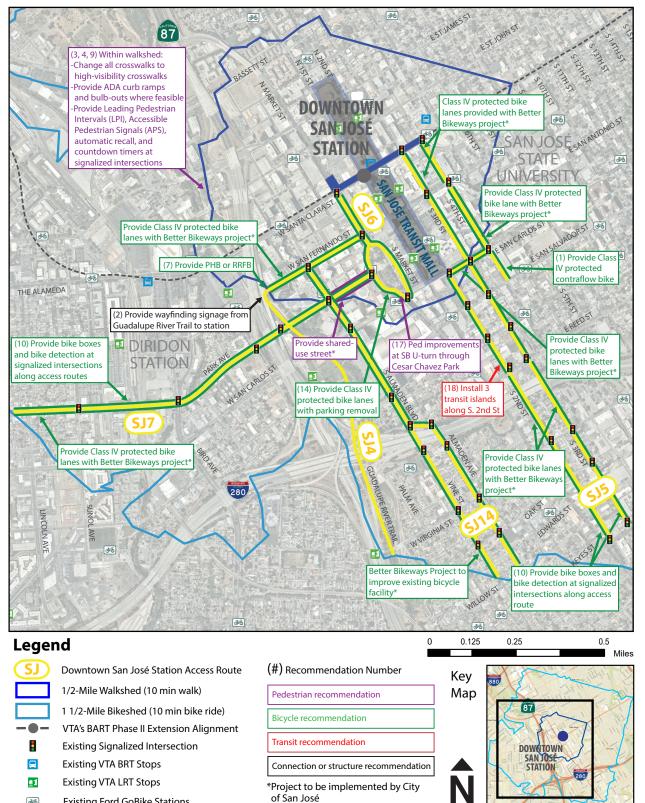


- Bicycle recommendation
- Transit recommendation
  - Connection or structure recommendation
  - \*Project to be implemented by City of San José

Nap

Figure 24: Recommended Improvements (1 of 3)

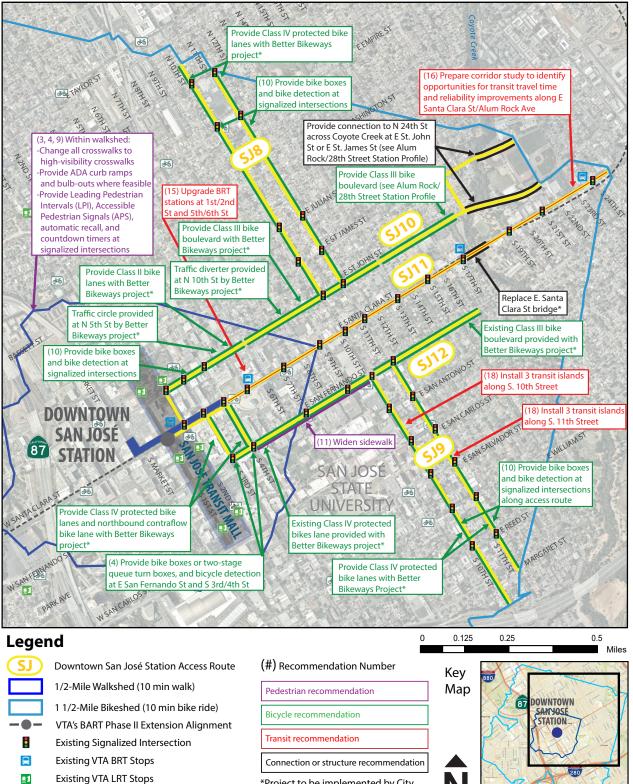




1 **Existing Ford GoBike Stations** 

Figure 25: Recommended Improvements (2 of 3)





\*Project to be implemented by City of San José

Figure 26: Recommended Improvements (3 of 3)



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**Existing Ford GoBike Stations** 

Downtown Station Profile



# Access Route SJ1 - N. 3<sup>rd</sup> Street/N. 4<sup>th</sup> Street North of Downtown San José Station (see Figure 24)

Access route SJ1 connects the area north of Downtown San José Station, including Japantown, via the couplet of N. 3rd Street and N. 4th Street. N. 3rd Street is northbound-only south of E. Julian Street and N. 4th Street is southbound-only south of E. St. James Street. Both streets have existing Class II buffered bike lanes. Key destinations along the access route include Japantown, Santa Clara Civic Center, Burnett Middle School, St. James Park, and San José City Hall. There are no significant barriers along this corridor.

N. 3rd Street and N. 4th Street are classified as Local Connector Streets in the San José General Plan north of E. St. John Street, and Main Streets between E. St. John Street and E. Santa Clara Street. The Better Bikeways San José project has changed the existing buffered Class II bike lanes on N. 3rd Street to Class IV protected bike lanes between E. St. James Street and E. Reed Street. The Better Bikeways project has changed the existing buffered Class IV protected bike lanes between E. Julian Street and E. Reed Street. The Better Bikeways project has changed the existing buffered Class II bike lanes on N. 4th Street to Class IV protected bike lanes between E. Julian Street and E. San Fernando Street. The project also implemented a 4-lane to 3-lane road diet on N. 4th Street between E. Hedding Street and E. Taylor Street to provide buffered Class II bike lanes. It is recommended that bike boxes and bike detection be installed at all signalized intersections along the access route. Note that bike detection may not be needed for intersections operating pre-timed signal plans all-day. Countdown pedestrian heads and accessible pedestrian signals (APS) are recommended at signalized intersections within the 0.5 mile walkshed. Automatic pedestrian recall and leading pedestrian intervals (LPI) are also recommended at signalized intersections should be further studied.

Wayfinding signage should be provided to any schools, museums, cultural institutions, recreational facilities, and other community landmarks, and should be consistent with agency wayfinding guidelines. Wayfinding should be provided along the access route to direct users to the station.

Along the access route, high-visibility crosswalks are recommended to be installed at all existing crosswalks where they are not installed. High-visibility crosswalks currently exist at the intersections of N. 3rd Street/N. 4th Street at E. Jackson Street, E. Empire Street, E. Hensley Street, E. Santa Clara Street and at the intersection of N. 4th Street at E. Washington Street. New crosswalks should be installed at the minor street approach of unsignalized two-way stop-controlled intersections where crosswalks do not exist. Sidewalks exist along the access route, but there are multiple locations that are not as wide as recommended within the *Complete Streets Design Standards & Guidelines*, 9' in Residential Neighborhood contexts and 10' elsewhere. Sidewalks should be widened to the existing ROW, where available. Curb ramps are recommended to be installed or updated to comply with ADA standards within the 0.5 mile walkshed.

**Table 4** below summarizes the existing, planned, and recommended improvements for Access Route SJ1.



Street(s)	Limits	Significant Barriers	Mode	Source	Existing (Frequency)	Planned (Frequency)	Further Recommendations
N. 3 <sup>rd</sup> / N.	E. Hedding Street to		Bike	CSJ Bike Plan	Class IV	Existing	Provide bike boxes and bike detection at all signalized intersections along access route
4 <sup>th</sup> Street	E. Santa Clara Street	None	Pedestrian	CSJ CSG	7'-12 Sidewalk	15' Sidewalk	None
	Succe		Transit	2019 New Transit Service Plan	None	None	None
			Auto	CSJ GP	Local Collector Street / Main Street	Local Collector Street / Main Street	None
			Bike	CSJ Bike Plan	None	None	None
			Pedestrian	CSJ CSG	> 12'	15' Sidewalk	None
E. Santa	N. 3 <sup>rd</sup> / N.				BRT 522 (15 min)	BRT 522 (12 min)	
Clara Street Clara Street Clara	None	Transit	2019 New Transit	Bus 22 (12 min)	Bus 22 (15 min)	None	
	Entrance	1	Transic	Service Plan	-	BRT 523 (15 min)	NOTE
					-	Bus 23 (15 min)	
			Auto	CSJ GP	Grand Boulevard	Grand Boulevard	Reduce travel lanes to 11'

### TABLE 4: IMPROVEMENTS FOR ACCESS ROUTE SJ1





## Access Route SJ2 - N. Market Street North of Downtown San José Station (see Figure 24)

Access route SJ2 connects the area northwest of Downtown San José Station via N. Market Street and E. Santa Clara Street. The Santa Clara Superior Court is a key destination along this route.

N. Market Street is classified as a City Connector Street in the San José General Plan, which does not give priority to a single mode and serves as a critical access route to the planned station entrance at Santa Clara Street and Market Street. Market Street is designated as a priority Cross County Bicycle Corridor in the *Santa Clara Countywide Bicycle Plan*. Class IV bike protected bike lanes are recommended on N. Market Street, which would require parking removal between W. Julian Street and W. Santa Clara Street.

It is recommended that two-stage left turn queue boxes and bike detection be installed at all signalized intersections along the access route. Note that bike detection may not be needed for intersections operating pre-timed signal plans all-day. Countdown pedestrian heads and accessible pedestrian signals (APS) are recommended at signalized intersections within the 0.5 mile walkshed. Automatic pedestrian recall and leading pedestrian intervals (LPI) are also recommended at signalized intersections within the 0.5 mile walkshed, but exact locations should be further studied.

Wayfinding signage should be provided to any schools, museums, cultural institutions, recreational facilities, and other community landmarks, and should be consistent with agency wayfinding guidelines. Wayfinding should be provided along the access route to direct users to the station.

Along the access route, high-visibility crosswalks are recommended to be installed at all existing crosswalks where they are not installed. High-visibility crosswalks currently exist at the intersections of N. Market Street at W. St. John Street and W. Santa Clara Street. New crosswalks should be installed at the minor street approach of unsignalized two-way stop-controlled intersections where crosswalks do not exist. Sidewalks exist along the access route, but there are multiple locations that are not as wide as recommended within the *Complete Streets Design Standards & Guidelines*, 15' within Downtown contexts and 10' elsewhere. Sidewalks should be widened to the existing ROW, where available. Curb ramps are recommended to be installed or updated to comply with ADA standards within the 0.5 mile walkshed.

**Table 5** below summarizes the existing, planned, and recommended improvements for Access Route SJ2.



Street(s)	Limits	Significant Barriers	Mode	Source	Existing (Frequency)	Planned (Frequency)	Further Recommendations
			Bike	CSJ Bike	None	Class II	Provide Class IV protected bike lane with parking removal between W. Julian Street and W. Santa Clara Street
	W. Julian Street to		DIKE	Plan	None		Provide two-stage left turn queue boxes and bicycle detection at signalized intersections along access route
N. Market Street	W. Santa Clara Street	None	Pedestrian	CSJ CSG	> 12'	Existing	Provide bulb-outs at intersection of W. St. John Street and N. Market Street
			Transit	2019 New Transit Service Plan	None	None	None
			Auto	CSJ GP	City Connector Street	City Connector Street	Reduce travel lanes to 11', remove on-street parking between W. Julian Street and W. Santa Clara Street
			Bike	CSJ Bike Plan	None	None	Consider additional bikeway improvements to improve bike circulation on W. Santa Clara Street
	<b>M</b> 1 .		Pedestrian	CSJ CSG	> 12'	15' Sidewalk	None
W. Santa Clara	Market Inta Clara Street to treet Station Entrance	None			BRT 522 (15 min)	BRT 522 (12 min)	
Street			Transit	2019 New Transit	Bus 22 (12 min)	Bus 22 (15 min)	None
			Tansic	Service Plan	-	BRT 523 (15 min)	None
					-	Bus 23 (15 min)	
			Auto	CSJ GP	Grand Boulevard	Grand Boulevard	Reduce travel lanes to 11'

### TABLE 5: IMPROVEMENTS FOR ACCESS ROUTE SJ2





Downtown Station Profile



## Access Route SJ3 - Guadalupe River Trail North of Downtown San José Station Across SR-87 (see Figure 24)

Access route SJ3 connects the area northwest of Downtown San José Station via the Guadalupe River Trail, W. St. John Street, and N. Market Street. The Guadalupe River Trail is a Class I multi-use trail that parallels the Guadalupe River. North of W. Julian Street the trail runs on both sides of the river with the primary path on the west side of the river. South of W. Julian Street, the trail runs only on the east side of the river and through-users of the trail must switch sides of the trail using W. Julian Street. The existing connection on W. Julian Street to connect the trail. It is recommended that the crossing be evaluated to provide improved bike circulation.

W. St. John Street between the Guadalupe River Trail and N. Market Street is an existing Class III bike route. Key destinations along the trail include Guadalupe River Park and SAP Center. SR-87 is a barrier to pedestrian and bicycle connections and its intersection with W. St. John Street is designated as an Inadequate Roadway Crossing in the Santa Clara Countywide Bicycle Plan.

It is recommended that wayfinding signage be provided on the Guadalupe Trail at its intersection with surface streets to direct users to Downtown San José Station. Class IV protected bike lanes are recommended on W. St. John Street under SR-87, requiring removal of parking on one side of the street. Improved lighting and wayfinding is also recommended at the connection of the Guadalupe River Trail and W. St. John Street and across SR-87.

It is recommended that bike boxes and bike detection be installed at all signalized intersections along the access route. Note that bike detection may not be needed for intersections operating pre-timed signal plans all-day. Countdown pedestrian heads and accessible pedestrian signals (APS) are recommended at signalized intersections within the 0.5 mile walkshed. Automatic pedestrian recall and leading pedestrian intervals (LPI) are also recommended at signalized intersections within the 0.5 mile valkshed. So mile walkshed, but exact locations should be further studied.

Wayfinding signage should be provided to any schools, museums, cultural institutions, recreational facilities, and other community landmarks, and should be consistent with agency wayfinding guidelines. Wayfinding should be provided along the access route to direct users to the station.

Along the access route, high-visibility crosswalks are recommended to be installed at all existing crosswalks where they are not installed. High-visibility crosswalks currently exist at the intersections of W. St. John Street at Almaden Boulevard, Notre Dame Street, Almaden Avenue, N. San Pedro Street, and N. Market Street. New crosswalks should be installed at the minor street approach of unsignalized two-way stop-controlled intersections where crosswalks do not exist. Sidewalks exist along the access route, but there are multiple locations that are not as wide as recommended within the *Complete Streets Design Standards & Guidelines*. Sidewalks should be widened to the existing ROW, where available, including on W. St. John Street under SR-87. Curb ramps are recommended to be installed or updated to comply with ADA standards within the 0.5 mile walkshed.

Table 6 below summarizes the existing, planned, and recommended improvements for Access Route SJ3.





Street(s)	Limits	Significant Barriers	Mode	Source	Existing (Frequency)	Planned (Frequency)	Further Recommendations
Guadaluas	W. Taylor	W biline	Bike	VTA Countywide Bicycle Plan	Class I Trail	Existing	Provide wayfinding signage from Guadalupe River Trail to station, evaluate W. Julian St/Guadalupe River Trail crossing for improved bike circulation
Guadalupe River Trail	Street to W. St. John Street	W. Julian Street	Pedestrian	VTA Countywide Bicycle Plan	Class I Trail	Existing	Add improved lighting and wayfinding
			Transit	2019 New Transit Service Plan	None	None	None
			Auto	CSJ GP	None	None	None
			Bike	CSJ Bike Plan	Class III	Existing	Provide Class IV protected bike lane through SR-87 underpass with parking removal
		SR-87		FIGIT			Provide wayfinding signage from Guadalupe River trail to Station Entrance
W. St. John Street	Guadalupe River to N. Market Street		Pedestrian	CSJ CSG	6'-10' Sidewalk	10' Sidewalk	Widen sidewalk through SR-87 Provide bulb-outs at
	Sueer						intersection of W. St. John Street and N. Market Street
			Transit	2019 New Transit Service Plan	None	None	None
			Auto	CSJ GP	2-Lane Undivided w/ On-Street Parallel Parking	Existing	Reduce travel lanes to 10'
			Bike	CSJ Bike Plan	None	Class II	Provide Class IV protected bike lane
W. St. John Street to		Pedestrian	CSJ CSG	> 12'	Existing	None	
N. Market Street	N. Market W. Santa	Santa None Clara	Transit	2019 New Transit Service Plan	None	None	None
			Auto	CSJ GP	City Connector Street	City Connector Street	Reduce travel lanes to 11'

### TABLE 6: IMPROVEMENTS FOR ACCESS ROUTE SJ3

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Downtown Station Profile



## Access Route SJ4 - Guadalupe River Trail South of Downtown San José Station Across I-280 (see Figure 25)

Access route SJ4 connects to the areas south of Downtown San José Station via the Guadalupe River Trail, W. San Fernando Street, and S. Market Street. There are existing Class II buffered bike lanes on W. San Fernando Street. Key destinations include the Children's Discovery Museum and the San José Convention Center.

To access the Downtown San José Station from the Guadalupe River Trail, users can connect to Park Avenue or W. San Fernando Street. The segment of W. San Fernando Street east of the Guadalupe River Trail is classified as an On-Street Primary Bicycle Facility in the San José General Plan.

Wayfinding signage should be provided on the Guadalupe River Trail to direct users to the Downtown San José Station. Enhanced trail crossings, such as controlled and high-visibility treatments, should be installed at W. San Fernando Street and Park Avenue. The current crossing at Park Avenue does not provide access to the eastbound bike lane due to the existing median. Access should be provided through the median so bicyclists do not have to use the sidewalk on the north side of Park Avenue to continue eastbound. Class IV protected bike lanes were implemented with the Better Bikeways project on San Fernando Street between Cahill Street and S. 10th Street, and on Park Avenue between SR-87 and S. Market Street.

It is recommended that bike boxes and bike detection be installed at all signalized intersections along the access route. Note that bike detection may not be needed for intersections operating pre-timed signal plans all-day. Countdown pedestrian heads and accessible pedestrian signals (APS) are recommended at signalized intersections within the 0.5 mile walkshed. Automatic pedestrian recall and leading pedestrian intervals (LPI) are also recommended at signalized intersections within the 0.5 mile valkshed. So mile walkshed, but exact locations should be further studied.

Wayfinding signage should be provided to any schools, museums, cultural institutions, recreational facilities, and other community landmarks, and should be consistent with agency wayfinding guidelines. Wayfinding should be provided along the access route to direct users to the station.

Along the access route, high-visibility crosswalks are recommended to be installed at all existing crosswalks where they are not installed. High-visibility crosswalks currently exist at the intersections of W. San Fernando Street at St. Almaden Boulevard, Almaden Avenue, S. San Pedro Street, and S. Market Street. New crosswalks should be installed at minor street approaches of unsignalized two-way stop-controlled intersections where crosswalks do not exist. Sidewalks exist along the access route, but there are multiple locations that are not as wide as recommended within the *Complete Streets Design Standards & Guidelines*, 9' within Residential Neighborhood contexts and 10' elsewhere. Sidewalks should be widened to the existing ROW, where available. Curb ramps are recommended to be installed or updated to comply with ADA standards within the 0.5 mile walkshed.

Table 7 below summarizes the existing, planned, and recommended improvements for Access Route SJ4.



Street(s)	Limits	Significant Barriers	Mode	Source	Existing (Frequency)	Planned (Frequency)	Further Recommendations				
			Bike	VTA Countywide Bicycle Plan	Class I Trail	Existing	Provide wayfinding signage from Guadalupe River Trail to station				
Guadalupe River Trail	W. Virginia Street to W. San Fernando Street / W. Santa Clara	Connections to W. San Fernando Street / W. Santa Clara Street	Pedestrian	VTA Countywide Bicycle Plan	Class I Trail	Existing	Provide enhanced connections at intersections of Guadalupe River Trail and W. San Fernando Street/Park Avenue				
	Street	Street	Transit	2019 New Transit Service Plan	None	None	None				
			Auto	CSJ GP	None	None	None				
		None					Bike	CSJ Better Bikeways	Class IV	Existing	None
			Pedestrian	CSJ CSG	> 8'	10' Sidewalk	None				
					Bus 63 (30 min)	Bus 63 (30 min)					
W. San Fernando	Guadalupe River Trail		Transit	2010 Nov	Bus 64 (15 min)	Bus 64 (15 min)					
Street	to S. Market Street			2019 New Transit Service Plan	Bus 65 (45 min)	-	None				
					Bus 72 (15 min)	Bus 72 (15 min)					
					Bus 73 (15 min)	Bus 73 (15 min)					
			Auto	CSJ GP	City Connector Street	City Connector Street	None				
							Provide Class IV protected bike lane				
S. Market Street Street to V	W. San Fernando		Bike	CSJ Bike Plan	None	Class II/III	Provide bike boxes and bike detection at signalized intersections along access route				
	Street to W. Santa Clara	None	Pedestrian	CSJ CSG	> 12' Sidewalk	Existing	None				
	Street		Transit	2019 New Transit Service Plan	None	None	None				
			Auto	CSJ GP	City Connector Street	City Connector Street	Reduce travel lanes to 11'				

### TABLE 7: IMPROVEMENTS FOR ACCESS ROUTE SJ4





Downtown Station Profile

# Access Route SJ5 - S. 2nd Street/ S. 3rd Street/S. 4th Street South of Downtown San José Station (see Figure 25)

Access route SJ5 connects the area south of Downtown San José Station via S. 3rd Street between E. Santa Clara Street and Keyes Street, S. 4th Street between E. Santa Clara Street and E. San Carlos Street, and S. 2nd Street between E. San Carlos Street and Keyes Street. S. 3rd Street is a one-way northbound roadway and S. 4th/S. 2nd Streets are one-way southbound roadways. S. 3rd Street and S. 4th Street have existing Class II buffered bike lanes. S. 2nd Street has an existing Class IV parking-protected bike facility (parking is reverse-angled). Key destinations along this route include San José City Hall, San José State University, the San José Social Security Administration building, and Notre Dame High School. S. 4th Street does not continue south past I-280, requiring southbound bicyclists to switch from S. 4th Street to S. 2nd Street to continue south of the interstate. S. 2nd, S. 3rd, and S. 4th Streets are all classified as both Main Streets and Local Connector Streets within the extent of this access route.

The Better Bikeways project has implemented a Class IV protected bike lane on S. 3rd Street between E. Santa Clara Street and Keyes Street, on S. 4th Street between E. Santa Clara Street and E. San Carlos Street, and on S. 2nd Street between E. San Carlos Street and Keyes Street. A Class IV bike protected lane is proposed on E. San Carlos Street between S. 4th Street and S. 2nd Street to allow southbound riders to easily switch between the two streets. A northbound contraflow Class IV protected bike lane was installed on the east side of S. 4th Street adjacent to San José State University between E. San Salvador Street and E. San Carlos Street.

It is recommended that bike boxes and bike detection be installed at all signalized intersections along the access route. Note that bike detection may not be needed for intersections operating pre-timed signal plans all-day. Countdown pedestrian heads and accessible pedestrian signals (APS) are recommended at signalized intersections within the 0.5 mile walkshed. Automatic pedestrian recall and leading pedestrian intervals (LPI) are also recommended at signalized intersections within the 0.5 mile valkshed. So mile walkshed, but exact locations should be further studied.

Potential locations for boarding islands are recommended on access routes with transit service. For stops where buses already stop in-lane (i.e. where buses would not be required to re-join the flow of traffic), no improvements are recommended. For stops where a Class IV bike facility is proposed (a combined width of at least 24'), a full bus boarding island is recommended. There are three locations along the access route where bus boarding islands are recommended.

Wayfinding signage should be provided to any schools, museums, cultural institutions, recreational facilities, and other community landmarks, and should be consistent with agency wayfinding guidelines. Wayfinding should be provided along the access route to direct users to the station.

Along the access route, high-visibility crosswalks are recommended to be installed at all existing crosswalks where they are not installed. High-visibility crosswalks currently exist at the intersections of S. 2nd Street/S. 3rd Street/S. 4th Street at E. Santa Clara Street, E. San Fernando Street, Paseo De San Antonio, and E. San Carlos Street. New crosswalks should be installed at the minor street approach of unsignalized two-way stop-controlled intersections where crosswalks do not exist. Sidewalks exist along the access route, but there are multiple locations that are not as wide as recommended within the *Complete Streets Design Standards & Guidelines*, 15' within Downtown contexts, 9' in Residential Neighborhood contexts, and 10' elsewhere. Sidewalks should be widened to the existing ROW, where available. Curb ramps are recommended to be installed or updated to comply with ADA standards within the 0.5 mile walkshed.

Table 8 below summarizes the existing, planned, and recommended improvements for Access Route SJ5.



Street(s)	Limits	Significant Barriers	Mode	Source	Existing (Frequency)	Planned (Frequency)	Further Recommendations
			Bike	CSJ Bike Plan	Class IV	Existing	Provide bike boxes and bike detection at signalized intersections along access route
S. 2 <sup>nd</sup> / S.	Keyes Street to E.	News	Pedestrian	CSJ CSG	7'-12' Sidewalk	15' Sidewalk	None
3 <sup>rd</sup> Street	San Carlos Street	None	Transit	2019 New Transit Service Plan	None	None	None
			Auto	CSJ GP	Local Collector Street	Local Collector Street	None
			Bike	CSJ Bike Plan	Class II	Class IV	None
E. San	S. 2 <sup>nd</sup>		Pedestrian	CSJ CSG	7'-12' Sidewalk	15' Sidewalk	None
Carlos Street	Street to S. 4 <sup>th</sup> Street	None	Transit	2019 New Transit Service Plan	None	None	None
			Auto	CSJ GP	Main Street	Main Street	None
S. 3 <sup>rd</sup> / S.	E. San Carlos Street to E.		Bike	CSJ Bike Plan	Class IV and northbound contraflow bike lane on 4 <sup>th</sup> Street along SJSU between E. San Fernando Street and E. San Carlos Street	Existing	Extend contraflow bike lane from E. San Carlos Street to E. San Salvador Street
4 <sup>th</sup> Street	Santa Clara Street		Pedestrian	CSJ CSG	7'-12' Sidewalk	15' Sidewalk	None
			Transit	2019 New Transit Service Plan	None	None	None
			Auto	CSJ GP	Main Street	Main Street	None
			Bike	CSJ Bike Plan	None	None	Consider additional bikeway improvements to improve bike circulation on E. Santa Clara Street
			Pedestrian	CSJ CSG	> 12'	15' Sidewalk	None
E. Santa Clara Streage Clara Streage Clara Streage Clara	None			BRT 522 (15 min)	BRT 522 (12 min)		
Street	Street Entrance		Transit	2019 New Transit	Bus 22 (12 min)	Bus 22 (15 min)	None
			anore	Service Plan	-	BRT 523 (15 min)	
					-	Bus 23 (15 min)	
			Auto	CSJ GP	Grand Boulevard	Grand Boulevard	Reduce travel lanes to 11'

## TABLE 8: IMPROVEMENTS FOR ACCESS ROUTE SJ5

6



**Downtown Station Profile** 



# Access Route SJ6 - S. Market Street South of Downtown San José Station Past Plaza de César Chávez (see Figure 25)

SJ6 connects the area south of Downtown San José Station via W. Santa Clara Street and S. Market Street between W. Santa Clara Street and W. San Carlos Street. Key destinations along the route include Plaza de César Chávez, the Tech Museum of Innovation, Paseo De San Antonio, and the San José Convention Center. S. Market Street becomes a one-way couplet around Plaza de César Chávez south of W. San Fernando Street and rejoins at its intersection with W. San Carlos Street. The transition from a one-way couplet to an undivided two-way roadway results in a large intersection and long pedestrian crossing distances.

S. Market Street is classified as a City Connector Street, which does not prioritize any mode. It is an important access route that will provide direct access to the planned station entrance at Santa Clara Street and Market Street. Class IV protected bike lanes are recommended on S. Market Street to provide low-stress connections to the station. Parking removal would be required to provide the Class IV bike facility between Santa Clara Street and W. San Carlos Street. This will need to be coordinated with implementation of the City's Park Paseo Plan and use of Plaza de Cesar Chavez for major community events.

It is recommended that bike boxes and bike detection be installed at all signalized intersections along the access route. Note that bike detection may not be needed for intersections operating pre-timed signal plans all-day. Countdown pedestrian heads and accessible pedestrian signals (APS) are recommended at signalized intersections within the 0.5 mile walkshed. Automatic pedestrian recall and leading pedestrian intervals (LPI) are also recommended at signalized intersections within the 0.5 mile walkshed at signalized intersections within the 0.5 mile walkshed, but exact locations should be further studied. Pedestrian crossing improvements are recommended at the southbound U-turn through Cesar Chavez Park triangle.

Wayfinding signage should be provided to any schools, museums, cultural institutions, recreational facilities, and other community landmarks, and should be consistent with agency wayfinding guidelines. Wayfinding should be provided along the access route to direct users to the station.

Along the access route, high-visibility crosswalks are recommended to be installed at all existing crosswalks where they are not installed. High-visibility crosswalks currently exist at the intersections of S. Market Street at W. Santa Clara Street, W. San Fernando Street, Paseo De San Antonio, and W. San Carlos Street. New crosswalks should be installed at the minor street approach of unsignalized two-way stop-controlled intersections where crosswalks do not exist. Sidewalks exist along the access route, but there are multiple locations that are not as wide as recommended within the *Complete Streets Design Standards & Guidelines*, 15' within Downtown contexts and 10' elsewhere. Sidewalks should be widened to the existing ROW, where available. Curb ramps are recommended to be installed or updated to comply with ADA standards within the 0.5 mile walkshed.

 Table 9 below summarizes the existing, planned, and recommended improvements for Access Route SJ6.



Street(s)	Limits	Significant Barriers	Mode	Source	Existing (Frequency)	Planned (Frequency)	Further Recommendations
				CS] Bike			Provide Class IV bike facility with removal of on-street parking
	W. San		Bike	Plan	None	Class II/III	Provide bike boxes and bike detection at signalized intersections along access route
S. Market Street	Carlos Street to W. Santa	Intersection of W. San Carlos Street and S.	Pedestrian	CSJ CSG	> 12' Sidewalk	Existing	Improvements at SB U-turn pedestrian crossing
Succe	Clara Street	Market Street	Transit	2019 New Transit Service Plan	None	None	None
			Auto	CSJ GP	City Connector Street	City Connector Street	Reduce travel lanes to 11'. Remove on-street parking between E. Reed Street and W. Santa Clara Street
			Bike	CSJ Bike Plan	None	None	Consider additional bikeway improvements to improve bike circulation on W. Santa Clara Street
			Pedestrian	CSJ CSG	> 12'	15' Sidewalk	None
W. Santa Clara	Stroot to	None			BRT 522 (15 min)	BRT 522 (12 min)	
Street	Entrance		Transit	2019 New Transit	Bus 22 (12 min)	Bus 22 (15 min)	None
			Transic	Service Plan	-	BRT 523 (15 min)	None
					-	Bus 23 (15 min)	
			Auto	CSJ GP	Grand Boulevard	Grand Boulevard	Reduce travel lanes to 11'

### TABLE 9: IMPROVEMENTS FOR ACCESS ROUTE SJ6





# Access Route SJ7 - Park Avenue Southwest of Downtown San José Station across SR-87 (see Figure 25)

Access Route SJ7 connects the area southwest of the Downtown San José Station and west of SR-87 via Park Avenue and S. Market Street. Park Avenue has existing Class II bike lanes between Race Street and S. Market Street. Key destinations include Adobe Headquarters, San José Center for the Performing Arts, Plaza de César Chávez, Paseo de San Antonio, and the Cahill Park neighborhood.

Between Woz Way and the SR-87 southbound off-ramp, there is a gap in the existing westbound Class II bike lane. The bike facility ends at the intersection of Woz Way and Park Avenue and begins again at the intersection of the SR-87 southbound off-ramp and Park Avenue. Park Avenue is classified as both an On-Street Primary Bicycle Facility and a Main Street within the extent of this access route.

Class IV protected bike lanes are proposed on Park Avenue between the San José city limit and S. Market Street with the Better Bikeways project. This would serve to close the existing bike lane gap noted above. This will need to be coordinated with implementation of the City's Park Paseo Plan and use of Plaza de César Chávez for major community events.

It is recommended that bike boxes and bike detection be installed at all signalized intersections along the access route. Note that bike detection may not be needed for intersections operating pre-timed signal plans all-day. Countdown pedestrian heads and accessible pedestrian signals (APS) are recommended at signalized intersections within the 0.5 mile walkshed. Automatic pedestrian recall and leading pedestrian intervals (LPI) are also recommended at signalized intersections within the 0.5 mile valkshed intersections within the 0.5 mile valkshed. But exact locations should be further studied.

Wayfinding signage should be provided to any schools, museums, cultural institutions, recreational facilities, and other community landmarks, and should be consistent with agency wayfinding guidelines. Wayfinding should be provided along the access route to direct users to the station.

Along the access route, high-visibility crosswalks are recommended to be installed at all existing crosswalks where they are not installed. High-visibility crosswalks currently exist at the intersections of Park Avenue at Delmas Avenue, Woz Way, S. Almaden Boulevard, and at the intersections of S. Market Street at W. San Fernando Street and W. Santa Clara Street. New crosswalks should be installed at the minor street approach of unsignalized two-way stop-controlled intersections where crosswalks do not exist. Sidewalks exist along the access route, but there are multiple locations that are not as wide as recommended within the *Complete Streets Design Standards & Guidelines*, 9' within Residential Neighborhood contexts and 10' elsewhere. Sidewalks should be widened to the existing ROW, where available. Curb ramps are recommended to be installed or updated to comply with ADA standards within the 0.5 mile walkshed.

**Table 10** below summarizes the existing, planned, and recommended improvements for Access Route SJ7.



Street(s)	Limits	Significant Barriers	Mode	Source	Existing (Frequency)	Planned (Frequency)	Further Recommendations
			Bike	CSJ Bike Plan	Class II	Class IV	Provide bike boxes and bike detection at signalized intersections along access route
Park	Lincoln Avenue to		Pedestrian	CSJ CSG	5'-20' Sidewalk	> 10' Sidewalk	None
Avenue	S. Market Street	SR-87	Transit	2019 New Transit Service Plan	None	None	None
			Auto	CSJ GP	City Connector Street	City Connector Street	Reduce travel lanes to 11'
			21	CSJ Bike			Provide Class IV protected bike lane with removal of on- street parking
			Bike	Plan	None	Class II/III	Provide bike boxes and bike detection at signalized intersections
S. Market	Park Avenue to W. Santa	None	Pedestrian	CSJ CSG	> 12' Sidewalk	Existing	None
Street Clara Street		Transit	2019 New Transit Service Plan	None	None	None	
			Auto	CSJ GP	City Connector Street	City Connector Street	Reduce travel lanes to 11'. Remove on-street parking between E. Reed Street and W. Santa Clara Street

### TABLE 10: IMPROVEMENTS FOR ACCESS ROUTE SJ7



**Downtown Station Profile** 



# Access Route SJ8 - N. 10th Street/N. 11th Street and E. St. John Street Northeast of Downtown San José Station (see Figure 26)

Access Route SJ8 connects the area northeast of the Downtown San José Station via N. 10th/N. 11th Streets, E. St. John Street, and N. 2nd Street. N. 10th Street and N. 11th Street form a one-way couplet where N. 10th Street is one-way southbound and N. 11th Street is one-way northbound. Class II buffered bike lanes exist on N. 10th Street and N. 11th Street. E. St. John Street is a Class III bicycle route. The Better Bikeways project has provided a traffic diverter at E. St. John and N. 10th Street, and a traffic circle at E. St. John and N. 5th Street. Key destinations along the route include Horace Mann Elementary School, Grant Elementary School, and St. James Park.

The San José General Plan classifies N. 10th Street and N. 11th Street as Local Connector Streets. N. 10th Street and N. 11th Street are designated as Cross County Bicycle Corridors (CCBCs) in the *Santa Clara Countywide Bicycle Plan*, and E. St. John Street is designated as a priority CCBC.

Class IV protected bike lanes are proposed on N. 10th Street and N. 11th Street between E. Hedding Street and Keyes Street with the Better Bikeways project. A Class III bicycle boulevard is proposed on E. St. John Street between N. 13th Street and 5th Street, Class II bike lanes between N. 5th Street and N. 3rd Street, and Class IV protected bike lanes between N. 3rd Street and N. 1st Street with the Better Bikeways project.

It is recommended that bike boxes and bike detection be installed at all signalized intersections along the access route. Note that bike detection may not be needed for intersections operating pre-timed signal plans all-day. Countdown pedestrian heads and accessible pedestrian signals (APS) are recommended at signalized intersections within the 0.5 mile walkshed. Automatic pedestrian recall and leading pedestrian intervals (LPI) are also recommended at signalized intersections within the 0.5 mile valkshed. So mile walkshed, but exact locations should be further studied.

Per VTA's adopted Transit Speed Policy, it is recommended that the highest level of Transit Signal Priority (TSP) be provided along all VTA frequent network routes. Leading bus signal phases should be implemented in the most congested areas, such as station entrances and exits, to minimize delay from route deviations into stations. TSP will make service faster and more reliable for passengers, and more cost-effective for VTA, by reducing delay and minimizing the variability in travel speed.

Wayfinding signage should be provided to any schools, museums, cultural institutions, recreational facilities, and other community landmarks, and should be consistent with agency wayfinding guidelines. Wayfinding should be provided along the access route to direct users to the station.

Along the access route, high-visibility crosswalks are recommended to be installed at all existing crosswalks where they are not installed. The only high-visibility crosswalk along this access route exists at the intersections of N. 2nd Street and E. Santa Clara Street. New crosswalks should be installed at the minor street approach of unsignalized two-way stop-controlled intersections where crosswalks do not exist. Sidewalks exist along the access route, but there are multiple locations that are not as wide as recommended within the *Complete Streets Design Standards & Guidelines*, 9' within Residential Neighborhood contexts and 10' elsewhere. Sidewalks should be widened to the existing ROW, where available. Curb ramps are recommended to be installed or updated to comply with ADA standards within the 0.5 mile walkshed.

**Table 11** below summarizes the existing, planned, and recommended improvements for Access Route SJ8.



Street(s)	Limits	Significant Barriers	Mode	Source	Existing (Frequency)	Planned (Frequency)	Further Recommendations	
			Bike	CSJ Better Bikeways	Class II	Class IV	Provide bike boxes and bike detection at signalized intersections along access route	
N. 10 <sup>th</sup> / N.	E. Jackson Street to		Pedestrian	CSJ CSG	7'-12' Sidewalk	15' Sidewalk	None	
11 <sup>th</sup> Street	E. St. John Street	None	Transit	2019 New Transit Service Plan	None	Bus 66 (15 min) BRT 500 (8 min)	None	
			Auto	CSJ GP	Local Connector Street	Local Connector Street	None	
			Bike	CSJ Bike Plan	Class III	Class III (N. 6 <sup>th</sup> Street – N. 13 <sup>th</sup> Street), Class II (N. 3 <sup>rd</sup> Street – N. 5 <sup>th</sup> Street) Class IV (N. 1 <sup>st</sup> Street – N. 3 <sup>rd</sup> Street)	Provide bike boxes and bike detection at signalized intersections along access route	
E. St. John Street	N. 11 <sup>th</sup> Street to N. 2 <sup>nd</sup> Street	None				Traffic circle at N. 5 <sup>th</sup> Street and traffic diverter at N. 10 <sup>th</sup> Street	Tote	
				Pedestrian	CSJ CSG	6'-10' Sidewalk	10' Sidewalk	None
			Transit	2019 New Transit Service Plan	None	None	None	
			Auto	CSJ GP	2-Lane Undivided w/ On-Street Parallel Parking	Existing	Reduce travel lanes to 10'	
			Bike	CSJ Bike Plan	Class III	Existing	Provide bike boxes and bike detection at N. 2 <sup>nd</sup> Street and E. Santa Clara Street	
			Pedestrian	CSJ CSG	>12' Sidewalk	15' Sidewalk	Consider sidewalk buffer as applicable	
E. St. John N. 2 <sup>nd</sup> Street to Street Station Entrance	Transit			Bus 72 (15 min)	Bus 72 (15 min)			
	Transit Conflicts	Tuonoit	2019 New Transit	Bus 73 (15 min)	Bus 73 (15 min)	Nama		
			Transit	Service Plan	LRT 901/Blue (15 min)	LRT 901/Blue (15 min)	None	
					LRT 902 (15 min)	LRT 902/Green (15 min)		
			Auto	CSJ GP	Main Street	Main Street	None	

### TABLE 11: IMPROVEMENTS FOR ACCESS ROUTE SJ8



**Downtown Station Profile** 



# Access Route SJ9 - S. 10th Street/S. 11th Street and E. San Fernando Street Southeast of Downtown San José Station (see Figure 26)

Access Route SJ9 connects the area southeast of the Downtown San José Station via S. 10th/S. 11th Streets, E. San Fernando Street, and S. 3rd/S. 4th Street. S. 10th Street forms a one-way couplet with S. 11 Street where S. 10th Street is one-way southbound and S. 11th Street is one-way northbound. S. 10th/S. 11th Streets and S. 3rd/S. 4th Streets have existing Class II buffered bike lanes. E. San Fernando Street has a recently-installed Class IV protected bike lane. Key destinations along this route include San José State University and San José City Hall.

The San José General Plan classifies S. 10th Street and S. 11th Street as City Connector Streets. S. 10th and S. 11th Street are both designated as Cross County Bicycle Corridor (CCBCs), and E. San Fernando Street is a Priority CCBC.

Class IV protected bike lanes are proposed on S. 10th/S. 11th Streets between E. Hedding Street and Keyes Street with the Better Bikeways project. The Better Bikeways project has provided Class IV protected bike lanes on San Fernando Street between Cahill Street and S. 10th Street. The Better Bikeways project has provided Class IV protected bike lanes on S. 3rd/S. 4th Streets.

It is recommended that bike boxes and bike detection be installed at all signalized intersections along the access route. Note that bike detection may not be needed for intersections operating pre-timed signal plans all-day. Countdown pedestrian heads and accessible pedestrian signals (APS) are recommended at signalized intersections within the 0.5 mile walkshed. Automatic pedestrian recall and leading pedestrian intervals (LPI) are also recommended at signalized intersections within the 0.5 mile valkshed intersections within the 0.5 mile valkshed. But exact locations should be further studied.

Per VTA's adopted Transit Speed Policy, it is recommended that the highest level of Transit Signal Priority (TSP) be provided along all VTA frequent network routes. Leading bus signal phases should be implemented in the most congested areas, such as station entrances and exits, to minimize delay from route deviations into stations. TSP will make service faster and more reliable for passengers, and more cost-effective for VTA, by reducing delay and minimizing the variability in travel speed.

Potential locations for boarding islands are recommended on access routes with transit service. For stops where buses already stop in-lane (i.e. where buses would not be required to re-join the flow of traffic), no improvements are recommended. For stops where a Class IV bike facility is proposed (a combined width of at least 24'), a full bus boarding island is recommended. Six bus boarding islands are recommended along S. 10th Street and S. 11th Street.

Wayfinding signage should be provided to any schools, museums, cultural institutions, recreational facilities, and other community landmarks, and should be consistent with agency wayfinding guidelines. Wayfinding should be provided along the access route to direct users to the station.

Along the access route, high-visibility crosswalks are recommended to be installed at all existing crosswalks where they are not installed. High-visibility crosswalks currently exist at the intersections of E. San Fernando Street at S. 10th Street, S. 9th Street, S. 8th Street, S. 7th Street, S. 6th Street, S. 5th Street, S. 4th Street, and S. 3rd Street. High-visibility crosswalks exist at the intersections of E. Santa Clara Street and 3rd Street/4th Street. New crosswalks should be installed at the minor street approach of unsignalized two-way stop-controlled intersections where crosswalks do not exist. Sidewalks exist along the access route, but there are multiple locations that are not as wide as recommended within the *Complete Streets Design Standards & Guidelines*,



15' within Downtown contexts and 10' elsewhere. Sidewalks should be widened to the existing ROW, where available. Curb ramps are recommended to be installed or updated to comply with ADA standards within the 0.5 mile walkshed.

Table 12 below summarizes the existing, planned, and recommended improvements for Access Route SJ9.

					VISFOR ACC																																							
Street(s)	Limits	Significant Barriers	Mode	Source	Existing (Frequency)	Planned (Frequency)	Further Recommendations																																					
			Bike	CSJ Better Bikeways	Class II	Class IV	Provide bike boxes and bicycle detection at S. 10 <sup>th</sup> / S. 11 <sup>th</sup> Street and E. San Fernando Street																																					
S. 10 <sup>th</sup> / S.	E. Margaret Street to E. San	None	None	Pedestrian	CSJ CSG	7'-12' Sidewalk	15' Sidewalk	None																																				
11 <sup>th</sup> Street	Fernando Street			None	None	None	None	Transit	2019 New Transit	Bus 72 (15 min)	Bus 72 (15 min)	None																																
			Tanoic	Service Plan	Bus 73 (15 min)	Bus 73 (15 min)	None																																					
			Auto	CSJ GP	City Connector Street	City Connector Street	None																																					
			Bike	CSJ Better Bikeways	Class IV	Existing	Provide bike boxes and bicycle detection at E. San Fernando Street and S. 3 <sup>rd</sup> / S. 4 <sup>th</sup> Street																																					
			Pedestrian	CSJ CSG	> 8' Sidewalk	10' Sidewalk	Widen sidewalk on south side in front of San José State University																																					
E. San	S. 11th														Bus 63 (30 min)	Bus 63 (30 min)																												
Fernando Street	Street to S. 3 <sup>rd</sup> / S. 4 <sup>th</sup>	None			Bus 64 (15 min)	Bus 64 (15 min)																																						
	Street	it .	Transit	VTA	Bus 65 (45 min)	-	None																																					
					Bus 72 (15 min)	Bus 72 (15 min)																																						
					Bus 73 (15 min)	Bus 73 (15 min)																																						
			Auto	CSJ	City Connector Street	City Connector Street	None																																					
		None	Bike	CSJ Better Bikeways	Class II	Class IV	None																																					
	E. San		None	None							Pedestrian	CSJ CSG	7'-12' Sidewalk	15' Sidewalk	None																													
S. 3 <sup>rd</sup> / S. 4 <sup>th</sup> Street	Fernando Street to E. Santa Clara Street				Transit	2019 New Transit Service Plan	None	None	None																																			
			Auto	CSJ GP	Main Street	Main Street	None																																					
								Bike	CSJ Bike Plan	None	None	Consider additional bikeway improvements to improve bike circulation on E. Santa Clara Street																																
E. Santa Clara Street Street Street E. Santa 4 <sup>th</sup> Street to Station Entrance		Pedestrian	CSJ CSG	> 12'	15' Sidewalk	None																																						
	None			BRT 522 (15 min)	BRT 522 (12 min)																																							
		Trancit	2019 New Transit	Bus 22 (12 min)	Bus 22 (15 min)	None																																						
			Transit	Service Plan	-	BRT 523 (15 min)	none																																					
																																										-	Bus 23 (15 min)	
			Auto	CSJ GP	Grand Boulevard	Grand Boulevard	Reduce travel lanes to 11'																																					

### TABLE 12: IMPROVEMENTS FOR ACCESS ROUTE SJ9



Downtown Station Profile

# Access Route SJ10 - E. St. John Street East of Downtown San José Station across Coyote Creek (see Figure 26)

Access route SJ10 connects the area east of Downtown San José Station across Coyote Creek to Alum Rock/28th Street Station via E. St. John Street and N. 2nd Street. There is an existing Class III bike route on E. St. John Street between N. 18th Street and N. 2nd Street, and an existing Class III bike route on N. 2nd Street between E. St. John Street and E. Santa Clara Street. The Better Bikeways project has provided a traffic diverter at E. St. John Street and N. 10th Street, and a traffic circle at N. 5th Street and E. St. John Street. Key destinations include Roosevelt Park, San José High School, and San José City Hall.

E. St. John Street does not have a roadway classification in the San José General Plan. E. St. John Street is a priority Cross County Bicycle Corridor designated in the *Santa Clara Countywide Bicycle Plan*.

The Better Bikeways project implemented a Class III bicycle boulevard for E. St. John Street between N. 13th Street and 5th Street, Class II bike lanes between N. 5th Street and N. 3rd Street, and Class IV protected bike lanes between N. 3rd Street and N. 1st Street. It is recommended that additional bicycle boulevard improvements, such as vertical or horizontal deflection to reduce auto speeds, be provided on E. St. John Street between N. 13th Street and N. 17th Street.

To connect the east and west sides of Coyote Creek, a bike/pedestrian bridge is recommended over Coyote Creek at either E. St. John Street or E. St. James Street. On the east side of Coyote Creek, this connection would require access through either Roosevelt Park or San José High School to connect to existing E. St. James Street or E. St. John Street east of N. 24th Street. Further coordination with the school and/or San José Department of Parks, Recreation, and Neighborhood Services would be required to assess the viability of this connection.

The Coyote Creek connection is preferred to be at E. St. John Street, since it is an east-west bicycle boulevard. In the existing condition, E. St. John Street does not connect between N. 27th Street and N. 28th Street, the planned location of the Alum Rock/28th Street station entrance, due to an existing development. If a connection at E. St. John Street is deemed infeasible through further development design, consideration should be given to either provide the connection over Coyote Creek at E. St. James Street or to provide the connection via E. St. John Street over Coyote Creek, turn north along the east bank of Coyote Creek, and join Bulldog Boulevard and E. St. James Street to provide direct station access.

It is recommended that bike boxes and bike detection be installed at all signalized intersections along the access route. Note that bike detection may not be needed for intersections operating pre-timed signal plans all-day. Countdown pedestrian heads and accessible pedestrian signals (APS) are recommended at signalized intersections within the 0.5 mile walkshed. Automatic pedestrian recall and leading pedestrian intervals (LPI) are also recommended at signalized intersections within the 0.5 mile valkshed. So mile walkshed, but exact locations should be further studied.

Wayfinding signage should be provided to any schools, museums, cultural institutions, recreational facilities, and other community landmarks, and should be consistent with agency wayfinding guidelines. Wayfinding should be provided along the access route to direct users to the station.

Along the access route, high-visibility crosswalks are recommended to be installed at all existing crosswalks where they are not installed. The only high-visibility crosswalk along this route exists at the intersection of 2nd Street and E. Santa Clara Street. New crosswalks should be installed at the minor street approach of unsignalized two-way stop-controlled intersections where crosswalks do not exist. Sidewalks exist along the



**Downtown Station Profile** 

access route, but there are multiple locations that are not as wide as recommended within the *Complete Streets Design Standards & Guidelines*, 9' within Residential Neighborhood contexts and 10' elsewhere. Sidewalks should be widened to the existing ROW, where available. Curb ramps are recommended to be installed or updated to comply with ADA standards within the 0.5 mile walkshed.

Table 13 below summarizes the existing, planned, and recommended improvements for Access Route SJ10.

Street(s)	Limits	Significant Barriers	Mode	Source	Existing (Frequency)	Planned (Frequency)	Further Recommendations
						Existing	Provide bike boulevard between N. 13 <sup>th</sup> Street and Coyote Creek
					Class III (N. 6 <sup>th</sup> Street – N. 13 <sup>th</sup> Street), Class II		Provide new bike/pedestrian bridge over Coyote Creek at either E. St. John Street or E. St. James Street
			Bike	CSJ Bike Plan	(N. 3 <sup>rd</sup> Street – N. 5 <sup>th</sup> Street) Class IV (N. 1 <sup>st</sup> Street –	Traffic circle at N. 5th Street and traffic diverter at N. 10th Street	Provide new connection for E. St. John Street between N. 19 <sup>th</sup> Street and N. 24 <sup>th</sup> Street
E. St. John Street	N. 22 <sup>nd</sup> Street to N. 2 <sup>nd</sup> Street	Coyote Creek			N. 3 <sup>rd</sup> Street)		Provide bike boxes and bike detection at signalized intersections along access route
			Pedestrian	CSJ CSG	6'-10' Sidewalk	10' Sidewalk	None
			Transit	2019 New Transit Service Plan	None	None	None
			Auto	CSJ GP	2-Lane Undivided w/ On-Street Parallel Parking	Existing	Reduce travel lanes to 10'
			Bike	CSJ Bike Plan	Class III	Existing	Provide bike boxes at N. 2 <sup>nd</sup> Street and Santa Clara Street
			Pedestrian	CSJ CSG	>12' Sidewalk	15' Sidewalk	Consider sidewalk buffer as applicable
N Ond	E. St. John N. 2 <sup>nd</sup> Street to Street Station Entrance	Transit			Bus 72 (15 min)	Bus 72 (15 min)	
		Conflicts		2019 New Transit	Bus 73 (15 min)	Bus 73 (15 min)	
		e	Transit	Service Plan	LRT 901/Blue (15 min)	LRT 901/Blue (15 min)	None
					LRT 902 (15 min)	LRT 902/Green (15 min)	
			Auto	CSJ GP	Main Street	Main Street	None

## TABLE 13: IMPROVEMENTS FOR ACCESS ROUTE SJ10



**Downtown Station Profile** 



## Access Route SJ11 - E. Santa Clara Street East of Downtown San José Station to Alum Rock/28th Street Station (see Figure 26)

Access route SJ11 connects the area east of Downtown San José Station to Alum Rock/28th Street Station across Coyote Creek via E. Santa Clara Street. Key destinations along this route include San José City Hall, Valley Health Center, Roosevelt Community Center, and San José High School. E. Santa Clara Street has a bridge across Coyote Creek, but lacks width to provide enhanced pedestrian and bicycle facilities. The bridge over Coyote Creek is planned to be widened by the City of San José.

Because E. Santa Clara Street/Alum Rock Avenue is classified as a Grand Boulevard by the San José General Plan, transit is prioritized over other modes. VTA BRT Route 522 and BRT Route 523 are planned to operate along E. Santa Clara Street/Alum Rock Avenue by the time of project opening. It is recommended that the City of San José consider a corridor study on E. Santa Clara Street/Alum Rock Avenue to investigate opportunities to improve transit travel time and reliability and accommodate all transportation modes. The existing BRT stations at 1st St./2nd St. and 5th St./6th St. were not constructed to their complete proposed design. It is recommended that these stations be upgraded to provide all BRT amenities in accordance with VTA standards.

The corridor study proposed on Santa Clara Street/Alum Rock Avenue should consider consolidating closelyspaced stops, relocating bus stops to far-side locations, implementing enhanced transit signal priority, providing bus boarding islands or bus curb extensions, and providing dedicated bus-only lanes in highcongestion and frequent service areas. Further analysis will be required to determine the location, extent, and operation of dedicated transit lanes. In addition, transit stop amenities will be upgraded per guidelines included in the VTA Transit Passenger Environment Plan (TPEP).

Per VTA's adopted Transit Speed Policy, it is recommended that the highest level of Transit Signal Priority (TSP) be provided along all VTA frequent network routes. Leading bus signal phases should be implemented in the most congested areas, such as station entrances and exits, to minimize delay from route deviations into stations. TSP will make service faster and more reliable for passengers, and more cost-effective for VTA, by reducing delay and minimizing the variability in travel speed.

Countdown pedestrian heads and accessible pedestrian signals (APS) are recommended at signalized intersections within the 0.5 mile walkshed. Automatic pedestrian recall and leading pedestrian intervals (LPI) are also recommended at signalized intersections within the 0.5 mile walkshed, but exact locations should be further studied.

Wayfinding signage should be provided to any schools, museums, cultural institutions, recreational facilities, and other community landmarks, and should be consistent with agency wayfinding guidelines. Wayfinding should be provided along the access route to direct users to the station.

Along the access route, high-visibility crosswalks are recommended to be installed at all existing crosswalks. High-visibility crosswalks currently exist at the intersections of E. Santa Clara Street at 6th Street, 5th Street, 4th Street, and 3rd Street. New crosswalks should be installed at the minor street approach of unsignalized two-way stop-controlled intersections where crosswalks do not exist. Sidewalks exist along the access route, but there are multiple locations that are not as wide as recommended within the *Complete Streets Design Standards & Guidelines*, 16' within Downtown contexts, 15' within Urban Village and Transit Employment Center contexts, and 12' elsewhere. Sidewalks should be widened to the existing ROW, where available. Curb ramps are recommended to be installed or updated to comply with ADA standards within the 0.5 mile walkshed.

Table 14 below summarizes the existing, planned, and recommended improvements for Access Route SJ11.



Street(s)	Limits	Significant Barriers	Mode	Source	Existing (Frequency)	Planned (Frequency)	Further Recommendations
			Bike	CSJ Bike Plan	None	Widened bridge over Coyote Creek	None
		None	Pedestrian	CSJ CSG	> 12'	15' Sidewalk	None
E. Santa Clara	N. 25 <sup>th</sup> Street to			2019 New Transit	BRT 522 (15 min)	BRT 522 (12 min)	
Street	Station Entrance		Turneth		Bus 22 (12 min)	Bus 22 (15 min)	Provide transit travel time and
			Transit	Service Plan	-	BRT 523 (15 min)	reliability improvements based on corridor study
					-	Bus 23 (15 min)	
			Auto	CSJ GP	Grand Boulevard	Grand Boulevard	Reduce travel lanes to 11'

### **TABLE 14: IMPROVEMENTS FOR ACCESS ROUTE SJ11**

# Access Route SJ12 - E. San Fernando Street east of Downtown San José Station past San José State University (see Figure 26)

Access route SJ12 connects the area east of Downtown San José Station via E. San Fernando Street, S. 3rd/S. 4th Streets, and E. Santa Clara Street. The Better Bikeways project has provided Class IV protected bike lanes on E. San Fernando Street between S. 3rd Street and S. 10th Street, and a Class III bike route between S. 10th Street and S. 17th Street. The Better Bikeways project has provided Class IV protected bike lanes on S. 3rd and S. 4th Streets. Key destinations include San José City Hall and San José State University. There are no significant barriers along this access route.

Per VTA's adopted Transit Speed Policy, it is recommended that the highest level of Transit Signal Priority (TSP) be provided along all VTA frequent network routes. Leading bus signal phases should be implemented in the most congested areas, such as station entrances and exits, to minimize delay from route deviations into stations. TSP will make service faster and more reliable for passengers, and more cost-effective for VTA, by reducing delay and minimizing the variability in travel speed.

E. San Fernando Street is classified as an On-Street Primary Bicycle Facility in the San José General Plan and is designated a Priority Cross County Bicycle Corridor in the *Santa Clara Countywide Bicycle Plan*.

It is recommended that bike boxes and bike detection be installed at all signalized intersections along the access route. Note that bike detection may not be needed for intersections operating pre-timed signal plans all-day. Countdown pedestrian heads and accessible pedestrian signals (APS) are recommended at signalized intersections within the 0.5 mile walkshed. Automatic pedestrian recall and leading pedestrian intervals (LPI) are also recommended at signalized intersections within the 0.5 mile valkshed. So mile walkshed, but exact locations should be further studied.

Wayfinding signage should be provided to any schools, museums, cultural institutions, recreational facilities, and other community landmarks, and should be consistent with agency wayfinding guidelines. Wayfinding should be provided along the access route to direct users to the station.

Along the access route, high-visibility crosswalks are recommended to be installed at all existing crosswalks where they are not installed. High-visibility crosswalks currently exist at the intersections of E. San Fernando





Street at S. 10th Street, S. 9th Street, S. 8th Street, S. 7th Street, S. 6th Street, S. 5th Street, S. 4th Street, and S. 3rd Street. New crosswalks should be installed at the minor street approach of unsignalized two-way stopcontrolled intersections where crosswalks do not exist. Sidewalks exist along the access route, but there are multiple locations that are not as wide as recommended within the *Complete Streets Design Standards & Guidelines*, 9' within Residential Neighborhood Contexts and 10' elsewhere. Sidewalks should be widened to the existing ROW where available, including on the south side of E. San Fernando Street in front of San José State University between S. 4th Street and S. 10th Street. Curb ramps are recommended to be installed or updated to comply with ADA standards within the 0.5 mile walkshed.

**Table 15** below summarizes the existing, planned, and recommended improvements for Access Route SJ12.

Street(s)	Limits	Significant Barriers	Mode	Source	Existing (Frequency)	Planned (Frequency)	Further Recommendations		
			Bike	CSJ Better Bikeways	Class II	Class IV	Provide bike boxes and bicycle detection at 3 <sup>rd</sup> / S. 4 <sup>th</sup> Street and E. San Fernando Street		
	S. 17 <sup>th</sup>		Pedestrian	CSJ CSG	> 8' Sidewalk	10' Sidewalk	Widen sidewalk on south side in front of San José State University		
San Fernando	Street to S. 3 <sup>rd</sup> / S. 4 <sup>th</sup>	None			Bus 63 (30 min)	Bus 63 (30 min)			
Street	Street				Bus 64 (15 min)	Bus 64 (15 min)			
			Transit	VTA	Bus 65 (45 min)	-	None		
					Bus 72 (15 min)	Bus 72 (15 min)			
							Bus 73 (15 min)	Bus 73 (15 min)	
			Auto	CSJ	City Connector Street	City Connector Street	None		
		E. None	Bike	CSJ Better Bikeways	Class II	Class IV	None		
	E. San Fernando		Pedestrian	CSJ CSG	7'-12' Sidewalk	15' Sidewalk	None		
S. 3 <sup>rd</sup> / S. 4 <sup>th</sup> Street	Street to E. Santa Clara Street		Transit	2019 New Transit Service Plan	None	None	None		
			Auto	CSJ GP	Main Street	Main Street	None		
			Bike	CSJ Bike Plan	None	None	Consider additional bikeway improvements to improve bike circulation on E. Santa Clara Street		
	Clara 4 <sup>an</sup> Street		Pedestrian	CSJ CSG	> 12'	15' Sidewalk	None		
E. Santa Clara		None			BRT 522 (15 min)	BRT 522 (12 min)			
Street			Transit	2019 New Transit	Bus 22 (12 min)	Bus 22 (15 min)	Nene		
			Transit	Service Plan	-	BRT 523 (15 min)	None		
					-	Bus 23 (15 min)			
			Auto	CSJ GP	Grand Boulevard	Grand Boulevard	Reduce travel lanes to 11'		

## TABLE 15: IMPROVEMENTS FOR ACCESS ROUTE SJ12



**Downtown Station Profile** 



# Access Route SJ13 - S. 1st Street/S. 2nd Street south of Downtown San José Station through the San José Transit Mall (see Figure 24)

Access route SJ13 connects the S. 1st Street and S. 2nd Street Transit Mall to the Downtown San José Station, along which runs both the Mountain View-Winchester and Alum Rock-Santa Teresa VTA light rail lines. S. 1st Street is northbound-only and S. 2nd Street is southbound-only south of E. St. James Street. Key destinations along the access route include the San José Transit Mall, Paseo de San Antonio, San José State University Hammer Theater, San José Museum of Art, and San José Social Security Administration building. There are no significant barriers along this corridor.

S. 1st Street and S. 2nd Street are classified as Grand Boulevards in the San José General Plan, meaning that transit is given the highest priority and wide sidewalks are desired. In addition to the light rail tracks, each street has a bus-only lane adjacent to the light rail platform, allowing both bus and rail to share shelters and benches. Both streets are Class III bicycle routes.

Per VTA's adopted Transit Speed Policy, it is recommended that the highest level of Transit Signal Priority (TSP) be provided along all VTA frequent network routes. Leading bus signal phases should be implemented in the most congested areas, such as station entrances and exits, to minimize delay from route deviations into stations. TSP will make service faster and more reliable for passengers, and more cost-effective for VTA, by reducing delay and minimizing the variability in travel speed. A vehicle loading study should be considered in the future to address transit delay caused by private delivery trucks loading and unloading in transit-only lanes within the Downtown San José transit mall.

A vehicle loading study should be considered in the future to address transit delay caused by private delivery trucks loading and unloading in transit-only lanes within the Downtown San José transit mall.

Countdown pedestrian heads and accessible pedestrian signals (APS) are recommended at signalized intersections within the 0.5 mile walkshed. Automatic pedestrian recall and leading pedestrian intervals (LPI) are also recommended at signalized intersections within the 0.5 mile walkshed, but exact locations should be further studied.

Safety enhancements should be further studied based on the recommendations of the Downtown San José Safety and Speed Enhancement Project. The purpose of this project is to encourage predicable pedestrian, bicyclist, and driver behavior traveling next to and across the tracks. By reducing unexpected track incursions, average transit travel speed can be increased while improving safety for all users of the transit mall. The Project recommended a variety of safety treatments such as:

- Install railing to separate sidewalk/platform from tracks
- Restripe vehicle paths
- Paint trackway brick red

markers

- Restripe edge of crosswalk outside of dynamic envelope
- Where space allows install bollards to guide vehicles around tracks
- Re-orient Clipper machines

• Install innovative low-profile raised pavement

Wayfinding signage should be provided to any schools, museums, cultural institutions, recreational facilities, and other community landmarks, and should be consistent with agency wayfinding guidelines. Wayfinding should be provided along the access route to direct users to the station.

High-visibility crosswalks currently exist at all intersections of S. 1st Street and S. 2nd Street between E. Santa



**Downtown Station Profile** 

Clara Street and E. San Carlos Street. Curb ramps are recommended to be installed or updated to comply with ADA standards within the 0.5 mile walkshed.

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**Table 16** below summarizes the existing, planned, and recommended improvements for Access Route SJ13.

Street(s)	Limits	Significant Barriers	Mode	Source	Existing (Frequency)	Planned (Frequency)	Further Recommendations
S. 1 <sup>st</sup> Street / S. 2 <sup>nd</sup> Street	E. Santa Clara Street to E. San Carlos Street	None	Bike	CSJ Bike Plan	Class III	Class III	None
			Pedestrian	CSJ CSG	> 12'	15' Sidewalk	None
			Transit	2019 New Transit Service Plan	Bus 17 (45 min)	-	None
					Bus 23 (<15 min)	Bus 23 (15 min)	
					Bus 66 (15-20 min)	Bus 66 (15 min)	
					Bus 68 (15-20 min)	Bus 68 (15 min)	
					Bus 72 (15 min)	Bus 72 (15 min)	
					Bus 73 (15 min)	Bus 73 (15 min)	
					Bus 82	-	
					Bus 181	-	
					Bus 304	-	
					Bus 323	BRT 523 (15 min)	
					LRT 901/Blue (15 min)	LRT 901/Blue (15 min)	
					LRT 902/Green (15 min)	LRT 902/Green (15 min)	
			Auto	CSJ GP	Grand Boulevard	Grand Boulevard	None

## TABLE 16: IMPROVEMENTS FOR ACCESS ROUTE SJ13





# Access Route SJ14 - Almaden Boulevard south of Downtown San José Station past I-280 (see Figure 25)

Access route SJ14 connects the area south of Downtown San José Station via S. Almaden Boulevard/Vine Street, W. San Fernando Street, and S. Market Street. Key destinations along the access route include the San José Convention Center, San José Center of the Performing Arts, the Children's Discovery Museum, the Center for Employment Training, as well as the Adobe and Oracle corporate offices.

There are two primary barriers to multimodal access along the route; the intersection of S. Almaden Boulevard and W. San Carlos Street presents long crossing distances for pedestrians and bicyclists, and the I-280 undercrossing acts as a barrier to multimodal access between S. Almaden Boulevard and Vine Street/Almaden Avenue. The I-280 undercrossing is designated as an Inadequate Roadway Crossing by the Santa Clara County Bicycle Plan.

S. Almaden Boulevard is classified as a City Connector Street in the San José General Plan, while Vine Street and Almaden Avenue, which form a one-way couplet, are classified as Local Connector Streets. S. Almaden Boulevard has existing Class II bike lanes adjacent to on-street parking. Vine Street and Almaden Avenue have existing Class II bike lanes adjacent to on-street parking. A Better Bikeways project is planned for the corridor, assumed to be Class IV to be consistent with other projects in the program.

It is recommended that bike boxes and bike detection be installed at all signalized intersections along the access route. Note that bike detection may not be needed for intersections operating pre-timed signal plans all-day. Countdown pedestrian heads and accessible pedestrian signals (APS) are recommended at signalized intersections within the 0.5 mile walkshed. Automatic pedestrian recall and leading pedestrian intervals (LPI) are also recommended at signalized intersections within the 0.5 mile valkshed intersections within the 0.5 mile valkshed. So mile walkshed, but exact locations should be further studied.

Wayfinding signage should be provided to any schools, museums, cultural institutions, recreational facilities, and other community landmarks, and should be consistent with agency wayfinding guidelines. Wayfinding should be provided along the access route to direct users to the station.

Along the access route, high-visibility crosswalks are recommended to be installed at all existing crosswalks where they are not installed. High-visibility crosswalks currently exist on the access route at the intersections of E. San Fernando Street at S. Market Street, S. San Pedro Street, Alamaden Avenue, and S. Almaden Boulevard, at the intersection of S. Almaden Avenue and Park Avenue. New crosswalks should be installed at the minor street approach of unsignalized two-way stop-controlled intersections where crosswalks do not exist. Sidewalks exist along the access route, but there are multiple locations that are not as wide as recommended within the *Complete Streets Design Standards & Guidelines*, 15' within Downtown contexts and 10' elsewhere. Sidewalks should be widened to the existing ROW, where available. Curb ramps are recommended to be installed or updated to comply with ADA standards within the 0.5 mile walkshed.

Table 17 below summarizes the existing, planned, and recommended improvements for Access Route SJ14.



Street(s)	Limits	Significant Barriers	Mode	Source	Existing (Frequency)	Planned (Frequency)	Further Recommendations
	Willow Street to W. San Fernando Street	I-280 Underpass, W. San Carlos Street	Bike	CSJ Better Bikeways	Class II	Class IV (presumed)	Provide bike boxes and bike detection at signalized intersections along access route
Almaden Avenue / Vine Street / Almaden			Pedestrian	CSJ CSG	> 8'	10' Sidewalk	None
Boulevard			Transit	2019 New Transit Service Plan	Bus 81 (25 min)	-	None
					Bus 201 (10 min)	-	
			Auto	CSJ GP	City/Local Connector Street	City/Local Connector Street	None
	Almaden Boulevard to S. Market Street	None	Bike	CSJ Better Bikeways	Class II	Class IV	None
			Pedestrian	CSJ CSG	> 8'	10' Sidewalk	None
			Transit	2019 New Transit Service Plan	Bus 63 (30-45 min)	Bus 63 (30 min)	None
W. San Fernando					Bus 64 (15 min)	Bus 64 (15 min)	
Street					Bus 65 (45 min)	-	
					Bus 72 (15 min)	Bus 72 (15 min)	
					Bus 73 (15 min)	Bus 73 (15 min)	
			Auto	CSJ GP	City Connector Street	City Connector Street	None
	W. San Fernando Street to W. Santa Clara Street	None	Bike	CSJ Bike Plan	None	Class II/III	Provide Class IV protected bike lane
							Provide bike boxes and bike detection at signalized intersections along access route
S. Market Street			Pedestrian	CSJ CSG	> 12' Sidewalk	Existing	None
			Transit	2019 New Transit Service Plan	None	None	None
			Auto	CSJ GP	City Connector Street	City Connector Street	Reduce travel lanes to 11'

### TABLE 17: IMPROVEMENTS FOR ACCESS ROUTE SJ14





# V. On-Site Station Requirements

Station access facilities are the foundation of a successful, multimodal facility. Providing adequate facilities with flexibility to adapt to future transportation needs maximizes the value of the transit investment. The BART Silicon Valley Phase II Extension stations are planned to be multimodal stations that encourage a wide variety of access means from a broad cross-section of the surrounding community. This document will lay the groundwork for station access concepts by identifying the facilities to be provided in the vicinity of the BART station entrances. It does not include requirements associated within the BART station itself, but rather identifies facilities to support multimodal access to the BART station.

In order to validate many of the on-site station requirements, access characteristics at comparable existing BART stations were analyzed through station observations. For Downtown San José Station, Powell Street and 12th Street/City Center were used as comparable stations in part due to their "Urban" station classification according to the BART Station Access Design Hierarchy (*BART Station Access Policy*). The BART Station Access Typology defines an Urban station as a high-ridership station with a combined walk, bike, and transit share of greater than 75% with drive alone rates of 5% or less. Most auto access is from drop-off activity and highway access is not convenient. As is the case at the Downtown San José Station, Urban stations are well-served by many types of transit services that stop on adjacent streets and the station is located underground or has a limited spatial footprint.

## Automobile/Park-and-Ride Parking

At the Downtown San José Station, no park-and-ride parking facilities will be provided, as stated in the *Final Subsequent Environmental Impact Report* (SEIR, 2018). The other comparable stations at Powell Street and 12th Street/City Center, similarly, do not provide any automobile parking.

## **Bicycle Parking**

According to the *BART Facilities Standards (BFS) Architecture – Passenger Station Sites*, both Class I and Class II bike parking shall be provided at the station and should be located outside the pedestrian paths of travel. Class I bicycle parking includes bicycle lockers, secured rooms or cages, and attended bicycle parking or bike stations. Bike lockers should be provided at all stations where space for installation exists, such as street level or in an external plaza. Class I lockers can accommodate up to two bicycles each according to the *BART Multimodal Access Design Guidelines* (MADG).

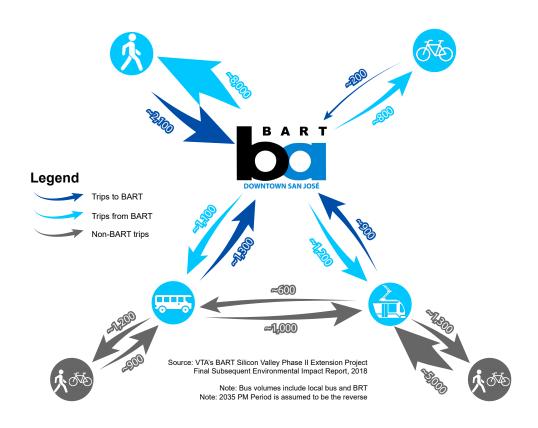
In addition to a secure group parking facility with an attendant, Class II bicycle parking (bicycle racks) may be provided. It should be prioritized inside the paid area or in the free area of the concourse in sight of the station agent and clustered as much as possible for convenience and theft protection (*BFS Architecture – Passenger Station Sites*). For outdoor parking, Class II bicycle racks should be covered with a roof or located under a structural overhang to provide protection from the elements.

Two methodologies were used to compute the required amount of Class I and II bicycle parking. The first method, from the *VTA Bicycle Technical Guidelines*, states that for transit centers, the required number of bike parking spaces is 2% of daily home-based boardings. The second method used the *BART Bicycle Plan's* systemwide goal of an 8% rideshare of BART passengers to access stations by bicycles by 2022.

No specific guidance exists in the *BFS* for the amount of bicycle parking required except that the required number of lockers should be obtained from the Bicycle Program Manager.



The first method to compute required bicycle parking uses the VTA Bicycle Technical Guidelines criteria that there should be enough bicycle spaces for 2% of daily home-based boardings with 75% of those as Class I and 25% as Class II. For this calculation, the daily home-based boardings were assumed to be all trips entering the station during the 2035 AM Period. According to the travel demand forecast, shown in **Figure 27**, there are projected to be ~4,500 daily station boardings entering the Downtown San José Station during the 2035 AM period (SEIR). The total bicycle parking required would be 2% of the daily home-based boardings, resulting in a minimum of 90 required parking spaces. The minimum facilities that should be provided according to the VTA Bicycle Technical Guidelines, are 68 Class I bike parking spaces and 22 Class II bike parking spaces.



### Figure 27: Forecast 2035 AM Period Station Boardings and Alightings

The second methodology uses the *BART Bicycle Plan's* systemwide goal of 8% rideshare of BART passengers to access stations by bike by 2022. The travel demand forecast was used to determine the number of daily station boardings (~4,500 boardings) during the 2035 AM period (SEIR). Assuming BART operates at its goal, there would be 361 bicyclists accessing the station in 2035. The comparable stations, 12th Street/City Center and Powell Street, were then used to determine the percentage of users who park their bike at the station versus taking it onto the BART trains. Between the comparable stations, the more conservative station, where more users parked their bikes at the station, was used for analysis. At 12th Street/City Center Station, the *BART Bicycle Plan* shows that 37% of bike access users parked their bikes at the station. This results in a total requirement of 134 bicycle parking spaces. The *BART Bicycle Plan* assumes that the percentage of users who park their bikes at stations will need to increase to approximately 60% by 2022. This assumption is based on



the fact that although the new BART fleet (going into service in 2018 and complete acceptance of new fleet in 2022) accommodates more bicycles, it is unlikely BART will have space for 11,000 more onboard bicycles, which would be the number required based on the current bicycle parking rate at stations. Using this estimate of 60% users parking their bikes at the station, 217 bicycle parking spaces should be provided.

The two methodologies are summarized in **Table 18** below. The scenario with 60% bicycles parked at the station from the *BART Bicycle Plan* is also shown. It should be noted that the *BART Bicycle Plan* does not have a requirement on minimum Class I, Class II parking, and it only states that world-class bicycle facilities should be provided.

Plan	Minimum Class I Parking	Minimum Class II Parking	Minimum Total Bicycle Parking
VTA Bicycle Technical Guidelines	68	22	90
BART Bicycle Plan (Comparable Station)	N/A	N/A	134
BART Bicycle Plan (60% Goal)	N/A	N/A	217

### **TABLE 18: MINIMUM PROVIDED BICYCLE PARKING**

As shown in the table above, there is a minimum bicycle parking projection of between 90 and 217 spaces at the Downtown San José Station. The VTA and BART methodologies result in different amounts of minimum bicycle parking. Assuming compatibility with station design, the larger number is recommended as the minimum amount of bicycle parking in order to facilitate non-auto access mode goals. Due to the large amount of parking required, bike lockers may not be an efficient use of space due to their large footprint. A secure group parking facility, with an attendant, such as at BART's Downtown Berkeley Station should be provided. At Downtown Berkeley Station, there are three types of parking provided as part of the bike station program: free valet bike parking during staffed hours (7AM – 9 PM weekdays), 24-hour controlled access parking, and secured Class II bike racks with a total capacity of 334 bikes. Bike repair tools or a bike repair station with an attendant is also encouraged, similar to the one provided at Downtown Berkeley. The *BART Bicycle Plan* recommends multiple payment options, providing enhanced lockers with greater security, and frequently maintaining bicycle facilities.

In planning space for bicycle and scooter parking, minimum areas for covered bike parking, docked bicycle parking, and shared mobility dockless bicycle/scooter parking should be provided, along with flexible space for expanding any one of these areas to meet future needs.

## Shared-Use Mobility Considerations

With the growing use of shared-use mobility services such as Lime, Bird, Jump, and others, consideration and planning of these modes is vital to preserve and organize the public right-of-way. Currently, there is no formal guidance provided by BART, VTA, or the City of San José for shared-use mobility services. The City of San José is planning to adopt a permit program for electric scooters or e-scooters. The cities of Santa Monica, California; Austin, Texas; Denver, Colorado; among others, have passed regulations limiting the areas that dockless mobility units can operate by utilizing geofencing and enforcing rules to ensure that these shareduse mobility services are compliant with applicable laws and the permitting process. In-street or sidewalk corrals, similar to the ones implemented in Austin, Texas, and Santa Monica, California, are recommended to reduce sidewalk clutter near station entrances. The National Association of City Transportation Officials



#### **Downtown Station Profile**

(NACTO) has also provided guidelines for cities to regulate and manage shared transportation. This guidance can be referenced until the City of San José passes its own ordinance.

The 2015 BART mode of access data and the travel demand model does not reflect the growing prevalence of bikeshare and scootershare. These shared-use mobility services have the potential to shift utilization away from private bike utilization. The effect of the growing use of these services should be further studied.

Lime and Bird are currently operating in the area along with the docked bikeshare program Ford GoBike. Ford GoBike is a bikeshare program based in the Bay Area with stations located throughout San José and the greater Bay Area. Ford GoBike bicycles need to be checked-out and returned at defined stations. Ford GoBike also has a dockless program currently being tested in North San José which should be monitored for future expansion to the station area. The existing docking stations in the station vicinity are located in **Figure 28**. Additional docked bikeshare facilities should be considered in close proximity to station entrances.

Several cities, including Denver and Santa Monica, have begun to install small corrals for shared-use devices within the roadway or on sidewalks, to encourage users to park vehicles in places where they will not impede pedestrian travel or accessibility. The corrals vary in size and character based on local context, but are typically 6 feet wide and between 10 to 15 feet in length. To encourage proper storage of these devices, it is recommended that 6 feet by 20 feet vehicle corrals be designated near primary station entrances (enough for between 20-30 units). Due to the uncertain future of shared-use mobility, these parking areas could be constructed with paint and other low-impact solutions to permit flexibility of future use and retain the potential to repurpose them for other uses if shared mobility activity significantly increases or decreases.

# Pick-up/drop-off Curb Space Requirement

The curb space required for pick-up and drop-off activity for private automobiles, taxis, and TNCs is difficult to assess for stations classified as "Urban" since comparable stations do not have dedicated pick-up/drop-off areas.

It is anticipated that pick-up/drop-off activity will occur at the Downtown San José Station. The City of San José should designate shared-use mobility (SUM) zones at the beginning and/or end of blocks near station entrances. In these zones, TNCs and taxis would be able to conduct pick-up/drop-offs during peak hours without blocking travel lanes and allowing drivers to pull over to the curb so passengers may safely access the sidewalk. Outside of peak hours, these zones could be used for regular parking or commercial delivery zones. Further investigation is needed to identify the amount of pick-up/drop-off space needed near station entrances.









## **Bus Bay Requirements**

VTA's 2019 New Transit Service Plan was analyzed to determine which bus routes may serve the station in the near term. The route start and end points, frequency, and whether the Downtown BART Station would serve as a route terminus are shown in **Table 19** below. Routes that terminate at the station may need additional space for layover and driver break facilities/restrooms.



# TABLE 19: ANTICIPATED ROUTES SERVING DOWNTOWN SAN JOSÉ STATION

Route	Direction	From	То	Peak Frequency	Route Terminus at Station	Nearest Stop
22	Eastbound/Westbound	Eastridge TC	Palo Alto TC	15 mins	No	E Santa Clara between 1st and 2nd St
23	Eastbound/Westbound	Alum Rock TC	De Anza College	15 mins	No	E. Santa Clara between 1st and 2nd St
64	Northbound/Southbound	Almaden LRT	McKee/White	15 mins	No	E. Santa Clara between 1st and 2nd St
66	Northbound/Southbound	Kaiser San José	Milpitas/Dixon	15 mins	No	1st St between E. Santa Clara and E San Fernando St
68	Northbound/Southbound	Gilroy TC	San José Diridon Station	15 mins	No	1st St between E. Santa Clara and E. San Fernando St
73	Northbound/Southbound	Monterey/ Branham	Downtown San José	15 mins	No	To be determined
168	Northbound/Southbound	SJ Diridon Station	Gilroy TC	20 mins	No	1st St between E. Santa Clara and E. San Fernando St
BRT 522	Eastbound/Westbound	Alum Rock TC	Palo Alto TC	12 mins	No	E. Santa Clara between 1st and 2nd St
BRT 523	Eastbound/Westbound	Downtown San José	Lockheed Martin TC	15 mins	No	E. Santa Clara between 1st and 2nd St



Downtown San José Station has designated bus bays on E. Santa Clara Street and curb space along busonly lanes along 1st and 2nd Streets. The current bus routes that stop in the station area are shown in **Figure 29** below. **Figure 30** shows the closest stops, for each route, to the planned Downtown San José Station entrances. It should be noted that the placement of the bus stops is based on the current route configuration and not the configuration from the 2019 New Transit Service Plan. Once available, these changes should be analyzed to verify that stop locations are not moved further away from station entrances.

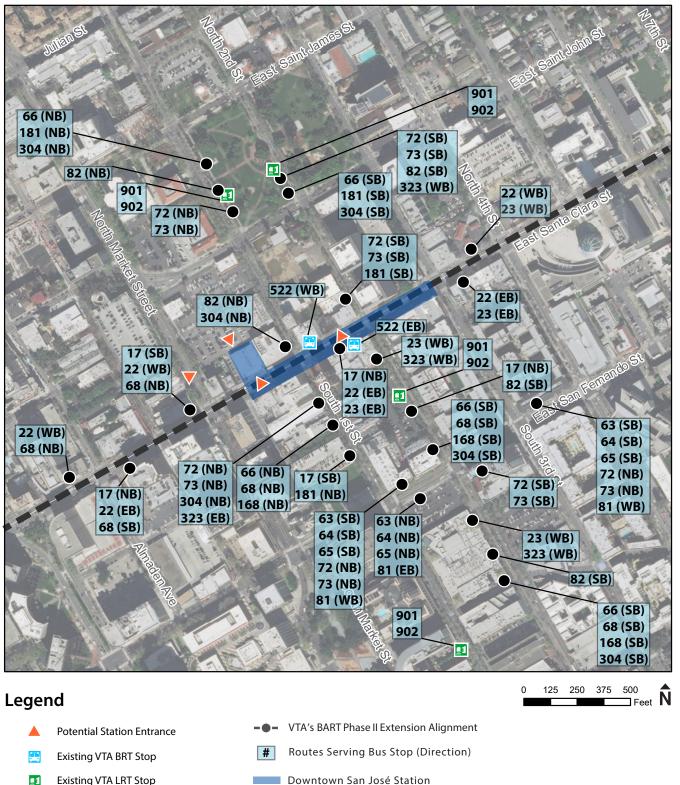
The station is well-connected by the planned 2019 New Transit Service Plan with routes serving most major attractions. No new routes are recommended for this station. VTA generally uses standard 40-foot buses and 60-foot articulated buses in its fleet. At bus stops in the vicinity, there are typically benches or individual seating, shelters, lighting, and trash receptacles available. The BRT stop between 1st and 2nd Streets on E. Santa Clara Street also has a digital dynamic sign displaying bus arrival times. The proposed routes have designated bus stops or curb space already identified. The existing BRT stations at 1st St./2nd St. and 5th St./6th St. were not constructed to their complete proposed design. It is recommended that these stations be upgraded to provide all BRT amenities in accordance with VTA standards.

There is approximately 675 feet of linear curb length on S. 1st Street between E. San Fernando Street and E. Santa Clara Street which provides enough space for approximately 6 bus bays (90 feet for each bus bay according to the *VTA Transit Facility Standards*). Currently there are 3 linear bus bays provided on the bus-only lane along 1st Street. Similarly, there is approximately 660 feet of linear curb length on 2nd Street between E. Santa Clara Street and E. San Fernando Street, which is currently striped for 3 bus bays. There is room for expansion to accommodate additional buses on 1st and 2nd Streets if needed for future growth.

The block of E. Santa Clara Street between 1st and 2nd Streets is approximately 270 feet with a bus pad of 115 feet on the south side and a bus pad along the entire block of the north side with red curb on both sides. Currently, there is one local bus stop and one rapid stop on the south side, and two local bus stops on the north side. If required for future growth, there is space to provide another bus stop on either side of the street.

Currently, the nearest proposed stop to the station for BRT 523 is at 4th Street and E. Santa Clara Street. A new stop is recommended to be added at E. Santa Clara and 1st Street to provide direct access to the station. There is already a BRT stop at this location, which serves Route 522, so the existing stop length should be increased to accommodate an additional bus. No other bus routes need to be altered to bring stops closer to the station entrances. Routes 63, 64, and 65 are in the station vicinity and the closest stops to the Downtown San José Station are located on E. San Fernando Street. These routes provide direct access to Diridon Station, so users would also be able to connect to BART at that location. The other routes can use their current allotment of curb space and as currently configured do not require an increase in bus bay capacity.

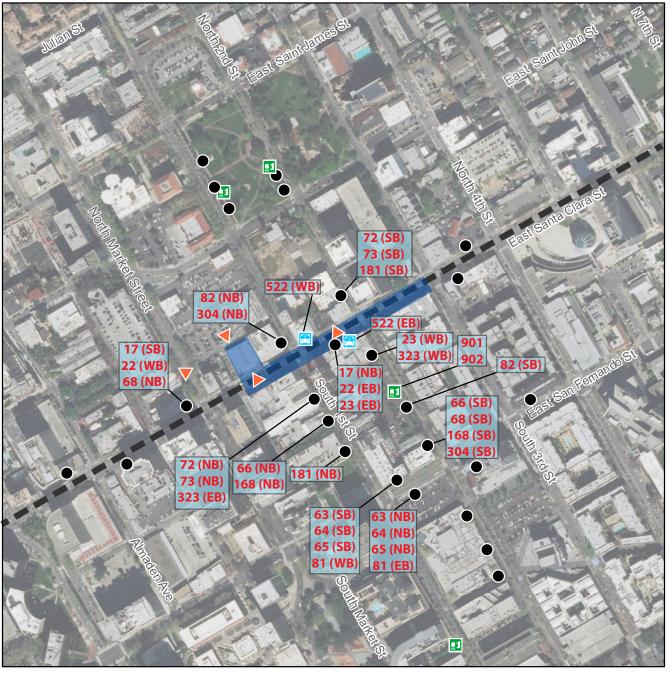




- **Existing VTA LRT Stop** <u>\_</u>1
- **Existing VTA Bus Stop**

Figure 29: Existing Bus Stop Locations (Prior to 2019 New Transit Service Plan)





# Legend

0 125 250 375 500 Feet N

- Potential Station Entrance
- Existing VTA BRT Stop
- Existing VTA LRT Stop
- Existing VTA Bus Stop

- VTA's BART Phase II Extension Alignment
- Closest Bus Stop to Downtown San José Station Entrance (Direction)
- Downtown San José Station

Figure 30: Existing Bus Stop Locations closest to Station Entrances (Prior to 2019 New Transit Service Plan)



#### Downtown Station Profile



# Faregate, Ticket Vending Machines, and Staffed Kiosks

According to the *BFS Architecture – Passenger Stations*, ticket vending machines should be located in the free area, visible to patrons entering the station but placed so as to not impede the flow between entrances and fare gates. Space or conduits for an additional 33% of ticket vending machines shall be provided for future expansion. The minimum queue space that should be provided in front of ticket vending machines is six feet. A minimum of two bill changers should also be provided in the free area with at least one VTA ticket vending machine.

There should be four types of faregates included at each station: entry consoles, exit consoles, reversible consoles, and accessible consoles. Their orientation and technical specification can be found in the *BFS R3.1.2.* In an array of gates, the right-side gate should be the entry gate, with the right side for the exiting flow being the exit gate. This exiting gate must accommodate users with oversized items and bicycles. The remaining center gates should face the major directional flows and there must be a minimum of six gate aisles per station with one ADA accessible fare gate being provided in each fare gate array per the *BFS Architecture – Passenger Stations*. A minimum queue space of fifteen feet shall be provided in front of the fare gates.

The station agent booth should be located within the line of sight of the gates and centrally located with respect to the gates or the side of the entry gates as circulation dictates. When there are two sets of gates, the station booth should be adjacent to the gate serving the majority of off-peak users (bus and taxi drop off, non-commuter parking). As an additional requirement, the booth should be located adjacent to fare gate arrays and, to the greatest extent possible, be visible from the entire concourse area.

## **Emergency Access/Egress and Fire Access**

Emergency access to stations entrances, pedestrian bridges, facilities, parking structures, and emergency egress locations should be provided from public streets, or an access road with a minimum paved width of 20 feet, and be within 150 feet of an access road in accordance with the *California Fire Code* (CFC) Section 503 and the *MADG*. There should also be an unobstructed vertical clearance of 13 feet 6 inches. An access road to the station should be continuous from a public street to a public street, or a 66-foot outside radius turnaround must be provided. Fire lanes should also be provided from a public street to the station, through parking lots, meeting the requirements of the *CFC Section 503* with a minimum radius of 30 feet for the inside path and 50 feet for the outside path.

Access through service gates for maintenance personnel and emergency crews should be provided in the fare gate array for movement between the free and paid areas in accordance with the *California Building Code*. The service gates should be provided along the barrier separating the paid and free area for staff and equipment access, and have a minimum clear opening of 3 feet 6 inches (*BFS*). At least one full size service gate should be located adjacent to the station agent booth for public use; other service gates not adjacent to the station agent booth for public use; other service gate to prevent unauthorized use.

## Wayfinding and Accessibility

Wayfinding serves to guide the public to the station from the surrounding neighborhoods and along major access routes. It also informs users of transfer connections and station facilities. Wayfinding should be developed as a part of the architecture and site design and should make stations recognizable within the urban fabric. Redundancy should also be used for wayfinding with both words and pictograms, audio messages repeated on visual message boards, and tactile with message repeated in Braille. Specific design guidelines and standards can be found in the *BART Criteria Architecture – Wayfinding and Signage*. Wayfinding should be





provided in coordination with VTA, BART, and the City of San José to include destinations in the surrounding neighborhood as well.

Bicycle wayfinding signage should be posted on the closest arterial and on all bikeways as they approach the station. Based on adjacent roadway configuration and location of existing bikeways, a separate bicycle entrance to the station may be preferable and available; these entrances should be identified and clearly marked. Wayfinding to both station entrances and bike parking areas should also be provided.

Wayfinding for users accessing the station with automobiles should also be posted on arterials in the station area as well as freeway interchanges that provide access to the station. In the vicinity of the station, access route signage, real-time parking availability signage as well as parking wayfinding signage should be provided.

All pedestrian walkways should be paved and free of tripping hazards and Tactile Ground Surface Indicators (TGSI) shall be provided. A TGSI is a minimum 1-foot wide paving feature strip with a material, pattern, or texture detectable for blind and low-vision patrons to orientate themselves at bus loading and pick-up and drop-off areas and through the station entrances and accessible gates (*BFS*). When there are direct connections to commercial, retail, or other facilities, or where they will be used to facilitate future direct connections, an accessible route to boarding platforms and other transportation system elements must be provided to be compliant with the Americans with Disabilities Act (ADA).

#### Safety and Security

No parking structure will be provided at the Downtown San José station so parking structure safety is not applicable to this station. Pedestrian, bicycle, vehicular access should all be designed to maximize safety of users in accordance with the *BFS Architecture – Passenger Station Sites*.







# **VI. Implementation and Next Steps**

Access improvement recommendations were prioritized to identify near-term and long-term implementation recommendations. Near-term improvements were those deemed most critical to support rider access with the start of project revenue service based on existing and near-term planned development activity. Long-term improvements were oriented around buildout of the overall TOC vision and improved connections between the new/enhanced transit-oriented communities and the station. Station access improvements and their level of priority were developed in close coordination with the Cities of San José and Santa Clara.

**Table 20** and **Table 21** below summarize the access improvement recommendations, organized by nearor long-term implementation. It is recommended that ongoing planning projects within in the Cities of San José and Santa Clara, such as the East San José Multimodal Transportation Plan (ESJ MTIP), Downtown Transportation Plan (DTP), and El Camino Real Specific Plan, should consider and carry forward the recommendations of this study. Note that projects that already have received full funding and are advancing towards implementation were excluded from the recommendations list. The Transit Oriented Communities Strategy Study includes funding strategies for the implementation of the projects identified here.

Streetscape improvements were also proposed for the station area. These include widened sidewalks to provide a buffer from the roadway, landscaping, lighting, shade, seating, and other amenities, and vary between the different street typologies recommended for the station area. The recommended street typologies are based on the typologies laid out by the City of San José's Complete Streets Design Standards and Guidelines and can be found in the overall Transit Oriented Communities Strategy Study.

Cost estimates for all access and streetscape improvements provided within this station profile and are included in the overall TOCs Strategy Study.

The on-site station requirements included in this report are intended to inform the station design for automobile and bicycle parking, shared-use mobility considerations, pick-up/drop-off curb space, bus bays, faregates, ticket vending machines, staffed kiosks, emergency access, wayfinding and accessibility, as well as safety and security. A Station Access Concepts development process will build off of the facility requirements identified in this Profile and will serve as an input to future design efforts.





## **TABLE 20: NEAR-TERM RECOMMENDED IMROVEMENTS**

#	Description	Quantity	Unit	Category of Improvement	Previous/Ongoing Planning Document
1	Extend Class IV contraflow bike lane on east side of S. 4th Street from E. San Carlos Street to E. San Salvador Street	650	LF	Bicycle	
2	Install wayfinding signage along access routes within Station Area	15	EA	Bicycle/Pedestrian/Transit	BART Station Access Planning Final Report
3	Construct bulb-outs and ADA ramps within 1/4 mile walkshed of Station Area	93	EA	Pedestrian	
4	Upgrade signals within ½ mile walkshed	27	EA	Bicycle/Pedestrian/Transit	
5	Improve bike circulation on Guadalupe River Trail at W. Julian Street	1	LS	Bicycle	
6	Install enhanced crossing at Guadalupe River Trail across W. St. John Street	1	LS	Bicycle/Pedestrian	
7	Install RRFB or PHB at intersection of W. San Fernando Street and Guadalupe River Trail	1	EA	Pedestrian	
8	Transit Mall safety enhancements - Platform safety, mid-block crossing safety, signalized crosswalks, etc.	1	EA	Transit/Pedestrian	Downtown Light Rail Speed and Safety Enhancements Project





# TABLE 21: LONG-TERM RECOMMENDED IMROVEMENTS

#	Description	Quantity	Unit	Category of Improvement	Previous/Ongoing Planning Document
9	Construct bulb-outs and ADA ramps within 1/2 mile walkshed of Station Area	186	EA	Pedestrian	
10	Upgrade signals within 1½ mile bikeshed	49	EA	Bicycle/Pedestrian/Transit	
11	Widen sidewalk on E. San Fernando Street from S. 4th Street to S. 10th Street	12,930	SF	Pedestrian	
12	Install Class IV bike lane on W. St. John Street under SR-87	320	LF	Bicycle	
13	Widen sidewalk under SR-87	4,000	SF	Pedestrian	
14	Install Class IV bike lane on Market Street from W. San Carlos Street to W. Julian Street	3,895	LF	Bicycle	San José Bike Plan
15	Upgrade BRT Stations	4	EA	Bicycle/Pedestrian/Transit	
16	Additional transit enhancements on E. Santa Clara Street for transit travel speeds, to be determined based on future corridor study	1	LS	Transit	
17	Pedestrian improvements at southbound U-turn through Cesar Chavez Park	1	LS	Pedestrian	VTA Pedestrian Access to Transit Plan
18	Construct transit islands within Station Area	9	EA	Transit/Pedestrian	





# **Report Glossary**

# Accessible Pedestrian Signal (APS)

Accessible Pedestrian Signals communicate in a non-visual format (i.e. by sound) to nearby pedestrians when it is safe to cross an intersection. APS helps ensure the safety of blind or visually-impaired pedestrians.

# All-Way Stop Control

An intersection where drivers approaching from all directions are required to stop before proceeding as opposed to a yield- or signal-controlled intersection.

# Automatic pedestrian recall

A method of traffic signal timing in which a pedestrian 'walk' signal always accompanies a green light given to drivers moving in the same direction. Without automatic pedestrian recall, a signal activation button must be pressed before the start of the cycle for pedestrians to be allowed to cross the intersection.

## **Bike box**

A painted green box that reserves space between the intersection and the vehicle stop bar (the line indicating where drivers are meant to stop) for bicyclists. When waiting for a green signal, bicyclists may use the box to move in front of waiting vehicles, allowing them to get a head start on vehicles and make a left turn more comfortably.

## **Bike detection**

Technology that triggers a call to a traffic signal when a bicyclist is waiting to turn or proceed straight.

## **Bulb-out**

A widening of the sidewalk, typically at an intersection, used to decrease the length of roadway a pedestrian must cross and to slow the speed of turning vehicles.

# Bus Rapid Transit (BRT)

Enhanced bus service typically characterized by all or a subset of features that are frequently associated with rail transit. These include a combination of elements such as dedicated lanes, signal priority, faster travel speeds, off-vehicle payment, enhanced stations/shelters with real-time arrival information, and less frequent stops than local bus routes.

# **Class I bicycle path**

Also known as an off-street path, a Class I Bicycle Facility has exclusive right-of-way for bicyclists or bicyclists and pedestrians, separate from motorized traffic.

# Class II bicycle lane

Also known as a standard bike lane, a Class II Bicycle Lane is a painted lane on the street designating an area to be used by bicyclists. These lanes are typically placed adjacent to traffic lanes, either between the traffic lane and parked cars, or against the curb. They may include a striped buffer between the traffic lane and the bicycle lane.



Downtown Station Profile



# **Class III bike route**

A route indicated by signage, pavement markings (such as "sharrows"), and depicted on bicycle wayfinding maps along which bicycle activity is encouraged.

# Class III bike boulevard

An on-street route specifically designed for comfortable bicycle travel. These boulevards frequently feature traffic calming treatments such as speed humps, neighborhood traffic circles, or traffic diverters to reduce vehicle speed and discourage cut-through auto travel.

# **Class IV protected bike lane**

A bicycle lane physically separated from vehicle traffic via a raised element, such as bollards, curb, planters, or parked cars.

#### **Curb radius**

A measurement of the radius of the curb at the corner of an intersection. An intersection with large curb radius (i.e. a gradual curve) allows drivers to make higher-speed turns. An intersection with a small curb radius (i.e. closer to a right angle) may force drivers to slow their speed, reducing risk for pedestrians using the intersection.

## Dwell time

The amount of time a vehicle, typically a transit vehicle, taxi, or ridehail vehicle, spends waiting for passengers to load and/or unload.

## Leading Pedestrian Interval (LPI)

A leading pedestrian interval gives pedestrians a 'walk' signal before drivers traveling in the same direction are given a green light. This allows pedestrians to get a head-start into the intersection, making them more visible to turning drivers, which improves pedestrian safety.

## Level of Traffic Stress (LTS)

An attempt to quantify the degree of stress experienced by bicycle riders, LTS is a measurement applied to a road segment or street crossing. High levels of traffic stress are generally caused by the proximity of fast-moving automobiles and lead to only risk-tolerant travelers riding on the segment. In this report LTS is typically measured on a 1-5 scale, ranging from a physically separated path (LTS 1) to high-speed mixed traffic (LTS 5).

## Median refuge

Typically installed on multilane roads, a median refuge provides pedestrians crossing a street with a place to rest outside of the traveled way. These are particularly useful for older adults or those with mobility impairments who are not able to cross an intersection within the duration of a walk and flashing 'don't walk' phase.

## Neighborhood traffic circle

A small roundabout, a neighborhood traffic circle is a traffic control device typically used in place of a fourway stop. Approaching vehicles must yield to vehicles currently within the circle before entering, proceeding in a counter-clockwise direction.



Downtown Station Profile



# Pedestrian Hybrid Beacon (PHB)

A pedestrian-activated traffic signal used to alert drivers to the presence of a person trying to cross the street and requiring them to come to a complete stop. When activated, the beacon cycles through a yellow interval before showing a solid red indicator during the walk phase. It then switches to a flashing red light during the flashing 'don't walk' phase, allowing for vehicles to proceed slowly across the crosswalk if the pedestrian has completed their crossing.

## Pedestrian-scale lighting

Street lighting at a lower height than typical street lights specifically intended to improve nighttime visibility for pedestrians rather than for drivers.

# **Protected crossing**

A crosswalk with some type of enhanced signal or active warning sign control, either a Rectangular Rapid Flashing Beacon (RRFB), or Pedestrian Hybrid Beason (PHB), traffic signal, or stop sign. Unprotected crossings, crosswalks with only striping or striping and static signs, tend to have very low yield rates from drivers, especially when vehicles are traveling quickly.

## Rectangular Rapid Flash Beacon (RRFB)

A pedestrian-activated traffic signal used to alert drivers to the presence of a person trying to cross the street and encourage them to yield. When activated, the beacon flashes yellow for a period that allows pedestrians to traverse the crosswalk. An RRFB can be activated by the pedestrian actively with a push-button or passively using sensors.

# Traffic calming

The broad term for a series of roadway treatments intended to slow the speed of drivers, typically applied in residential zones or areas with large volumes of pedestrian travel. Such measures may include speed humps, raised intersections, neighborhood traffic circles, and reducing lane widths.

## **Traffic diverter**

A roadway feature designed to allow unimpeded travel by pedestrians and cyclists, but require a left- or right-turning movement for the automobile. The purpose of such diverters is to maintain connectivity for pedestrians and cyclists while discouraging cut-through automobile traffic. Diverters are typically designed to preserve all movements for emergency vehicles.

# Transit Oriented Development (TOD)

A type of mixed-use development located proximate to high-frequency transit. Such developments often include amenities and facilities that encourage transit and non-auto use.

# Transit Oriented Community (TOC)

While TOD generally refers to an individual mixed-use project adjacent to high-quality transit, the concept of a Transit Oriented Community encompasses the neighborhood surrounding the transit station. A TOC is one in which travel via non-auto modes is convenient, seamless, and comfortable.



Downtown Station Profile



# Transit Signal Priority (TSP)

A traffic signal operation in which transit vehicles are given priority treatment at signalized intersections. This includes a range of treatments such as modifying signal phase timings and providing dedicated transit phases or facilities.

# Transportation Network Company (TNC)

The preferred general term for companies such as Uber and Lyft, also known as ridehail or app-based transportation companies.

## Two-stage left turn box

A painted green box that helps bicyclists turn left across intersections. Most bikeways travel along the right side of the roadway. This make left turns difficult on multilane roads, as a bicyclist would be required to cross several lanes of auto traffic to position themselves in the left-turn lane. A two-stage left turn box allows a bicyclist to proceed through an intersection to the far right-side corner, where they may wait in the box out of the flow of traffic until the cross traffic is given a green signal, allowing them to complete a left turn in two steps.

# Walkshed

The land area that falls within a 10-minute walk of a point, using the existing pedestrian network.

