Winchester Station Access Study

Final Access Study

Prepared for Santa Clara Valley Transportation Authority (VTA) By Arcadis with Bluepoint Planning

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Valley Transportation Authority

ARCADIS

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1 Introduction

1.1 Study Background

The Santa Clara Valley Transportation Authority (VTA) Transit-Oriented Development (TOD) Program initiated an access planning study for Winchester Station in June 2023. The goal of this program is to make transit use easier and more convenient, in an effort to reduce driving and vehicle emissions and increase active transportation use. This will be achieved through public-private partnerships for mixed-use developments on VTA-owned sites that open opportunities for people of all incomes to live, work, and play nearby.

Winchester Station has been identified for transit-oriented development, utilizing the existing park-and-ride facilities to accommodate an affordable housing development in a cooperative partnership with the Santa Clara County Office of Supportive Housing (OSH). This study provides the basis that will ensure the proposed developments are well integrated into the transportation network and surrounding neighborhood, and pedestrians, bicyclists, and transit needs are fully considered and incorporated in subsequent stages.

1.2 Purpose of Report

The purpose of the TOD access study is to identify multimodal transportation improvements that will improve access to the stations for existing and future transit riders. This report presents findings from an analysis of existing conditions and needs at Winchester Station and proposed recommendations within a half mile of buffer surrounding the station. These findings were used to inform a suite of proposed access improvements and transportation demand management (TDM) recommendations to reduce single-occupancy trips to the station that are presented in Sections 7 and 8. Associated cost estimates and a prioritization and implementation plan are presented in Sections 9 and 10.

2 Station Area & Station Layout

The half-mile radius surrounding Winchester Station will serve as the study area for the purposes of this study. Winchester Station is located in the City of Campbell, just east of SR 17. The study area is generally bound by Campbell Avenue to the north, San Tomas Expressway to the west and south, and SR 17 to the east. Winchester Station serves as the terminus of the VTA Green Line and serves bus Routes 27, 37, and 60.

The station is generally bound by Winchester Boulevard to the west, Kennedy Avenue/Industrial Street to the north, and State Route 17 (SR 17) to the east. The study area surrounding Winchester Station is primarily commercial and residential. Industrial uses are located in the southern portions of the study area as well as east of SR 17. The Los Gatos Creek Trail runs along SR 17 between the roadway and the VTA light rail right-of-way, buffered by residential uses. Travelers can access the trail near the station at two points: off Railway Avenue, just north of Kennedy Avenue, and off of the southern portion of Camden Avenue.

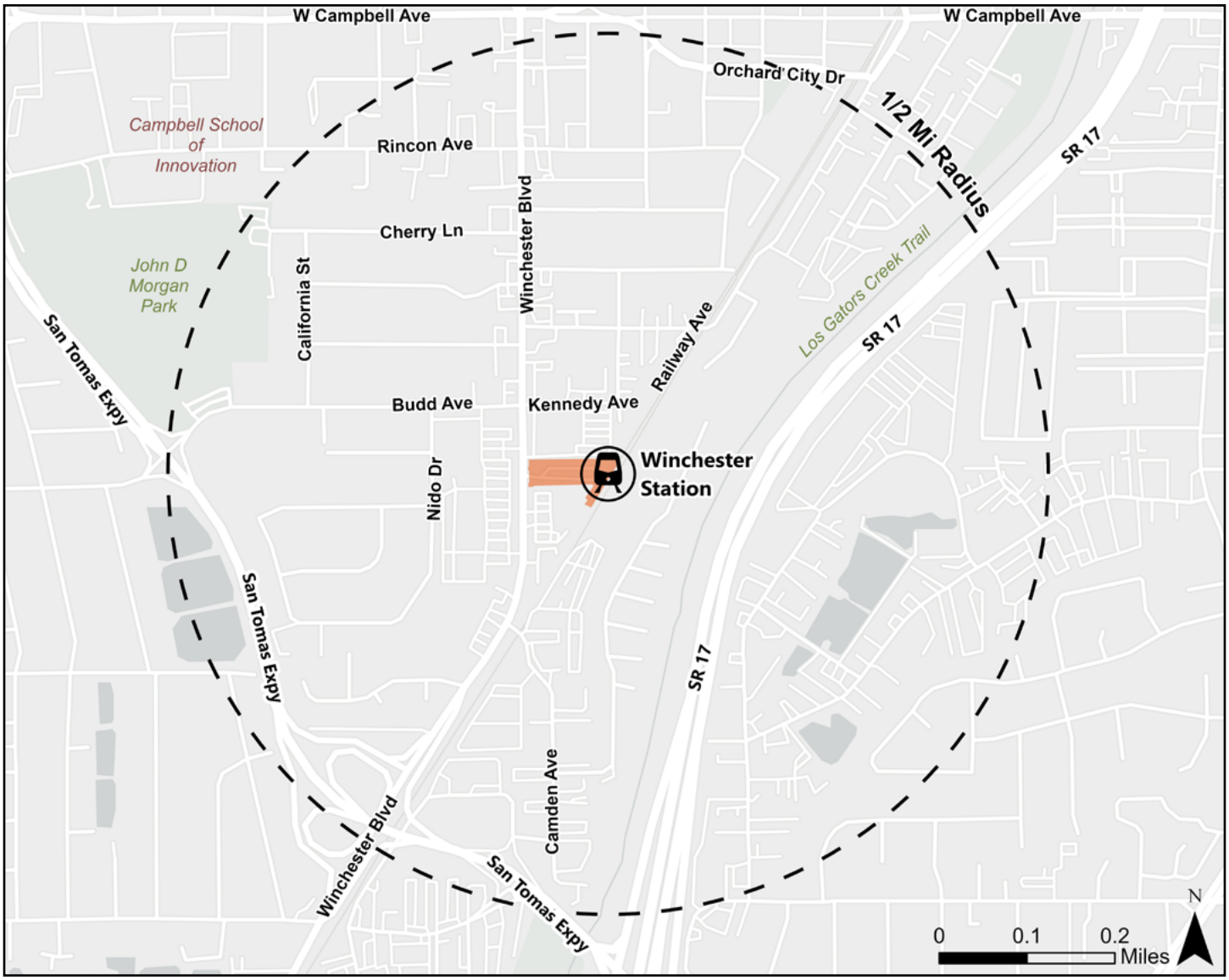


Figure 2.1
Winchester Station Study Area

Figure 2.2
Aerial view of
Winchester Station

All station users enter and exit the station at its only entrance on Winchester Boulevard. The Winchester parking lot provides 54 parking spaces, of which three are marked as accessible. Pedestrian sidewalks are provided along the northern and southern borders of the station. Two bus bays are located along the southern curb of the parking lot. A loop within the lot is provided for vehicles and buses. The two light rail entrances are located on the northeast and southeast corners of the lot, with eight bike lockers located near the northeastern entrance.

Figure 2.3
Winchester Station and Winchester Boulevard Intersection

Figure 2.4
Bus bays along the southern curb of the Winchester Station parking lot

Figure 2.5
Southeastern corner of parking lot facing southeastern light rail entrance

Figure 2.6
Bike lockers at northeastern corner of Winchester parking lot

Figure 2.7
Northeastern light rail entrance

3 Existing Conditions

This section provides a review of existing planning documents and initiatives from the City of Campbell, City of San José, and VTA, as well as a review of existing data relevant to the study area. Existing data reviewed for this task included information about population and employment density, median household income, and communities of color in the station area. This section also provides an on-the-ground analysis of conditions based on a walk audit conducted in the station area with community members as a part of outreach process for the study.

3.1 Planning Document Review

Planning documents were reviewed to gather a comprehensive understanding of current planning initiatives and projects relevant to Winchester Station, as well as identify how the plans or projects will impact and/or improve station access.

City of Campbell Planning Documents and Projects

City of Campbell General Plan Streetscape Standards (1993)

The City of Campbell's Streetscape Standards were developed to create a more cohesive, attractive, and pedestrian-friendly environment along the city's "image streets": Hamilton Avenue, Bascom Avenue, Winchester Boulevard, and parts of West Campbell Avenue. The standards were also designed to emphasize the use of street trees as a component of design and screen off-street parking areas to further enhance the city's aesthetics.

The guidelines for each image street include dimensions, types of preferred trees and proposed spacing between them, and other elements that can be used by the City and private developers to improve the built environment during redevelopment. Campbell Avenue and Winchester Boulevard are the two streets closest to Winchester Station, and diagrams of their concepts are shown in the figures below.

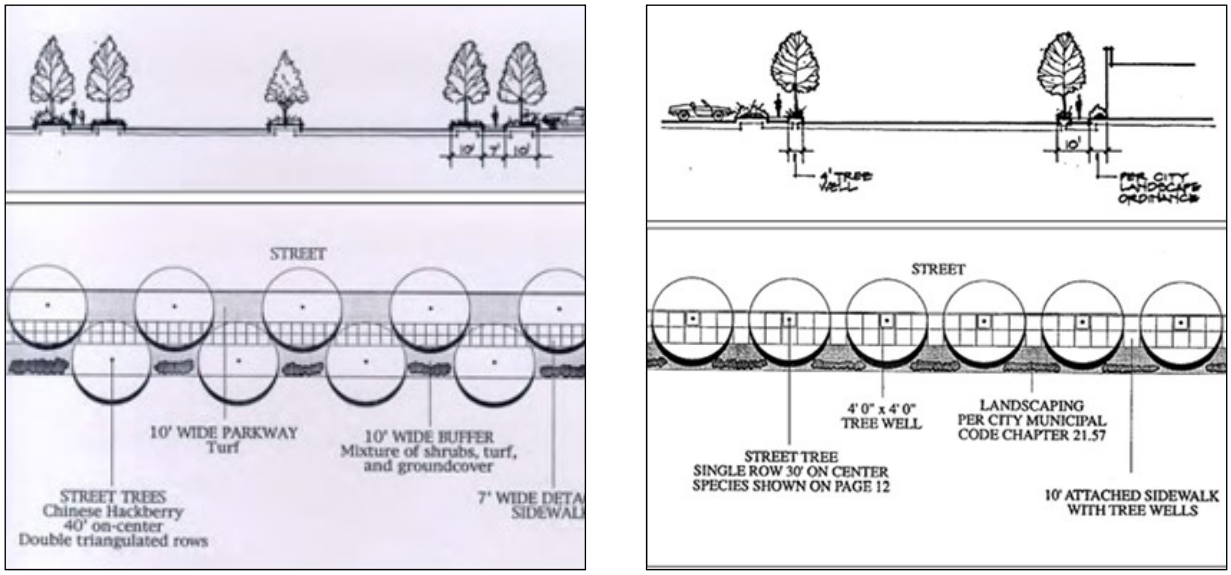


Figure 3.1 (Left to Right)
West Campbell Avenue and Winchester Boulevard Streetscape Diagrams

Key Takeaways:

- The Streetscape Standards identified for Campbell Avenue and Winchester Boulevard will form the baseline for recommendations considered as part of this study.
- Updates to the recommendations may be necessary depending on best practices in urban and landscape design, such as the use of drought-tolerant tree/plant species.

City of Campbell General Plan Housing Element (2023)

The City of Campbell Housing Element provides the most recent strategy for 2023 – 2031, which includes a site inventory, goals, policies and programs, and other documentation needed to provide essential housing for thousands of new neighbors. The housing element has been prepared as required by the California Department of Housing and Community Development (HCD) and meet the city's Regional Housing Needs Allocation (RHNA).

The Housing Element was adopted concurrently with the General Plan Update, which modified land uses and allowed for increased densities throughout the City of Campbell. These changes rely on land use changes proposed in the General Plan update and policies focused on Affirmatively Furthering Fair Housing (AFFH) and providing housing for renters and special needs groups.

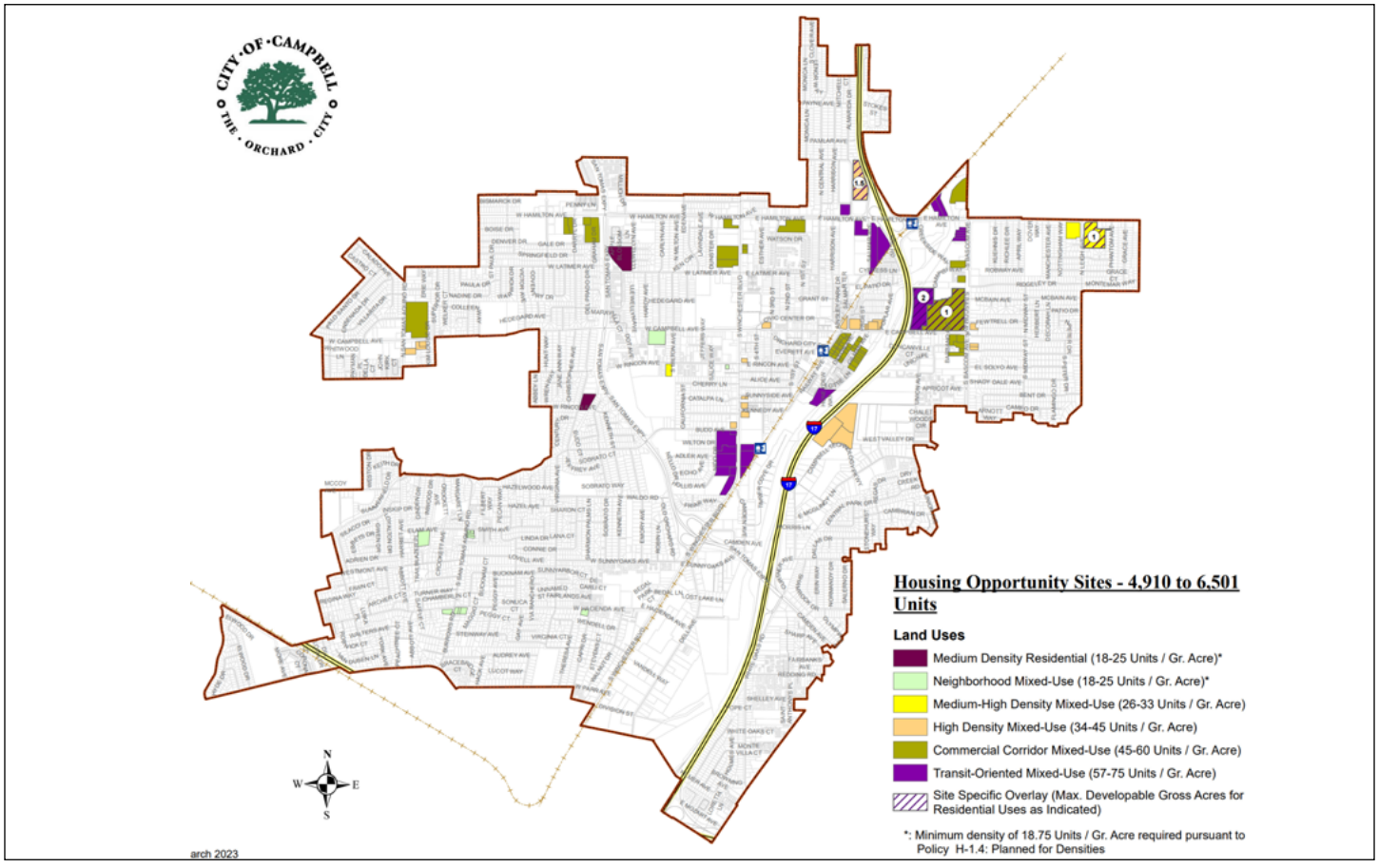


Figure 3.2
Housing Opportunity Sites

The City has also identified several housing opportunity sites as part of the housing element. More specifically, the selected housing opportunity sites will allow for 6,644 new residential units. Land uses proposed as housing opportunity sites include medium density residential, neighborhood mixed use, medium-high density mixed use, medium-high density mixed-use, high density mixed-use, commercial corridor mixed-use, and transit-oriented mixed-use. Transit-oriented mixed use is proposed to the west of Winchester Station, while medium-high density mixed use is proposed to the east of the station, east of SR 17. Housing Opportunity Sites are reflected in Figure 3 below.

Key Takeaways:

- Parcels to the west and south of Winchester Station have been identified as housing opportunity sites. This study will explore access considerations for potential transit-oriented mixed-use development on these parcels.

Winchester Boulevard Master Plan (2009)

Winchester Boulevard is an important north-south and commercial corridor in Campbell and was the focus of a development and design master plan in 2009. The plan was developed in response to an increasing number of developments and project applications for properties along the corridor and sought to establish a vision concept that supported private infill development and street improvements. The plan divided the Winchester Boulevard corridor and the plan's recommendations into three segments:

- Area 1: Camden Avenue to Budd Avenue
- Area 2: Budd Avenue to Campbell Avenue
- Area 3: Campbell Avenue to Rosemary Lane (San José border)

The plan identifies recommendations for improvements along these segments in several categories, including the types of development and building heights, landscaping treatments, and other components that should be considered for the streets leading toward Winchester Station. The plan also highlights that parking personal vehicles is discouraged along Winchester Boulevard. Several of the major recommendations are summarized in the table below.

Table 1: Recommendations for Improvements on Winchester Boulevard

CATEGORY	AREA 1	AREA 2	AREA 3
Development Type	First floor office, residential and/or commercial	First floor commercial with residential or office above; emphasis on small-scale, pedestrian-oriented uses (specialty retail, restaurants, local services)	First floor office, residential and/or commercial
Building Heights	55 feet	45 feet	55 feet
Landscaping	Curbside planting strip added where no parking proposed	Tree grates added	Curbside planting strip added where no parking proposed
Landscaped Median	Recommended for this area	n/a	Recommended for this area
Streetlights	n/a	Pedestrian-oriented streetlights added in coordination with utility undergrounding	n/a

CATEGORY	AREA 1	AREA 2	AREA 3
Bulb-outs	Partial bulb-outs at non-signalized intersections and full bulb-outs at signalized intersections		
Parking	Located to rear, side, or below buildings, and strongly discouraged along Winchester Boulevard frontage		

The plan includes conceptual renderings of streetscapes in the project study area, such as that of Area 2 shown in the figure below.

Figure 3.3
Conceptual Rendering of Winchester Boulevard Streetscape

The plan also identifies a streetscape improvement concept for the area near Winchester Station with proposed bulb outs and the addition of street trees as illustrated in the figure below.

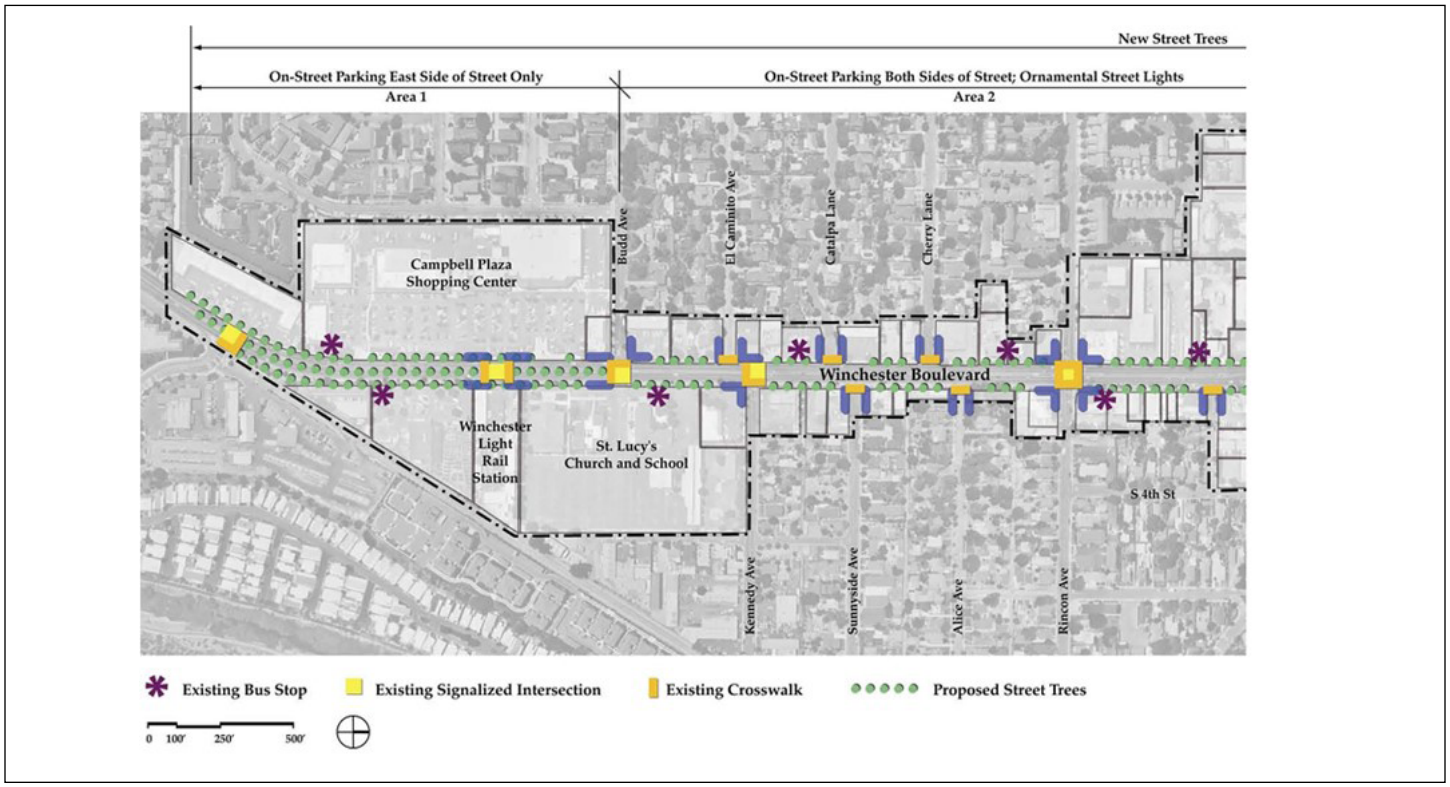


Figure 3.4
Winchester Station Area Proposed Streetscape Improvement Concept

These recommendations will be used to inform future steps of this study.

Key Takeaways:

- The Winchester Boulevard Master Plan should be considered the baseline for improvements leading to/from the Winchester Station area. Its recommendations supersede those of the Campbell Streetscape Standards where conflicts may exist.
- Any changes to the Winchester Boulevard streetscape since the plan's release will need to be considered and evaluated by the technical team to inform the recommendations of this plan.
- Recent developments in best practices in urban design and planning (as well as input from the community) may necessitate going beyond the recommendations contained in the Winchester Boulevard Master Plan to ensure that its designs are still relevant.

Cal Poly San Luis Obispo Student Study – Urban Design Visions, Winchester District (2022)

In 2022, undergraduate students from the Cal Poly San Luis Obispo Urban Design Studio III submitted a visioning report on the area surrounding Winchester Station to the City of Campbell Community Development Department and presented their report to the Planning Commission.

Eight teams of students developed their own concept for developing the site, based on a core set of goals and objectives. The report presented a range of options amongst the teams, including various levels of housing density and affordability, multimodal circulation and streetscape design, and options for sustainable development. The site plans also presented a mix of public and semi-private spaces and aimed to balance increased housing density with maintaining the small-town feel of the area.

Of the design concepts presented, two were related to circulation and focused on multimodal and pedestrian friendliness:

- Objective 5: Provide first/last mile solutions by creating exclusively pedestrian and bike routes to main destinations such as the station, large retail, and large public areas.
    - Teams either focused on creating strong east-west connections from the light rail station to the neighborhoods to the west of the station on Nido Drive, or they created a more centralized pedestrian circuit, focusing pedestrian activity centrally on Winchester Boulevard. Bicycle circulation focuses on Winchester Boulevard, with Class IV protected bikeways heading northbound and southbound.
- Objective 6: Provide a safe pedestrian and biking experience by calming the flow of traffic with corner bulb-outs, safety islands, and physical barriers between modal uses.
    - All design concepts presented widened sidewalks, protected bike lanes, more trees, and street furniture to make Winchester Boulevard more walkable.
    - Some design concepts retained the current VTA kiss-and-ride loop model, with half of the teams including bus-only lanes at the VTA drop-off.
    - Parking standards were based on affordability, with half of the teams presenting conservative parking standards for less affordable housing, and the other half presenting reduced parking standards for more affordable housing.

Images from the report reflecting some of these design concepts are presented below.

Figure 3.5
Site plan featuring a strong east-west connection to the station (Team 4)

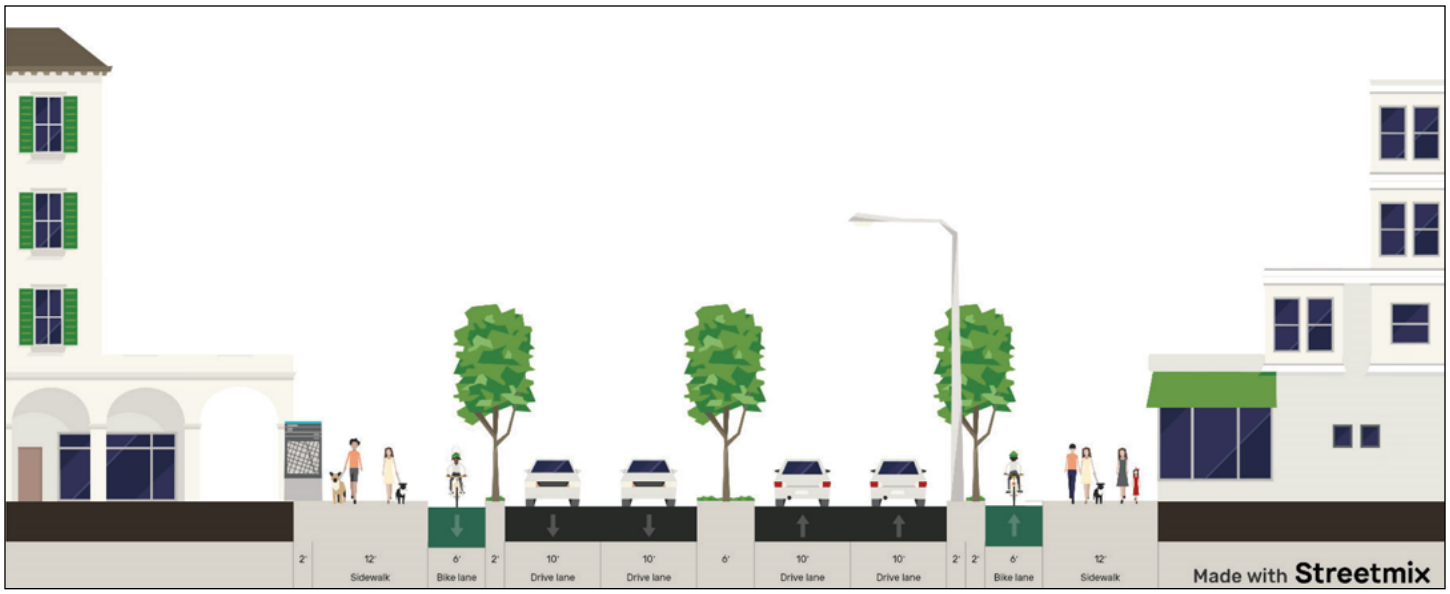


Figure 3.6
Cross section of Winchester Boulevard featuring a median, protected bike lane, and widened sidewalks from (Team 1)

Key Takeaways:

- Although not an adopted City plan, the report presents a range of circulation options as well as non-vehicular access design ideas that should be taken into consideration for the Station Access Study. In particular, designs that increase east-west connections can improve access to the station from the surrounding neighborhood to the west of the station.
- The report found that pedestrian and bicyclist networks around the station area are generally poor and can be improved with various infrastructure improvements and amenities, including traffic calming along Winchester Boulevard. This can include median extensions to create separation and additional landscaping. The improvements primarily focus on the area west of the station, so this should be considered when developing neighborhood access improvements in light of new development.

Camden Avenue Resurfacing Project

The City of Campbell will be conducting a resurfacing project along Camden Avenue and Dell Avenue in the southeastern portion of the study area. This area is mostly industrial with poor roadway conditions and missing sidewalks. The resurfacing project consists of sidewalk, driveway, curb, and gutter work on the east side of the street. This project was completed during the duration of this study in late September 2023.

Key Takeaway:

- Camden Avenue is an important route for those using the Los Gatos Creek Trail as it leads to a trail entrance at its southern cul-de-sac. The cul-de-sac also provides a connection to San Tomas Expressway. Resurfacing and sidewalk paving would improve this connection to the trail and station and make this pathway more attractive to travelers.

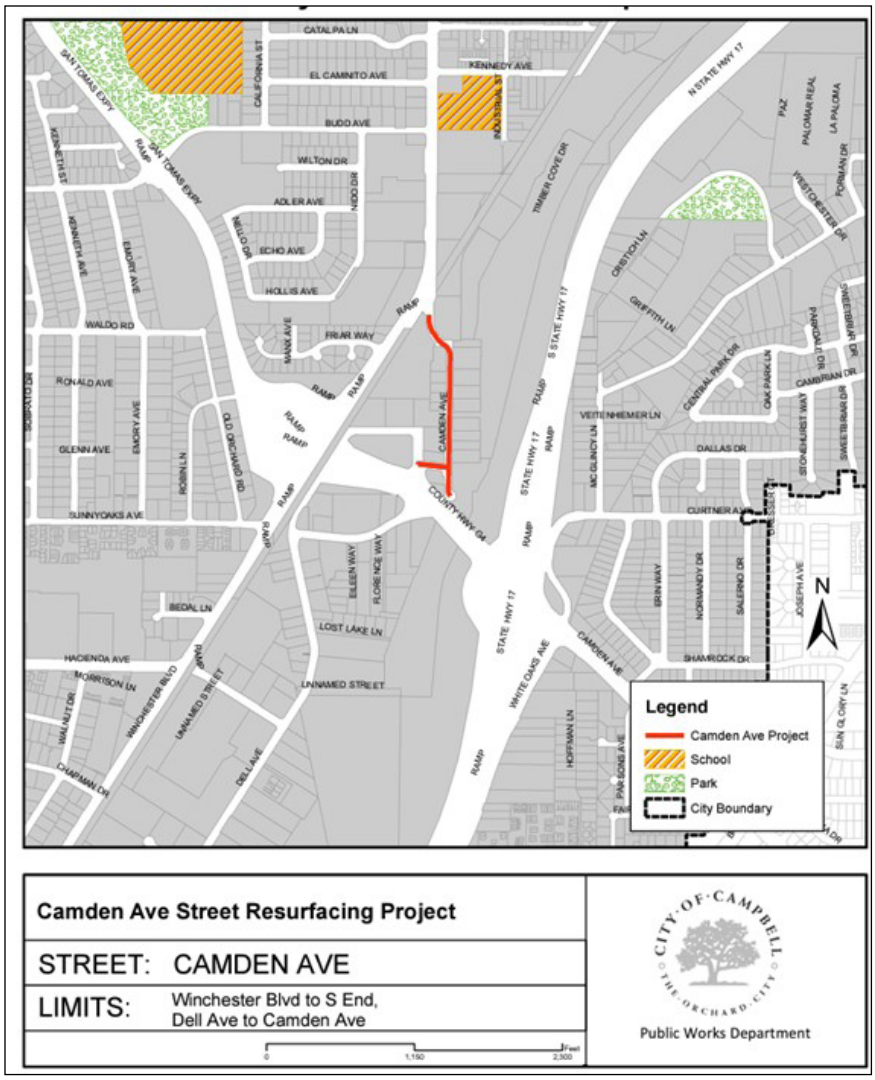


Figure 3.7
Map of Camden Avenue project study area

City of San José Planning Documents

Better Bike Plan 2025

Released in 2020, San José's bike plan was designed to provide an update to the city's 2009 plan, report out on infrastructure implemented since that time, and outline a strategy to continue making San José and its surrounding areas safer and more accessible for cyclists. The Better Bike Plan 2025 identifies several key goals:

- Build a 550-mile low-stress, connected network
- Achieve a 15% citywide bike mode share by 2040 and a 20% bike mode share by 2050
- Eliminate all roadway fatalities and major injuries, in line with the City's Vision Zero plan
- Expand the availability of sidewalk bike parking, secure bike parking, and end-of-trip facilities at transit stops
- Achieve Gold status according to ratings of city bicycle friendliness
- Expand shared micromobility (bike and scooter share)

The plan analyzed existing and planned bicycle infrastructure, locations where pedestrians and bicyclists have been injured or killed, potential areas of unrealized cycling demand, and equity metrics to guide recommendations. The plan concludes with an implementation and prioritization strategy to guide the immediate improvements.

Several bikeways recommended in the Better Bike Plan 2025 are located in the City of Campbell and near Winchester Station. The bikeways recommended in this plan can be further leveraged by improvements at Winchester Station. Improvements and recommendations that are most relevant to Winchester Station include:

- Upgrades to existing bike lanes on Winchester Boulevard from standard or buffered lanes to protected bicycle lanes, and closing a gap in the network that currently exists south of I-280
- Implementation of a Class IV protected bicycle trail on San Tomas Expressway between Campbell Avenue and the Cambrian Village area east of SR 17, which would provide a protected direct crossing of the freeway

Key Takeaways:

- Include potential Winchester Boulevard and San Tomas Expressway in considerations for Winchester Station area improvements

Figure 3.8
Better Bike Plan 2025 Corridors

Los Gatos Planning Documents

2040 Los Gatos General Plan (2022)

As the Town of Los Gatos neighbors the City of Campbell, it is important to consider projects that may be planned just south of the study area. The Town's Mobility Element includes a planned extension of the existing Class IV protected bikeway on Winchester Boulevard north to the border of Los Gatos and Campbell.

Key Takeaway:

- Continuity of this bikeway on Winchester Boulevard north into Campbell should be considered for this access study. This is also identified as part of VTA's Cross County Bicycle Corridors.

VTA Planning Documents and Programs

VTA Complete Streets Policy

In 2017, VTA published the most recent Board Memorandum on Complete Streets. The policy specifies the responsibilities that VTA will follow to ensure that Complete Streets best practices are used during the planning, design, funding, and construction of all transportation capital projects and funding programs administered by VTA, and applies to VTA employees, contractors, and consultants performing work for VTA. The document defines principles and practices that must be considered for the current access study to Winchester Station, which include: serving all users, using context sensitive design, maintaining of enhancing networks, incorporating technology, consistency with adopted plans, maintaining transportation infrastructure, seeking and responding to public input, building complete streets infrastructure, and using latest best practice design standards and guides.

Key Takeaway:

- The Winchester Station Access Study will be consistent with the Complete Streets Policy's goals and is designed to be an implementation action from that policy.

VTA Station Access Policy

The 2018 VTA Station Access Policy establishes VTA's access priorities to guide planning and investment decisions regarding station access for all modes of transportation. The guiding principles of this policy are to increase ridership, prioritize sustainable travel behavior, build effective partnerships, support sustainable development partners, and promote cost effectiveness. Additionally, the policy establishes a hierarchy for station access systemwide providing priority access to modes that can produce the highest ridership and revenue benefits for VTA at the least cost. This study incorporates the guidelines defined in the VTA Station Access Policy, to ensure these goals are met.

Key Takeaway:

- The Winchester Station Access Study will be consistent with the Station Access Policy's principles and is designed to be an implementation action from that policy.

VTA Transit-Oriented Communities Policy

Originally published in 2016 as the agency's Transit-Oriented Development (TOD) Policy, this policy was reviewed and renamed in 2022 to VTA's Transit-Oriented Communities Policy. This policy seeks to create mixed-use and mixed-income equitable Transit-Oriented Communities (TOC), through public-private and public-public partnerships on VTA-owned sites that will generate revenues, increase ridership, and create Transit-Oriented Communities. The access study for Winchester Station supports the implementation of this policy.

The document includes two appendices. Appendix B's purpose is to guarantee the optimal level of parking at VTA stations while encouraging alternatives to automobile to access the stations. Appendix C defines the strategies to increase affordable housing in VTA TOD projects.

VTA has identified Winchester Station as an Active Development site for Transit-Oriented Development along with other sites in Santa Clara County.

VTA Pedestrian Access to Transit Plan

VTA's Pedestrian Access to Transit Plan reviews the current state of pedestrian conditions within Santa Clara County. Through local observations within the county, the Pedestrian Access Plan seeks to improve the safety, comfort, and convenience of pedestrian VTA customers. While the Plan does not address the Winchester Station directly as part of its focus areas (where both transit ridership and the need for pedestrian improvements are high), it does evaluate the existing conditions for pedestrians in the county. Based on data collected during the study relating to road safety and vehicle-pedestrian collisions, Winchester Station did not stand out as less safe than other intersections with similar pedestrian volumes.

Key Takeaway:

- Although Winchester Station was not selected as a focus area for the Pedestrian Access to Transit Plan, this study will be broadly consistent with its goals of improving safe and convenient connections to transit.

VTA Countywide Bicycle Plan

The Countywide Bicycle Plan's goals and policies support national, state, and regional plans and policies that view bicycling as a safe, convenient, healthy, and environmentally friendly transportation option. Additionally, nearly all local jurisdictions have adopted and updated bicycle master plans in recent years. Ideally, local plans should consider four key elements of bicycle planning: engineering, encouragement, education, and enforcement.

The VTA Countywide Bicycle Plan identifies both priority cross county bicycle corridors and a bicycle superhighway network. Priority cross county bicycle corridors relevant to Winchester Station include:

- A portion of Winchester Boulevard just south of the study area that connects to the Los Gatos Creek Trail between San Tomas Expressway and SR 85 via Division Avenue
- The De Anza UPRR Trail
- San Tomas Expressway
- Bascom Avenue

There are no proposed bicycle superhighways that connect directly to Winchester Station.

Key Takeaway:

- Priority cross country bicycle corridors that connect to Winchester Station will be considered for inclusion in the recommendations for this study.

2016 Measure B Bicycle & Pedestrian Program

Santa Clara County voters approved Measure B, a 30-year, half-cent countywide sales tax to enhance transit, highways, expressways and active transportation (bicycles, pedestrians and complete streets) in 2016.

The Bicycle & Pedestrian Program, revised in August 2022, allocated 3.97% of the program tax revenues. VTA is yet to release a 2022 Annual Report. The 2021 report highlights five project agreements with Member Agencies for the FY 2020 – FY 2021 funding cycle, four for Final design and one for construction. It also mentions the first call-for-projects in February 2021, where eleven applications were submitted, and five projects were approved for funding by the Board. It also funded education and encouragement.

3.2 Existing Data Review

This section provides a review of existing data and infrastructure within the station half-mile radius. Demographic data discussed in this section include population density, employment density, median household income, and information about communities of color. Existing infrastructure described in this section includes the existing transit network, bicycle and pedestrian network, bicycle and pedestrian collisions, and vehicle volumes.

3.2.1 Demographics

This section provides an overview of existing demographics within a half mile radius of Winchester Station. Demographics discussed within the study area include population density, employment density, median household income, communities of color, and linguistic isolation.

Population Density

The total population living within the half-mile study area surrounding Winchester Station is 51,005 people. The figure below represents population density at the census block group level surrounding Berryessa Station. The densest block group is located south of Budd Avenue and West of Winchester Boulevard, which contains between 15,000 and 22,000 people per square mile. The majority of the study area has a population density is between 2,500 and 5,000 people. It should also be noted that the lowest density area is located to the east of SR 17. There is a low population density in this area due to a predominance of industrial land uses.

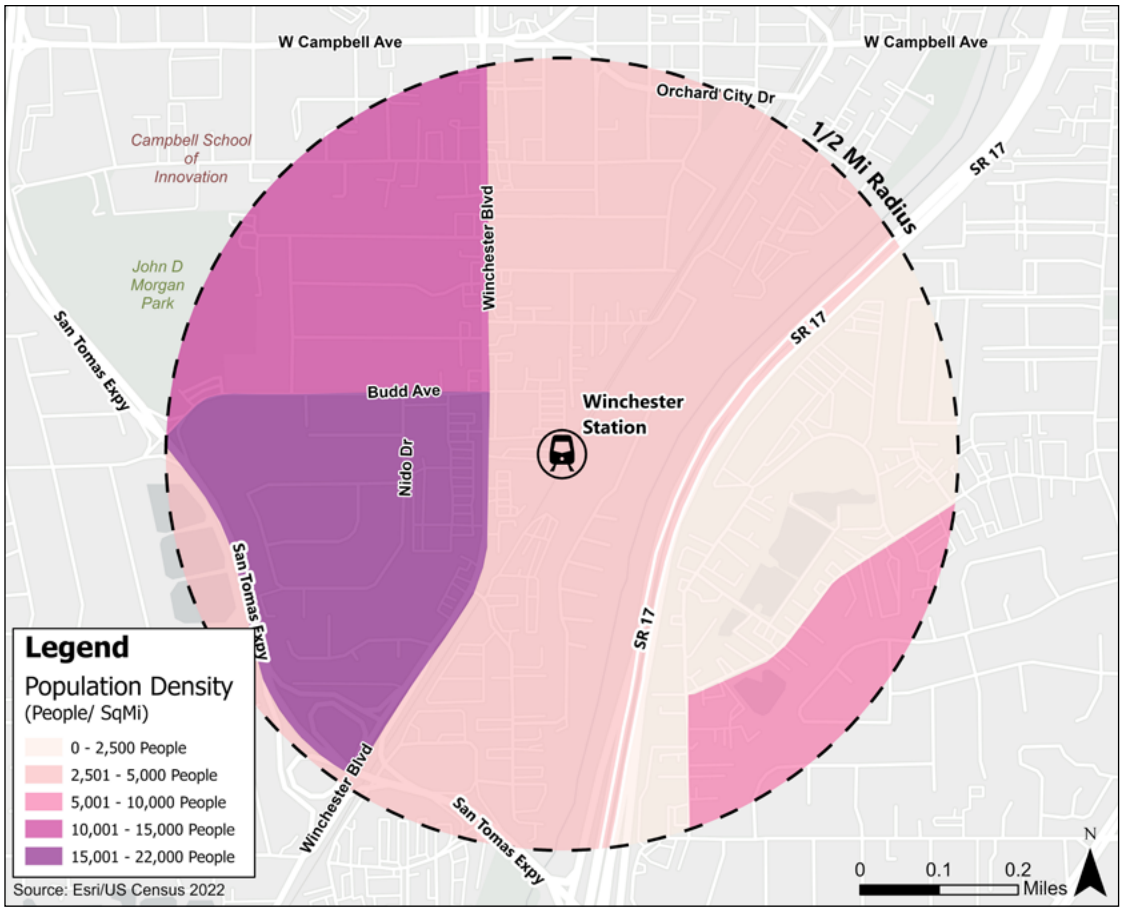


Figure 3.9
Winchester Station Existing Population Density

Employment Density

The figure below represents employment density at the block group level within a half mile radius of Winchester Station. More specifically, employment density refers to the total employed population over 16 per square mile. The area with the highest employment density is located west of Winchester Boulevard and south of Budd Avenue. In this area, employment density is between 9,000 and 12,000 employees. The lowest employment density is located east of SR 17, where employment density is between 1,500 and 3,000 employees per square mile. The greatest share of the study area has an employment density of between 3,000 and 6,000 employees per square mile.

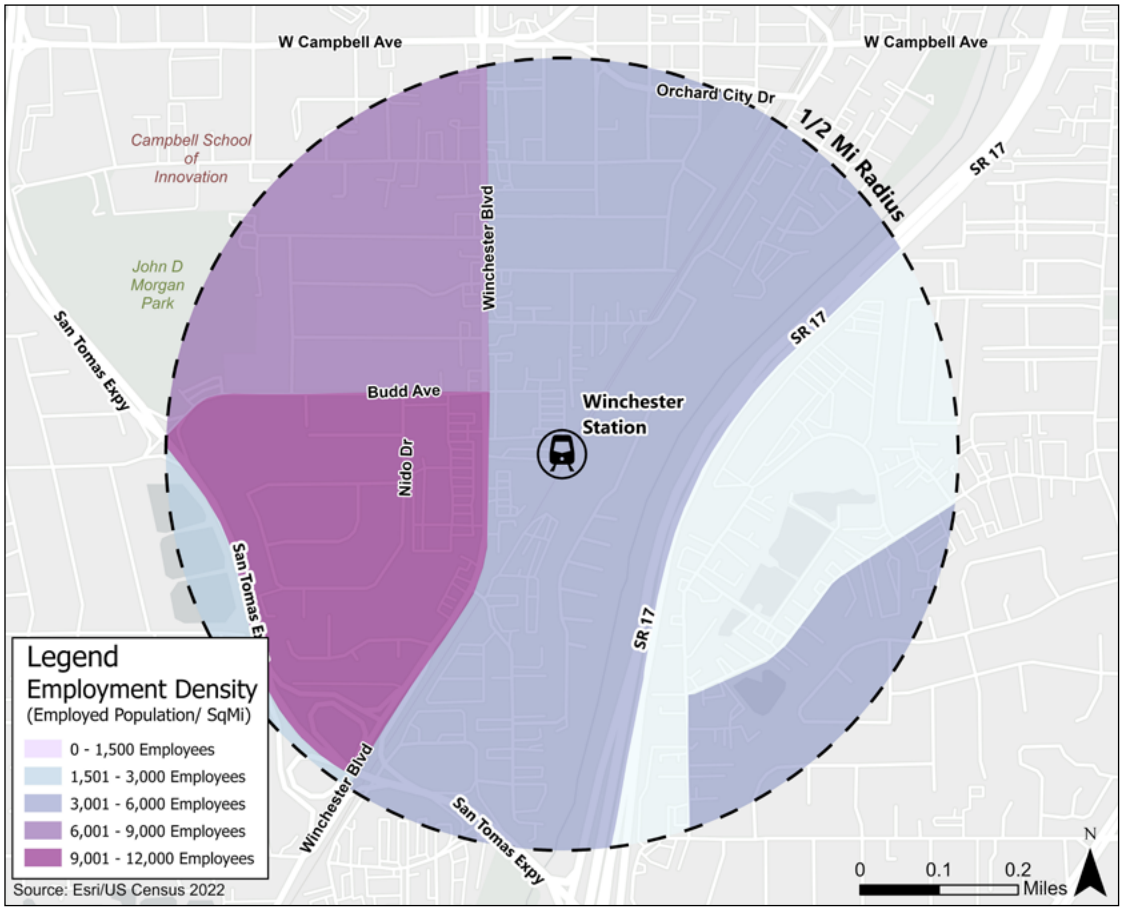


Figure 3.10
Winchester Station Employment Density

Median Household Income

The figure below reflects the median household income for households within a half mile of Winchester Station. The majority of households within the study area are living above the federally recognized poverty line of $35,000 per year. However, there is a significant number of households located in the northeastern portion of the study area that are identified as living in poverty by this standard. Efficient connections to Winchester Station have a higher importance for these households, as low-income households have less reliable access to a vehicle. This can negatively impact their access to jobs, healthcare, and essential services. Therefore, efficient connections to a transportation hub, like Winchester Station, can have a strong positive effect on ensuring there is equitable access to opportunity for all community members. In contrast, the majority of households earn an annual income of over $100,000, with a significant portion of households earning more than $150,000 per year.

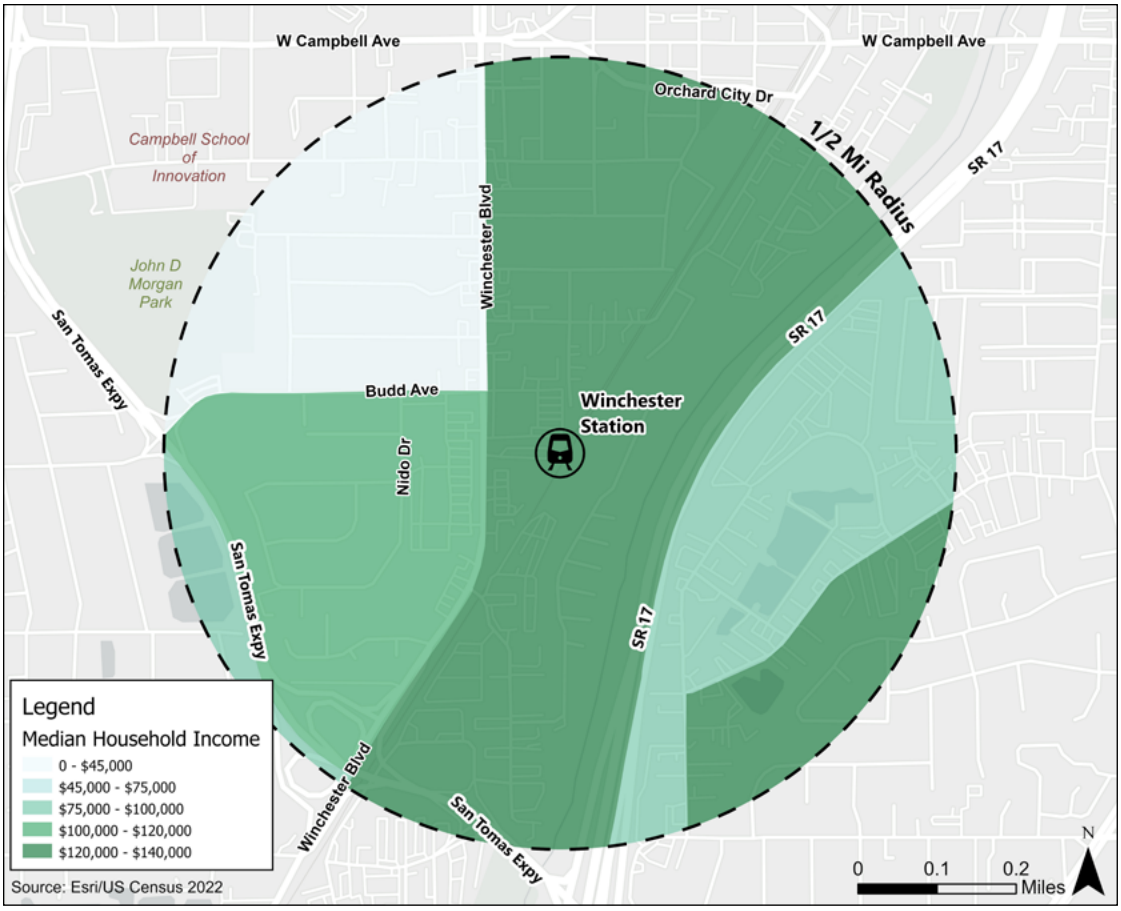


Figure 3.11
Winchester Station Median Household Income

Communities of Color

The figure below reflects communities of color living within a half mile of Winchester Station. Communities of color are reflected as the percentage of non-white residents living within the study area. Communities of color are strongly represented within the study area, with non-white populations composing more than 50 percent of most block groups' population. The block group located south of Budd Avenue and west of Winchester Boulevard has the highest percentage of non-white residents, where non-white residents compose more than 60 percent of the total population.

Figure 3.12
Winchester Station Non-White Population

3.2.2 Existing Transportation Network

This section provides an overview of the existing transportation network within a half mile radius of Winchester Station. Transportation infrastructure described in this section includes the bicycle and pedestrian network. Additionally, this section discusses bicyclist and pedestrian collisions and vehicular traffic volumes.

Transit Network

There are six transit routes operating within the Winchester Station study area, including five bus routes and the VTA Green Line light rail. The figure below reflects the location of these transit routes in relation to Winchester Station.

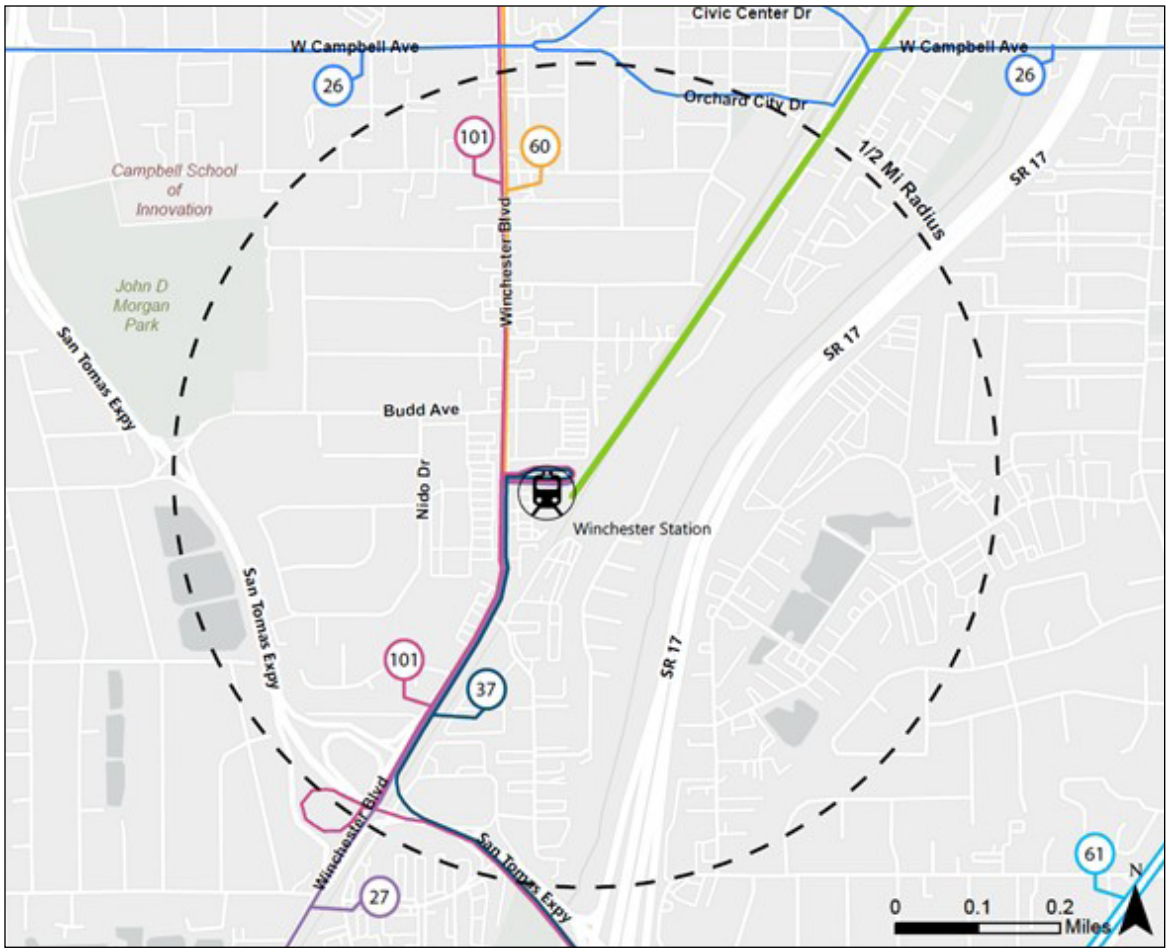


Figure 3.13
Winchester Station Transit Routes

Transit Service

Transit service is available both on weekdays and weekends within the service area. Generally, headways are about 25 minutes apart on weekdays and one hour apart on weekends. Transit service times are summarized below:

SCHEDULE	SERVICE	ROUTE	HOURS OF OPERATION	HEADWAYS (MINS)
Weekdays	Frequent Bus	Route 26	5:29 AM – 10:36 PM	15
	Local Bus	Route 27	5:43 AM – 8:05 PM	25
	Local Bus	Route 37	6:41 AM – 6:34 PM	60
	Frequent Bus	Route 60	5:46 AM – 10:13 PM	15
	Express	Route 101 Express	6:24 AM – 6:18 PM	60

SCHEDULE	SERVICE	ROUTE	HOURS OF OPERATION	HEADWAYS (MINS)
Weekends	Frequent Bus	Route 26	6:17 AM – 9:41 PM	30
	Local Bus	Route 27	8:08 AM – 7:09 PM	60
	Local Bus	Route 37	N/A	N/A
	Frequent Bus	Route 60	6:35 AM – 9:44 PM	20
	Express	Route 101 Express	N/A	N/A

Transit Ridership

The table below reflects weekday transit ridership at stations within a half-mile radius of Winchester Station. Transit stations are listed in descending order according to the number of boardings at each station. Winchester Station facilitates the highest number of boardings, with 352 boardings per day. It should also be noted that highest number of alightings also occurs at Winchester Station, with 349 alightings occurring at Winchester Station per weekday.

STATION	STATION TYPE	BOARDINGS	ALIGHTINGS	ROUTES SERVED
Winchester Station	Light rail stop	352	349	GREEN
Winchester Station N – S Bound Routes	Bus stop	200	220	101, 60
Winchester Station E – W Bound Routes	Bus stop	154	152	27, 37
Winchester & Budd	Bus stop	27	1	60
Winchester & Rincon	Bus stop	15	1	60
Winchester & Camden E – W Bound Routes	Bus stop	14	3	27, 37
Campbell Station	Light rail stop	10	148	Green
Winchester & Sanford	Bus stop	3	11	60
Winchester & Catalpa	Bus stop	2	18	60
Winchester & Camden E – W Bound Routes	Bus stop	1	18	27, 37
Winchester & Mission	Bus stop	1	11	60
Winchester & Friar	Bus stop	1	2	27, 37

The figure below reflects weekday transit ridership at each transit stop within a half mile radius of Winchester Station. Most bus stops within the study area receive less than 25 boardings during the weekdays. However, transit ridership is highest at bus stops and the light rail station at Winchester Station.

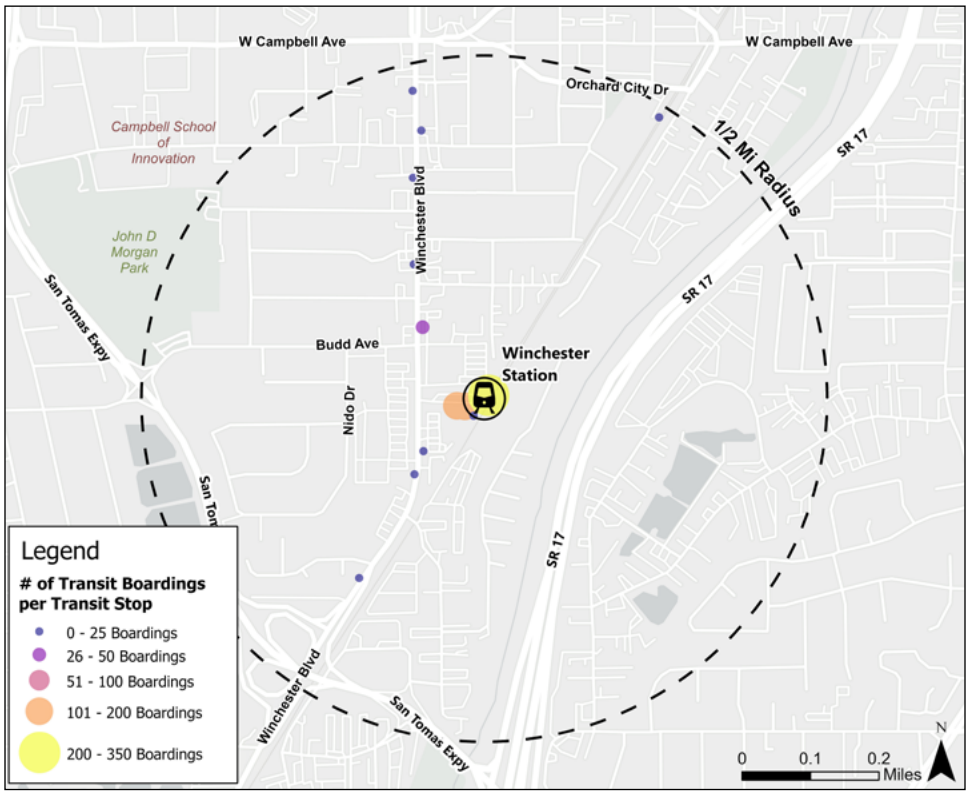


Figure 3.14
Winchester Station Transit Ridership

Bus Stop Amenities

In addition to the two bus bays at Winchester Station, eight VTA bus stops are located in the station area, all of which are along Winchester Boulevard. VTA's Transit Passenger Environment Plan (TPEP, 2016) classifies bus stops within the VTA service area into the four following categories: basic, core, major, or community destination. Bus stop classification is determined based upon the number of weekday daily boardings at each station. Basic bus stops receive fewer than 40 weekday boardings, core stops receive between 40 and 199 boardings, major stops receive over 200 weekday boardings, and community destinations are defined as major stops within a unique location within the community context. The TPEP then assigns a typical set of amenities that should be available to passengers according to the bus stop category.

All of the bus stops along Winchester Boulevard are classified as basic bus stops, while the stops at Winchester Station are classified as core bus stops. The bus stops are generally in compliance with the TPEP. A review of the existing conditions for each location is detailed in the following table. Cells in gray are amenities that are noted by the plan as "may be" provided but not required, or not required at all. Note that trees are not mentioned as an amenity in the TPEP but were included as a part of this study's analysis to determine if stops have shaded areas available.

Amenities Required by TPEP	BASIC								CORE
	Winchester/Sanford	Winchester/Rincon	Winchester/Mission	Winchester/Catalpa	Winchester/Budd	Winchester/Camden N	Winchester/Camden S	Winchester/Friar	Winchester Station N-S/E-W
Standard bus stop sign	X	X	X	X	X	X	X	X	X
Real-time information decal on standard bus stop sign	X	X	X	X	X	X	X	X	X
One "U-rack" if along bicycle facility									X
Seating	X				X	X	X		X
Shelter system					X				X
Scheduled stop display/system map if shelter provided					X				X
Trash can if needed		X					X		X
In-shelter lighting, or pedestrian-activated lighting									X
Trees[1]	X	X			X	X	X		X

All bus stops have a standard bus stop sign and real-time information decal. None of the basic bus stops have a U-rack despite the presence of Class II and Class III bikeways on Winchester Boulevard. Half of the basic bus stops have a bench, with one including a shelter system. Most of the stops are near trees that can provide shade, and a couple include trash receptacles. The Winchester Station bus bays include shelter systems.

[1] Not an amenity required by the Transit Passenger Environment Plan.

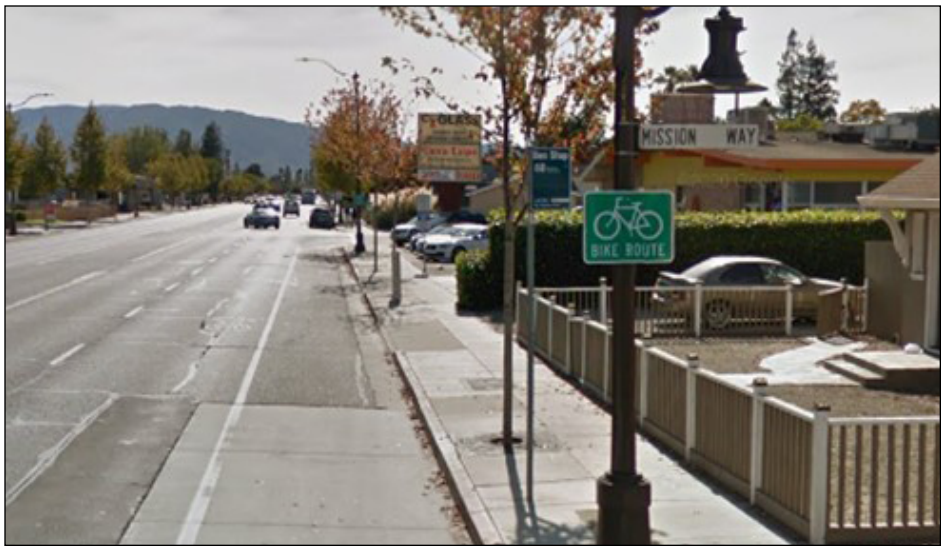


Figure 3.15
Winchester Boulevard and Mission Way bus stop

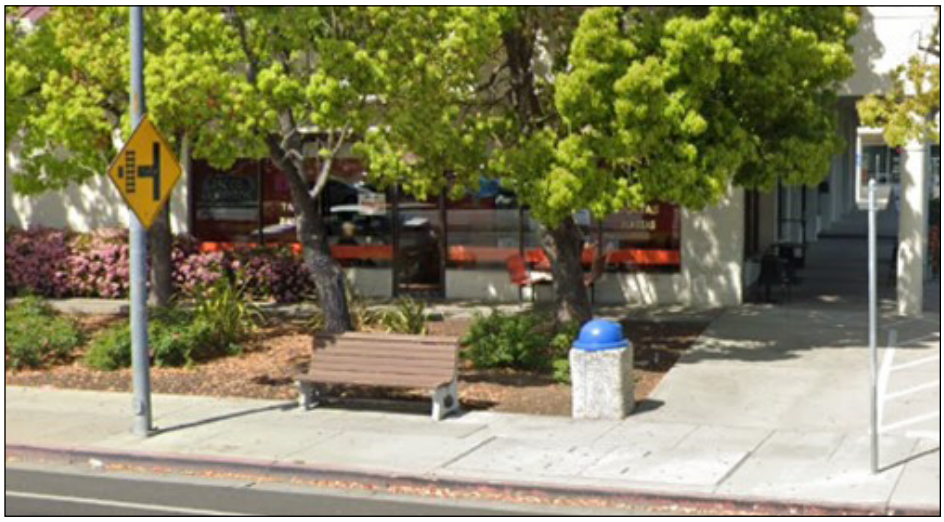


Figure 3.16
Winchester Boulevard and Camden Avenue southbound bus stop

Figure 3.17
Bus stop shelter system at Winchester Station, including transit network map and digital signage

Bicycle and Pedestrian Network

To take a closer look at each street surrounding Winchester Station, this section will provide an overview of existing conditions around the station area in terms of access points for pedestrians and bicycles. Winchester Station is positioned along several high traffic volume corridors including Winchester Boulevard, Campbell Avenue, Bascon Avenue, and Hamilton Avenue.

The station is also well positioned along nearby Los Gatos Creek, where a multi-use path provides a protected bicycle and pedestrian connection. There is substantial bicycle and pedestrian infrastructure already surrounding the station. However, there are also opportunities to close gaps in the sidewalk network and to create more protected bike connections.

Pedestrian Access Conditions

The City of Campbell currently does not have a file of existing sidewalk data. However, a network of sidewalks, crosswalks, pedestrian signals, and curb ramps currently provide access for pedestrians along Winchester Boulevard and along the west side of South Winchester Boulevard within the project vicinity. In contrast, pedestrian access along the east side of South Winchester Boulevard is limited as sidewalks are not provided between Camden Avenue and approximately 135 feet north of Hacienda Avenue.[2]

Generally, sidewalks are provided throughout the surrounding neighborhood streets, varying in width, with some more narrow than others. Sidewalks are somewhat present on the east side of Camden Avenue, which is lined with industrial uses, although not continuous and in poor condition. The City of Campbell recently completed a resurfacing project on Camden Avenue from Winchester Boulevard to the end, and the east-west segment of Camden Avenue to Dell Avenue. This includes sidewalk, driveway, and curb and gutter work on the east side of the street. This is an important street as it provides a connection to the Los Gatos Creek Trail.

The figure below reflects the 10-minute walkshed surrounding the station. The 10-minute walkshed indicates the distance that a pedestrian could travel in any direction if they left from the station within 10 minutes. The walkshed is approximately a half-mile radius surrounding the station, with the exception of not traveling far eastward, as pedestrian travel is inhibited by SR 17.

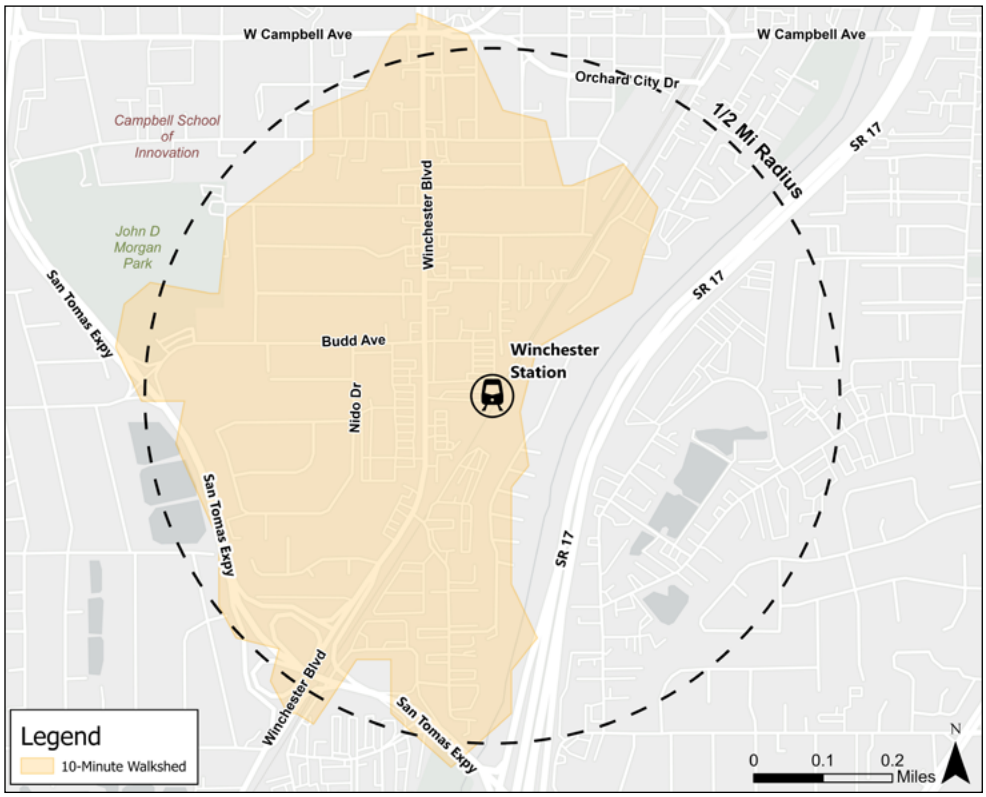


Figure 3.18
10-Minute Walkshed

[2] Final Transportation Impact Analysis for 2575 & 2585 S Winchester Blvd. City of Campbell, February 22, 2021.

Bicycle Access Conditions

The figure below reflects the existing and proposed bicycle network surrounding Winchester Station. Currently, Class III bike routes provide most of the existing connections for bicyclists surrounding the station, particularly within the residential area to the west of the station. Class II bike lanes exist along Campbell Avenue, portions of Winchester Boulevard, Hamilton Avenue, and portions of Curtner Avenue. Lastly, a Class I multi-use path exists along the Los Gatos Creek and provides a protected bike and pedestrian connection from outside the mile and half-mile radii.

In addition to these existing connections, several more protected options are proposed as part of the San Jose Better Bike Plan and City of Campbell General Plan. Bikeways proposed as part of these plans include Class IV protected bikeways along high traffic volume corridors including along the San Tomas Expressway, Hamilton Avenue, and Bascon Avenue. There are several Class II bike lanes proposed as well, including along Camden Avenue and Hamilton Avenue. Lastly, Class III bike routes are proposed in the residential areas to the east of Winchester Station to provide safer bicyclist connections along lower traffic speed streets.

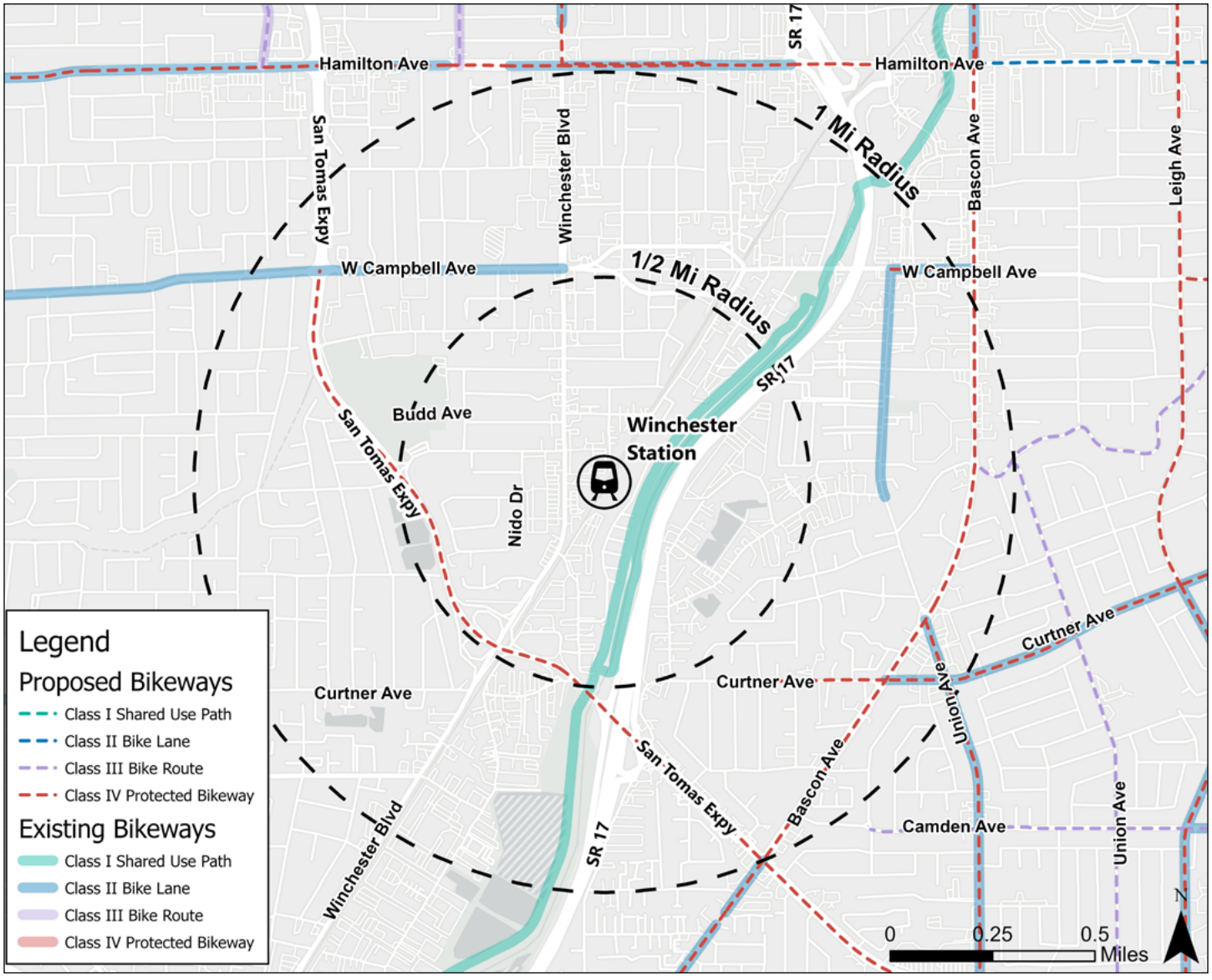


Figure 3.19
Winchester Station Existing and Proposed Bikeways

The figure below indicates the 10-minute bikeshed surrounding the station. The 10-minute bikeshed indicates the distance that a bicyclist could travel in any direction if they left from the station within 10 minutes. The bikeshed is approximately a three-mile radius and is supported by an extensive bicycle network surrounding the station. Impedances to bicycle travel indicated in the bikeshed may include gaps in the bicycle network, street connectivity, or steeper topography making it harder for bicyclists to travel further.

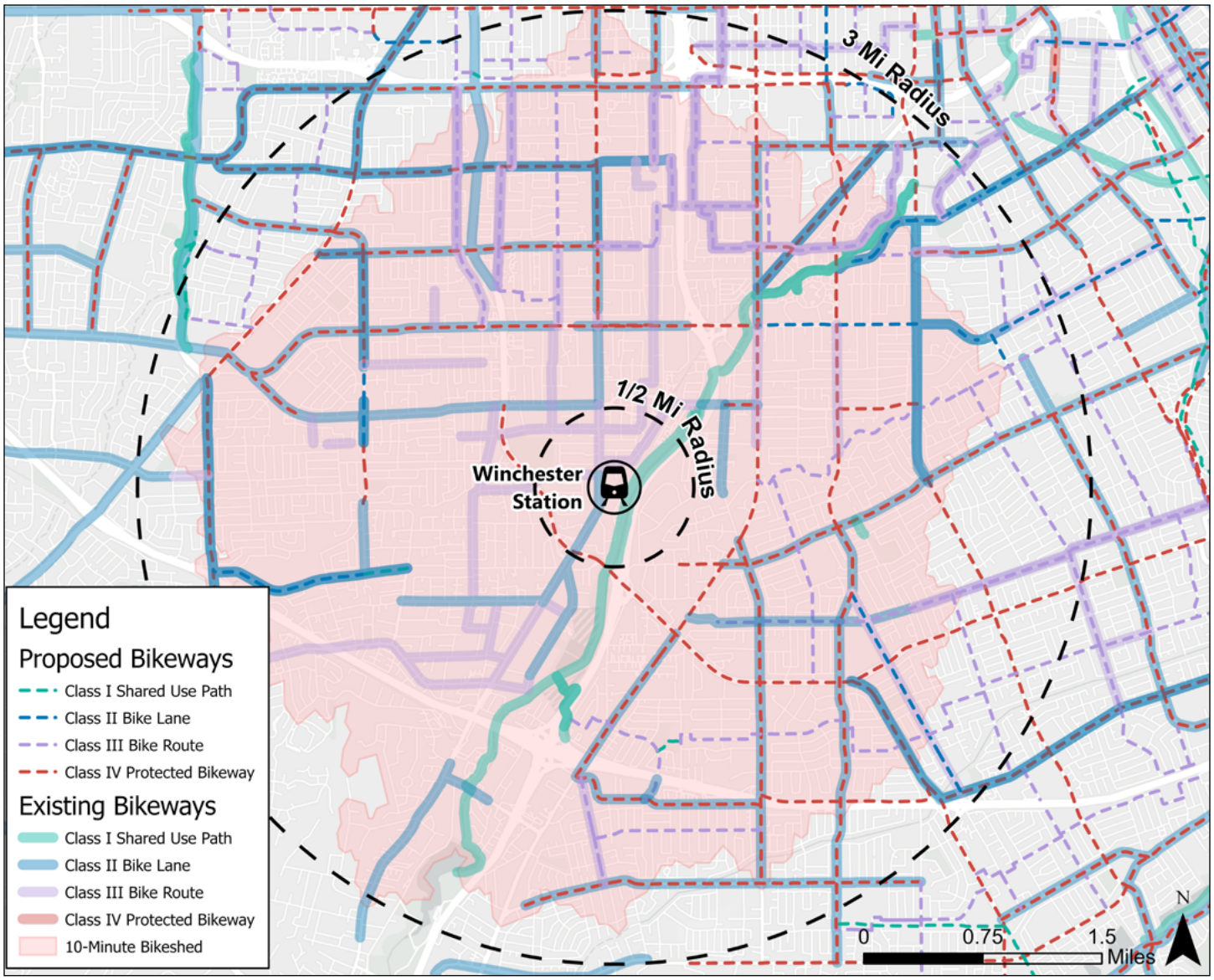


Figure 3.20
10-Minute Bikeshed

Bicycle and Pedestrian Collisions

The figures below reflect instances of pedestrian and bicyclist collisions and severity within a half mile of Winchester Station between 2017 and 2021. The figure below indicates that a total of eight pedestrian collisions occurred within a half-mile radius of Winchester Station, with most collisions resulting in severe injury or death. Collisions mostly occurred in the residential area to the west of Winchester Boulevard and on Winchester Boulevard, as well as along Orchard City Drive near Downtown Campbell.

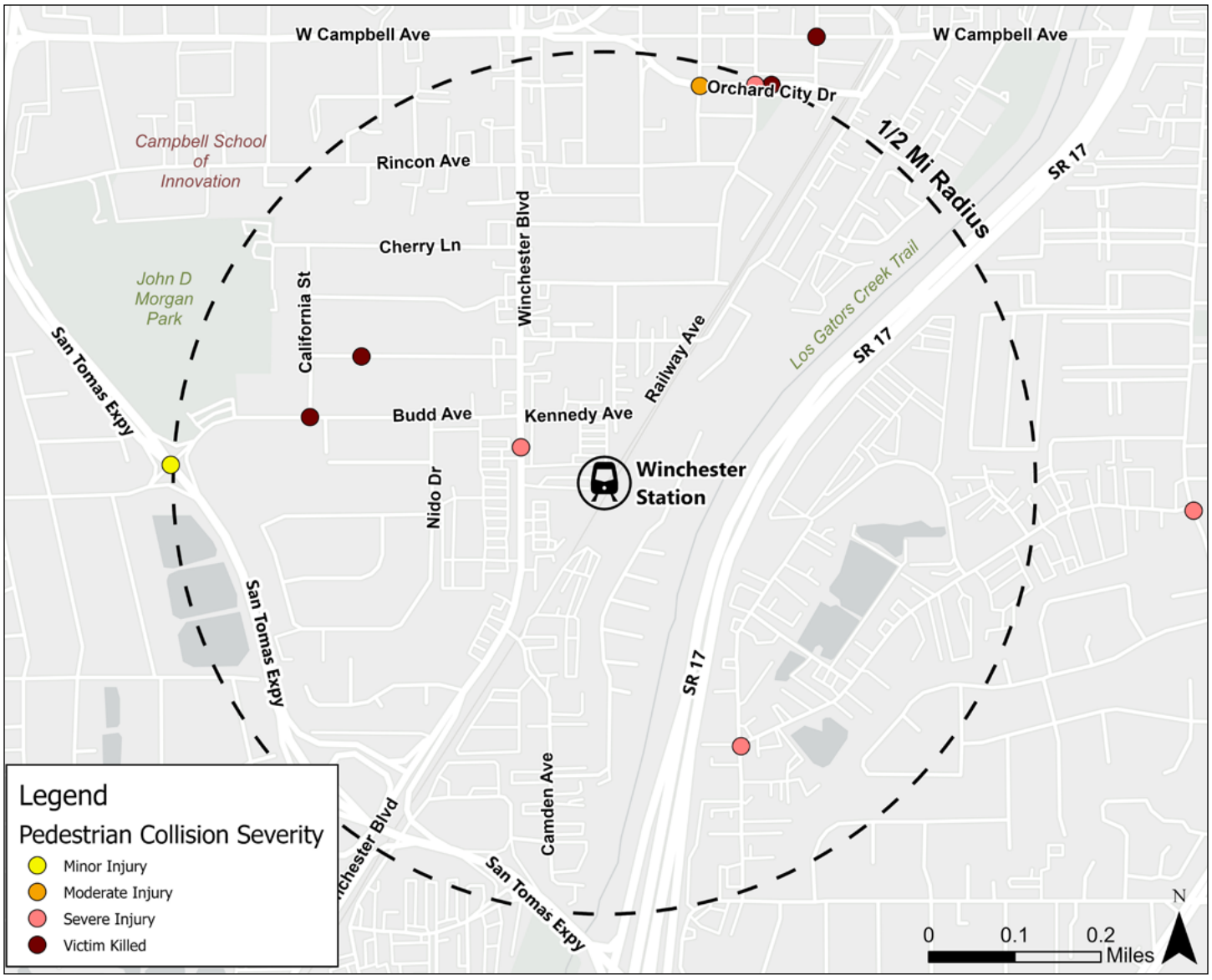


Figure 3.21
Pedestrian Collision Severity (2017 – 2021)

The figure below indicates that a total of six bicyclist collisions occurred within a half-mile radius of Winchester Station during the same time frame, with all collisions resulting in death or severe injury. Collisions mostly occurred along Winchester Boulevard and near the intersection of SR 17 and San Tomas Expressway. These locations are corridors with high vehicular travel speeds and volumes.

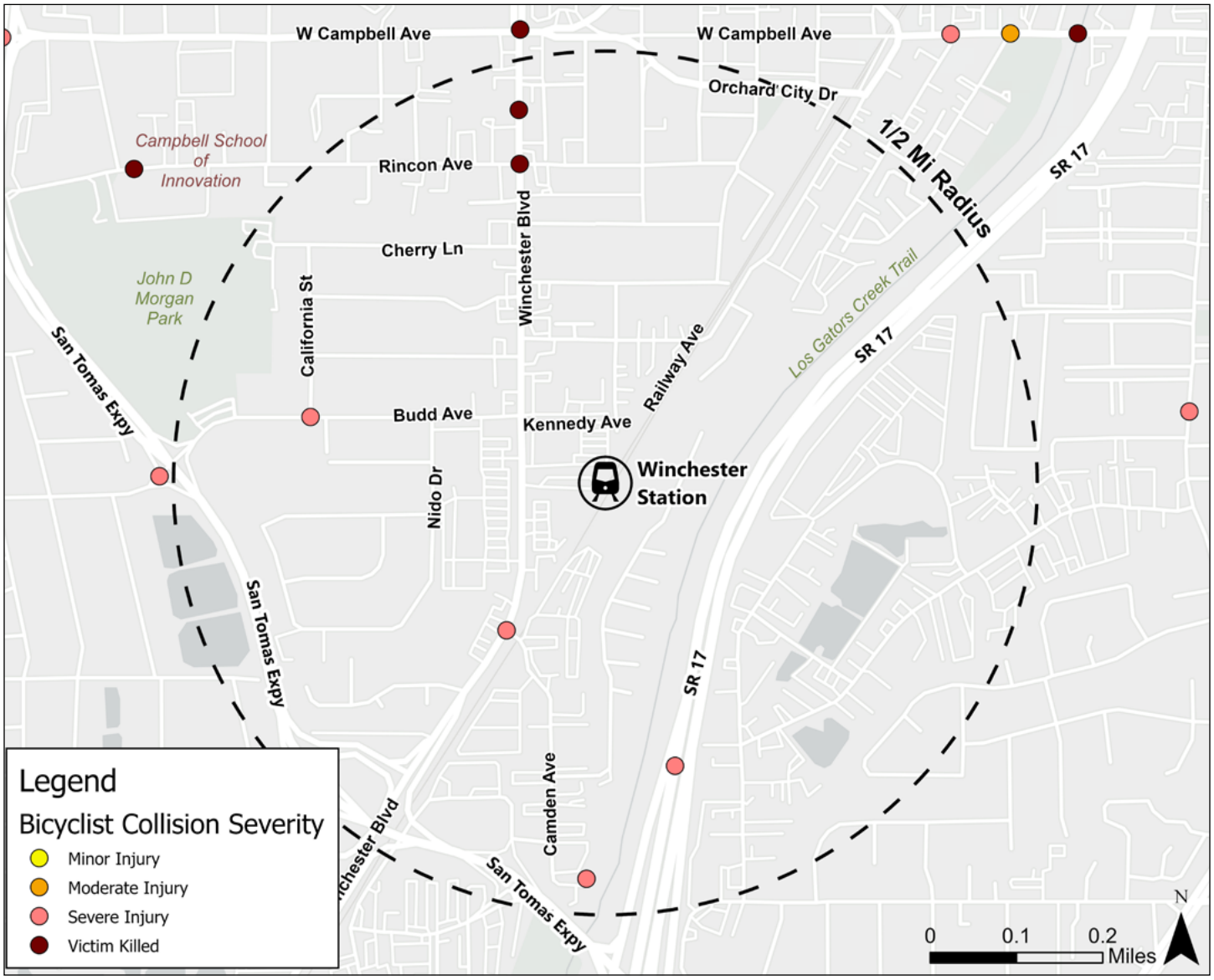


Figure 3.22
Bicyclist Collision Severity (2017 – 2021)

3.3 Walk Audit Results

To further assess on-the-ground conditions for bicyclists and pedestrians, a walk audit was conducted on September 18, 2023. Community groups and stakeholders around the station areas were invited to participate in the walk audit for this study. The walk audit was conducted with 11 participants, including VTA staff and the consultant team. The station area was divided into quadrants with a designated walking route for each, for a total of four designated walking routes. Walk audit routes are reflected below.

Participants noted barriers, strengths, and observations on a map. The locations of barriers, strengths, and observations are included on the map below.

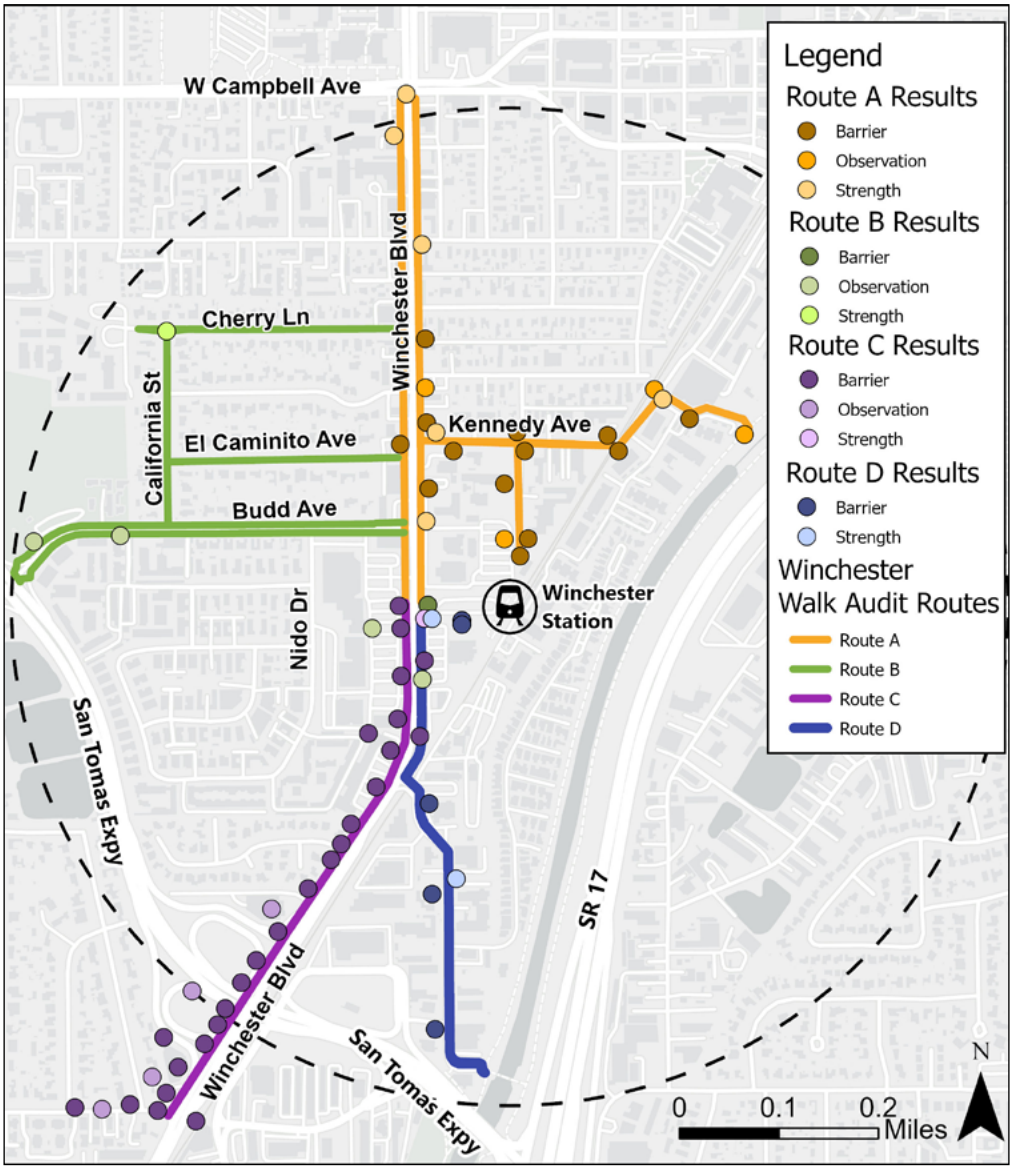


Figure 3.23
Walk Audit Results

3.3.1 Walk Audit Key Findings

The most common themes emerging from the walk audit results are summarized as follows:

Barriers:

- There are several sidewalk gaps and narrow sidewalks.
- There is a lack of ADA ramps where some sidewalks resume and at pedestrian crossings at rail track.
- There is a lack of a safe bike lane at station on Winchester Boulevard.
- Vehicular speeds on Winchester Boulevard are high.

Strengths:

- There is good tree canopy and shade present on some pedestrian paths.
- There are wide sidewalks in some areas with pleasant walking conditions.

Opportunities:

- It is common for pedestrians to pass through the shopping center, bank, and Cinelux. This could be considered as a future access improvement.
- Wayfinding signage can be made more consistent and frequent to direct travelers from the Los Gatos Creek Trail to the station.
- The existing parking lane on Winchester Boulevard could be turned into a bike lane. The impact of on-street parking availability on St. Lucy Parish Church should be explored before removing the parking lane.

Figure 3.24
Walk audit participant evaluating conditions along Railway Avenue

3.3.2 Walk Audit Survey Summary

Participants also filled out a post-walk survey to rate various elements of their experience walking in the Winchester Station area from 1-5 in four categories: safety, aesthetics, accessibility, and transfers.

The safety category of the survey included nine metrics related to lighting, pedestrian and bicyclist infrastructure, security, eyes on the street, and general perception of safety. Participants gave most metrics a score above 3.0. Station lighting scored highest in the 'safety' category, followed by adequate safety buffers for pedestrians on walkways. Walk audit participants noted that they felt safe in the station area, however, gave the 'eyes on the street' metric the lowest score. Winchester Station is located on Winchester Boulevard, a corridor with high vehicular traffic speeds and volumes, but limited pedestrian or bicyclist activity. This might contribute to a feeling of isolation that pedestrians experience along this corridor as they approach Winchester Station. In contrast, an activated streetscape would make Winchester Boulevard a welcoming entryway into Winchester Station for all travelers, particularly pedestrians and bicyclists.

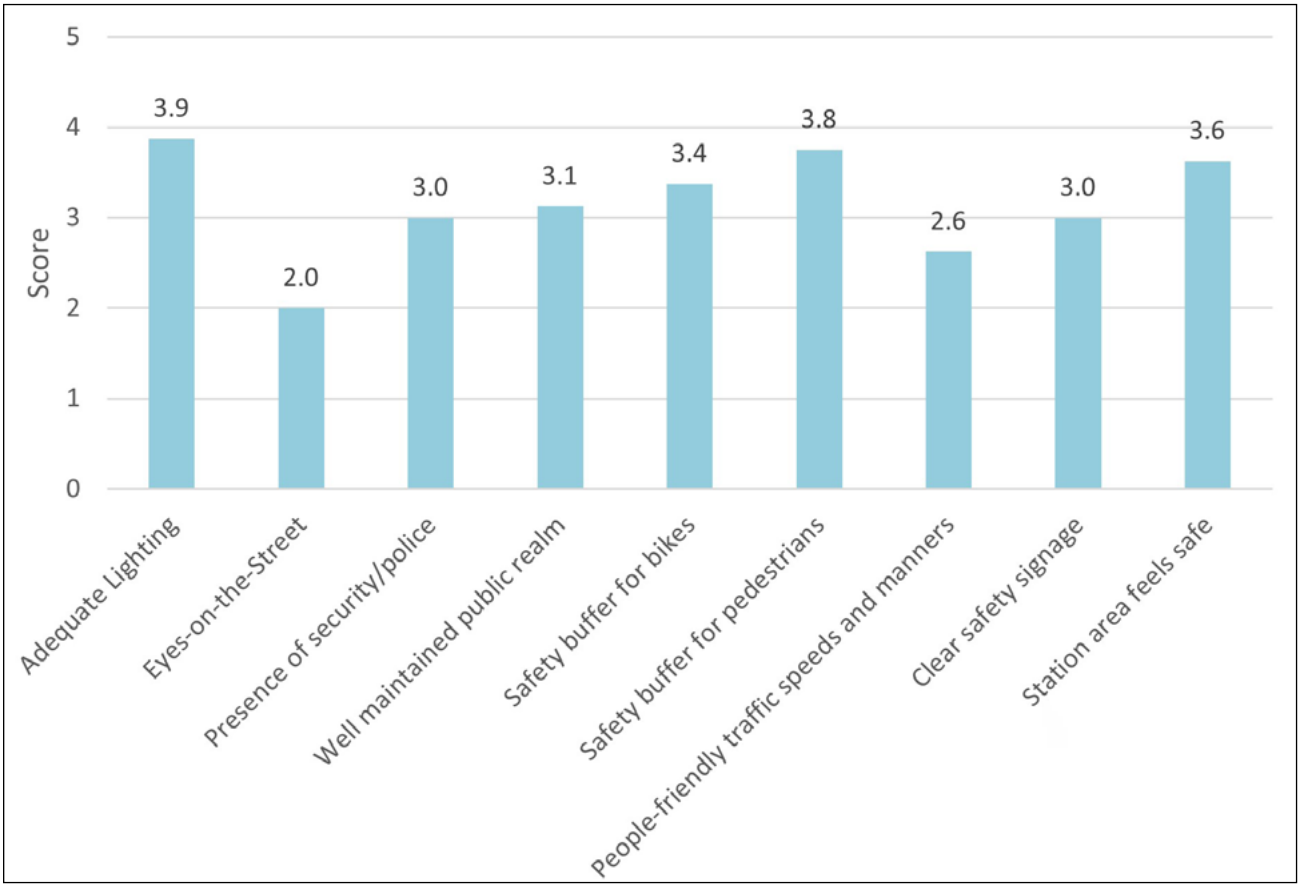


Figure 3.25
Safety Scores

The 'aesthetics' category included five metrics related to sense of place, landscaping, the placement of pedestrian amenities, and an overall pleasant station area experience. Scores in this category varied, with the highest score being given to pleasant landscaping along corridors surrounding Winchester Station, followed by limited pedestrian-unfriendly elements. In contrast, walk audit participants noted that pedestrian amenities were not placed strategically throughout the station area. More specifically, some participants noted that additional pedestrian scale wayfinding signage directing toward the station would help to make the station area easier to navigate. Participants also noted a need for public restrooms at the station outside of the station platform. Participants highlighted that there is currently no restroom for travelers visiting the station via bus.

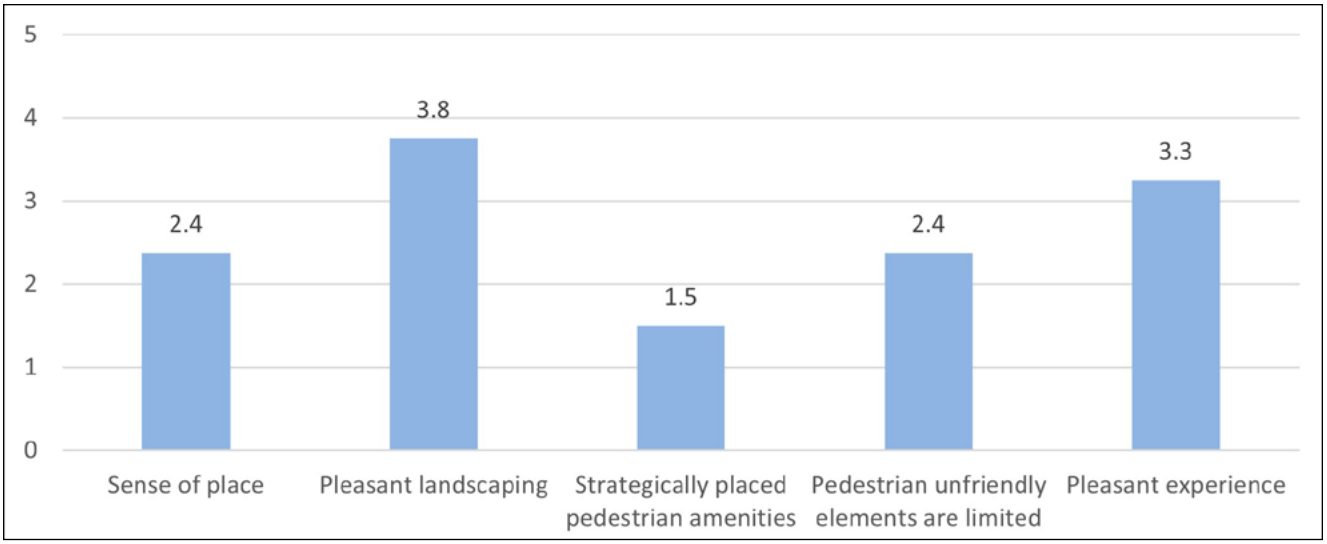


Figure 3.26
Aesthetic Scores

The 'accessibility' category included seven metrics related to sidewalks, pedestrian crossings, bicycle infrastructure, signage, curb ramps, and pick up-drop off activity. The overall accessibility of the Winchester Station area was scored highly. Metrics scored highest included sufficient curbs and curb ramps, streamlined pick up-drop off activity, and high-quality sidewalks. The lowest scoring metric was 'clear-safe pedestrian crossings. A new high visibility crosswalk is recommended at the station in the proposed TOD plan, however, participants noted that additional high visibility crosswalks on Winchester Boulevard connecting to the station entrance would be helpful. This would make the station entrance safer and more comfortable for pedestrians entering the station, particularly as vehicular and transit traffic is expected to increase with the new TOD.

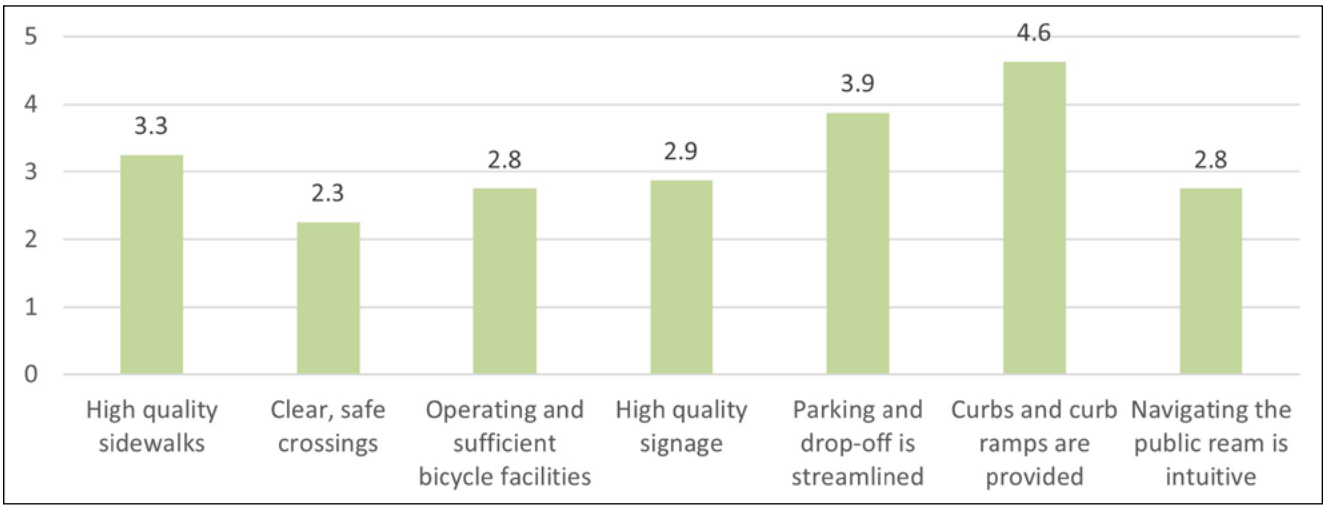


Figure 3.27
Accessibility Scores

The 'transfer' category included five metrics related to clear transit transfer signage, real-time information, shared seating and waiting areas, reduced distances for transfers, and seamless transfers between transit modes. The 'reduced distances for transfers' metric scored highest, indicating that travelers did not have to travel far to reach their next connection and creating a more seamless transfer experience. In contrast, participants noted that the transfer experience could be improved if real-time information and additional signage was more available. Additionally, travelers noted that additional wayfinding at the PUDO location would help direct them to the station platform easier.

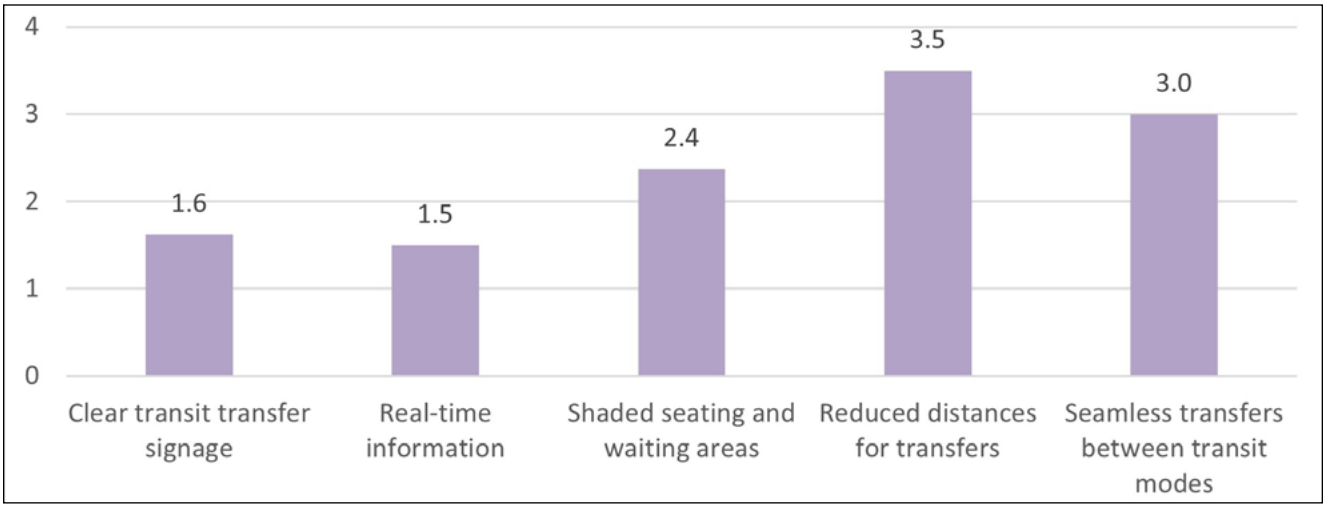


Figure 3.28
Transfer Scores

The figure below reflects the average score for each of the four categories measured on the walk audit survey. The 'transfer' category was scored highest, followed by station accessibility. In contrast, station aesthetics were scored lowest and offer an opportunity for improvements to be recommended in later tasks of the station access study.

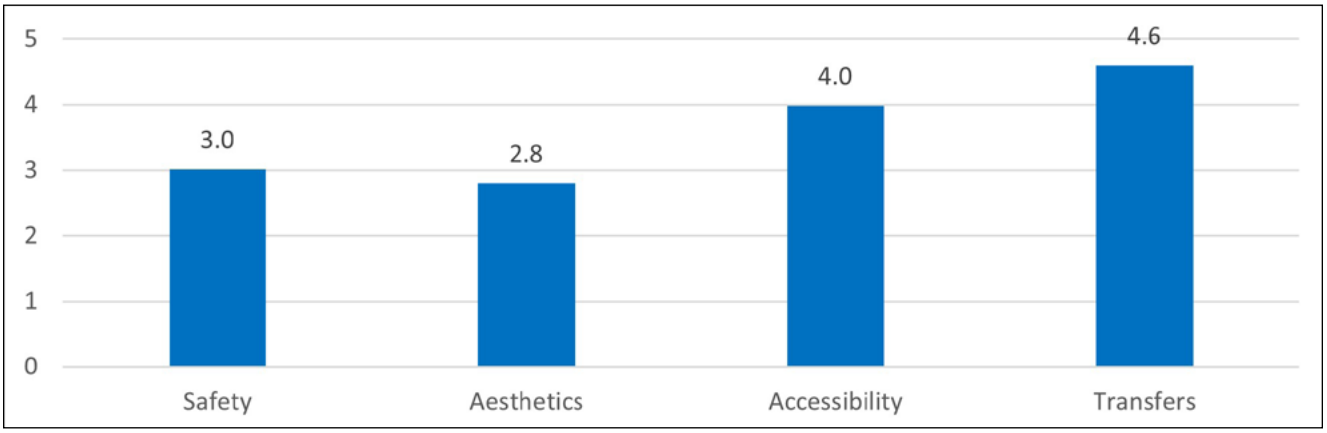


Figure 3.29
Average Scores

3.4 Summary Analysis of Access Patterns and Issues

This section highlights the access patterns and issues present in the Winchester Station study area based on the review existing conditions detailed in this report. These access patterns and issues reflect conditions that will be further explored in the Needs Assessment for development of proposed access improvements.

Pedestrian Network Gaps

While there are some pedestrian pathways provide generally pleasant walking conditions, there are a number of currently missing sidewalks. Sidewalks throughout the study area commonly consist of varying widths. There is also a lack of ADA curb ramps commonly where sidewalks resume and where the light rail crosses roadways. A large portion of the population lives in the southwestern quadrant, where transit coverage is limited and convenient pedestrian connections are currently lacking due to the street network around the station. San Tomas Expressway bisects the neighborhood to the west, and the rail right-of-way and SR-17 create a divide between the station and the neighborhood to the east.

Additionally, one of the closest entrances to the Los Gatos Creek Trail from the station is located at the end of Camden Avenue, which is a street with poor pavement conditions and missing sidewalks and curb ramps, including at the rail right-of-way. The other entrance is located north of the station off of Railway Avenue, which also requires crossing the rail right-of-way. These entrances are generally far from the station, and in the case of the Railway Avenue entrance to the trail, the Downtown Campbell station is currently more convenient to get to. Industrial Street could provide an easier connection from the station, but it currently ends in a cul-de-sac next to St. Lucy Parish. The parcel in between the station and cul-de-sac is currently occupied by industrial uses.

Lack of Consistent and Frequent Wayfinding Signage

Generally, the area lacks wayfinding signage to the station. The station fronts Winchester Boulevard near commercial uses and its entrance is generally small. Not much wayfinding signage is found along Winchester Boulevard to help travelers find the station or make them aware that it exists.

Wayfinding signage to the trail exists but branding of the trail is inconsistent in both the name of the trail and signage design. For example, standard green street signs along Camden Avenue identify the trail as the Par Course Bike Trail, while a standard brown sign at the trail entrance identifies the trail as the Los Gatos Creek Trail.

Auto-Centric Travel on Winchester Boulevard

Winchester Boulevard is currently the only access point to the station for all modes of travel. The road consists of two northbound lanes, two southbound travel lanes, and a turn lane with a southbound Class II bike lane and northbound sharrow. A median is present between the station and Camden Avenue. However, the corridor is dominated by high speeds of vehicular traffic. This has resulted in several collisions resulting in death or severe injury. Bicycle and pedestrian collisions can be reviewed in Section 3.2.2.3 of this report.

A parking lane exists on northbound Winchester Boulevard near the station. Site visits to the station found the parking lane generally underutilized. This may be an opportunity to utilize the roadway space to upgrade the existing sharrow into a bike lane.

Considerations for Access with Future Development in the Study Area

As development occurs at the station site, it is important to acknowledge that there will be limited access for vehicles, buses, and waste management vehicles, as they all currently share one driveway for entering and existing the station.

Additionally, further east-west connection between the station and surrounding neighborhood should be considered, especially in light of future housing element opportunity sites across Winchester Boulevard and south of the station. Public and semi-private spaces will need to be explored carefully to provide access to the station for the public while development options are explored. This could also help connectivity issues preventing residents who actually live closer to Winchester Station, but are more conveniently located to the next LRT station due to existing barriers.

4 Future Conditions

The following section provides an analysis of future anticipated conditions for the Winchester Station site. This includes preliminary TOD site plans and proposed recommendations from other projects and plans for the study areas.

4.1 Winchester Station TOD - Preliminary Site Plan

The proposed TOD will include 90 residential units, with residential/transit parking on the ground floor to replace all current parking on the site, and residential units on the top levels. The TOD will be located on the northern half of the current site, with a two-way roadway and new transit loop with plaza. The TOD layout includes 52 parking stalls and four motorcycle parking spaces in the parking garage and a transit plaza on the northeastern portion of the site that will include five additional bike lockers, bike racks, and additional seating. A residential vehicle gate that will allow bi-directional vehicle flows in and out of the parking garage is proposed at the top of the transit plaza for residents of the new residential development. Additionally, one way vehicle travel is proposed in the station commuter parking garage, with vehicles entering from the top of the transit loop through a separate driveway adjacent to the residential driveway. These vehicles will travel through the parking garage and exit near the station entrance before turning onto Winchester Boulevard. A pick-up and drop-off (PUDO) zone on the lower east corner of the site next to the bus bays is also available for vehicles that are not parking at the site. Additionally, the roadway will facilitate bi-directional vehicular travel for transit vehicles. This proposed site plan is reflected in the figure below.

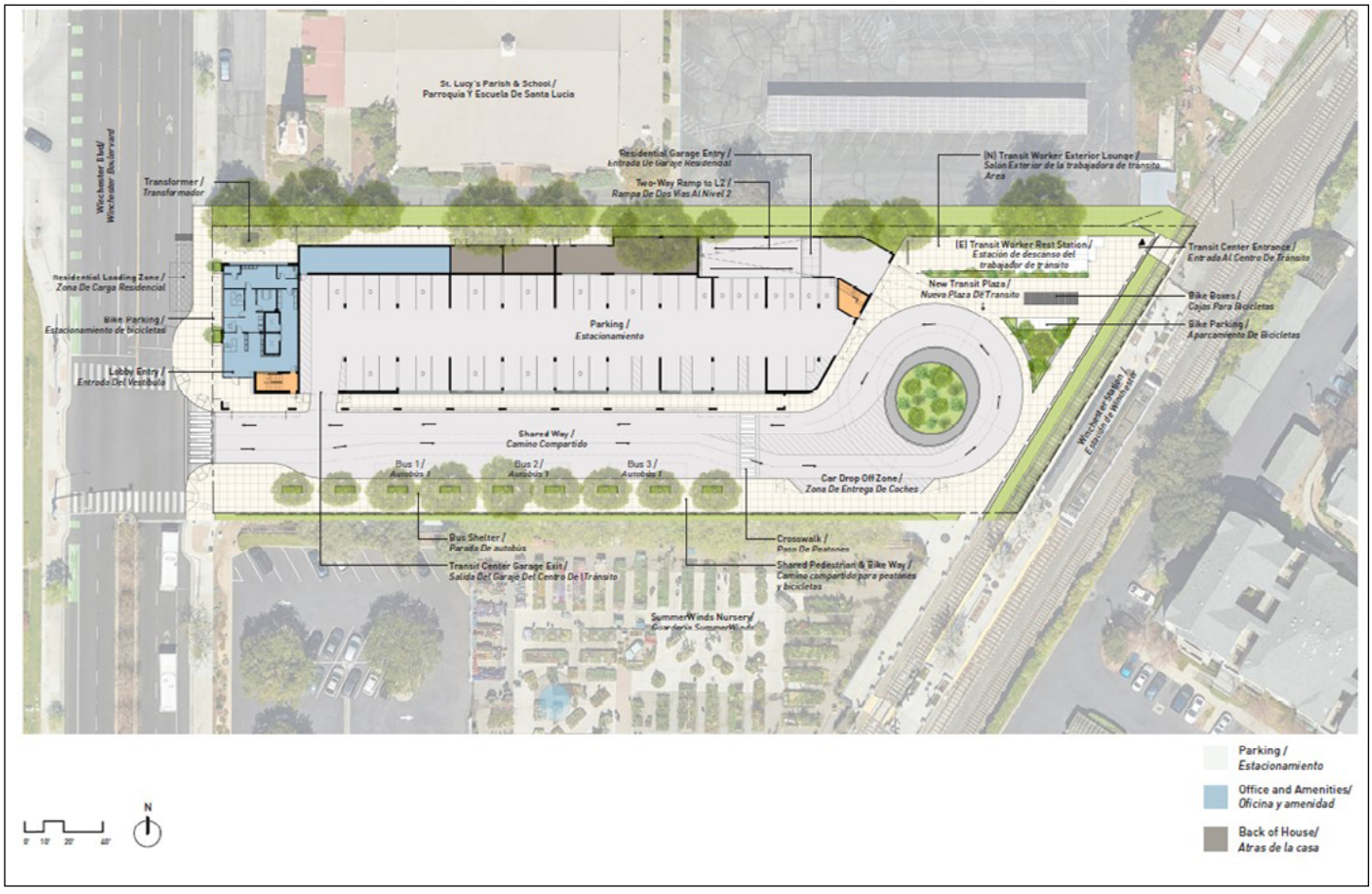


Figure 4.1
Proposed Winchester Station Layout

4.2 Circulation Plan

The proposed TOD improvements at Winchester Station must facilitate access for multimodal travelers. The figure below shows how vehicles, buses, bikes, and pedestrians are proposed to enter and exit the site. Specific access routes, according to the most recent TOD site plan, are also described by mode below:

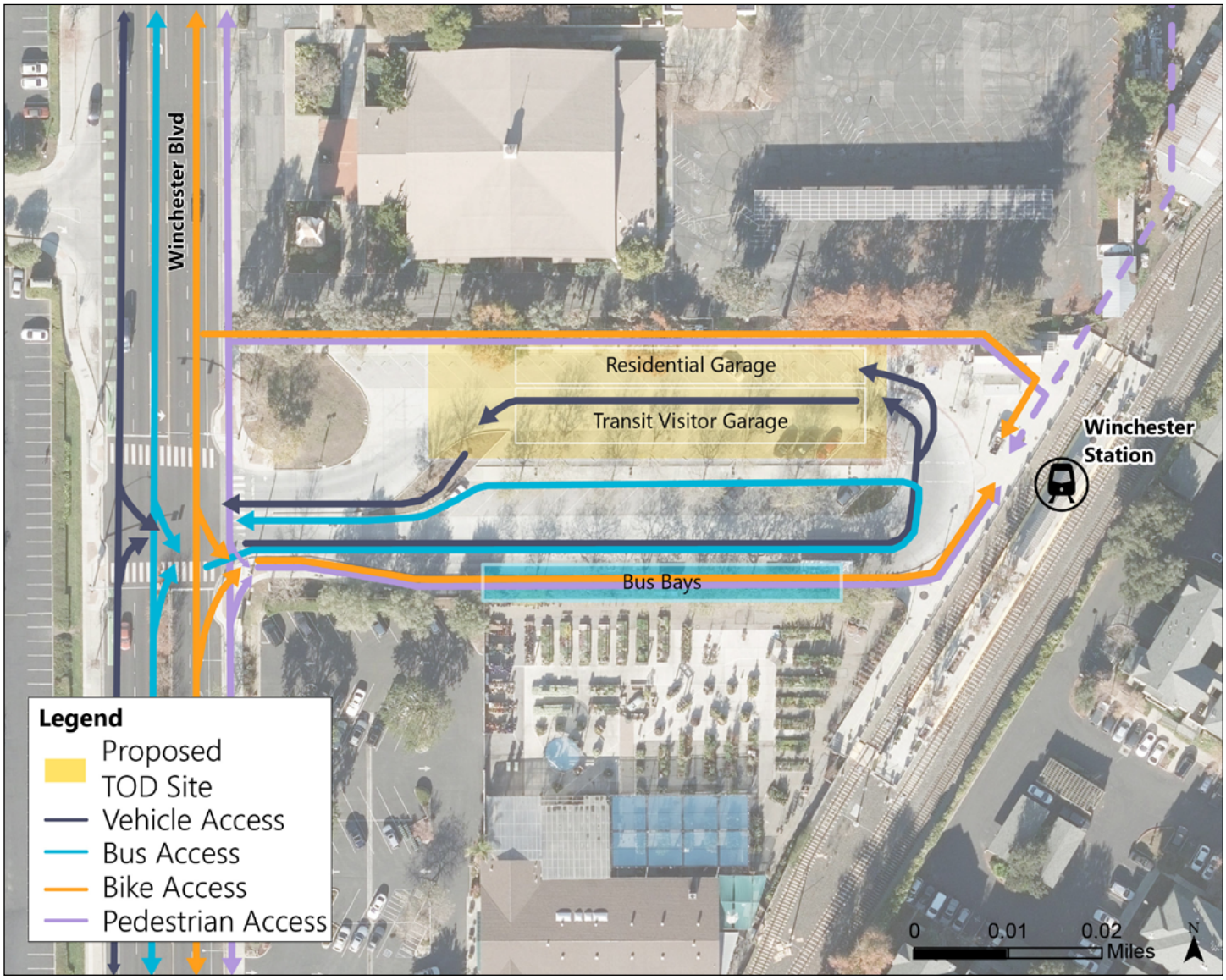


Figure 4.2
Winchester Station Multimodal Circulation

- **Vehicle Access:** Vehicles can access the station via northbound and southbound Winchester Boulevard. Vehicle access is one-way at the station, traveling in a loop into and out of the transit visitor garage. There is a separate parking garage entrance for residents at the station.
- **Bus Access:** Buses can access the station via northbound and southbound Winchester Boulevard. Buses will stop at the bus bays located on the southern edge of the site, without blocking vehicles trying to access the parking garage. Buses will turn around at the transit loop at the top of the station and return onto Winchester Boulevard.
- **Bike Access:** Bikes can access the station via northbound and southbound Winchester Boulevard. Bikes can travel along a separated multi-use path located at the southern-most edge of the site before arriving to bike parking at the station. Bikes can also use this pathway in the opposite direction to return onto Winchester Boulevard when leaving the station.

- **Pedestrian Access:** Pedestrians can access the station via northbound and southbound Winchester Boulevard. Similar to bicyclists, pedestrians can walk along a separated multi-use path located at the southern-most edge of the site to reach the station platform. Pedestrians can also use this pathway in the opposite direction to return onto Winchester Boulevard when leaving the station. Pedestrians could potentially also enter and exit the station via a pathway extending from Industrial Street in the northeast corner of the station if an easement is attained through St. Lucy's Parish Church, which is recommended by this study.

Circulation Considerations

The proposed site plan will improve multimodal access for all station visitors, as well as residents who will live in the proposed TOD residential development. The proposed flow of vehicle travel will help to mitigate conflicts between vehicles and buses, as well as between vehicles and bicyclists entering and exiting the station. However, given the tight space limitations of the station entry road adjacent to the parking garage, vehicles may slow bus movement as they queue to exit the parking garage. Queuing may be exacerbated by the timing of the stop light at the intersection outside of the station. Additionally, bi-directional travel lanes could be added to the proposed multi-use path that runs along the station entry road to help bicyclists and pedestrian identify their safest path for entering and exiting the station. It is not clearly indicated how bicyclists should enter back onto Winchester Boulevard if they are leaving the station.

Lastly, the limited space availability at Winchester Station limits access for vehicle PUDO activity. An offsite PUDO location could be implemented along Industrial Street to provide additional curb space for station visitors. Improvements to circulation should facilitate access to key destinations, including the shopping center across Winchester Boulevard, and supporting active transportation connections in the study area. Specific pedestrian and bicycle, transit, and vehicular access needs will be further described in Section 6.

4.3 Proposed Projects

In addition to the anticipated development described in the previous section, this access study includes consideration of roadway or access improvements that have already been proposed by other local or regional plans, as reviewed in Section 3 of this plan. This section further summarizes key projects proposed within these plans to be incorporated into this access study's recommendations.

4.3.1 San José Better Bike Plan 2025

The City of Campbell is currently seeking funding opportunities to develop a multimodal transportation plan to address bicycle needs in the city. The Better Bike Plan 2025 of the neighboring City of San José includes improvements connecting to Campbell, such as a Class IV bikeway on Winchester Boulevard, San Tomas Expressway, and along Bascom Avenue. These additional connections provide more efficient regional connections for commuters traveling longer distances to reach the station. Additionally, these proposed protected bikeways run along corridors with high vehicle volumes and speeds and will therefore improve bicyclist level of comfort and safety. This in turn could attract more commuters to travel to the station via bicycle. Another protected bikeway along Budd Avenue would also provide a more efficient east-west connection for bicyclists traveling to the station.

4.3.2 Housing Opportunity Sites

The City has also identified several housing opportunity sites as part of the housing element. More specifically, the selected housing opportunity sites include medium density residential, neighborhood mixed use, medium-high density mixed use, medium-high density mixed-use, high density mixed-use, commercial corridor mixed-use, and transit-oriented mixed-use. Transit-oriented mixed use is proposed to the west of Winchester Station at the current Safeway Plaza and at the parcel directly south of the station, while medium-high density mixed use is proposed to the east of the station, east of SR 17. Housing Opportunity Sites are reflected in the figure below.

Access should be streamlined between Winchester Station and the housing opportunity sites located to the west and south of Winchester Station. More specifically, east-west access should be enhanced for bicyclists and pedestrians traveling between the station and the TOD housing or surrounding neighborhood. There is also opportunity to implement additional pathways to cut through the TOD development to minimize travel distances and further streamline bicyclist and pedestrian access.

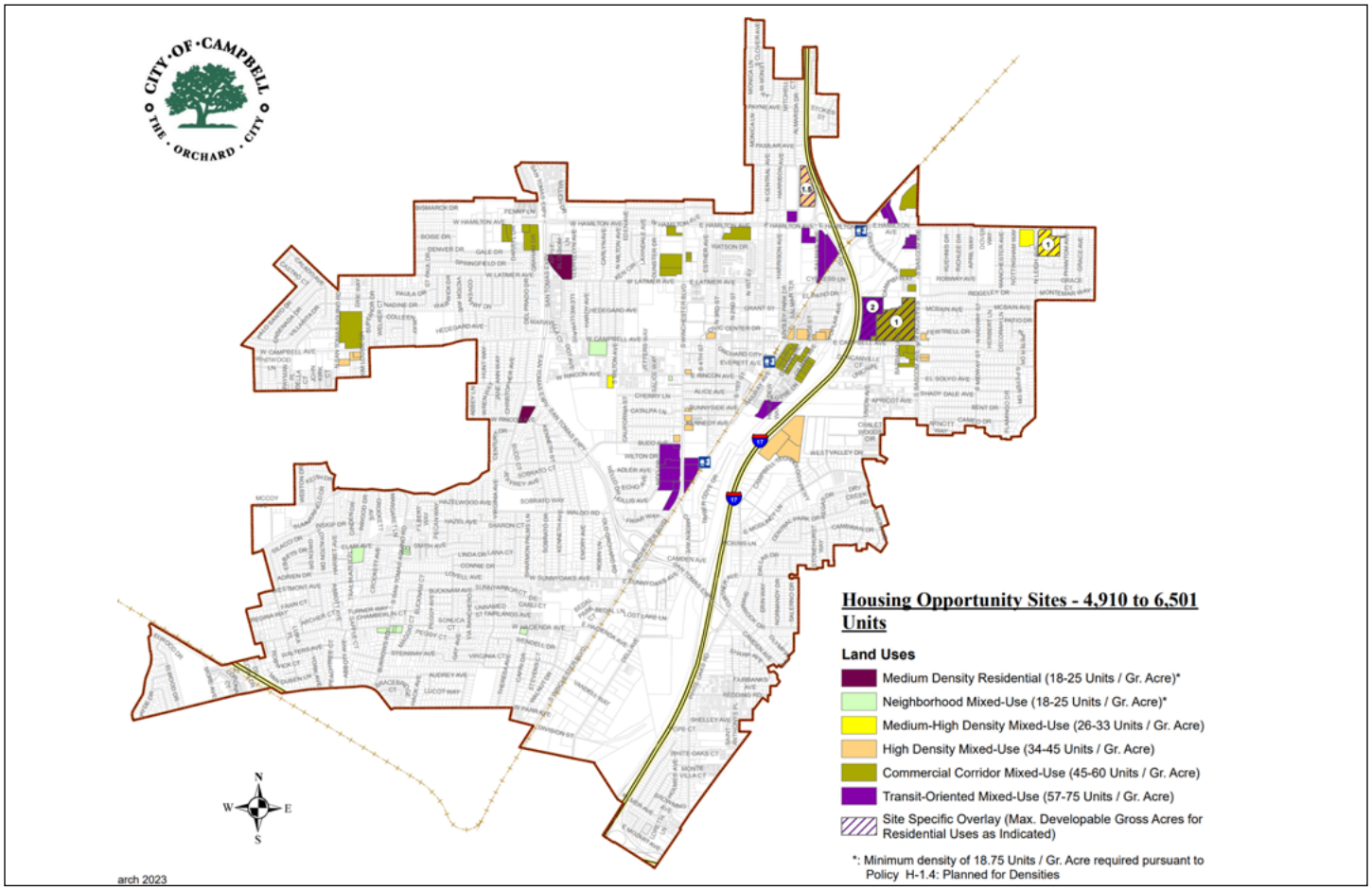


Figure 4.3
Housing Opportunity Sites

5 Community Engagement

Prior to this study, VTA held two public meetings regarding the development of TOD at the station. The first was a community meeting held in January 2022. Following the selection of developer partners Related California and Path Ventures in June 2022, VTA held a Meet the Developer meeting in January 2023. Feedback during these meetings regarding access to the station included the following:

- There should be more seating while waiting for the bus.
- The approach to Winchester Station is poor due to the busy street.
- The crosswalk light at the station entrance has a long wait and the traffic lanes don't feel safe to cross.
- Winchester has wide streets, very high speeds, and inattentive drivers. The traffic lights do not favor pedestrians.
- The station could use improvements to make it nicer like the Downtown Campbell Station.
- It would be nice to have a walking path to the station and a pedestrian overcrossing, as it is hard to get to the station if you are on the other side of SR 17.

Community engagement for this access study included two rounds of both in-person and online outreach. The first round was intended to gather information about on-the-ground conditions at the station and challenges regarding access to the station. The second round was intended to obtain feedback from stakeholders, the community, and agency staff regarding the first draft of access improvements for the station area. Outreach events consisted of the following:

Round 1:

- Walk audit with community members
- Pop-up events near the station
- Online survey, available in English, Spanish, Vietnamese, Chinese, Korean, and Tagalog
- Technical Advisory Committee meeting #1

Round 2:

- Pop-up events near the station
- Online survey, available in English, Spanish, Vietnamese, Chinese, Korean, and Tagalog
- Technical Advisory Committee meeting #2

5.1 Walk Audit

Walk audits are conducted to assess on-the-ground conditions for pedestrians and bicyclists. Community-based organizations, local residents, City and VTA staff, and the TOD developer team were invited to participate in the walk audit for this study on September 18, 2023. The results of the walk audits are discussed in Section 3.3 and were incorporated into the needs assessment for this study.

Figure 5.1
Walk audit orientation

5.2 Pop-Up Events

Pop-up events were held during both rounds of engagement. During the first round of engagement, three pop-up events were held at locations around Winchester Station between August 7 – August 13, 2023 to capture local residents and station users. The pop-ups aimed to identify current barriers to station access and engaged over 205 community members.

The second round consisted of four pop-up events around the stations between November 13 – November 19, 2023 and engaged over 215 community members. Boards displaying the draft improvement recommendations were presented on boards and allowed participants to vote on which improvements they would like to prioritize or suggest other improvements. Results from these pop-up events were incorporated into the needs assessment and proposed improvements for this study and are presented in Appendix A.

Figure 5.2
Pop-up event at the Campbell Farmer's Market

5.3 Online Survey

Online surveys were deployed during both rounds of engagement using the Survey Monkey platform. The surveys coincided with the timing of in-person pop-ups and the content mirrored the in-person pop-up materials. The surveys were available in English, Spanish, Vietnamese, Chinese, Korean, and Tagalog. QR codes to the survey were also distributed during in-person engagement so that community members could provide their feedback at their convenience. The first round's survey was deployed between August 1, 2023 and August 31, 2023 and received 81 respondents. The second survey was deployed between November 6, 2023 and December 3,2023, and received 48 respondents. Detailed results from these surveys are in Appendix A.

5.4 Technical Advisory Committee Meetings

A Technical Advisory Committee (TAC) was organized for this study, consisting of VTA staff, City of Campbell Public Works and Community Development Departments, and the TOD developer team. Two TAC meetings were held during the course of the study to provide study updates and gather feedback from TAC members. The first meeting was held on September 28, 2023, and provided an overview of the access study, the existing conditions reviewed by the consultant team, and a summary of the first round of engagement.

The second meeting was held on December 7, 2023, and provided a summary of the needs assessment and future conditions analysis conducted by the consultant team, proposed access recommendations, and a summary of the second round of engagement. Both meetings included an opportunity for TAC members to provide their input on the consultant team's findings and recommendations, as well as provide updates on VTA or City projects that may impact the access study. Feedback was incorporated into the needs assessment and overall recommendations of the study.

5.5 Summary of Key Findings

After the first round of community engagement conducted both in person and online, several key themes emerged.

- Most users use Winchester Boulevard to get to the station. Most users walk or roll to the station, and many also drive.
- Wide, busy street crossings near the station are a major concern for station access.
- The safety and comfort of the station itself is a concern for many users. Effort should be made to increase sun & weather protection at the station as well as adding light.
- Many users do not feel safe walking or biking through sparsely populated areas to get to the station.
- Users expressed concern over unreliable transportation to the station and wanted to see improvements in bus and transit connections.

After the second round of engagement, the following high-level themes for access improvements emerged from discussions during pop-up events and survey comments:

- There is an overwhelming desire for Class I and Class IV bike connections in the station area with a general sentiment that Class II and Class II bikeways are not safe enough.
- Access to the station from the east side of the tracks is limited and inconvenient.
- Potential riders are deterred by perceived safety and cleanliness issues in that station area, particularly due to a lack of lighting, trash pick-up, and law enforcement.
- The community would like to see gaps filled in both the cycling an dpedestrian infrastructure for a fully connected system, through the addition or upgrade of crosswalks, sidewalks, bike lanes, or new paths.

- The top proposed improvements voted on during this round of engagement included Class IV protected bikeways on Winchester Boulevard, San Tomas Expressway, Campbell Avenue, and Bascom Avenue, and improved lighting on the Los Gatos Creek Trail to the Camden Avenue connection.

These findings have been incorporated into the improvements recommended in Section 7 of this report.

6 Needs Assessment

The existing and future conditions analysis summarized access patterns and issues gleaned from a background literature review, summary of ongoing projects, and data collection analysis. These findings, along with feedback gained from the first round of community engagement and walk audit results, paint a picture of access needs at the stations. The needs summarized in this section were integrated into the proposed access improvements presented in Section 7.

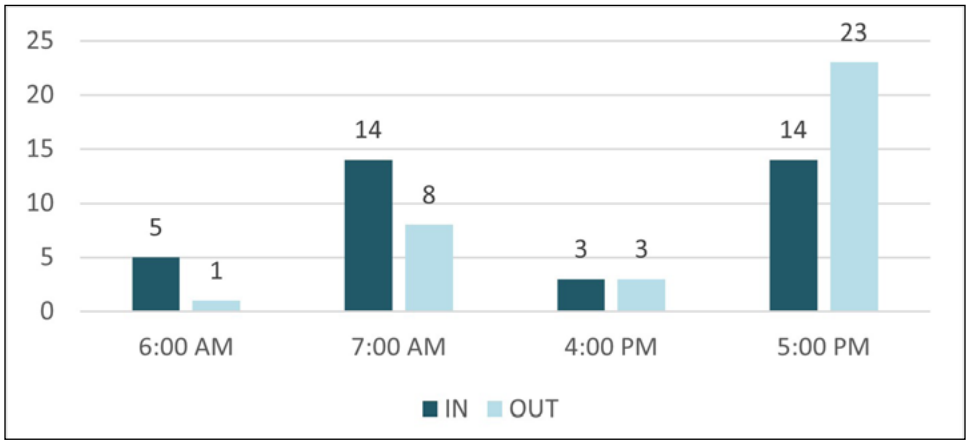
6.1 Mode of Access Results

Mode of access counts were performed at Winchester Station at the driveway where all cars, buses, pedestrians, and buses must enter and exit the station.

6.1.1 Access Counts Summary

The vehicle access counts were conducted on Tuesday, September 12, 2023 including driveway in/out movements. Observation was conducted within the AM peak hours (6-8 am) and PM Peak hours (4-6 pm).

Results indicated that generally, more vehicles arrived at the station in the morning, with more vehicles exiting the station at 7 AM than at 6 AM. An equal number of vehicles entered and exited the station at 4 PM and more vehicles exited the station than entered at 5 PM.



6.1.2 Mode of Access

Different modes of access were counted at station entrances/access such as:

- Walking
- Bicycle
- Car
- Pick-up/drop-off
- VTA Bus
- Motorcycle
- Scooter
- Skateboard

6.1.2 Mode of Access

Different modes of access were counted at station entrances/access such as:

- Walking

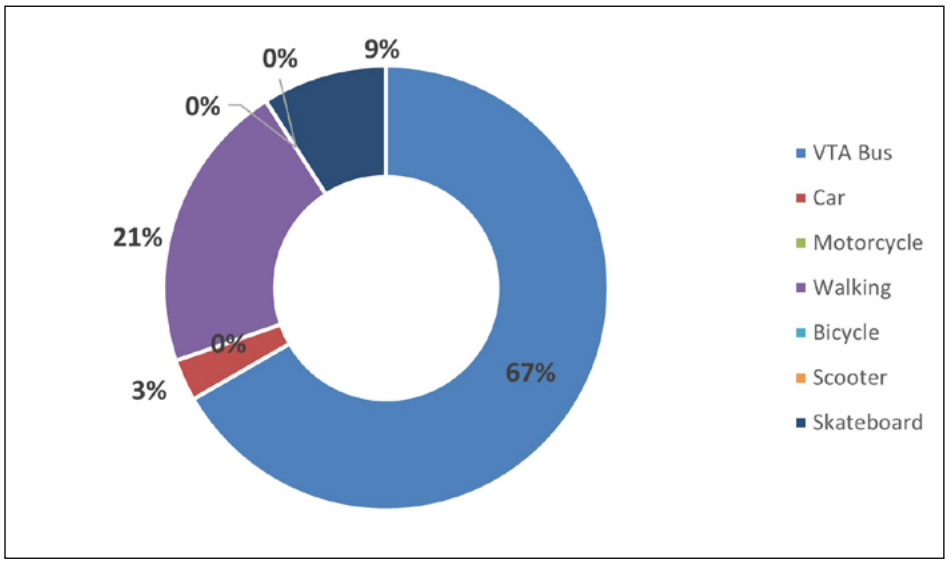


Figure 6.1
Percent of Mode Arriving at Winchester Station

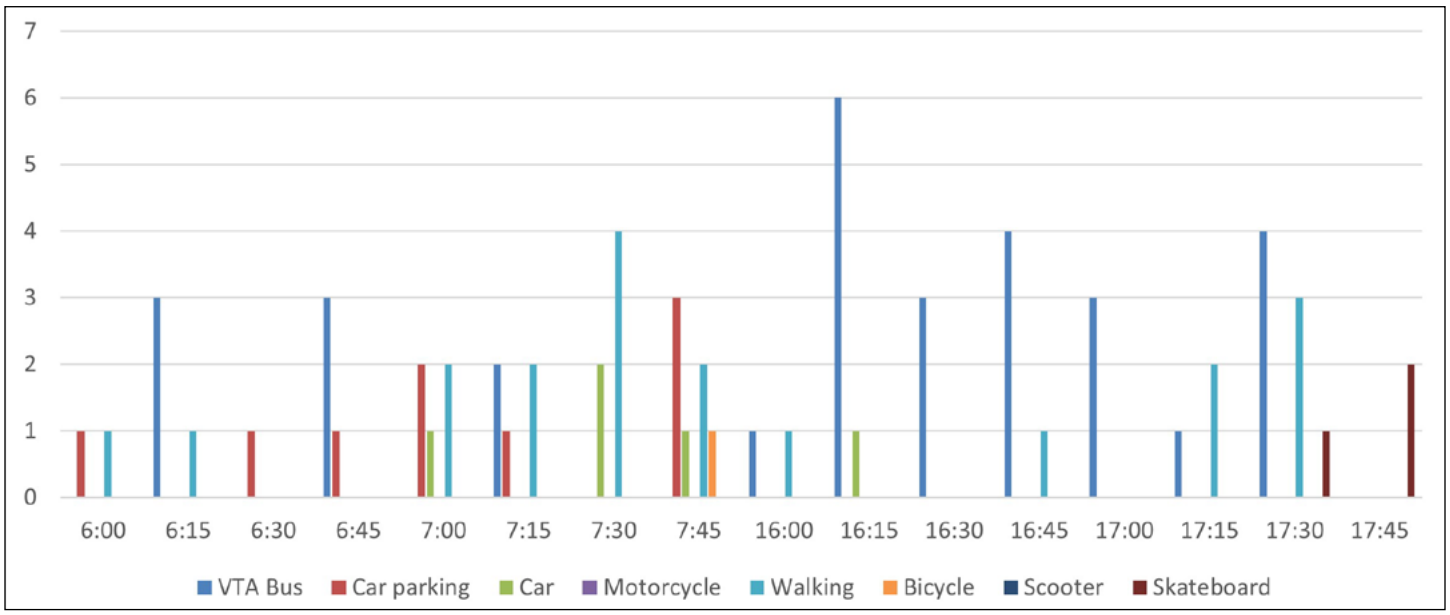


Figure 6.2
Modes of Arrival by Time

6.2 Pedestrian and Bicycle Access Needs

Pedestrian and bicycle access needs were identified through a review of existing conditions and walk audits at the station and within the station area. The needs identified through these analyses shared a common theme that there was a need for improved safety, accessibility, and streetscape conditions. Needs are further detailed below:

- Additional ADA accommodations & ramps connecting to the station.
- Additional, cohesive wayfinding signage.
- Streetscape improvements that contribute toward a stronger "sense of place."
- More strategically placed pedestrian amenities.
- Additional clear, safe crossings would make the area more accessible.
- Improved, clear connections to and from the Los Gatos Creek Trail that would make the trail a more attractive route to the station.
- Safer bicycle and pedestrian connection to the station from the neighborhood east of SR 17.

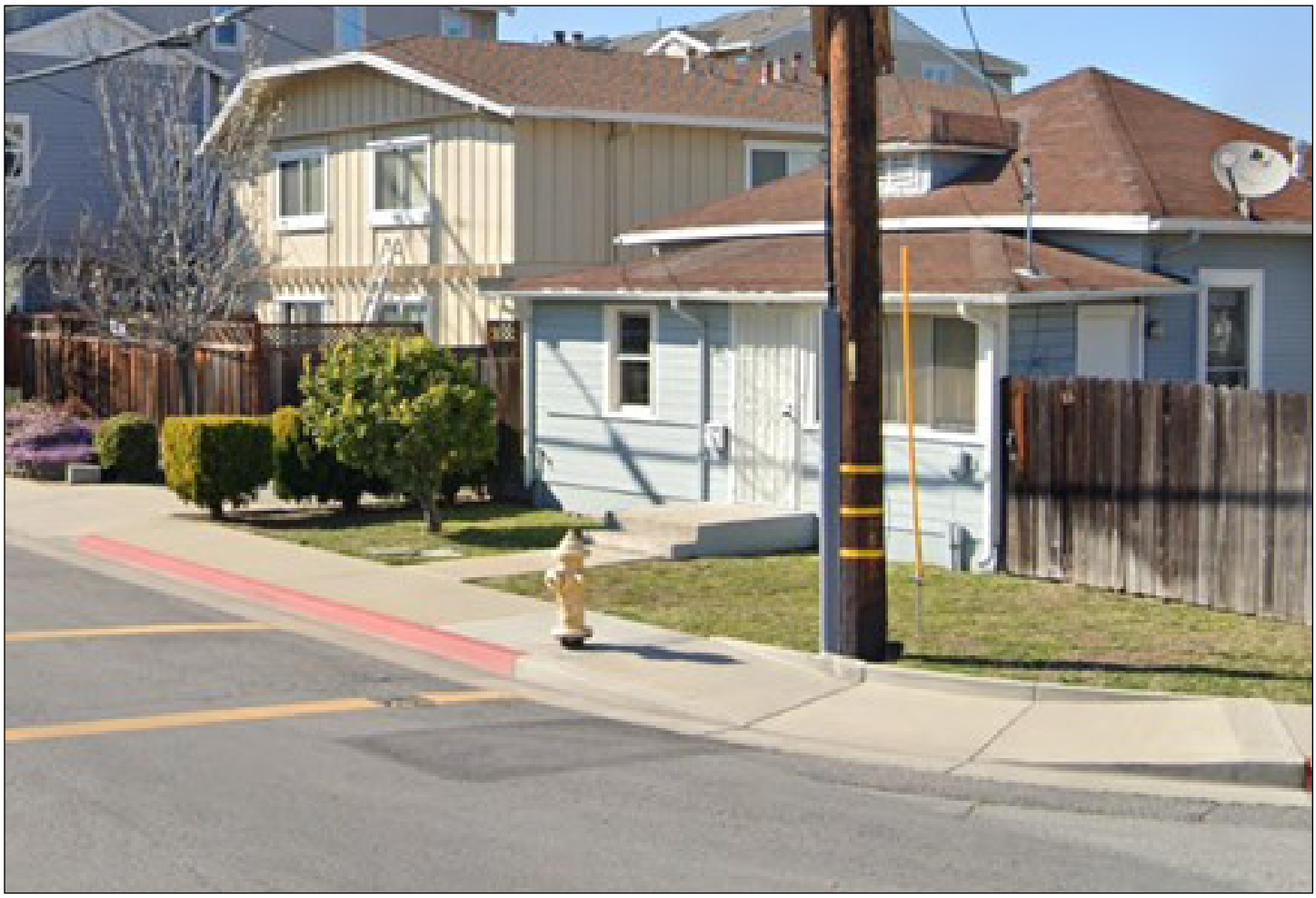


Figure 6.3
Misaligned curb ramp at Kennedy Avenue & Industrial Street

Figure 6.4
Identification signage at the station entrance on Winchester Boulevard

6.3 Transit Access Needs

A review of existing transit access identified that transit is generally accessible in the station area. Most transit needs were related to the transfer experience and to wayfinding. Transit access needs are further highlighted below:

- Real-time transit arrival information at Winchester Station and surrounding bus stations.
- Additional wayfinding signage directing visitors to the station.
- Additional wayfinding signage directing travelers to other modes and key destinations.
- Bus shelters at bus stops in the study area.
- More frequent bus arrivals to bus stops in the study area.

6.4 Vehicular Access Needs

Vehicular access is expected to change significantly with the proposed TOD developments.

- Efficient circulation at Winchester Station, as improvements at the station will induce more demand for personal vehicle and bus access. Efficient circulation will become increasingly important for personal vehicles, buses, and waste management vehicles, as they will all be required to use the same station entrance and exit.
- Additional off-street parking for businesses located along Winchester Boulevard. Additional off-street parking would open right-of-way (ROW) for a protected bikeway along this high vehicular volume corridor.
- Streamlined pickup-drop off access at Winchester Station. Limited ROW at the station makes this challenging and a nearby location may be needed to accommodate this.

7 Proposed Access Improvements

The following section discusses access improvements for the surrounding station area and on-site improvements. The proposed TOD project is expected to increase traffic at the station and within the station area and multimodal access improvements will help to prevent traffic congestion from growing and maximize safety and visibility and safety for active transportation users traveling within the station area.

7.1 Station Area Improvements

Improvements to the station area will support improvements recommended at Winchester Station itself. This section describes pedestrian and bicyclist improvements within the Winchester Station Area, as these users are some of the most vulnerable travelers.

7.1.1 Pedestrian Access Improvements

Pedestrian access improvements are reflected in the table and figure below. Pedestrian improvements recommended to the station area include:

- Widened sidewalks
- Trees, plantings, or landscaping maintenance
- Improved lighting
- Bus shelters
- Repaving or adding new sidewalks
- Landscaped medians
- Accessible curbs
- Directions and signage
- Pedestrian pathway
- Removing porkchop
- Safer crosswalks

Table 1: Pedestrian Access Improvements

ID	IMPROVEMENT	LOCATION	JUSTIFICATION
1	Widen Sidewalk	West Side Of Winchester Blvd: Catalpa Ln – El Caminito Ave	Walk audit participants noted a narrow sidewalk on this segment of Winchester Boulevard.
2	Sidewalk Repaving	East side of Winchester Blvd: Sunnyside Ave – Kennedy Ave	Walk audit participants noted uneven sidewalk on this segment which impedes accessibility.
3	Widen Sidewalk	West side of Winchester Blvd: Friar Way – Camden Ave	Walk audit participants noted a narrow sidewalk along this segment.

ID	IMPROVEMENT	LOCATION	JUSTIFICATION
4	Widen Sidewalk	West side of Winchester Blvd: San Tomas Expy on ramp – San Tomas Expy off ramps	Walk audit participants noted narrow sidewalks and a general uncomfortable feeling with walking along this segment
5	Wayfinding Signage	Winchester Blvd & Campbell Ave	A review of existing conditions and walk audit findings indicated a need for additional wayfinding directing users of all modes to the station from Downtown Campbell.
6	Wayfinding Signage	Winchester Blvd & Kennedy Ave	A review of existing conditions indicated a need for additional wayfinding signage directing bicyclists and pedestrians to the station. Feedback received from pop-up participants cited that a lack of wayfinding and informational signage are a barrier to station use.
7	Wayfinding Signage	Winchester Blvd & Budd Ave	A review of existing conditions indicated a need for additional wayfinding signage directing users of all modes to the station, particularly those coming from the neighborhood to the west of Winchester Boulevard. Feedback received from pop-up participants cited that a lack of wayfinding and informational signage are a barrier to station use.
8	Wayfinding Signage	Shopping center entrance on Winchester Blvd	Recommended to direct users of all modes to the station entrance, based on the TOD Site Plan.
9	Wayfinding Signage	Winchester & Camden Bus Stop on Winchester Blvd	A review of existing conditions indicated a need for additional wayfinding signage directing users of all modes to the station. Feedback received from pop-up participants cited that a lack of wayfinding and informational signage are a barrier to station use.
10	Add Bus Shelter	Winchester & Camden Bus Stop on Winchester Blvd	A review of existing conditions indicated a lack of sufficient shade at this stop.
			Community engagement feedback indicated a need for more shade at transit stops.
11	High Visibility Crosswalk	Winchester Blvd & Camden Ave	A review of existing conditions found collisions at this intersection – crosswalks need to be made more visible for high-speed vehicles.
12	Wayfinding Signage	Winchester Blvd & Camden Ave	Walk audit findings and a review of existing conditions indicated a need for additional wayfinding signage directing bicyclists and pedestrians to the station. This is an important intersection that provides connection between the Los Gatos Creek Trail entrance on Camden Avenue and the station.
13/14/15/16/17	High-Visibility Crosswalk	Winchester Blvd & San Tomas Expy On-ramp	Walk audit participants noted that this segment was uncomfortable to walk, and a higher visibility of pedestrians is needed for vehicles entering and exiting the interchange.

ID	IMPROVEMENT	LOCATION	JUSTIFICATION
18	Pedestrian Pathways	Safeway plaza	A review of existing conditions indicated a lack of east-west connectivity to the station. These pathways are intended to be considered during redevelopment of the plaza (identified as a Housing Opportunity site in the City's Housing Element) in the future to maintain public access for neighborhoods to the west of the station. Similar pathways were mentioned in the Cal Poly SLO study.
			Walk audit participants noted and observed that people tend to cut through the plaza from Budd Avenue to get to the station.
19	Accessible Curb	Kennedy Ave & Industrial St	Walk audit participants noted a misaligned curb ramp and crosswalk at this intersection.
20	High-Visibility Crosswalk	Kennedy Ave & Industrial St	Walk audit participants noted a missing crosswalk at the northern leg of this intersection.
21	Wayfinding Signage	Railway Ave & Los Gatos Creek Trail Entrance	Walk audit findings indicated a need for clear, well-branded wayfinding signage for trail users to the station. Feedback received from pop-up participants cited that a lack of wayfinding and informational signage are a barrier to station use.
22	Wayfinding Signage	Railway Ave & Los Gatos Creek Trail Entrance	Walk audit findings indicated a need for clear, well-branded wayfinding signage for transit users to the trail.
23/24/25	Wayfinding Signage	Camden Ave/San Tomas Expy & Los Gatos Creek Trail	Walk audit findings indicated a need for clear, well-branded wayfinding signage to the station for trail users. Feedback received from pop-up participants cited that a lack of wayfinding and informational signage are a barrier to station use.
26	Improve Lighting	Los Gatos Creek Trail: San Tomas Expy – Camden Ave/ Winchester Blvd	Community members expressed a need for improved lighting along the trail connection from San Tomas Expressway to Camden Avenue. This was the third most voted improvement during the second round of community engagement. Improved lighting along Camden Avenue would also increase pedestrian comfort since the land uses along Camden Avenue are planned to remain industrial.
27	Improve Landscaping	Los Gatos Creek Trail entrance at Camden Ave	Community members expressed a desire for well-maintained landscaping that would make this a more attractive connection to the trail.
28	Add Bus Shelter	Winchester Blvd & Friar Way bus stop	A review of existing conditions indicated a lack of shade and seating at this bus stop.
29	Extend median with refuge for pedestrians	Winchester Blvd & Station entrance	A median extension was suggested by a TAC member to enhance pedestrian safety at station entrance. Feedback from the community during the Meet the Developer meeting prior to this study indicated that the crosswalk at the station entrance did not feel safe to cross due to traffic lanes.
30	Improve landscaping	Camden Ave & San Tomas Expy fence opening	Formalizing this entryway to Camden Ave with landscaping maintenance, signage, and lighting along Camden Ave, would help to make this connection more welcoming for transit users coming from east of SR 17 along San Tomas Expy, especially since San Tomas Expy is proposed to be a Class IV protected bikeway.

Figure 7.1
Pedestrian Access Improvements

7.1.2 Bike Access Improvements

Bike access improvements are reflected in the figure and table below. Bike access improvements aim to improve accessibility, safety, and connectivity to Winchester Station within the half-mile station radius. Bike improvements recommended to the station area include:

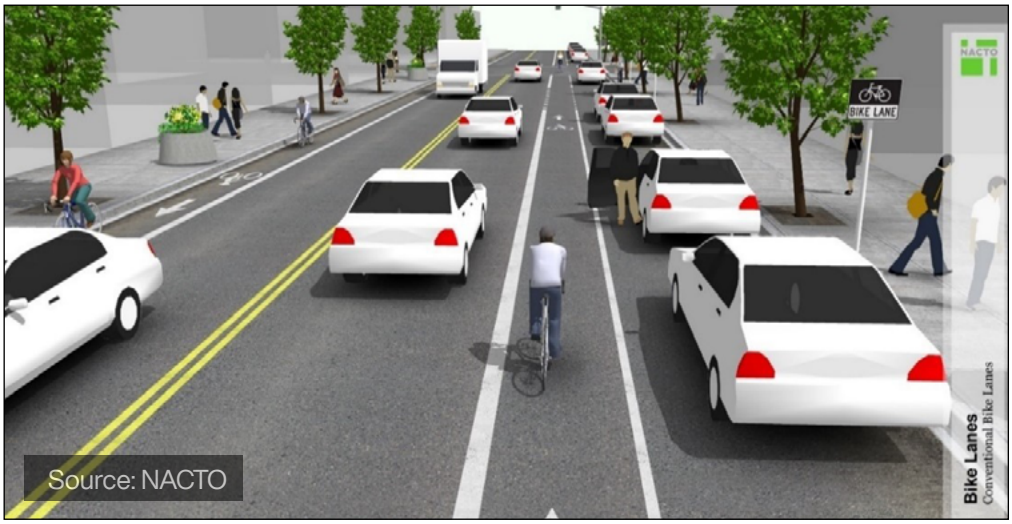
Class I Shared Use Path

Provides a completely separate right of way bike facility for the exclusive use of bicyclists and pedestrians.

Source: City of Santa Cruz

Class II Bike Lane

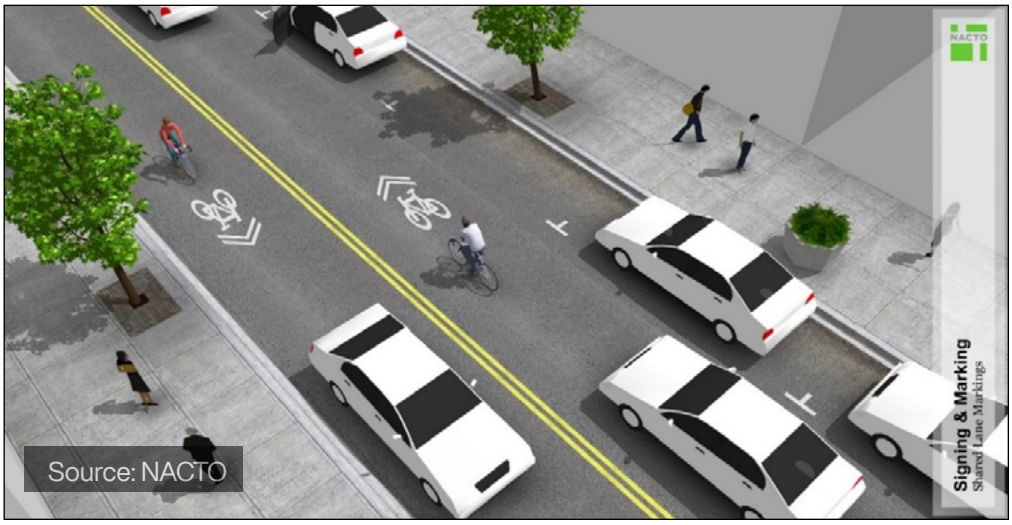
Provides a striped bike lane for one-way bike travel on a street or highway.



Source: NACTO

Class III Bike Route

Provides a signed, shared roadway that allows for shared use between bicyclists and pedestrians or motorists. Typically, bike routes are placed on lower volume roadways.



Source: NACTO

Class IV Protected Bikeway

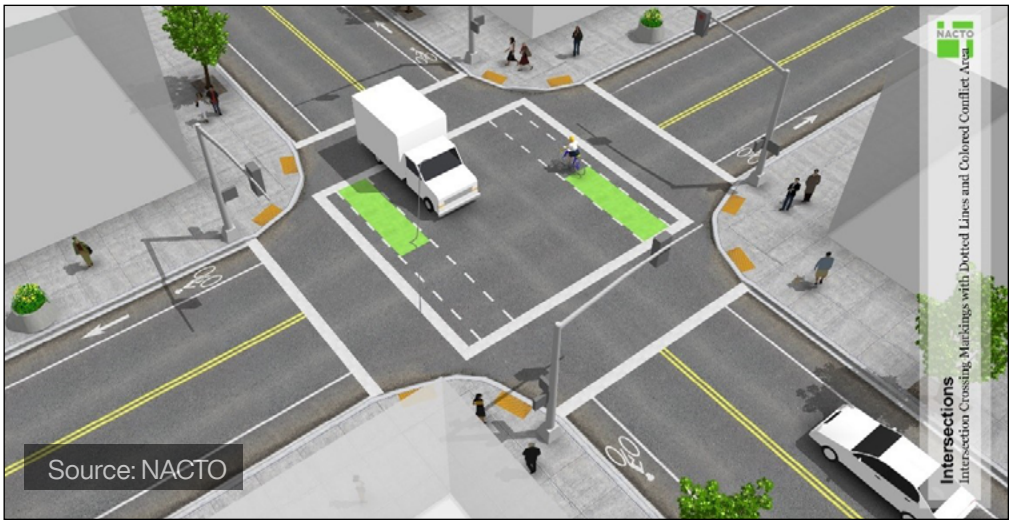
A bikeway that is vertically physically separated from vehicle traffic. Protection and separation from traffic can be provided through grade separation, flexible posts, inflexible barriers, or on street parking.

Two stage left turns

Two stage left turns offer bicyclists a safe way to make left turns at multi-lane signalized intersections from a right-side cycle track or bike lane, or right turns from a left side cycle track or bike lane.

Green bicycle transition lanes

Green transition lanes provide a clear demarcation of the bicyclist through movements across an intersection. This treatment provides improved visibility for bicyclists, leads to more predictable bicyclist and motorist travel movements, and alerts motorists to expect and yield to merging bicycle traffic.



Bike Box

Bike boxes are designated areas at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase.

Source: NACTO

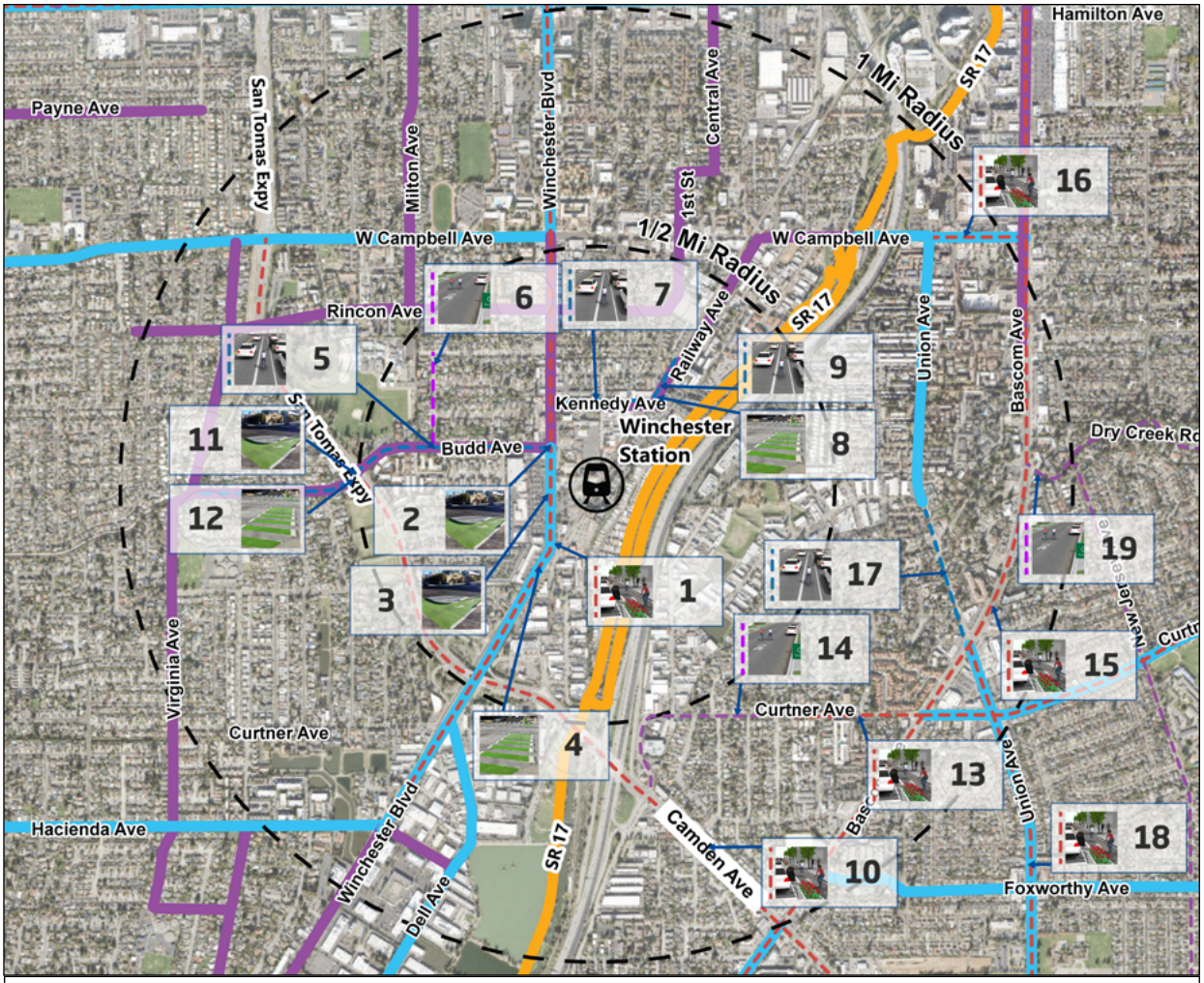
The improvements recommended are listed in the table below. If an improvement has already been recommended as part of a previous or ongoing plan, the plan is referenced in the last column of the table.

Table 2: Bike Access Improvements

ID	IMPROVEMENT	LOCATION	JUSTIFICATION	REFERENCE PLAN
1	Class IV Protected Bikeway	Winchester Blvd	Walk audit participants noted a narrow sidewalk on this segment of Winchester Boulevard. This sentiment was shared by community members who indicated a need for additional protected bikeway infrastructure. This was the top voted proposed improvement during the second round of community engagement.	This project would continue a planned Class IV north of the study area (San José Better Bike Plan 2025) and south of the study area (Los Gatos General Plan 2040). It will also impact the Winchester Boulevard Master Plan
2	Two Stage Left Turn	Winchester Blvd & Budd Ave	A Class II bike lane is proposed along Budd Avenue, which will connect to the Class IV bikeway proposed along Winchester Boulevard. A two-stage left turn will improve bicyclist visibility as they turn from Budd Avenue onto Winchester Boulevard. This will improve bicyclist safety as Winchester Boulevard has been highlighted as a corridor with high traffic volumes and speeds.	N/A
3	Two Stage Left Turn	Winchester Station entrance	The proposed TOD site plan has limited space availability to accommodate all travel modes. A two-stage left turn at the Winchester Station entrance will help to dedicate street space to allow bicyclists to turn more easily and comfortably into and out of the station. This improvement will also make bicyclists more visible to motorists and bus drivers entering and exiting the station.	N/A
4	Green Bicycle Transition Lanes	Winchester Blvd & Camden Ave	An existing conditions review indicated that green bicycle transition lanes would help bicyclists see where the bike lane continues through the intersection. This will also help to prevent drivers from encroaching on bicyclist ROW in the intersection.	N/A
5	Class II Bike Lanes	Budd Ave - Winchester Blvd to Virginia Ave	This improvement would upgrade an existing Class III Bike Route and provide an improved connection for the neighborhood west of the station along a key pathway for access to the station. This will require further study of the feasibility of parking removal to accommodate.	N/A
6	Class III Bike Route	California St - Cherry Ln to Budd Ave	This improvement would add a connection to Budd Avenue from the Campbell School of Innovation and residential streets.	N/A

ID	IMPROVEMENT	LOCATION	JUSTIFICATION	REFERENCE PLAN
7	Class II Bike Lanes	Kennedy Ave - Winchester Blvd to Railway Ave	This improvement would upgrade the existing Class III Bike Route going eastbound and provide an improved connection from Winchester Boulevard along a key pathway for access to the station.	N/A
8	Green Bicycle Transition Lane	Railway Ave & Kennedy Ave	A review of existing conditions highlighted that green transition lanes over the rail tracks would help bicyclists to identify where the bike lane continues as they cross the intersection. This will help to ensure that street space is dedicated to all users of the road and prevent drivers from encroaching into the bike lane.	N/A
9	Class II Bike Lanes	Railway Ave - Kennedy Ave to Los Gatos Creek Trail entrance	This improvement would upgrade the existing Class III bike route and continue the Class II bike lane on Railway Avenue north of the Los Gatos Creek Trail entrance.	N/A
10	Class IV Protected Bikeway	San Tomas Expy - Campbell Ave to study boundary	This improvement was identified in the San José Better Bike Plan 2025 and would provide safer infrastructure for bicyclists on a major corridor that is currently uncomfortable for active transportation users. This was the second most voted proposed improvement during the second round of community engagement.	San José Better Bike Plan 2025
11	Two Stage Left Turn	Budd Ave & San Tomas Expy	A review of existing conditions highlighted that a two-stage left turn at this intersection would help to improve bicyclist visibility, particularly as they cross San Tomas Expressway. This will make the transition from a Class II bike lane on Budd Avenue to a Class IV protected bikeway on San Tomas Expressway more comfortable.	N/A
12	Green Bicycle Transition Lane	Budd Ave & San Tomas Expy	In addition to a need for a two-stage left turn at the intersection of Budd Avenue and San Tomas Expressway, an existing conditions review indicated that green bicycle transition lanes would help bicyclists see where the bike lane continues through the intersection. This will also help to prevent drivers from encroaching on bicyclist ROW in the intersection.	N/A
13	Class IV Protected Bikeway	Curtner Ave - east of Salerno Dr	This improvement was identified in the San José Better Bike Plan 2025.	San José Better Bike Plan 2025

ID	IMPROVEMENT	LOCATION	JUSTIFICATION	REFERENCE PLAN
14	Class III Bike Route	Curtner Ave - Camden Ave to Salerno Dr	This improvement would continue the bikeway planned east of Salerno Drive and connect bicyclists to the planned Class IV on San Tomas Expressway.	N/A
15	Class IV Protected Bikeway	Bascom Ave - Campbell Ave to study boundary	This improvement was identified in the San José Better Bike Plan 2025 to upgrade the existing Class III bike route north of Campbell Ave and continue the bikeway south of Campbell Ave. This segment closes a gap in the bikeway network and connects multiple east-west bikeways in the neighborhood east of SR 17. This was one of the top voted improvements during the second round of community engagement.	San José Better Bike Plan 2025
16	Class IV Protected Bikeway	Campbell Ave - Union Ave to Bascom Ave	This improvement was identified in the San José Better Bike Plan 2025. It closes a gap in the bikeway network by connecting the existing Class II on Campbell Ave east to Bascom Ave.	San José Better Bike Plan 2025
17	Class II Bike Lane	Union Ave - Bascom Ave to E. McGlincy Ln	This segment would close a gap in the bikeway network and connect the existing end of the Class II bike lane on Union Ave to the planned Class IV on Bascom Ave and the planned Class IV on Union Ave south of Bascom Ave. This was one of the top voted proposed improvements during the second round of community engagement.	N/A
18	Class IV Protected Bikeway	Union Ave - South of Bascom Ave	This improvement was identified in the San José Better Bike Plan 2025 to upgrade the existing Class II bike lane along this segment.	San José Better Bike Plan 2025
19	Class III Bike Route	Dry Creek Road	This improvement was identified in the San José Better Bike Plan 2025 and provides a residential connection to the planned Class IV on Bascom Ave.	San José Better Bike Plan 2025



Legend

Proposed Bikeways

- Class I Shared Use Path
- Class II Bike Lane
- Class III Bike Route
- Class IV Protected Bikeway

Existing Bikeways

- Class I Shared Use Path
- Class II Bike Lane
- Class III Bike Route
- Class IV Protected Bikeway

- Bike turning areas
- Bike lane painting for intersections
- Bike box

Figure 7.2
Bicycle Station Area Access Improvements Map

7.2 On-Site Improvements

Minor on-site improvements are recommended to facilitate multimodal access at Winchester Station. Additionally, it will be important for VTA to consider placemaking improvements that complement the access improvements and further enhance and activate the station to make it attractive to existing and potential transit users. On-site infrastructure improvements are reflected in the figure and table below, followed by a discussion of placemaking considerations.

7.2.1 Infrastucture Improvements

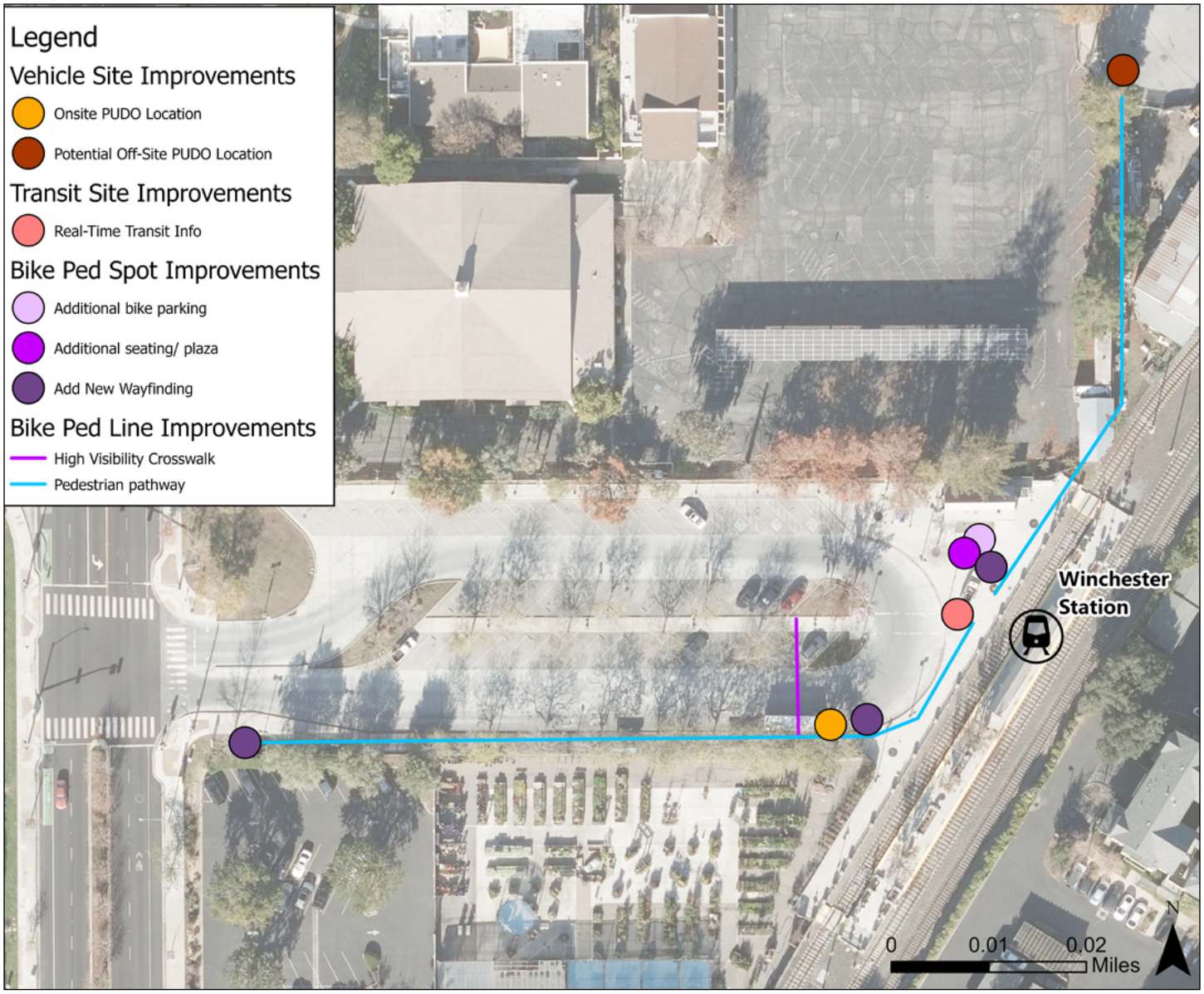


Figure 7.3
Winchester Station On-Site Improvements

Table 3: Station On-site Improvements

IMPROVEMENT TYPE	ID	IMPROVEMENT	LOCATION	JUSTIFICATION
Pedestrian	1	Pedestrian Pathway	Cut through from S Industrial Street to Station	A review of the proposed TOD site plan indicated limited space availability for PUDO access. Additionally, walk audit participants noted a need for additional curb space to facilitate PUDO access. This could be accommodated at a nearby off-site location, like Industrial Street, so travelers can be dropped off and have a short walk to the station. This would help to alleviate some of the space limitations at Winchester Station.
Bike	2	Additional bike parking (5)	East of TOD	A review of existing conditions highlighted a need for additional bike parking to support bicyclists arriving via the Los Gatos Creek Trail.
Placemaking	3	Additional seating/plaza	East of TOD	Walk audit participants noted a need for additional seating or a pedestrian plaza. This sentiment was echoed by members of the TAC that noted a need for pedestrian friendly placemaking improvements to make waiting for transit connections more comfortable, and also mentioned at the Meet the Developer meeting prior to this study.
Pedestrian	4	Add new wayfinding signage	East of PUDO location	A review of the proposed TOD site plan indicates limited space availability for bikes and pedestrians to enter and exit from the station. In particular, bicyclist visibility may be limited for vehicles queuing to exit the station. A separated multi-use path running behind the TOD would provide a safer connection for bicyclists and pedestrians trying to access Winchester Boulevard from Winchester Station.
Pedestrian	5	Add new wayfinding signage	East of TOD	Walk audit participants noted a need for additional wayfinding signage directing travelers to the station platform. This sentiment was shared by members of the TAC that highlighted a need for more visible wayfinding signage to direct travelers to multimodal connections and the station platform.

IMPROVEMENT TYPE	ID	IMPROVEMENT	LOCATION	JUSTIFICATION
Pedestrian	6	Add new wayfinding signage	Station Entrance	Walk audit participants, as well as pop-up and survey participants, noted a need for additional wayfinding signage directing travelers to the station platform. This sentiment was shared by members of the TAC that highlighted a need for more visible wayfinding signage to direct travelers to multimodal connections and the station platform.
Placemaking	7	Add station bathrooms	Outside of station platform at the top of the transit loop	TAC members noted a need for public bathrooms outside of the station platform. They noted that there are no bathrooms available for people waiting for a transit connection or to be picked up.
Accessibility	8	ADA Curb Ramp	East of PUDO location	Walk audit participants noted a need for accessible curb ramps along the curb between the PUDO location for easier ADA access to the station platform.
Transit	9	Real time transit info	Station platform	Walk audit participants noted a need for improved real time transit information at the station.
Vehicle	10	Potential off-site PUDO location	Industrial St Cul-de-sac	A review of existing station conditions indicated that limited space availability will impact PUDO access on site at the station. Adding an off-site PUDO location would create more space for curbside access.
Pedestrian	11	High visibility crosswalk	From TOD to bus stops	The TOD plan proposes a high visibility crosswalk to provide a safer pedestrian connection between the TOD and the bus bays and station platform.

7.2.2 Placemaking Considerations

Transit stations have the potential to be the heart of the community and be the place where people meet or bump into people they know. They can be places that inspire and encourage public life. They are ideally located in a central location and are supported by nearby residential and commercial developments as well as onsite amenities. Winchester Station is currently challenged by its location along a wide, busy road, a small set back from the road and the fact that it is cut off from neighboring developments through a variety of physical barriers. For this station to truly thrive, these barriers need to be mitigated or removed.

The future of the Winchester site as a residential development will help bring people to the station, and the future build out of adjacent opportunity sites will also help support the future viability of the station. Placemaking strategies such as accessible design, adding comfort and amenities, and most importantly, adding character to the station that reflects community values will improve the user experience. A positive user experience will ultimately lead to greater VTA ridership.

A positive user experience is achieved through not only improving the physical infrastructure elements of the site recommended in the previous section, but also improving the cultural elements. The station and station area should reflect the character of the community and support the comfort of the various demographics. Adding public art commissioned from local artists, improving cleanliness in the station area, adding wayfinding signage that reflects the local languages spoken and creating vibrant public spaces to gather in help to make people feel safe and welcome.

Based on the current TOD site plan and on-site access improvements recommended above, specific location opportunities for improving placemaking and adding art to Winchester Station include:

- The Transit Plaza: A series of three features would animate the plaza. The features should be interactive and at least one should function as seating. One should be located near the car drop off zone, one in the open plaza area and the other would be flexible but must respect pedestrian and vehicular movements. There is an opportunity to make the ground plane part of the art feature through the use of paving techniques and metal work for tree grates.
- Bulb-out at Lobby: An art piece located at the bulb-out on Winchester near the future lobby space could help identify the station and bring attention to the site. The content of the art piece should take into consideration station identification.
- Mural on Transit Worker Lounge Building: The lounge building is located in the plaza area and provides and opportunity for murals to be applied to the south and east walls.

Ultimately, placemaking is an integral part of activating public spaces and increasing the visibility of transit stations. Activating these spaces can also help to address safety concerns that were voiced by community members during the public engagement process. It is recommended that VTA explore these opportunities in tandem with the implementation of the infrastructure-based access improvements recommended as part of this study. Art opportunities may be implemented through partnerships with developers, the City, Community Based Organizations and/or other public agencies. Together with partners, VTA may put out a request for proposals by artists as funding allows.

7.2.3 Station Connection from East of SR 17

An access challenge that surfaced multiple times during the engagement process was the lack of safe connection from the east side of SR 17 to the station, particularly from the White Oaks neighborhood. Lack of direct access from the Los Gatos Creek Trail was also mentioned. Direct access from the trail to the east would require easements through private property, which likely would not be feasible. Additionally, trail users coming from the south may opt to continue north to the Railway Avenue exit to connect to the Downtown Campbell Station instead. As such, the access improvements recommended in this study are focused on improving existing pathways to the station from the southeast, namely San Tomas Expressway, Camden Avenue, Winchester Boulevard, and the Los Gatos Creek Trail.

While this study focuses on pedestrian improvements within the half-mile radius of the station, a number of pedestrian improvements just outside of the study area should also be considered. As Camden Avenue/San Tomas Expressway is the only existing connection between the neighborhoods to the east of SR 17 and the Los Gatos Creek Trail, improvements should be made along Camden Avenue/San Tomas Expressway to improve travel comfort for pedestrians and bicyclists. The expressway is proposed to be a Class IV protected bikeway by the San José Better Bike Plan. Since the on- and off-ramps to and from SR 17 are still a challenge, additional improvements at these intersections may include high-visibility crosswalks and removal of porkchop islands to prevent free right turns by vehicles and increase safety for pedestrians. Due to jurisdiction, this would require coordination with Caltrans. If porkchop islands cannot be removed, installation of rectangular rapid flashing beacons may be considered to improve the visibility of pedestrians. Connections to the station via the Los Gatos Creek Trail and the entryway to Camden Avenue have been recommended in this plan for improvement with wayfinding signage, landscaping maintenance, and improved lighting to formalize these connections and create safer, more inviting pathways for pedestrians to travel via the trail or Camden Avenue.

8 Transportation Demand Management (TDM) Recommendations

With development of TOD projects at Winchester Station comes the potential for increased traffic demand at the existing station and surrounding areas. This section presents a summary of strategies to reduce single-occupancy trips and relieve traffic congestion and parking demand at the station sites. To reduce single-occupancy vehicle trips to the station, the following recommendations should be considered:

- Ensure the provision of additional bicycle parking. These should be provided close to the station entrance for transit riders and TOD residents.
- Consider implementing a bicycle share facility on site for station visitors. This can encourage trips by active transportation to and from the station. Bicycle and scooter share facilities can help fulfill first/last mile connections to and from transit for passengers.
- Provide free or reduced cost monthly VTA transit passes for residents of the TOD. This is to introduce the new residents of the area to VTA services in their vicinity and encourage travel by transit and active transportation modes. This can help increase use of VTA transit service at Winchester Station and throughout the VTA network.
- Promote transit through targeted marketing campaigns. These campaigns can be targeted particularly to residents of the TOD as a supplement to free or reduced cost VTA transit passes, to promote the benefits of using transit and further encourage multimodal travel to alleviate single-occupancy trip demand. Campaigns may also be extended to the surrounding neighborhoods and general VTA network.
- Consider implementing an off-site pick-up/drop-off (PUDO) location to accommodate passenger curbside activity. Given limited space availability at the site and the incoming TOD site, an off-site PUDO location would help to streamline the inflow and outflow of cars and buses from the loop at Winchester Station.

9 Cost Estimates

Planning-level, rough order of magnitude cost estimates for on-site and off-site improvements were developed based on a combination of sources available, including unit cost information provided by VTA from the Story-Keyes Corridor Complete Streets Study completed in 2018 and utilized for the Capitol and Branham Station Access Studies completed in 2023. Unit cost sources are outlined in Appendix B, with a description of escalation factors applied to the original sources based on inflation. Cost estimates may vary, with increasing magnitudes, for future years and should be updated accordingly. It is advised that the escalation factor for future costs be developed similarly to those presented in the Appendix – based on inflation between the base and target years. Like the proposed improvements presented in Section 7, cost estimates are presented by corridor.

Assumptions for all cost estimates are included in the cost estimate sheets presented in Appendix B. In general, cost estimates do not include construction inspection, engineering, geotechnical analysis, right-of-way acquisition, or utility costs unless noted.

10 Prioritization and Implementation

Implementation of the proposed access improvements requires a plan that can be carried out efficiently and with flexibility. To facilitate this, the improvements proposed can be separated into near-term, mid-term, and long-term phasing. Also, many of these improvements must be made in coordination with the City of Campbell or the TOD developer.

The following section discusses these considerations, then provides a prioritized list of projects for pursuit of funding and implementation.

10.1 Phasing Considerations

Near-term improvements can be implemented quickly (within a year), due to minimal materials, low cost, more urgent safety needs, or because of project construction timing. Mid-term improvements may be implemented within one to two years, still quickly, but may take more time due to higher costs, materials and/or coordination. Longer-term improvements may require two or more years for implementation and include improvements that may require larger infrastructural changes, more materials, higher cost, or further feasibility analysis. Phasing will also be affected by whether projects are already planned or funded as a part of another ongoing project, study, or the TOD at the site.

Near-term improvements can include:

- Station identification signage
- Wayfinding signage pointing bicyclists and pedestrians near the station

Mid-term improvements can include:

- Real-time transit information signage
- Improvements that require paint striping, including crosswalks or bike lanes
- Installation of rectangular rapid flashing beacons for midblock high visibility crosswalks

Longer-term improvements can include:

- Installation of hardscape vertical separators for Class IV protected bike lanes
- Installation of larger traffic calming measures, such as roadway medians or widened sidewalks
- Installation of bike/e-scooter share facilities

10.2 Interagency Coordination Considerations

Because there are several roadway improvements that have been identified in other City projects, the implementation of projects should be coordinated with the City of Campbell, City of San José, County of Santa Clara, or Caltrans. For example, a number of bikeways in the station area are located in the City of San José and have been planned by the City of San José for upgrades. VTA should ensure coordination between the City of Campbell and City of San José or the City of Los Gatos, as appropriate, to ensure continuity of bicycle infrastructure, feasibility studies, and implementation of permanent materials, especially for Class IV bikeways. This coordination will also be particularly beneficial when attaining funding and right-of-way necessary for implementing roadway and bikeway projects. In particular, the City of Campbell is currently seeking funding for a multimodal transportation plan to address bicycle facilities in the city. The City also noted that sidewalk widening improvements may need to be conditioned to future developers for implementation in those locations, as the City of Campbell does not currently have a sidewalk installation or improvement program.

Additionally, since the TOD projects are currently still in the planning stages, VTA may require that certain improvements are conditioned to the developer in accordance with approved construction plans. These improvements affect private and public access to the TODs and the transit stations directly.

10.3 High Priority Projects

The recommended projects for this study listed in Table 3 are all intended to improve access Berryessa Station and benefit non-vehicular mobility within the overall station areas. To determine which projects are of the highest priority for implementation, the projects were evaluated further and scored based on the following:

Table 4: Project Evaluation Criteria

CRITERION	DESCRIPTION	SCORING
Improves Connectivity to Transit	High: the project has a high direct impact on connectivity to the station by closing a current critical gap in infrastructure. The project is essential to maintain pedestrian/bicycle access considering potential new development at the station site. Medium: The project improves the general connectivity of infrastructure in the Low = 0.3 station area (i.e., introduces additional midblock crossings). Low: The project enhances or complements connectivity improvements in the station area (i.e., improves wayfinding or provides other amenities).	High = 1 Medium = 0.6 Low = 0.3
Improves Accessibility	The project eliminates a barrier to ADA accessibility (i.e., by closing sidewalk gaps or providing ADA access ramps).	Yes = 1 No = 0
Improves Safety	High: the project addresses an area with high collision activity. Medium: The project addresses a safety issue that was identified by public engagement or by field review. Low: The project generally improves safety issues.	High = 1 Medium = 0.6 Low = 0.3
Coordination With Planned Projects	The project is planned or proposed by another project or agency, or the improvement is or can be incorporated into the TOD Plan.	Yes = 1 No = 0

Based on the results of the scoring exercise, which are found in Appendix C, the top high-priority projects for each station are presented below.

Table 5: High Priority Projects for the Winchester Station Area

TYPE OF IMPROVEMENT	ID	PROJECT	LOCATION
On-Site Access	1	Pedestrian pathway	Industrial St to station through St. Mary's
Pedestrian Access	18	Pedestrian pathway	Through Safeway Plaza
On-Site Access	11	High visibility crosswalk	From TOD to bus stops
Bicycle Access	1	Class IV protected bikeway	Winchester Blvd
On-Site Access	8	ADA curb ramp	PUDO location at site
Bicycle Access	10	Class IV protected bikeway	San Tomas Expy: Campbell Ave – study boundary
Bicycle Access	16	Class IV protected bikeway	Campbell Ave: Union Ave – Bascom Ave
On-Site Access	6	Wayfinding signage (identification signage)	Winchester Station entrance

It is important to note that these projects are not the only project recommendations that will benefit the station and station area, but are intended to be identified as priority for coordination with the stations' ongoing TOD plans as well as existing or ongoing City of Campbell plans, such as the Winchester Boulevard Master Plan or development of the Housing Opportunity Sites at the current Safeway Plaza, or City of San José Better Bike Plan.

It is also important that VTA consider complementary improvements within the recommendations. This can include coordinating with the City of Campbell on a wayfinding signage program to provide a comprehensive system of wayfinding signage for the locations recommended by this access study. Similarly, further placemaking at the station plaza activates the site and enhances the visibility and utility of these various access improvements.

Appendix

Appendix A: Community Engagement

VTA Winchester Station Access Study

Engagement Summary
Round 2

December 2023

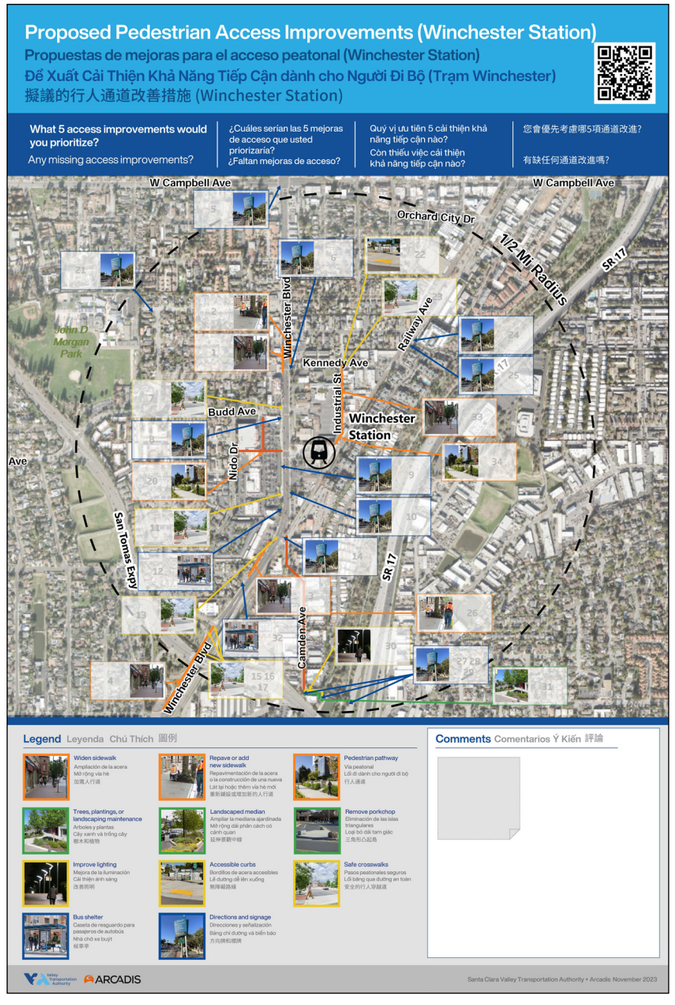
Valley Transportation Authority

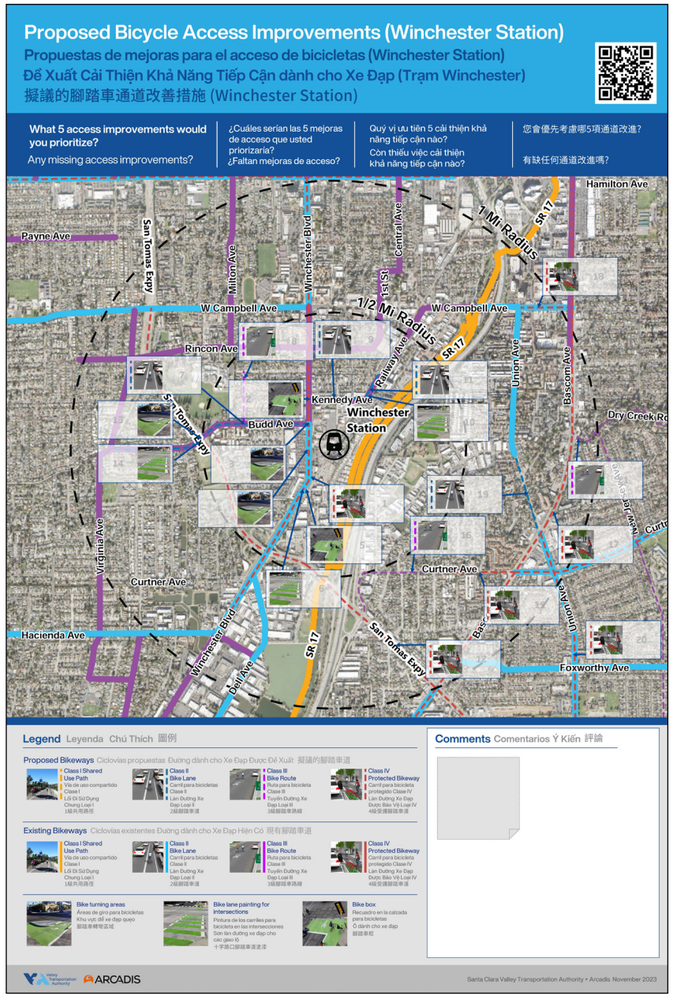
ARCADIS

Introduction

The Winchester Station Access Study is focused on identifying recommendations and projects to make it easier to walk, bike, and take connecting transit to the light rail stations. These recommendations could include improvements to bicycle and pedestrian access or experience, lighting, bus waiting areas, and directional signs.

During the second round of engagement, the project team conducted four pop-ups at and nearby Winchester Station. The purpose of this second round was to get feedback on a preliminary set of proposed access improvements. Participants were provided with a map of the station area, with recommended improvements listed out by location. For pedestrian improvements, the team considered a 0.5-mile radius from Winchester Station and a 1-mile radius for bicycle improvements. Through in person and online engagement the team asked users to identify their top five preferred improvements, and identify through additional comments, any gaps in the preliminary proposed recommendations.





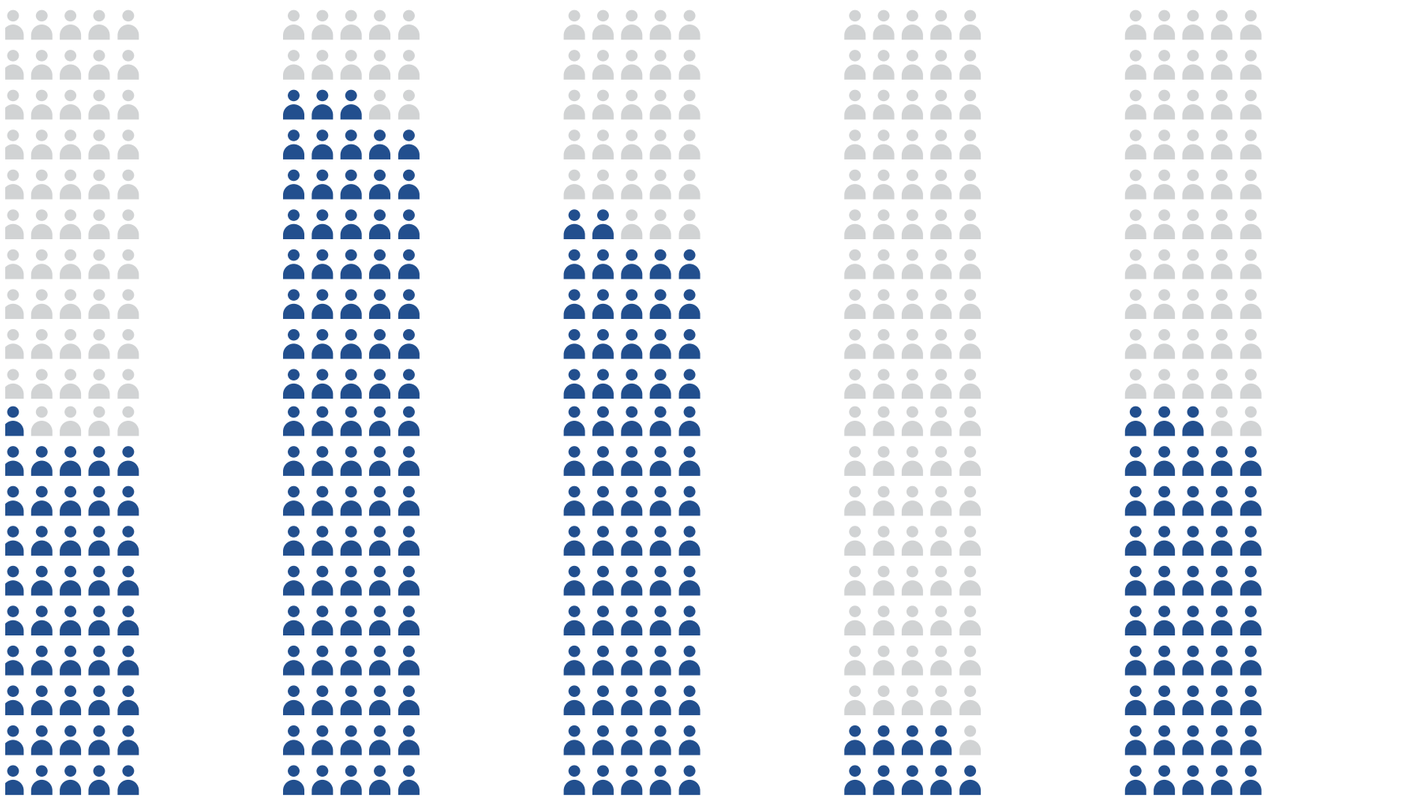
Engagement Events

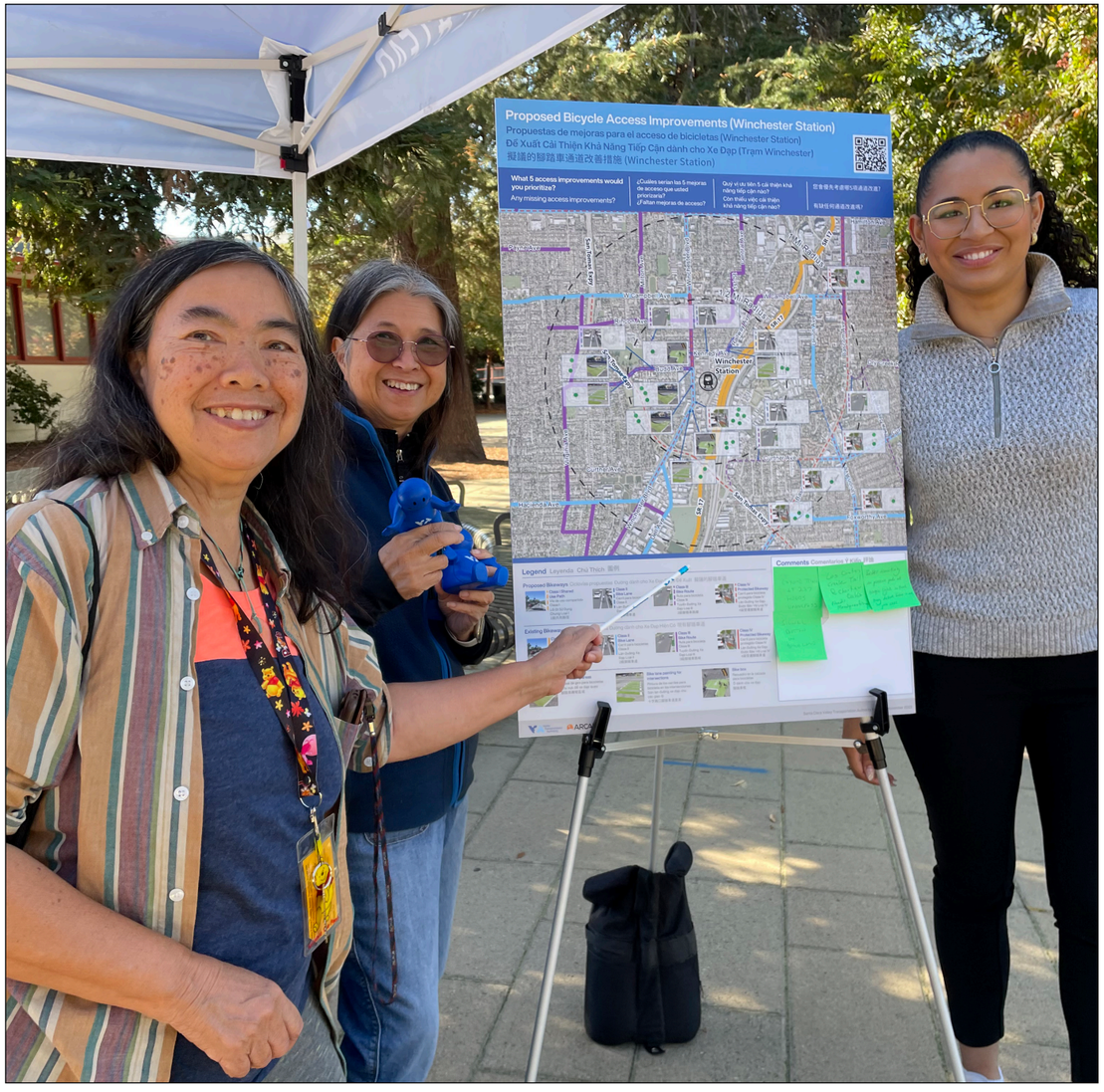
Community members were very engaged and provided excellent feedback to help shape the final recommendations in the access study. Spanish speaking team members were available at each event to ensure community members could participate in English or Spanish. A total of 215 people were engaged in the pop-ups providing feedback through conversation and dot-voting. The team also ran a corresponding survey on Survey Monkey from November 6th to December 3rd. The survey included the same materials as the pop-up events and collected demographic information (optional). Demographic information was not collected from the in-person engagement.

Participants

263+total

Nov 13	Nov 16	Nov 19	Nov 28	Nov 6-Dec3
10:00am - 2:00pm	3:30pm - 6:30pm	9:00am - 1:00pm	6:00pm -7:30pm	N/A
Campbell Community Center	Winchester Light Rail Station	Campbell Farmers Market	Winchester TOD Open House	Online Survey (Survey Monkey)
46	88	72	9	48





Participants at the Campbell Community Center provide feedback on Winchester Station Area access improvements.

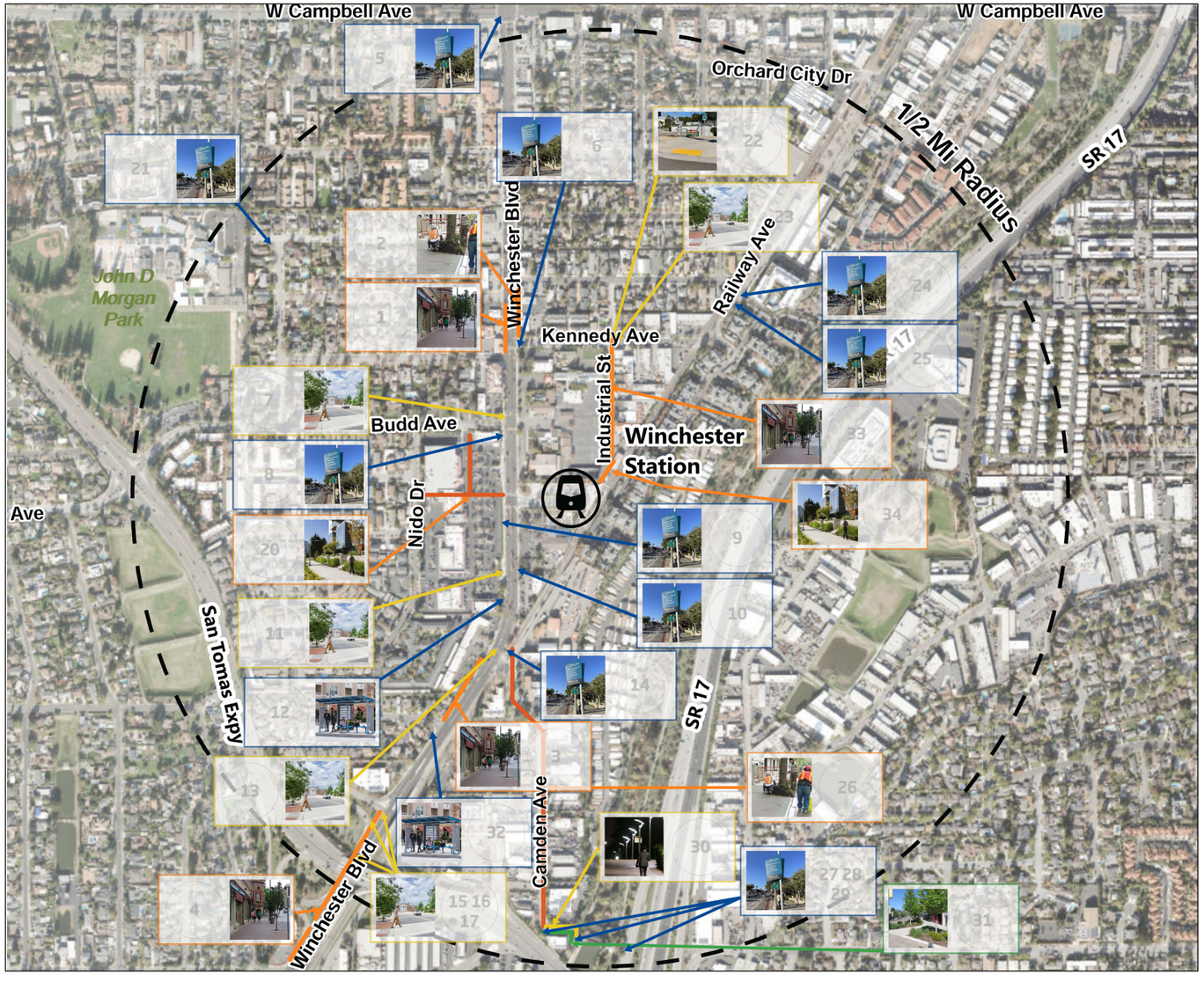
Participants at the Campbell Farmers Market provide feedback on Winchester Station Area access improvements.

Participants at the Winchester Station provide feedback on Winchester Station Area access improvements.

Participants at the Campbell Community Center, Affordable Housing Open House provide feedback on Winchester Station Area access improvements.

Priority Pedestrian Access Improvements

Overall, the prioritization for pedestrian improvements from the online survey and in-person pop-ups were similar, with priority given to improved lighting, widened sidewalks, and high visibility crosswalks. The main difference between the in-person events and the online survey is that there were more votes for adding a pedestrian connection from Industrial Street to the Station through St. Mary's at the in-person events compared to the online survey. The survey results favored crosswalk and sidewalk improvements.



Legend Leyenda Chú Thích 圖例

Widen sidewalk
Ampliación de la acera
Mở rộng vỉa hè
加寬人行道

Repave or add new sidewalk
Repavimentación de la acera o la construcción de una nueva
Lát lại hoặc thêm vỉa hè mới
重新鋪設或增加新的人行道

Pedestrian pathway
Vía peatonal
Lối đi dành cho người đi bộ
行人通道

Trees, plantings, or landscaping maintenance
Arboles y plantas
Cây xanh và trồng cây
樹木和植物

Landscaped median
Ampliar la mediana ajardinada
Mở rộng dải phân cách có cảnh quan
延伸景觀中線

Remove porkchop
Eliminación de las islas triangulares
Loại bỏ dải tam giác
三角形凸起島

Improve lighting
Mejora de la iluminación
Cải thiện ánh sáng
改善照明

Accessible curbs
Bordillos de acera accesibles
Lề đường dễ lên xuống
無障礙路緣

Safe crosswalks
Pasos peatonales seguros
Lối băng qua đường an toàn
安全的行人穿越道

Bus shelter
Caseta de resguardo para pasajeros de autobús
Nhà chờ xe buýt
候車亭

Directions and signage
Direcciones y señalización
Bảng chỉ đường và biển báo
方向牌和標牌

Priority Pedestrian Access Improvements

The top five pedestrian access improvements in the Winchester Station Study Area based on in-person pop-ups were:

Improvement	Votes	% of Votes
Add pedestrian pathway connection from Industrial Street to Station through St. Mary's Church Property directly to Station.	17	5.0%
Improve lighting on trail to Camden Avenue Connection.	**16**	**4.7%**
Make curb accessible at Kennedy and Industrial Streets.	13	3.8%
Add high visibility crosswalk on Winchester at Budd.	**11**	**3.2%**
Widen sidewalk on the west side of Winchester at Kennedy.*	**9**	**2.6%**
Add bus shelter at Safeway Plaza Entrance.*	9	2.6%

The top five pedestrian access improvements in the Winchester Station Study Area based on the online survey were:

Improvement	Votes	% of Votes
Add high visibility crosswalk on Winchester at Budd.	**19**	**5.0%**
Improve lighting on trail to Camden Avenue Connection.	**17**	**4.4%**
Widen sidewalk on the west side of Winchester at Kennedy.	**14**	**3.7%**
Add high visibility crosswalk at Safeway Plaza Entrance.	13	3.4%
Add high visibility crosswalk at Winchester & San Tomas.*	12	3.1%
Repave sidewalk on east side of Winchester Ave at Kennedy.*	12	3.1%

The top five pedestrian access improvements in the Winchester Station Study Area combined from the in-person events and online survey were:

Improvement	Votes	% of Votes
Improve lighting on trail to Camden Avenue Connection	**33**	**9.1%**
Add high visibility crosswalk on Winchester at Budd.	**30**	**8.3%**
Widen sidewalk on the west side of Winchester at Kennedy.	**23**	**6.4%**
Make curb accessible at Kennedy and Industrial Streets.	22	6.1%
High visibility crosswalk at Safeway Plaza Entrance. *	19	5.2%
Add bus shelter at Safeway Plaza Entrance. *	19	5.2%

Notes: The asterisk (*) indicates the two improvement that were tied for 5th place. The bolded improvements were common to both in-person and online. The % of votes represents a percentage of the overall total votes for all pedestrian improvements.

A full list of all the votes online and in-person are provided in Appendix A.

Pedestrian Improvement Comment Summary

Detailed comments about pedestrian access were collected at the in-person events and online. These comments have been grouped by theme. An asterisk indicates that multiple people made the same comment.

Increase direct pedestrian access within the Station Area.

- White Oaks neighborhood (and neighborhood to the south) has no direct access to Winchester Station via trail, needs more direct pedestrian access.
- Add gate access to Avalon complex directly to station platform. *
- Add a sidewalk on Camden south of the San Tomas/Camden split and connect it to Winchester. * The flyover makes it hard for pedestrians to connect because there is no sidewalk.
- One participant said they would not walk on Dell Avenue even if there were street improvements, as they would rather go around to Winchester where there are people. Dell Avenue is too industrial.
- Fill gaps in sidewalk along Railway Avenue next to station.
- Add a pedestrian connection to Industrial Street.
- Improve access to the Los Gatos Creek Trail.* I use it for my commute to reach the Netflix offices down Winchester. It is unsafe to bike or walk on Winchester.
- Consider completing the gaps in the sidewalk next to the Downtown Campbell Light Rail on Railway Avenue.

Improve pedestrian safety.

- Improve the crossing and lights at Winchester and Campbell Avenue to make it more pedestrian friendly.
- Add traffic calming on Winchester.
- Add safe crosswalks on busy streets.* One respondent noted a preference for traffic calming over high-visibility solutions to slow traffic rather than just making pedestrians more visible.
- Add raised crosswalks.
- Improve accessibility by trimming trees and removing poles from the center of sidewalks.

Improve bus service.

- Need to add bus service from Bascom to Winchester LRT.
- Bus service on weekends is slow.

Improve the frequency and service of LRT Green Line.

- Light rail should run until at least 1am, especially on weekends.
- Trains should be more frequent on weekends.
- Extend LRT service
  - Green line LRT should go directly to Great Mall.
  - Extend to Hacienda and Verona Junction.
  - Extend to Vasona/Los Gatos.
- More weekend and late evening frequency on LRT - provide more 15-minute service.

Improve bus stops, station, and user experience.

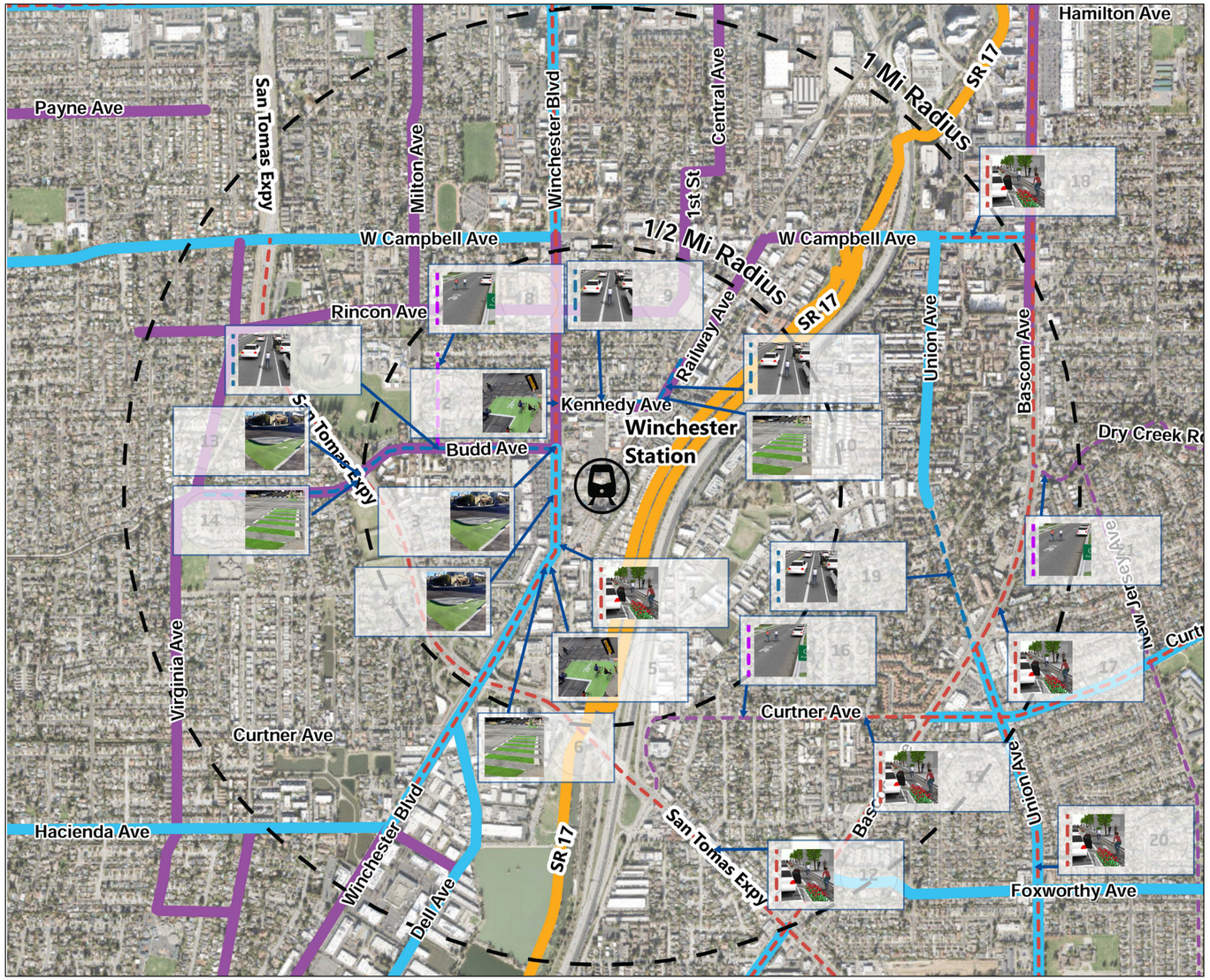
- Improve accuracy of real time information.
- Need a garbage can at bus stop at Campbell and Winchester.
- Some bus stops are dark - add light to indicate passenger waiting.
- Add more lighting at the Station.
- There is a need for better bus shelters that provide more shelter from the sun and rain.
- Add public bathrooms at the Station for families.
- Allow the pay kiosks at Winchester Station to accept credit cards to add value to Clipper cards or to purchase excursion passes.

Perceived safety at Winchester station.

- Users feel unsafe riding with mentally ill individuals.
- Adding live security cameras along the station walkway would increase the feeling of safety.
- Respondents noted that police presence and fare inspectors on light rail and at stations would improve the feeling of safety and reduce non-paying riders.

Priority Bicycle Access Improvements

The priority bicycle improvements from the online survey and in-person pop-ups were very similar, with a consistently high priority on Class IV protected bikeways along key roads within the station area.



Legend Leyenda Chú Thích 圖例

Proposed Bikeways Ciclovías propuestas Đường dành cho Xe Đạp Được Đề Xuất 擬議的腳踏車道

Class I Shared Use Path
Vía de uso compartido Clase I
Lối Đi Sử Dụng Chung Loại I
1級共用路徑

Class II Bike Lane
Carril para bicicletas Clase II
Làn Đường Xe Đạp Loại II
2級腳踏車道

Class III Bike Route
Ruta para bicicleta Clase III
Tuyến Đường Xe Đạp Loại III
3級腳踏車路線

Class IV Protected Bikeway
Carril para bicicleta protegido Clase IV
Làn Đường Xe Đạp Được Bảo Vệ Loại IV
4級受護腳踏車道

Existing Bikeways Ciclovías existentes Đường dành cho Xe Đạp Hiện Có 現有腳踏車道

Class I Shared Use Path
Vía de uso compartido Clase I
Lối Đi Sử Dụng Chung Loại I
1級共用路徑

Class II Bike Lane
Carril para bicicletas Clase II
Làn Đường Xe Đạp Loại II
2級腳踏車道

Class III Bike Route
Ruta para bicicleta Clase III
Tuyến Đường Xe Đạp Loại III
3級腳踏車路線

Class IV Protected Bikeway
Carril para bicicleta protegido Clase IV
Làn Đường Xe Đạp Được Bảo Vệ Loại IV
4級受護腳踏車道

Bike turning areas
Áreas de giro para bicicletas
Khu vực để xe đạp quẹo
腳踏車轉彎區域

Bike lane painting for intersections
Pintura de los carriles para bicicleta en las intersecciones
Sơn làn đường xe đạp cho các giao lộ
十字路口腳踏車道塗漆

Bike box
Recuadro en la calzada para bicicletas
Ô dành cho xe đạp
腳踏車框

Priority Bicycle Access Improvements

The top five bicycle access improvements in the Winchester Station Study Area based on in-person pop-ups were:

Improvement	Votes	% of Votes
Add Class IV protected bikeway along Winchester, from Hacienda to Budd	**18**	**9.9%**
Add Class IV protected bikeway along Campbell Ave., from Union to Bascom	**16**	**8.8%**
Add Class IV protected bikeway along San Tomas Expressway	**16**	**8.8%**
Add Class IV protected bikeway along Bascom	**13**	**7.1%**
Add Class IV Protected Bikeway on Union, South of Bascom	11	6.0%

The top five bicycle access improvements in the Winchester Station Study Area based on the online survey were:

Improvement	Votes	% of Votes
Add Class IV protected bikeway from along Winchester, from Hacienda to Budd	33	18.2%
Add Class IV protected bikeway along San Tomas Expressway	19	10.5%
Add Class IV protected bikeway along Campbell Ave., from Union to Bascom	14	7.7%
Add Class IV protected bikeway along Bascom	12	6.6%
Add green bicycle transition lanes along Railway Ave. and Kennedy	11	6.1%

The top five pedestrian access improvements in the Winchester Station Study Area combined from the in-person events and online survey were:

Improvement	Votes	% of Votes
Add Class IV protected bikeway along Winchester, from Hacienda to Budd	51	14%
Add Class IV protected bikeway along San Tomas Expressway	35	9.6%
Add Class IV protected bikeway along Campbell Ave., from Union to Bascom	30	8.3%
Add Class IV protected bikeway along Bascom	25	6.9%
Add green bicycle transition lanes along Railway Ave. and Kennedy	19	5.2%

Notes: The bolded improvements were common to both in-person and online. The % of votes represents a percentage of the overall total votes for all bicycle improvements.

A full list of all the votes online and in-person are provided in Appendix A.

Bicycle Improvement Comment Summary

Detailed comments about bicycle access were collected at the in-person events and online. These comments have been grouped by theme. An asterisk indicates that multiple people made the same comment.

Reduce gaps and improve continuity in bike access in the Winchester station area.

- Make the bike lane continuous on East Campbell Avenue downtown to the Pruneyard.
- There is a need for a continuous Class IV bicycle route from White Oaks Neighborhood to Winchester Station with consideration for transition from Camden Avenue to Winchester at the flyover.
- Provide a more direct connection to Los Gatos Creek Trail. *
- There is a need for a better bike connection from east side of tracks to the station. *
- Provide a pedestrian/bike crossing over Highway 17. *

Add new protected bike lanes and off-road paths.

- The area needs more Class I and Class IV bike lanes to let kids bike safely; Class II & III are not enough.
- Los Gatos Creek Trail and Charter Oaks needs floodproofing.

Improve bike amenities at stations and on transit.

- Add bike lockers at Winchester Station.
- Make bike racks better on light rail cars. A bike fell on a friend.

Provide community Education Programs

- Provide more driver education on bike boxes and other bike infrastructure improvements so drivers and cyclists can share the road with fewer conflicts.*

Improve existing cycling infrastructure

- Los Gatos Creek Trail and Charter Oaks needs floodproofing.
- Provide better sensitivity on pressure pads at traffic lights so that they detect bikes - not just cars.
- Provide a signal button in bike lane.
- The Coyote Creek Trail at 237 needs an underpass.
- The San Tomas Expressway / Winchester Blvd area and San Tomas Expressway/Hwy 17 area would need significant improvements to allow cyclists and especially pedestrians to safely navigate the areas.

Conclusions

Total Engagement

In Person

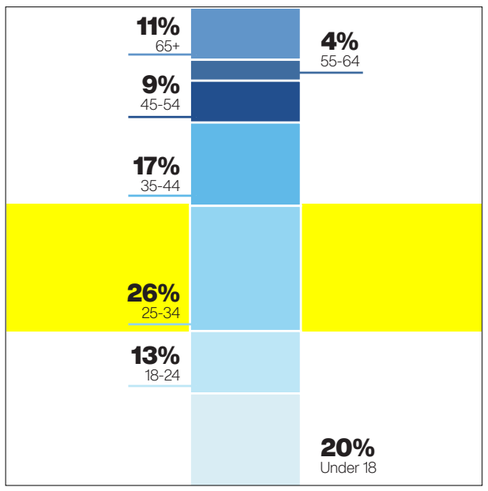
215+ attendees

Online

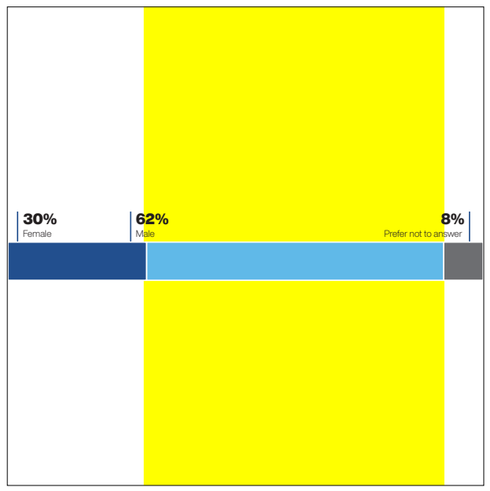
48 attendees

Demographic Highlights (Online only)

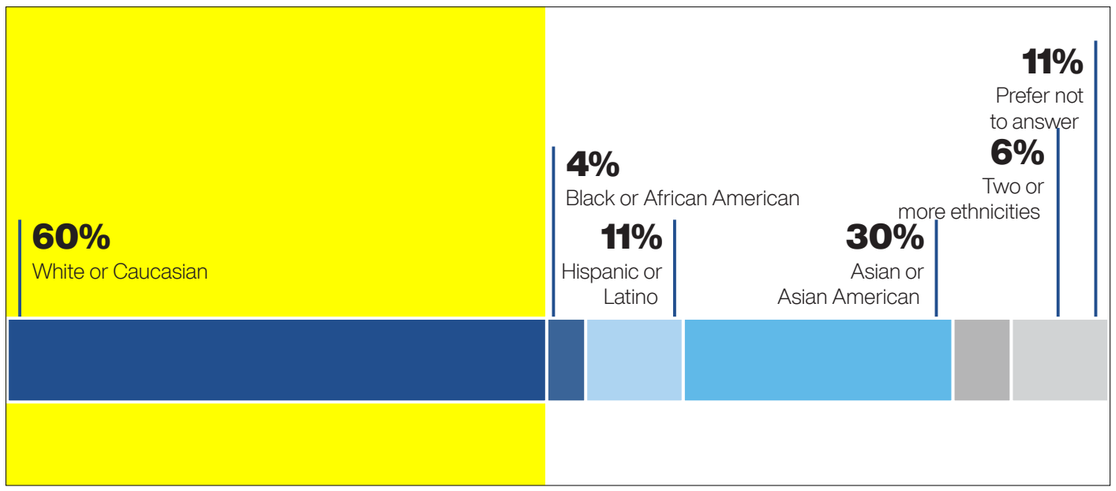
26% of respondents were between the ages of 25 and 34.



60% of respondents were male.



60% of respondents were white or Caucasian.



Proposed Improvements

High Level Themes

The following were identified as high-level themes for access from discussions during the pop-ups and survey comments:

- There is an overwhelming desire for Class I and Class IV bike connections in the station area. There is a general sentiment that Class II and Class III are not safe enough. There is an equally important public education component about cycling infrastructure and how cars interact with cycling infrastructure.
- Access to the Winchester Station from the east side of the tracks is limited and inconvenient. Additional connections that are safe and convenient are desired by the community.
- Potential riders are deterred due to perceived safety and cleanliness issues in the station area on VTA buses and light rail. Lack of lighting, trash pick-up, and law enforcement were cited barriers to ridership.
- The community would like to see the gaps filled in both the cycling and the pedestrian infrastructure, for a fully connected system, through the addition or upgrade of crosswalks, sidewalks, bike lanes or new paths.

Top Improvements (Combined)

Improvement	Votes
Add Class IV protected bikeway along Winchester, from Hacienda to Budd.	51
Add Class IV protected bikeway along San Tomas Expressway.	35
Improve lighting on trail to Camden Avenue Connection.	33
Add Class IV protected bikeway along Campbell Ave., from Union to Bascom.	30
Add high visibility crosswalk on Winchester at Budd.	30
Add Class IV protected bikeway along Bascom .	25

Priorities

By Location

- Attendees at the Campbell Farmers' Market voted to prioritize upgraded bikeways and expressed that education for drivers is also needed.
- TOD Open House attendees voted to prioritize upgraded bikeways, particularly Class IV bikeways on Winchester Boulevard, San Tomas Expressway, and Bascom Avenue.

By Demographic

- Transit users at the station expressed desire for more lighting at the station and more bus shelters at stops in the station area, as well as improved connections to the Los Gatos Creek Trail.

Valley Transportation Authority

ARCADIS

Appendix – Full Engagement Results

In-Person Engagement Results

Proposed Pedestrian Access Improvements (Winchester Station)

We asked participants to place stickers on the access improvement most important to them. The results below are color-coded, identifying the improvements with the greatest number of votes across all in-person pop-ups.

Improvement	Location	Votes	% of Votes
Widen Sidewalk	Winchester west side at Kennedy	9	2.6%
Sidewalk Repaving	Winchester east side at Kennedy	7	2.0%
Widen Sidewalk	Winchester west side north of Friar	2	0.6%
Widen Sidewalk	Winchester west side at San Tomas	2	0.6%
Add Wayfinding Signage	Winchester & Campbell	6	1.8%
Add Wayfinding Signage	Winchester & Kennedy	1	0.3%
Add High Visibility Crosswalk	Winchester & Budd	11	3.2%
Add Wayfinding Signage	Winchester & Budd	2	0.6%
Add Wayfinding Signage	Winchester & Safeway Plaza	5	1.5%
Add Wayfinding Signage	Winchester Station Entrance	4	1.2%
Ad High Visibility Crosswalk	Safeway Plaza Entrance	6	1.8%
Add Bus Shelter	Safeway Plaza Entrance	9	2.6%
Add High Visibility Crosswalk	Winchester & Camden	4	1.2%
Add Wayfinding Signage	Winchester & Camden	1	0.3%
Add High Visibility Crosswalk	Winchester & San Tomas	5	1.5%
Add Pedestrian Pathways	N/A	7	2.0%
Add Wayfinding Signage	California & Cherry	2	0.6%
Add Accessible Curb	Kennedy & Industrial	13	3.8%
Add High Visibility Crosswalk	Kennedy & Industrial	4	1.2%
Add Wayfinding Signage	Trail to Railway Ped Path	5	1.5%
Add Wayfinding Signage	Trail to Railway Ped Path	3	0.9%
Sidewalk Repaving	Campden Avenue	3	0.9%
Add Wayfinding Signage	Trail to Camden Connection	4	1.2%
Improve Lighting	Trail to Camden Connection	16	4.7%
Improve Landscaping	Trail to Camden Connection	6	1.8%
Add Bus Shelter	Winchester west side north of Friar	4	1.2%
Widen Sidewalk	Industrial Street	2	0.6%
Add Pedestrian Pathways	Connection from Industrial Street to Station through St. Mary's	17	5.0%

Most Votes 2nd Most Votes 3rd Most Votes

In-Person Engagement Results

Proposed Bicycle Access Improvements (Winchester Station)

We asked participants to place stickers on the access improvement most important to them. The results below are color-coded, identifying the improvements with the greatest number of votes across all in-person pop-ups.

Improvement	Location	Votes	% of Votes
Add Class IV Protected Bikeway	Winchester - Hacienda to Budd	18	9.9%
Add Bike Box	Winchester & Kennedy	6	3.3%
Add Two Stage Left Turn	Winchester & Budd	8	4.4%
Add Two Stage Left Turn	Winchester & Safeway Plaza	7	3.8%
Add Bike Box	Winchester & Camden	10	5.5%
Add Green Bicycle Transition Lane	Winchester & Camden	10	5.5%
Add Class II Bike Lanes	Budd - Winchester to Virginia	3	1.6%
Add Class III Bike Route	California	3	1.6%
Add Class II Bike Lanes	Kennedy Ave	5	2.7%
Add Green Bicycle Transition Lane	Railway & Kennedy	8	4.4%
Add Class II Bike Lanes	Railway Ave	7	3.8%
Add Class IV Protected Bikeway	San Tomas Expressway	16	8.8%
Add Two Stage Left Turn	Budd & San Tomas	6	3.3%
Add Green Bicycle Transition Lane	Budd & San Tomas	4	2.2%
Add Class IV Protected Bikeway	Curtner east of Salerno	10	5.5%
Add Class III Bike Route	Curtner west of Salerno	9	4.9%
Add Class IV Protected Bikeway	Bascom	13	7.1%
Add Class IV Protected Bikeway	Campbell Ave - Union to Bascom	16	8.8%
Add Class II Bike Lanes	Union - Bascom to E. McGlincy Lane	7	3.8%
Add Class IV Protected Bikeway	Union - South of Bascom	11	6.0%
Add Class III Bike Route	Dry Creek Road	5	2.7%
Green Bicycle Transition Lane	King Road & Las Plumas Ave	3	3.5%

Most Votes 2nd Most Votes 3rd Most Votes

On-line Engagement Results

Proposed Pedestrian Access Improvements (Winchester Station)

We asked participants to select the access improvement most important to them. The results below are color-coded, identifying the improvements with the greatest number of votes from the online survey.

Improvement	Location	Votes	% of Votes
Widen Sidewalk	Winchester west side at Kennedy	14	3.7%
Sidewalk Repaving	Winchester east side at Kennedy	12	3.1%
Widen Sidewalk	Winchester west side north of Friar	4	1.0%
Widen Sidewalk	Winchester west side at San Tomas	7	1.8%
Add Wayfinding Signage	Winchester & Campbell	3	0.8%
Add Wayfinding Signage	Winchester & Kennedy	3	0.8%
Add High Visibility Crosswalk	Winchester & Budd	19	5.0%
Add Wayfinding Signage	Winchester & Budd	3	0.8%
Add Wayfinding Signage	Winchester & Safeway Plaza	2	0.5%
Add Wayfinding Signage	Winchester Station Entrance	5	1.3%
Ad High Visibility Crosswalk	Safeway Plaza Entrance	13	3.4%
Add Bus Shelter	Safeway Plaza Entrance	10	2.6%
Add High Visibility Crosswalk	Winchester & Camden	10	2.6%
Add Wayfinding Signage	Winchester & Camden	0	0.0%
Add High Visibility Crosswalk	Winchester & San Tomas	12	3.1%
Add Pedestrian Pathways	N/A	10	2.6%
Add Wayfinding Signage	California & Cherry	1	0.3%
Add Accessible Curb	Kennedy & Industrial	9	2.3%
Add High Visibility Crosswalk	Kennedy & Industrial	11	2.9%
Add Wayfinding Signage	Trail to Railway Ped Path	3	0.8%
Add Wayfinding Signage	Trail to Railway Ped Path	2	0.5%
Sidewalk Repaving	Campden Avenue	4	1.0%
Add Wayfinding Signage	Trail to Camden Connection	4	1.0%
Improve Lighting	Trail to Camden Connection	17	4.4%
Improve Landscaping	Trail to Camden Connection	6	1.6%
Add Bus Shelter	Winchester west side north of Friar	6	1.6%
Widen Sidewalk	Industrial Street	10	2.6%
Add Pedestrian Pathways	Connection from Industrial Street to Station through St. Mary's	2	0.5%

Most Votes 2nd Most Votes 3rd Most Votes

On-line Engagement Results

Proposed Bicycle Access Improvements (Winchester Station)

We asked participants to select the access improvement most important to them. The results below are color-coded, identifying the improvements with the greatest number of votes from the online survey.

Improvement	Location	Votes	% of Votes
Add Class IV Protected Bikeway	Winchester - Hacienda to Budd	33	18.2%
Add Bike Box	Winchester & Kennedy	9	5.0%
Add Two Stage Left Turn	Winchester & Budd	10	5.5%
Add Two Stage Left Turn	Winchester & Safeway Plaza	8	4.4%
Add Bike Box	Winchester & Camden	5	2.8%
Add Green Bicycle Transition Lane	Winchester & Camden	8	4.4%
Add Class II Bike Lanes	Budd - Winchester to Virginia	7	3.9%
Add Class III Bike Route	California	3	1.7%
Add Class II Bike Lanes	Kennedy Ave	8	4.4%
Add Green Bicycle Transition Lane	Railway & Kennedy	11	6.1%
Add Class II Bike Lanes	Railway Ave	10	5.5%
Add Class IV Protected Bikeway	San Tomas Expressway	19	10.5%
Add Two Stage Left Turn	Budd & San Tomas	2	1.1%
Add Green Bicycle Transition Lane	Budd & San Tomas	2	1.1%
Add Class IV Protected Bikeway	Curtner east of Salerno	8	4.4%
Add Class III Bike Route	Curtner west of Salerno	0	0.0%
Add Class IV Protected Bikeway	Bascom	12	6.6%
Add Class IV Protected Bikeway	Campbell Ave - Union to Bascom	14	7.7%
Add Class II Bike Lanes	Union - Bascom to E. McGlincy	5	2.8%
Add Class IV Protected Bikeway	Union - South of Bascom	7	3.9%
Add Class III Bike Route	Dry Creek Road	0	0.0%
Green Bicycle Transition Lane	King Road & Las Plumas Ave	7	3.3%

Most Votes 2nd Most Votes 3rd Most Votes

Appendix B: Cost Estimates

Cost Estimates - Notes

Note	Description
1	The cost estimates are probable construction costs based on Arcadis' experience with the design of similar projects. The estimated are prepared as a guide only, and are subject to change based on further development of the design. These estimates were prepared based on general improvements identified in the VTA Tamien Station TOD Access Study.
2	The estimates are based on general assumptions for each of the segments. Assumptions for each segment are provided in the "Assumptions" section of their respective segment.
3	Right of Way and/or Easement costs were not assessed and included. Formal consultation with a Right of Way acquisition expert is advised and may change the costs presented herein.
4	Costs associated with special material imports, geotechnical costs, hazardous materials, or other special circumstances were not included.
5	Prices include an escalation factor as noted below. Costs were modified to be consistent with expected 2024 costs.

Cost Sources - Notes

Source	Date	Escalation Factor	Note
Arcadis roadway improvement project directory.	2020	1.06	An increase of 6% was applied to reflect inflation between 2020 and 2024.
Countermeasure Cost Report (UNC-Highway Safety Research Center 2013)	2013	1.165	An increase of 16.5% was applied to reflect inflation between 2013 and 2024.
Story-Keys Corridor Complete Streets Study	2018	1.09	An increase of 7.5% was applied to reflect inflation between 2018 and 2024.
Willow-Keyes Complete Streets Improvements	2018	1.09	An increase of 7.5% was applied to reflect inflation between 2018 and 2024.
https://www.itskrs.its.dot.gov/its/benecost.nsf/ID/	2011	1.195	An increase of 19.5% was applied to reflect inflation between 2011 and 2024.

Cost Sources - Roadway

Proposed

#	Description	Unit	Unit Price	2024 Escalated Price	Source
	Curb (6") & Gutter (24")	LF	$50.00	$100,900.00	Story-Keys Corridor Complete Streets Study
	Curb (6")	LF	$20.00	$40,400.00	Arcadis Roadway Improvement Project Directory
	Curb (6") - Divider	LF	$30.00	$60,600.00	Arcadis Roadway Improvement Project Directory
	Curb Ramp - Corner	EA	$2,800.00	$5,656,000.00	Arcadis Roadway Improvement Project Directory
	Curb Ramp - Mid Block	EA	$2,500.00	$5,050,000.00	Arcadis Roadway Improvement Project Directory
	Curb Extension w/ ADA Ramp	EA	$13,000.00	$26,169,000.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Detectable Warning Tiles	SF	$62.00	$125,116.00	Willow-Keyes Complete Streets Improvements
	Traffic Circle	EA	$50,000.00	$100,650,000.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Roundabout	EA	$250,000	$503,250,000.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Retrofit 4-way Intersection w/ Curb Extensions	LS	$100,000.00	$201,300,000.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Traffic Diverter	EA	$20,000.00	$40,400,000.00	Arcadis Roadway Improvement Project Directory
	Median / Median Island	SF	$15.00	$30,270.00	Story-Keys Corridor Complete Streets Study
	Raised Crosswalk	EA	$8,200.00	$16,506,600.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Raised Intersection	EA	$51,000.00	$102,663,000.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Speed Hump	EA	$2,700.00	$5,435,100.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Speed Bump	EA	$1,625.00	$3,271,125.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Speed Table	EA	$2,000.00	$4,026,000.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Asphalt Driveway - Grind, Regrade and Overlay	SF	$3.00	$6,060.00	Arcadis Roadway Improvement Project Directory
	Asphalt Filler Strip (2' wide)	LF	$56.00	$113,120.00	Arcadis Roadway Improvement Project Directory
	Asphalt Paving (Grind & Replace)	SF	$15.00	$30,300.00	Arcadis Roadway Improvement Project Directory
	Asphalt Paving (3.5")	SF	$4.00	$8,080.00	Arcadis Roadway Improvement Project Directory
	Asphalt Paving (5")	SF	$5.00	$10,100.00	Arcadis Roadway Improvement Project Directory
	PCC - Concrete Roadway - 9" Depth	SF	$15.00	$30,300.00	Arcadis Roadway Improvement Project Directory
	PCC - Filler Strip (6" wide)	LF	$5.00	$10,090.00	Story-Keys Corridor Complete Streets Study
	PCC Sidewalk - 4" Depth / 2' Wide	LF	$20.00	$40,360.00	Story-Keys Corridor Complete Streets Study
	PCC Sidewalk - 4" Depth / 4' Wide	LF	$40.00	$80,720.00	Story-Keys Corridor Complete Streets Study
	PCC Sidewalk - 4" Depth / 6' Wide	LF	$60.00	$121,080.00	Story-Keys Corridor Complete Streets Study
	PCC Sidewalk - 4" Depth / 7' Wide	LF	$70.00	$141,260.00	Story-Keys Corridor Complete Streets Study
	PCC Sidewalk - 4" Depth / 8' Wide	LF	$80.00	$161,440.00	Story-Keys Corridor Complete Streets Study
	PCC Sidewalk - 4" Depth / 10' Wide	LF	$100.00	$201,800.00	Story-Keys Corridor Complete Streets Study
	PCC Sidewalk - 4" Depth / 12' Wide	LF	$120.00	$242,160.00	Story-Keys Corridor Complete Streets Study
	PCC Sidewalk - 4" Depth / 15' Wide	LF	$150.00	$302,700.00	Story-Keys Corridor Complete Streets Study
	PCC Driveway	SF	$14.00	$28,252.00	Story-Keys Corridor Complete Streets Study
	Stamped Concrete - 6" Depth	SF	$20.00	$40,400.00	Arcadis Roadway Improvement Project Directory
	Class II Aggregate Base (2", Sand Base)	CY	$0.50	$1,010.00	Arcadis Roadway Improvement Project Directory
	Cement Treated Base (12")	SF	$4.00	$8,080.00	Arcadis Roadway Improvement Project Directory
	Cement Treated Base (16")	SF	$5.00	$10,100.00	Arcadis Roadway Improvement Project Directory
	Slurry Seal + Crack Sealing	SF	$0.75	$1,515.00	Arcadis Roadway Improvement Project Directory
	Saw-cut of existing Concrete Pavement	LF	$4.00	$8,080.00	Arcadis Roadway Improvement Project Directory
	Saw-cut of existing Asphalt Pavement	LF	$3.00	$6,060.00	Arcadis Roadway Improvement Project Directory
	Install Fence	LF	$50.00	$101,000.00	Arcadis Roadway Improvement Project Directory
	Install Gate	EA	$1,000.00	$2,020,000.00	Arcadis Roadway Improvement Project Directory
	Reset Survey Markers	EA	$2,000.00	$4,040,000.00	Arcadis Roadway Improvement Project Directory
	Adjust Utility Boxes to Grade	EA	$300.00	$606,000.00	Arcadis Roadway Improvement Project Directory

Removals

#	Description	Unit	Unit Price	2024 Escalated Price	Source
	Roadway Excavation	CY	$20.00	$40,400.00	Arcadis Roadway Improvement Project Directory
	Remove existing asphalt pavement (driveway)	SF	$4.00	$8,080.00	Arcadis Roadway Improvement Project Directory
	Remove existing asphalt pavement (roadway)	SF	$10.00	$20,200.00	Arcadis Roadway Improvement Project Directory
	Remove existing concrete pavement (roadway)	SF	$10.00	$20,200.00	Arcadis Roadway Improvement Project Directory
	Remove existing Curb & Gutter	LF	$20.00	$40,400.00	Arcadis Roadway Improvement Project Directory
	Remove existing Fence	LF	$12.00	$24,240.00	Arcadis Roadway Improvement Project Directory
	Remove existing Tree	EA	$1,000.00	$2,020,000.00	Arcadis Roadway Improvement Project Directory
	Remove existing sidewalk, curb ramps & driveways	SF	$7.00	$14,140.00	Arcadis Roadway Improvement Project Directory
	Remove Existing Asphalt Sidewalk	SF	$2.50	$5,050.00	Arcadis Roadway Improvement Project Directory
	Remove Existing PCC Sidewalk	SF	$3.00	$6,060.00	Arcadis Roadway Improvement Project Directory

Cost Sources - Signing and Striping

Proposed

#	Description	Unit	Unit Price	2024 Escalated Price	Source
	Install Limit Line	LF	$8.50	$17,170.00	Arcadis Roadway Improvement Project Directory
	Install Centerline w/ Reflectors	LF	$3.00	$6,060.00	Arcadis Roadway Improvement Project Directory
	Install 4" Striping - Paint	LF	$0.50	$1,010.00	Arcadis Roadway Improvement Project Directory
	Install 4" Striping - Thermoplastic	LF	$5.00	$10,100.00	Arcadis Roadway Improvement Project Directory
	Install 4" Striping (Dashed) - Paint	LF	$0.25	$505.00	Arcadis Roadway Improvement Project Directory
	Install 4" Striping (Dashed) - Thermoplastic	LF	$2.50	$5,050.00	Arcadis Roadway Improvement Project Directory
	Install 8" Striping - Thermoplastic	LF	$10.00	$20,200.00	Arcadis Roadway Improvement Project Directory
	Install Double Yellow Line (4") - Thermoplastic	LF	$3.00	$6,060.00	Arcadis Roadway Improvement Project Directory
	Install Parking Stripes (stall)	EA	$10.00	$20,200.00	Arcadis Roadway Improvement Project Directory
	Install Roadside Sign	EA	$300.00	$606,000.00	Arcadis Roadway Improvement Project Directory
	Install Crosswalk - Thermoplastic (12')	LF	$40.00	$80,800.00	Arcadis Roadway Improvement Project Directory
	Install Continental Crosswalk - Thermoplastic (12')	LF	$80.00	$161,600.00	Arcadis Roadway Improvement Project Directory
	Instal Turn Arrow - Thermoplastic	EA	$500.00	$1,010,000.00	Arcadis Roadway Improvement Project Directory
	Install Crosshatching - Thermoplastic	LF	$12.00	$24,240.00	Arcadis Roadway Improvement Project Directory
	Install Stop Line - Thermoplastic	LF	$15.00	$30,195.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Install Text Pavement Marking - per word	EA	$400.00	$808,000.00	Arcadis Roadway Improvement Project Directory
	Bike Route Signing	MI	$1,650.00	$3,333,000.00	Arcadis Roadway Improvement Project Directory
	Bike Lane Marking - Paint	EA	$100.00	$202,000.00	Arcadis Roadway Improvement Project Directory
	Install Sharrow - Paint	EA	$120.00	$242,400.00	Arcadis Roadway Improvement Project Directory
	Install Bike Buffer (2' wide) - Thermoplastic	LF	$6.00	$12,120.00	Arcadis Roadway Improvement Project Directory
	Install Bike Buffer (4' wide) - Thermoplastic	LF	$12.00	$24,240.00	Arcadis Roadway Improvement Project Directory
	Install Curb Paint	LF	$3.00	$6,039.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Install Cycle Track Paint	SF	$6.00	$12,120.00	Arcadis Roadway Improvement Project Directory
	Install Bike Lane Marking - Thermoplastic	EA	$350.00	$707,000.00	Arcadis Roadway Improvement Project Directory
	Install Sharrow - Thermoplastic	EA	$500.00	$1,010,000.00	Arcadis Roadway Improvement Project Directory
	Install Greenback Sharrow - Thermoplastic	EA	$700.00	$1,414,000.00	Arcadis Roadway Improvement Project Directory
	Install Green Thermoplastic	SF	$10.00	$20,200.00	Arcadis Roadway Improvement Project Directory
	Install Sign on Existing Post	EA	$80.00	$161,600.00	Arcadis Roadway Improvement Project Directory
	Install Sign on New Post	EA	$360.00	$727,200.00	Arcadis Roadway Improvement Project Directory
	Install Green Bike Lane Conflict Marking - Thermoplastic	LF	$20.00	$40,400.00	Arcadis Roadway Improvement Project Directory

Removals

#	Description	Unit	Unit Price	2024 Escalated Price	Source
	Remove Delineation	LF	$1.00	$2,020.00	Arcadis Roadway Improvement Project Directory
	Remove Turn Arrow	EA	$75.00	$151,500.00	Arcadis Roadway Improvement Project Directory
	Remove Crosswalk	LF	$5.00	$10,100.00	Arcadis Roadway Improvement Project Directory
	Relocate Sign and Pole	EA	$400.00	$808,000.00	Arcadis Roadway Improvement Project Directory
	Remove Sign and Pole	EA	$175.00	$353,500.00	Arcadis Roadway Improvement Project Directory
	Remove "Stop" Text	EA	$100.00	$202,000.00	Arcadis Roadway Improvement Project Directory
	Remove Sign	EA	$150.00	$303,000.00	Arcadis Roadway Improvement Project Directory

Cost Sources - Traffic / Electrical

Proposed

#	Description	Unit	Unit Price	2024 Escalated Price	Source
	Modify Controller	EA	$7,500.00	$15,150,000.00	Arcadis Roadway Improvement Project Directory
	Modify Intersection traffic Signal System	LS	$550,000.00	$1,109,900,000.00	Willow-Keyes Complete Streets Improvements
	Vehicle Heads	EA	$1,200.00	$2,424,000.00	Arcadis Roadway Improvement Project Directory
	Ped Heads	EA	$1,530.00	$3,079,890.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Audible Ped Signal	EA	$800.00	$1,610,400.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Ped Countdown Timer	EA	$725.00	$1,459,425.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Loops	EA	$700.00	$1,414,000.00	Arcadis Roadway Improvement Project Directory
	Ped Buttons	EA	$360.00	$724,680.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Bike Button, Pole, and Sign	EA	$1,100.00	$2,222,000.00	Arcadis Roadway Improvement Project Directory
	EVP Sensor	EA	$3,000.00	$6,060,000.00	Arcadis Roadway Improvement Project Directory
	Parking Lot Light Fixture	EA	$4,000.00	$8,080,000.00	Arcadis Roadway Improvement Project Directory
	Type 17 Poles, Luminaires, and Foundation	EA	$18,000.00	$36,360,000.00	Arcadis Roadway Improvement Project Directory
	Type 26-3 Pole, Luminaires, and Foundation	EA	$22,000.00	$44,440,000.00	Arcadis Roadway Improvement Project Directory
	Type 61-5 Pole, Luminaires, and Foundation	EA	$24,000.00	$48,480,000.00	Arcadis Roadway Improvement Project Directory
	Pedestrian Push Botton Post	EA	$1,100.00	$2,222,000.00	Arcadis Roadway Improvement Project Directory
	Pullboxes	EA	$750.00	$1,515,000.00	Arcadis Roadway Improvement Project Directory
	2" Conduit	LF	$40.00	$80,800.00	Arcadis Roadway Improvement Project Directory
	3" Conduit	LF	$50.00	$101,000.00	Arcadis Roadway Improvement Project Directory
	Traffic Signal Wiring	LS	$15,000.00	$30,300,000.00	Arcadis Roadway Improvement Project Directory
	Bike Detector Loop	EA	$800.00	$1,616,000.00	Arcadis Roadway Improvement Project Directory
	Mast Arm Sign	EA	$400.00	$808,000.00	Arcadis Roadway Improvement Project Directory
	Street Light - Basic	EA	$7,500	$15,150,000.00	Arcadis Roadway Improvement Project Directory
	Street Light - Stone	EA	$15,000	$30,300,000.00	Arcadis Roadway Improvement Project Directory
	Pedestrian Scale Lighting	EA	$6,000	$12,108,000.00	Story-Keys Corridor Complete Streets Study
	Install Flashing Crosswalk (In-Road Lights + Solar Panel)	LS	$25,000.00	$50,500,000.00	Arcadis Roadway Improvement Project Directory
	Ped Barricade and R49 Sign	EA	$600.00	$1,212,000.00	Arcadis Roadway Improvement Project Directory
	Install HAWK Ped Signal	EA	$45,000.00	$90,900,000.00	Arcadis Roadway Improvement Project Directory
	Install Rapid Flashing Ped Beacon	EA	$22,350.00	$44,990,550.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Street Name Signs	EA	$1,500.00	$3,030,000.00	Arcadis Roadway Improvement Project Directory
	Install APS (including sign and button)	EA	$1,000.00	$2,020,000.00	Arcadis Roadway Improvement Project Directory

Removals

#	Description	Unit	Unit Price	2024 Escalated Price	Source

Cost Sources - Site Furnishings

Proposed

#	Description	Unit	Unit Price	2024 Escalated Price	Source
	Trash Receptacle	EA	$1,000.00	$2,020,000.00	Arcadis Roadway Improvement Project Directory
	Recycle Receptacle	EA	$1,000.00	$2,020,000.00	Arcadis Roadway Improvement Project Directory
	Pre-Fabricated Kiosk	EA	$2,600.00	$5,252,000.00	Arcadis Roadway Improvement Project Directory
	Benches - 6' length	EA	$1,200.00	$2,424,000.00	Arcadis Roadway Improvement Project Directory
	Bike Locker	EA	$2,000.00	$4,026,000.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Bike Rack	EA	$725.00	$1,459,425.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Bus Rack	EA	$1,000.00	$2,013,000.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Bike Station (per bike)	EA	$5,000	$10,055,000.00	https://www.itskrs.its.dot.gov/its/benecost.nsf/ID/
	Bollard (Decorative Stone)	EA	$725.00	$1,459,425.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Bollard (Steel with Plastic Sleeve)	EA	$412.00	$412.00	Market research.
	Gateway Sign	EA	$360.00	$724,680.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Gateway Structure	EA	$22,800.00	$45,896,400.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Real Time Public Info Display	EA	$2,000.00	$4,040,000.00	Arcadis Roadway Improvement Project Directory
	Information Kiosk	EA	$160,000.00	$322,080,000.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Shade Shelter	EA	$30,000.00	$60,390,000.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Bike Access Ramp	LF	$50.00	$101,000.00	Arcadis Roadway Improvement Project Directory
	Tree Grates	EA	$1,450.00	$2,918,850.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Street Tree (includes irrigation)	EA	$2,000.00	$4,036,000.00	Story-Keys Corridor Complete Streets Study
	Bus Shelter	EA	$20,000.00	$40,360,000.00	Story-Keys Corridor Complete Streets Study
	Street Furnishing (includes wayfinding)	LF	$35.00	$70,630.00	Story-Keys Corridor Complete Streets Study
	Flexible Delineator	EA	$40.00	$80,800.00	Arcadis Roadway Improvement Project Directory
	Stair Railing	LF	$35.00	$35.00	https://porch.com/project-cost/cost-to-install-a-stairway-handrail
	Stair Construction	LS	$17,000.00	$17,000.00	https://www.homewyse.com/services/cost_to_install_stairway.html
	Concrete ADA Ramp (5ft. wide)	LF	$70.00	$141,260.00	Story-Keys Corridor Complete Streets Study
	Public Restroom Stall	EA	$100,000.00	$201,800,000.00	Story-Keys Corridor Complete Streets Study
	Real Time Transit	EA	$10,000.00	$20,180,000.00	Story-Keys Corridor Complete Streets Study

Removals

#	Description	Unit	Unit Price	2024 Escalated Price	Source
	Remove Bike Rack	EA	$1,000.00	$2,013,000.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Relocate Bike Rack	EA	$1,200.00	$2,415,600.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Remove Bench	EA	$900.00	$1,811,700.00	Countermeasure Cost Report (UNC-HSRC 2013)
	Remove Bus Shelter	EA	$3,700.00	$7,448,100.00	Countermeasure Cost Report (UNC-HSRC 2013)

Cost Sources - Landscaping

Proposed

#	Description	Unit	Unit Price	2024 Escalated Price	Source
	Proposed Landscaping / Irrigation	SF	$16.00	$32,288.00	Story-Keys Corridor Complete Streets Study

Removals

#	Description	Unit	Unit Price	2024 Escalated Price	Source
	Clearing and Grubbing	SF	$1.50	$3,030.00	Arcadis Roadway Improvement Project Directory
	Landscaping / Irrigation Removals	LS		$-	Arcadis Roadway Improvement Project Directory

Winchester Station Area Pedestrian Improvements Summary

	Item	Amount
	Civil	$456,884,240.00
	Signing / Striping	$109,403,200.00
	Traffic / Electrical	$69,690,000.00
	Traffic / Electrical Labor (25% of T/E)	$17,422,500.00
	Furnishing	$80,720,000.00
	Landscaping / Irrigation	
	Traffic Control	
	Water Pollution Control	
	Maintain WPCP / Perform Filings	
	Project Construction Survey	
	Materials and Permits Subtotal	$734,119,940
	Mobilization (10% of Mat./Perm. Subtotal)	$73,411,994
	Construction Subtotal	$807,531,934
	Contingency (% of Constr. Subtotal)	
	Contingency Amount	
	Total Construction Cost	$807,531,934
	Eng./Design (10% of Constr. Total)	$80,753,193
	Administration (5% of Constr. Total)	$40,376,597
	Constr. Mgmt (7% of Constr. Total)	$56,527,235
	Total Project Cost	$985,188,959

	Assumptions	Cost
1	Widen Sidewalk (270 ft)	$51,769,800.00
2	Sidewalk Repaving (270 ft)	$70,848,000.00
3	Widen Sidewalk (400 ft)	$76,696,000.00
4	Widen Sidewalk (775 ft)	$148,598,500.00
5	Wayfinding Signage (2)	$1,454,400.00
6	Wayfinding Signage (2)	$1,454,400.00
7	Wayfinding Signage (2)	$1,454,400.00
8	Wayfinding Signage (2)	$1,454,400.00
9	Wayfinding Signage (2)	$1,454,400.00
10	Add Bus Shelter	$40,360,000.00
11	High Visibility Crosswalk (90 ft)	$14,544,000.00
12	Wayfinding Signage (2)	$1,454,400.00
13-17	High Visibility Crosswalk (118 ft)	$19,068,800.00
18	Pedestrian Pathways (330 ft continental stripping) (50 ft sidewalk)	$59,382,000.00
19	Accessible Curb	$26,169,000.00
20	High Visibility Crosswalk (40 ft)	$6,464,000.00
21	Wayfinding Signage (2)	$1,454,400.00
22	Wayfinding Signage (2)	$1,454,400.00
23	Wayfinding Signage (2)	$1,454,400.00
24	Wayfinding Signage (2)	$1,454,400.00
25	Wayfinding Signage (2)	$1,454,400.00
26	Improve Lighting (690 ft)	$69,690,000.00
27	Improve Landscaping (187 ft) (On-going maintenance cost, not included in estimate)	
28	Add Bus Shelter	$40,360,000.00
29	Extend median with refuge for pedestrians	$3,632,400.00
30	Improve Landscaping (On-going maintenance cost, not included in estimate)	
27	Wayfinding Signage (2)	$1,454,400.00
28	Wayfinding Signage (2)	$1,454,400.00
29	Improve Lighting (2445 ft)	$246,945,000.00
30	Add sidewalk (include utility relocation) (236ft)	$33,337,360.00

NOTE: DOES NOT INCLUDE CONSTRUCTION INSPECTION, ENGINEERING, RIGHT-OF-WAY, OR UTILITY COSTS EXCEPT AS NOTED.

Pedestrian Improvements - Roadway (Civil)

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Curb (6") & Gutter (24")	LF	$100,900.00		
	Curb (6")	LF	$40,400.00		
	Curb (6") - Divider	LF	$60,600.00		
	Curb Ramp - Corner	EA	$5,656,000.00		
	Curb Ramp - Mid Block	EA	$5,050,000.00		
	Curb Extension w/ ADA Ramp	EA	$26,169,000.00	1	$26,169,000.00
	Detectable Warning Tiles	SF	$125,116.00		
	Traffic Circle	EA	$100,650,000.00		
	Roundabout	EA	$503,250,000.00		
	Retrofit 4-way Intersection w/ Curb Extensions	LS	$201,300,000.00		
	Traffic Diverter	EA	$40,400,000.00		
	Median / Median Island	SF	$30,270.00	120	$3,632,400.00
	Raised Crosswalk	EA	$16,506,600.00		
	Raised Intersection	EA	$102,663,000.00		
	Speed Hump	EA	$5,435,100.00		
	Speed Bump	EA	$3,271,125.00		
	Speed Table	EA	$4,026,000.00		
	Asphalt Driveway - Grind, Regrade and Overlay	SF	$6,060.00		
	Asphalt Filler Strip (2' wide)	LF	$113,120.00		
	Asphalt Paving (Grind & Replace)	SF	$30,300.00		
	Asphalt Paving (3.5")	SF	$8,080.00		
	Asphalt Paving (5")	SF	$10,100.00		
	PCC - Concrete Roadway - 9" Depth	SF	$30,300.00		
	PCC - Filler Strip (6" wide)	LF	$10,090.00		
	PCC Sidewalk - 4" Depth / 2' Wide	LF	$40,360.00		
	PCC Sidewalk - 4" Depth / 4' Wide	LF	$80,720.00		
	PCC Sidewalk - 4" Depth / 6' Wide	LF	$121,080.00	533	$64,535,640.00
	PCC Sidewalk - 4" Depth / 7' Wide	LF	$141,260.00		
	PCC Sidewalk - 4" Depth / 8' Wide	LF	$161,440.00	1445	$233,280,800.00
	PCC Sidewalk - 4" Depth / 10' Wide	LF	$201,800.00	270	$54,486,000.00
	PCC Sidewalk - 4" Depth / 12' Wide	LF	$242,160.00		
	PCC Sidewalk - 4" Depth / 15' Wide	LF	$302,700.00		
	PCC Driveway	SF	$28,252.00		
	Stamped Concrete - 6" Depth	SF	$40,400.00		
	Class II Aggregate Base (2", Sand Base)	CY	$1,010.00		
	Cement Treated Base (12")	SF	$8,080.00		
	Cement Treated Base (16")	SF	$10,100.00		
	Slurry Seal + Crack Sealing	SF	$1,515.00		
	Saw-cut of existing Concrete Pavement	LF	$8,080.00		
	Saw-cut of existing Asphalt Pavement	LF	$6,060.00		
	Install Fence	LF	$101,000.00		
	Install Gate	EA	$2,020,000.00		
	Reset Survey Markers	EA	$4,040,000.00		
	Adjust Utility Boxes to Grade	EA	$606,000.00		

Removals

#	Description	Unit	Unit Price	Quantity	Total
	Roadway Excavation	CY	$40,400.00		
	Remove existing asphalt pavement (driveway)	SF	$8,080.00		
	Remove existing asphalt pavement (roadway)	SF	$20,200.00		
	Remove existing concrete pavement (roadway)	SF	$20,200.00		
	Remove existing Curb & Gutter	LF	$40,400.00		
	Remove existing Fence	LF	$24,240.00		
	Remove existing Tree	EA	$2,020,000.00		
	Remove existing sidewalk, curb ramps & driveways	SF	$14,140.00		
	Remove Existing Asphalt Sidewalk	SF	$5,050.00		
	Remove Existing PCC Sidewalk	SF	$6,060.00	12340	$74,780,400.00
				ROADWAY SUBTOTAL	$456,884,240.00

Pedestrian Improvements - Signing and Striping

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Install Limit Line	LF	$17,170.00		
	Install Centerline w/ Reflectors	LF	$6,060.00		
	Install 4" Striping - Paint	LF	$1,010.00		
	Install 4" Striping - Thermoplastic	LF	$10,100.00		
	Install 4" Striping (Dashed) - Paint	LF	$505.00		
	Install 4" Striping (Dashed) - Thermoplastic	LF	$5,050.00		
	Install 8" Striping - Thermoplastic	LF	$20,200.00		
	Install Double Yellow Line (4") - Thermoplastic	LF	$6,060.00		
	Install Parking Stripes (stall)	EA	$20,200.00		
	Install Roadside Sign	EA	$606,000.00		
	Install Crosswalk - Thermoplastic (12')	LF	$80,800.00		
	Install Continental Crosswalk - Thermoplastic (12')	LF	$161,600.00	578	$93,404,800.00
	Instal Turn Arrow - Thermoplastic	EA	$1,010,000.00		
	Install Crosshatching - Thermoplastic	LF	$24,240.00		
	Install Stop Line - Thermoplastic	LF	$30,195.00		
	Install Text Pavement Marking - per word	EA	$808,000.00		
	Bike Route Signing	MI	$3,333,000.00		
	Bike Lane Marking - Paint	EA	$202,000.00		
	Install Sharrow - Paint	EA	$242,400.00		
	Install Bike Buffer (2' wide) - Thermoplastic	LF	$12,120.00		
	Install Bike Buffer (4' wide) - Thermoplastic	LF	$24,240.00		
	Install Curb Paint	LF	$6,039.00		
	Install Cycle Track Paint	SF	$12,120.00		
	Install Bike Lane Marking - Thermoplastic	EA	$707,000.00		
	Install Sharrow - Thermoplastic	EA	$1,010,000.00		
	Install Greenback Sharrow - Thermoplastic	EA	$1,414,000.00		
	Install Green Thermoplastic	SF	$20,200.00		
	Install Sign on Existing Post	EA	$161,600.00		
	Install Sign on New Post	EA	$727,200.00	22	$15,998,400.00
	Install Green Bike Lane Conflict Marking - Thermoplastic	LF	$40,400.00		

Removals

#	Description	Unit	Unit Price	Quantity	Total
	Remove Delineation	LF	$2,020.00		
	Remove Turn Arrow	EA	$151,500.00		
	Remove Crosswalk	LF	$10,100.00		
	Relocate Sign and Pole	EA	$808,000.00		
	Remove Sign and Pole	EA	$353,500.00		
	Remove "Stop" Text	EA	$202,000.00		
				SIGNING / STRIPING SUBTOTAL	$109,403,200.00

Pedestrian Improvements - Traffic and Electrical

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Modify Controller	EA	$15,150,000.00		
	Modify Intersection Traffic Signal System	LS	$1,109,900,000.00		
	Vehicle Heads	EA	$2,424,000.00		
	Ped Heads	EA	$3,079,890.00		
	Audible Ped Signal	EA	$1,610,400.00		
	Ped Countdown Timer	EA	$1,459,425.00		
	Loops	EA	$1,414,000.00		
	Ped Buttons	EA	$724,680.00		
	Bike Button, Pole, and Sign	EA	$2,222,000.00		
	EVP Sensor	EA	$6,060,000.00		
	Parking Lot Light Fixture	EA	$8,080,000.00		
	Type 17 Poles, Luminaires, and Foundation	EA	$36,360,000.00		
	Type 26-3 Pole, Luminaires, and Foundation	EA	$44,440,000.00		
	Type 61-5 Pole, Luminaires, and Foundation	EA	$48,480,000.00		
	Pedestrian Push Botton Post	EA	$2,222,000.00		
	Pullboxes	EA	$1,515,000.00		
	2" Conduit	LF	$80,800.00		
	3" Conduit	LF	$101,000.00		
	Traffic Signal Wiring	LS	$30,300,000.00		
	Bike Detector Loop	EA	$1,616,000.00		
	Mast Arm Sign	EA	$808,000.00		
	Street Light - Basic	EA	$15,150,000.00	5	$69,690,000.00
	Street Light - Stone	EA	$30,300,000.00		
	Pedestrian Scale Lighting	EA	$12,108,000.00		
	Install Flashing Crosswalk (In-Road Lights + Solar Panel)	LS	$50,500,000.00		
	Ped Barricade and R49 Sign	EA	$1,212,000.00		
	Install HAWK Ped Signal	EA	$90,900,000.00		
	Install Rapid Flashing Ped Beacon	EA	$44,990,550.00		
	Street Name Signs	EA	$3,030,000.00		
	Install APS (including sign and button)	EA	$2,020,000.00		

Removals

#	Description	Unit	Unit Price	Quantity	Total
				TRAFFIC / ELECTRICAL SUBTOTAL	$69,690,000.00

Pedestrian Improvements - Site Furnishings

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Trash Receptacle	EA	$2,020,000.00		
	Recycle Receptacle	EA	$2,020,000.00		
	Pre-Fabricated Kiosk	EA	$5,252,000.00		
	Benches - 6' length	EA	$2,424,000.00		
	Bike Locker	EA	$4,026,000.00		
	Bike Rack	EA	$1,459,425.00		
	Bus Rack	EA	$2,013,000.00		
	Bike Station (per bike)	EA	$10,055,000.00		
	Bollard (Decorative Stone)	EA	$1,459,425.00		
	Bollard (Steel with Plastic Sleeve)	EA	$412.00		
	Gateway Sign	EA	$724,680.00		
	Gateway Structure	EA	$45,896,400.00		
	Real Time Public Info Display	EA	$4,040,000.00		
	Information Kiosk	EA	$322,080,000.00		
	Shade Shelter	EA	$60,390,000.00		
	Bike Access Ramp	LF	$101,000.00		
	Tree Grates	EA	$2,918,850.00		
	Street Tree (includes irrigation)	EA	$4,036,000.00		
	Bus Shelter	EA	$40,360,000.00		
	Street Furnishing (includes wayfinding)	LF	$70,630.00		
	Flexible Delineator	EA	$80,800.00		
	Stair Railing	LF	$35.00		
	Stair Construction	LS	$17,000.00		
	Concrete ADA Ramp (5ft. wide)	LF	$141,260.00		
	Public Restroom Stall	EA	$201,800,000.00	2	$80,720,000.00
	Real Time Transit	EA	$20,180,000.00		

Removals

#	Description	Unit	Unit Price	Quantity	Total
	Remove Bike Rack	EA	$1,100.00		
	Relocate Bike Rack	EA	$1,300.00		
	Remove Bench	EA	$1,000.00		
	Remove Bus Shelter	EA	$4,100.00		
				SITE FURNISHINGS SUBTOTAL	$80,720,000.00

Pedestrian Improvements - Landscaping

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Proposed Landscaping / Irrigation	SF	$32,288.00		

Removals

#	Description	Unit	Unit Price	Quantity	Total
	Clearing and Grubbing	SF	$3,030.00		
	Landscaping / Irrigation Removals	LS			
				LANDSCAPING SUBTOTAL	

Winchester Station Area Bicycle Improvements Summary

	Item	Amount
	Civil	
	Signing / Striping	$(20,190,001.00)
	Traffic / Electrical	
	Traffic / Electrical Labor (25% of T/E)	
	Furnishing	
	Landscaping / Irrigation	
	Traffic Control	
	Water Pollution Control	
	Maintain WPCP / Perform Filings	
	Project Construction Survey	
	Materials and Permits Subtotal	$(20,190,001)
	Mobilization (10% of Mat./Perm. Subtotal)	$(2,019,000)
	Construction Subtotal	$(22,209,001)
	Contingency (% of Constr. Subtotal)	
	Contingency Amount	
	Total Construction Cost	$(22,209,001)
	Eng./Design (10% of Constr. Total)	$(2,220,900)
	Administration (5% of Constr. Total)	$(1,110,450)
	Constr. Mgmt (7% of Constr. Total)	$(1,554,630)
	Total Project Cost	$(27,094,981)

	Assumptions	Cost
1	Class IV Protected Bikeway (1.82 mi)	$276,578,382.08
2	Two Stage Left Turn (70 ft x 2)	$6,302,400.00
3	Two Stage Left Turn (60 ft x 2)	$5,494,400.00
4	Green Bicycle Transition Lanes (86 ft x 2)	$6,948,800.00
5	Class II Bike Lanes (0.771 mi)	$174,057,259.20
6	Class III Bike Route (1041 ft)	$11,572,580.00
7	Class II Bike Lanes (1005 ft)	$21,485,225.00
8	Green Bicycle Transition Lane (50 ft. x 2)	$4,040,000.00
9	Class II Bike Lanes (312 ft)	$13,340,080.00
10	Class IV Protected Bikeway (1.88 mi)	$285,696,350.72
11	Two Stage Left Turn (125 ft x 2)	$10,746,400.00
12	Green Bicycle Transition Lane (120 ft. x2)	$9,696,000.00
13	Class IV Protected Bikeway (1.45 mi)	$220,350,908.80
14	Class III Bike Route (0.427 mi)	$17,292,492.80
15	Class IV Protected Bikeway (2.09 mi)	$317,609,240.96
16	Class IV Protected Bikeway (1010 ft)	$29,069,281.33
17	Class II Bike Lane (0.309 mi)	$69,758,356.80
18	Class IV Protected Bikeway (0.523 mi)	$79,478,293.31
19	Class III Bike Route (0.663 mi)	$23,165,683.20

NOTE: DOES NOT INCLUDE CONSTRUCTION INSPECTION, ENGINEERING, RIGHT-OF-WAY, OR UTILITY COSTS EXCEPT AS NOTED.

Bicycle Improvements - Roadway (Civil)

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Curb (6") & Gutter (24")	LF	$100,900.00		
	Curb (6")	LF	$40,400.00		
	Curb (6") - Divider	LF	$60,600.00		
	Curb Ramp - Corner	EA	$5,656,000.00		
	Curb Ramp - Mid Block	EA	$5,050,000.00		
	Curb Extension w/ ADA Ramp	EA	$26,169,000.00		
	Detectable Warning Tiles	SF	$125,116.00		
	Traffic Circle	EA	$100,650,000.00		
	Roundabout	EA	$503,250,000.00		
	Retrofit 4-way Intersection w/ Curb Extensions	LS	$201,300,000.00		
	Traffic Diverter	EA	$40,400,000.00		
	Median / Median Island	SF	$30,270.00		
	Raised Crosswalk	EA	$16,506,600.00		
	Raised Intersection	EA	$102,663,000.00		
	Speed Hump	EA	$5,435,100.00		
	Speed Bump	EA	$3,271,125.00		
	Speed Table	EA	$4,026,000.00		
	Asphalt Driveway - Grind, Regrade and Overlay	SF	$6,060.00		
	Asphalt Filler Strip (2' wide)	LF	$113,120.00		
	Asphalt Paving (Grind & Replace)	SF	$30,300.00		
	Asphalt Paving (3.5")	SF	$8,080.00		
	Asphalt Paving (5")	SF	$10,100.00		
	PCC - Concrete Roadway - 9" Depth	SF	$30,300.00		
	PCC - Filler Strip (6" wide)	LF	$10,090.00		
	PCC Sidewalk - 4" Depth / 2' Wide	LF	$40,360.00		
	PCC Sidewalk - 4" Depth / 4' Wide	LF	$80,720.00		
	PCC Sidewalk - 4" Depth / 6' Wide	LF	$121,080.00		
	PCC Sidewalk - 4" Depth / 7' Wide	LF	$141,260.00		
	PCC Sidewalk - 4" Depth / 8' Wide	LF	$161,440.00		
	PCC Sidewalk - 4" Depth / 10' Wide	LF	$201,800.00		
	PCC Sidewalk - 4" Depth / 12' Wide	LF	$242,160.00		
	PCC Sidewalk - 4" Depth / 15' Wide	LF	$302,700.00		
	PCC Driveway	SF	$28,252.00		
	Stamped Concrete - 6" Depth	SF	$40,400.00		
	Class II Aggregate Base (2", Sand Base)	CY	$1,010.00		
	Cement Treated Base (12")	SF	$8,080.00		
	Cement Treated Base (16")	SF	$10,100.00		
	Slurry Seal + Crack Sealing	SF	$1,515.00		
	Saw-cut of existing Concrete Pavement	LF	$8,080.00		
	Saw-cut of existing Asphalt Pavement	LF	$6,060.00		
	Install Fence	LF	$101,000.00		
	Install Gate	EA	$2,020,000.00		
	Reset Survey Markers	EA	$4,040,000.00		
	Adjust Utility Boxes to Grade	EA	$606,000.00		

Removals

#	Description	Unit	Unit Price	Quantity	Total
	Roadway Excavation	CY	$40,400.00		
	Remove existing asphalt pavement (driveway)	SF	$8,080.00		
	Remove existing asphalt pavement (roadway)	SF	$20,200.00		
	Remove existing concrete pavement (roadway)	SF	$20,200.00		
	Remove existing Curb & Gutter	LF	$40,400.00		
	Remove existing Fence	LF	$24,240.00		
	Remove existing Tree	EA	$2,020,000.00		
	Remove existing sidewalk, curb ramps & driveways	SF	$14,140.00		
	Remove Existing Asphalt Sidewalk	SF	$5,050.00		
	Remove Existing PCC Sidewalk	SF	$6,060.00		
				ROADWAY SUBTOTAL	

Bicycle Improvements - Signing and Striping

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Install Limit Line	LF	$17,170.00		$-
	Install Centerline w/ Reflectors	LF	$6,060.00		$-
	Install 4" Striping - Paint	LF	$1,010.00	0	$-
	Install 4" Striping - Thermoplastic	LF	$10,100.00		$-
	Install 4" Striping (Dashed) - Paint	LF	$505.00		$-
	Install 4" Striping (Dashed) - Thermoplastic	LF	$5,050.00		$-
	Install 8" Striping - Thermoplastic	LF	$20,200.00	(4,071)	$(82,231,776.00)
	Install Double Yellow Line (4") - Thermoplastic	LF	$6,060.00		$-
	Install Parking Stripes (stall)	EA	$20,200.00		$-
	Install Roadside Sign	EA	$606,000.00		$-
	Install Crosswalk - Thermoplastic (12')	LF	$80,800.00		$-
	Install Continental Crosswalk - Thermoplastic (12')	LF	$161,600.00		$-
	Instal Turn Arrow - Thermoplastic	EA	$1,010,000.00		$-
	Install Crosshatching - Thermoplastic	LF	$24,240.00		$-
	Install Stop Line - Thermoplastic	LF	$30,195.00		$-
	Install Text Pavement Marking - per word	EA	$808,000.00		$-
	Bike Route Signing	MI	$3,333,000.00	6	$19,998,000.00
	Bike Lane Marking - Paint	EA	$202,000.00		$-
	Install Sharrow - Paint	EA	$242,400.00		$-
	Install Bike Buffer (2' wide) - Thermoplastic	LF	$12,120.00	-	$-
	Install Bike Buffer (4' wide) - Thermoplastic	LF	$24,240.00		$-
	Install Curb Paint	LF	$6,039.00		$-
	Install Cycle Track Paint	SF	$12,120.00		$-
	Install Bike Lane Marking - Thermoplastic	EA	$707,000.00	(2)	$(1,184,225.00)
	Install Sharrow - Thermoplastic	EA	$1,010,000.00		$-
	Install Greenback Sharrow - Thermoplastic	EA	$1,414,000.00		$-
	Install Green Thermoplastic	SF	$20,200.00		$-
	Install Sign on Existing Post	EA	$161,600.00		$-
	Install Sign on New Post	EA	$727,200.00		$-
	Install Green Bike Lane Conflict Marking - Thermoplastic	LF	$40,400.00	1,070	$43,228,000.00

Removals

#	Description	Unit	Unit Price	Quantity	Total
	Remove Delineation	LF	$2,020.00		
	Remove Turn Arrow	EA	$151,500.00		
	Remove Crosswalk	LF	$10,100.00		
	Relocate Sign and Pole	EA	$808,000.00		
	Remove Sign and Pole	EA	$353,500.00		
	Remove "Stop" Text	EA	$202,000.00		
				SIGNING / STRIPING SUBTOTAL	$(20,190,001.00)

Bicycle Improvements - Traffic and Electrical

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Modify Controller	EA	$15,150,000.00		
	Modify Intersection Traffic Signal System	LS	$1,109,900,000.00		
	Vehicle Heads	EA	$2,424,000.00		
	Ped Heads	EA	$3,079,890.00		
	Audible Ped Signal	EA	$1,610,400.00		
	Ped Countdown Timer	EA	$1,459,425.00		
	Loops	EA	$1,414,000.00		
	Ped Buttons	EA	$724,680.00		
	Bike Button, Pole, and Sign	EA	$2,222,000.00		
	EVP Sensor	EA	$6,060,000.00		
	Parking Lot Light Fixture	EA	$8,080,000.00		
	Type 17 Poles, Luminaires, and Foundation	EA	$36,360,000.00		
	Type 26-3 Pole, Luminaires, and Foundation	EA	$44,440,000.00		
	Type 61-5 Pole, Luminaires, and Foundation	EA	$48,480,000.00		
	Pedestrian Push Botton Post	EA	$2,222,000.00		
	Pullboxes	EA	$1,515,000.00		
	2" Conduit	LF	$80,800.00		
	3" Conduit	LF	$101,000.00		
	Traffic Signal Wiring	LS	$30,300,000.00		
	Bike Detector Loop	EA	$1,616,000.00		
	Mast Arm Sign	EA	$808,000.00		
	Street Light - Basic	EA	$15,150,000.00		
	Street Light - Stone	EA	$30,300,000.00		
	Pedestrian Scale Lighting	EA	$12,108,000.00		
	Install Flashing Crosswalk (In-Road Lights + Solar Panel)	LS	$50,500,000.00		
	Ped Barricade and R49 Sign	EA	$1,212,000.00		
	Install HAWK Ped Signal	EA	$90,900,000.00		
	Install Rapid Flashing Ped Beacon	EA	$44,990,550.00		
	Street Name Signs	EA	$3,030,000.00		
	Install APS (including sign and button)	EA	$2,020,000.00		

Removals

#	Description	Unit	Unit Price	Quantity	Total
				TRAFFIC / ELECTRICAL SUBTOTAL	

Bicycle Improvements - Site Furnishings

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Trash Receptacle	EA	$2,020,000.00		
	Recycle Receptacle	EA	$2,020,000.00		
	Pre-Fabricated Kiosk	EA	$5,252,000.00		
	Benches - 6' length	EA	$2,424,000.00		
	Bike Locker	EA	$4,026,000.00		
	Bike Rack	EA	$1,459,425.00		
	Bus Rack	EA	$2,013,000.00		
	Bike Station (per bike)	EA	$10,055,000.00		
	Bollard (Decorative Stone)	EA	$1,459,425.00		
	Bollard (Steel with Plastic Sleeve)	EA	$412.00		
	Gateway Sign	EA	$724,680.00		
	Gateway Structure	EA	$45,896,400.00		
	Real Time Public Info Display	EA	$4,040,000.00		
	Information Kiosk	EA	$322,080,000.00		
	Shade Shelter	EA	$60,390,000.00		
	Bike Access Ramp	LF	$101,000.00		
	Tree Grates	EA	$2,918,850.00		
	Street Tree (includes irrigation)	EA	$4,036,000.00		
	Bus Shelter	EA	$40,360,000.00		
	Street Furnishing (includes wayfinding)	LF	$70,630.00		
	Flexible Delineator	EA	$80,800.00		
	Stair Railing	LF	$35.00		
	Stair Construction	LS	$17,000.00		
	Concrete ADA Ramp (5ft. wide)	LF	$141,260.00		
	Public Restroom Stall	EA	$201,800,000.00		
	Real Time Transit	EA	$20,180,000.00		

Removals

#	Description	Unit	Unit Price	Quantity	Total
	Remove Bike Rack	EA	$1,100.00		
	Relocate Bike Rack	EA	$1,300.00		
	Remove Bench	EA	$1,000.00		
	Remove Bus Shelter	EA	$4,100.00		

SITE FURNISHINGS SUBTOTAL

Bicycle Improvements - Landscaping

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Proposed Landscaping / Irrigation	SF	$32,288.00		

Removals

#	Description	Unit	Unit Price	Quantity	Total
	Clearing and Grubbing	SF	$3,030.00		
	Landscaping / Irrigation Removals	LS			

LANDSCAPING SUBTOTAL

Winchester Station On-Site Improvements Summary

	Item	Amount
	Civil	$63,701,200.00
	Signing / Striping	$11,473,600.00
	Traffic / Electrical	$25,250,000.00
	Traffic / Electrical Labor (25% of T/E)	$6,312,500.00
	Furnishing	$453,681,125.00
	Landscaping / Irrigation	
	Traffic Control	
	Water Pollution Control	
	Maintain WPCP / Perform Filings	
	Project Construction Survey	
	Materials and Permits Subtotal	$560,418,425
	Mobilization (10% of Mat./Perm. Subtotal)	$56,041,843
	Construction Subtotal	$616,460,268
	Contingency (% of Constr. Subtotal)	
	Contingency Amount	
	Total Construction Cost	$616,460,268
	Eng./Design (10% of Constr. Total)	$61,646,027
	Administration (5% of Constr. Total)	$30,823,013
	Constr. Mgmt (7% of Constr. Total)	$43,152,219
	Total Project Cost	$752,081,527

	Assumptions	Cost
1	Pedestrian Pathway (250 ft) (lighting every 150 ft) (remove 230 ft. fence)(remove 1 tree)	$83,295,200.00
2	Additional bike parking (5)	$7,297,125.00
3	Additional seating/plaza	$2,424,000.00
4	Add new wayfinding signage	$1,454,400.00
5	Add new wayfinding signage	$1,454,400.00
6	Add new wayfinding signage	$1,454,400.00
7	Add station bathrooms (2 Stalls)	$403,600,000.00
8	ADA Curb Ramp	$5,656,000.00
9	Real time transit info	$40,360,000.00
10	Potential off-site PUDO location (2 signs)	$1,454,400.00
11	High visibility crosswalk (35 ft)	$5,656,000.00

NOTE: DOES NOT INCLUDE CONSTRUCTION INSPECTION, ENGINEERING, RIGHT-OF-WAY, OR UTILITY COSTS EXCEPT AS NOTED.

On-Site Improvements - Roadway (Civil)

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Curb (6") & Gutter (24")	LF	$100,900.00		
	Curb (6")	LF	$40,400.00		
	Curb (6") - Divider	LF	$60,600.00		
	Curb Ramp - Corner	EA	$5,656,000.00	1	$5,656,000.00
	Curb Ramp - Mid Block	EA	$5,050,000.00		
	Curb Extension w/ ADA Ramp	EA	$26,169,000.00		
	Detectable Warning Tiles	SF	$125,116.00		
	Traffic Circle	EA	$100,650,000.00		
	Roundabout	EA	$503,250,000.00		
	Retrofit 4-way Intersection w/ Curb Extensions	LS	$201,300,000.00		
	Traffic Diverter	EA	$40,400,000.00		
	Median / Median Island	SF	$30,270.00		
	Raised Crosswalk	EA	$16,506,600.00		
	Raised Intersection	EA	$102,663,000.00		
	Speed Hump	EA	$5,435,100.00		
	Speed Bump	EA	$3,271,125.00		
	Speed Table	EA	$4,026,000.00		
	Asphalt Driveway - Grind, Regrade and Overlay	SF	$6,060.00		
	Asphalt Filler Strip (2' wide)	LF	$113,120.00		
	Asphalt Paving (Grind & Replace)	SF	$30,300.00		
	Asphalt Paving (3.5")	SF	$8,080.00		
	Asphalt Paving (5")	SF	$10,100.00		
	PCC - Concrete Roadway - 9" Depth	SF	$30,300.00		
	PCC - Filler Strip (6" wide)	LF	$10,090.00		
	PCC Sidewalk - 4" Depth / 2' Wide	LF	$40,360.00		
	PCC Sidewalk - 4" Depth / 4' Wide	LF	$80,720.00		
	PCC Sidewalk - 4" Depth / 6' Wide	LF	$121,080.00		
	PCC Sidewalk - 4" Depth / 7' Wide	LF	$141,260.00		
	PCC Sidewalk - 4" Depth / 8' Wide	LF	$161,440.00		
	PCC Sidewalk - 4" Depth / 10' Wide	LF	$201,800.00	250	$50,450,000.00
	PCC Sidewalk - 4" Depth / 12' Wide	LF	$242,160.00		
	PCC Sidewalk - 4" Depth / 15' Wide	LF	$302,700.00		
	PCC Driveway	SF	$28,252.00		
	Stamped Concrete - 6" Depth	SF	$40,400.00		
	Class II Aggregate Base (2", Sand Base)	CY	$1,010.00		
	Cement Treated Base (12")	SF	$8,080.00		
	Cement Treated Base (16")	SF	$10,100.00		
	Slurry Seal + Crack Sealing	SF	$1,515.00		
	Saw-cut of existing Concrete Pavement	LF	$8,080.00		
	Saw-cut of existing Asphalt Pavement	LF	$6,060.00		
	Install Fence	LF	$101,000.00		
	Install Gate	EA	$2,020,000.00		
	Reset Survey Markers	EA	$4,040,000.00		
	Adjust Utility Boxes to Grade	EA	$606,000.00		

Removals

#	Description	Unit	Unit Price	Quantity	Total
	Roadway Excavation	CY	$40,400.00		
	Remove existing asphalt pavement (driveway)	SF	$8,080.00		
	Remove existing asphalt pavement (roadway)	SF	$20,200.00		
	Remove existing concrete pavement (roadway)	SF	$20,200.00		
	Remove existing Curb & Gutter	LF	$40,400.00		
	Remove existing Fence	LF	$24,240.00	230	$5,575,200.00
	Remove existing Tree	EA	$2,020,000.00	1	$2,020,000.00
	Remove existing sidewalk, curb ramps & driveways	SF	$14,140.00		
	Remove Existing Asphalt Sidewalk	SF	$5,050.00		
	Remove Existing PCC Sidewalk	SF	$6,060.00		
				ROADWAY SUBTOTAL	$63,701,200.00

On-Site Improvements - Signing and Striping

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Install Limit Line	LF	$17,170.00		
	Install Centerline w/ Reflectors	LF	$6,060.00		
	Install 4" Striping - Paint	LF	$1,010.00		
	Install 4" Striping - Thermoplastic	LF	$10,100.00		
	Install 4" Striping (Dashed) - Paint	LF	$505.00		
	Install 4" Striping (Dashed) - Thermoplastic	LF	$5,050.00		
	Install 8" Striping - Thermoplastic	LF	$20,200.00		
	Install Double Yellow Line (4") - Thermoplastic	LF	$6,060.00		
	Install Parking Stripes (stall)	EA	$20,200.00		
	Install Roadside Sign	EA	$606,000.00		
	Install Crosswalk - Thermoplastic (12')	LF	$80,800.00		
	Install Continental Crosswalk - Thermoplastic (12')	LF	$161,600.00	35	$5,656,000.00
	Instal Turn Arrow - Thermoplastic	EA	$1,010,000.00		
	Install Crosshatching - Thermoplastic	LF	$24,240.00		
	Install Stop Line - Thermoplastic	LF	$30,195.00		
	Install Text Pavement Marking - per word	EA	$808,000.00		
	Bike Route Signing	MI	$3,333,000.00		
	Bike Lane Marking - Paint	EA	$202,000.00		
	Install Sharrow - Paint	EA	$242,400.00		
	Install Bike Buffer (2' wide) - Thermoplastic	LF	$12,120.00		
	Install Bike Buffer (4' wide) - Thermoplastic	LF	$24,240.00		
	Install Curb Paint	LF	$6,039.00		
	Install Cycle Track Paint	SF	$12,120.00		
	Install Bike Lane Marking - Thermoplastic	EA	$707,000.00		
	Install Sharrow - Thermoplastic	EA	$1,010,000.00		
	Install Greenback Sharrow - Thermoplastic	EA	$1,414,000.00		
	Install Green Thermoplastic	SF	$20,200.00		
	Install Sign on Existing Post	EA	$161,600.00		
	Install Sign on New Post	EA	$727,200.00	8	$5,817,600.00
	Install Green Bike Lane Conflict Marking - Thermoplastic	LF	$40,400.00		

Removals

#	Description	Unit	Unit Price	Quantity	Total
	Remove Delineation	LF	$2,020.00		
	Remove Turn Arrow	EA	$151,500.00		
	Remove Crosswalk	LF	$10,100.00		
	Relocate Sign and Pole	EA	$808,000.00		
	Remove Sign and Pole	EA	$353,500.00		
	Remove "Stop" Text	EA	$202,000.00		
				SIGNING / STRIPING SUBTOTAL	$11,473,600.00

On-Site Improvements - Traffic and Electrical

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Modify Controller	EA	$15,150,000.00		
	Modify Intersection Traffic Signal System	LS	$1,109,900,000.00		
	Vehicle Heads	EA	$2,424,000.00		
	Ped Heads	EA	$3,079,890.00		
	Audible Ped Signal	EA	$1,610,400.00		
	Ped Countdown Timer	EA	$1,459,425.00		
	Loops	EA	$1,414,000.00		
	Ped Buttons	EA	$724,680.00		
	Bike Button, Pole, and Sign	EA	$2,222,000.00		
	EVP Sensor	EA	$6,060,000.00		
	Parking Lot Light Fixture	EA	$8,080,000.00		
	Type 17 Poles, Luminaires, and Foundation	EA	$36,360,000.00		
	Type 26-3 Pole, Luminaires, and Foundation	EA	$44,440,000.00		
	Type 61-5 Pole, Luminaires, and Foundation	EA	$48,480,000.00		
	Pedestrian Push Botton Post	EA	$2,222,000.00		
	Pullboxes	EA	$1,515,000.00		
	2" Conduit	LF	$80,800.00		
	3" Conduit	LF	$101,000.00		
	Traffic Signal Wiring	LS	$30,300,000.00		
	Bike Detector Loop	EA	$1,616,000.00		
	Mast Arm Sign	EA	$808,000.00		
	Street Light - Basic	EA	$15,150,000.00	2	$25,250,000.00
	Street Light - Stone	EA	$30,300,000.00		
	Pedestrian Scale Lighting	EA	$12,108,000.00		
	Install Flashing Crosswalk (In-Road Lights + Solar Panel)	LS	$50,500,000.00		
	Ped Barricade and R49 Sign	EA	$1,212,000.00		
	Install HAWK Ped Signal	EA	$90,900,000.00		
	Install Rapid Flashing Ped Beacon	EA	$44,990,550.00		
	Street Name Signs	EA	$3,030,000.00		
	Install APS (including sign and button)	EA	$2,020,000.00		

Removals

#	Description	Unit	Unit Price	Quantity	Total
				TRAFFIC / ELECTRICAL SUBTOTAL	$25,250,000.00

On-Site Improvements - Site Furnishings

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Trash Receptacle	EA	$2,020,000.00		
	Recycle Receptacle	EA	$2,020,000.00		
	Pre-Fabricated Kiosk	EA	$5,252,000.00		
	Benches - 6' length	EA	$2,424,000.00	1	$2,424,000.00
	Bike Locker	EA	$4,026,000.00		
	Bike Rack	EA	$1,459,425.00	5	$7,297,125.00
	Bus Rack	EA	$2,013,000.00		
	Bike Station (per bike)	EA	$10,055,000.00		
	Bollard (Decorative Stone)	EA	$1,459,425.00		
	Bollard (Steel with Plastic Sleeve)	EA	$412.00		
	Gateway Sign	EA	$724,680.00		
	Gateway Structure	EA	$45,896,400.00		
	Real Time Public Info Display	EA	$4,040,000.00		
	Information Kiosk	EA	$322,080,000.00		
	Shade Shelter	EA	$60,390,000.00		
	Bike Access Ramp	LF	$101,000.00		
	Tree Grates	EA	$2,918,850.00		
	Street Tree (includes irrigation)	EA	$4,036,000.00		
	Bus Shelter	EA	$40,360,000.00		
	Street Furnishing (includes wayfinding)	LF	$70,630.00		
	Flexible Delineator	EA	$80,800.00		
	Stair Railing	LF	$35.00		
	Stair Construction	LS	$17,000.00		
	Concrete ADA Ramp (5ft. wide)	LF	$141,260.00		
	Public Restroom Stall	EA	$201,800,000.00	2	$403,600,000.00
	Real Time Transit	EA	$20,180,000.00	2	$40,360,000.00

Removals

#	Description	Unit	Unit Price	Quantity	Total
	Remove Bike Rack	EA	$1,100.00		
	Relocate Bike Rack	EA	$1,300.00		
	Remove Bench	EA	$1,000.00		
	Remove Bus Shelter	EA	$4,100.00		
				SITE FURNISHINGS SUBTOTAL	$453,681,125.00

On-Site Improvements - Landscaping

Proposed

#	Description	Unit	Unit Price	Quantity	Total
	Proposed Landscaping / Irrigation	SF	$32,288.00		

Removals

#	Description	Unit	Unit Price	Quantity	Total
	Clearing and Grubbing	SF	$3,030.00		
	Landscaping / Irrigation Removals	LS			
				LANDSCAPING SUBTOTAL	

Appendix C: Project Prioritization Scoring

Winchester Station Access Improvement Projects

Pedestrian Station Area Access Improvements

ID	Project	Location	Improves Connectivity to Transit	Improves Accessibility	Improves Safety	Coordination with Planned Projects	Total Score
1	Widen Sidewalk	West side of Winchester Blvd: Catalpa Ln – El Caminito Ave	0.6	1	0.6	0	2.2
2	Sidewalk Repaving	East side of Winchester Blvd: Sunnyside Ave – Kennedy Ave	0.3	1	0.6	0	1.9
3	Widen Sidewalk	West side of Winchester Blvd: Friar Way – Camden Ave	0.6	1	0.6	0	2.2
4	Widen Sidewalk	West side of Winchester Blvd: San Tomas Expwy on ramp – San Tomas Expwy off ramps	0.6	1	0.6	0	2.2
5	Wayfinding Signage	Winchester Blvd & Campbell Ave	0.3	0	0.3	0	0.6
6	Wayfinding Signage	Winchester Blvd & Kennedy Ave	0.3	0	0.3	0	0.6
7	Wayfinding Signage	Winchester Blvd & Budd Ave	0.3	0	0.3	0	0.6
8	Wayfinding Signage	Shopping center entrance on Winchester Blvd	0.3	0	0.3	0	0.6
9	Wayfinding Signage	Winchester & Camden Bus Stop on Winchester Blvd	0.3	0	0.3	0	0.6
10	Add Bus Shelter	Winchester & Camden Bus Stop on Winchester Blvd	0.3	0	0.3	0	0.6
11	High Visibility Crosswalk	Winchester Blvd & Camden Ave	0.6	0	0.6	0	1.2
12	Wayfinding Signage	Winchester Blvd & Camden Ave	0.3	0	0.3	0	0.6
13/14/15/16/17	High Visibility Crosswalk	Winchester Blvd & San Tomas Expwy On-ramp	0.6	0	0.6	0	1.2
18	Pedestrian Pathways	Safeway Plaza	1	1	0.3	1	3.3

Winchester Station Access Improvement Projects

Pedestrian Station Area Access Improvements

ID	Project	Location	Improves Connectivity to Transit	Improves Accessibility	Improves Safety	Coordination with Planned Projects	Total Score
19	Accessible Curb	Kennedy Ave & Industrial St	0.6	1	0.6	0	2.2
20	High Visibility Crosswalk	Kennedy Ave & Industrial St	0.6	0	0.6	0	1.2
21	Wayfinding Signage	Railway Ave & Los Gatos Creek Trail Entrance	0.3	0	0.3	0	0.6
22	Wayfinding Signage	Railway Ave & Los Gatos Creek Trail Entrance	0.3	0	0.3	0	0.6
23/24/25	Wayfinding Signage	Camden Ave/San Tomas Expy & Los Gatos Creek Trail	0.3	0	0.3	0	0.6
26	Improve Lighting	Los Gatos Creek Trail: San Tomas Expressway – Camden Avenue/ Winchester Boulevard	0.3	0	0.6	0	0.9
27	Improve Landscaping	Los Gatos Creek Trail entrance at Camden Avenue	0.3	0	0.6	0	0.9
28	Add Bus Shelter	Winchester Blvd & Friar Way bus stop	0.3	0	0.3	0	0.6
29	Extend median with refuge for pedestrians	Winchester Blvd & Station entrance	0.3	1	0.6	0	1.9
30	Improve landscaping	Camden Ave & San Tomas Expressway fence opening	0.6	1	0.6	0	2.2

Winchester Station Access Improvement Projects

Bicycle Station Area Access Improvements

ID	Project	Location	Improves Connectivity to Transit	Improves Accessibility	Improves Safety	Coordination with Planned Projects	Total Score
1	Class IV Protected Bikeway	Winchester Blvd	1	0	1	1	3
2	Two Stage Left Turn	Winchester Blvd & Budd Ave	0.6	0	0.6	0	1.2
3	Two Stage Left Turn	Winchester Station entrance	1	0	0.6	0	1.6
4	Green Bicycle Transition Lanes	Winchester Blvd & Camden Ave	0.6	0	1	0	1.6
5	Class II Bike Lanes	Budd Ave - Winchester Blvd to Virginia Ave	0.6	0	1	0	1.6
6	Class III Bike Route	California St - Cherry Ln to Budd Ave	0.6	0	0.6	0	1.2
7	Class II Bike Lanes	Kennedy Ave - Winchester Blvd to Railway Ave	1	0	0.6	0	1.6
8	Green Bicycle Transition Lane	Railway Ave & Kennedy Ave	0.6	0	0.6	0	1.2
9	Class II Bike Lanes	Railway Ave - Kennedy Ave to Los Gatos Creek Trail entrance	1	0	0.6	0	1.6
10	Class IV Protected Bikeway	San Tomas Expy - Campbell Ave to study boundary	0.6	0	1	1	2.6
11	Two Stage Left Turn	Budd Ave & San Tomas Expy	0.6	0	0.6	0	1.2
12	Green Bicycle Transition Lane	Budd Ave & San Tomas Expy	0.6	0	0.6	0	1.2
13	Class IV Protected Bikeway	Curtner Ave - east of Salerno Dr	0.6	0	0.6	1	2.2
14	Class III Bike Route	Curtner Ave - Camden Ave to Salerno Dr	0.6	0	0.6	0	1.2
15	Class IV Protected Bikeway	Bascom Ave - Campbell Ave to study boundary	0.6	0	0.6	1	2.2
16	Class IV Protected Bikeway	Campbell Ave - Union Ave to Bascom Ave	0.6	0	1	1	2.6

Winchester Station Access Improvement Projects

Bicycle Station Area Access Improvements

ID	Project	Location	Improves Connectivity to Transit	Improves Accessibility	Improves Safety	Coordination with Planned Projects	Total Score
17	Class II Bike Lane	Union Ave - Bascom Ave to E. McGlincy Ln	0.6	0	0.6	0	1.2
18	Class IV Protected Bikeway	Union Ave - South of Bascom Ave	0.6	0	0.6	1	2.2
19	Class III Bike Route	Dry Creek Road	0.6	0	0.6	1	2.2

Winchester Station Access Improvement Projects

On-Site Station Area Access Improvements

ID	Project	Location	Improves Connectivity to Transit	Improves Accessibility	Improves Safety	Coordination with Planned Projects	Total Score
1	Pedestrian Pathway	Cut through from S Industrial Street to Station	1	1	0.6	1	3.6
2	Additional bike parking (5)	East of TOD	0.3	0	0.3	1	1.6
3	Additional seating/plaza	East of TOD	0.3	0	0.3	1	1.6
4	Add new wayfinding signage	East of PUDO location	0.6	0	0.3	1	1.9
5	Add new wayfinding signage	East of TOD	0.6	0	0.3	1	1.9
6	Add new wayfinding signage	Station Entrance	1	0	0.6	1	2.6
7	Add station bathrooms	Outside of station platform at the top of the transit loop	0.3	0	0.3	1	1.6
8	ADA Curb Ramp	East of PUDO location	0.6	1	0.3	1	2.9
9	Real time transit info	Station platform	0.3	0	0.3	1	1.6
10	Potential off-site PUDO location	Industrial St Cul-de-sac	0.6	1	0.3	0	1.9
11	High visibility crosswalk	From TOD to bus stops	0.6	1	0.6	1	3.2

Valley Transportation Authority

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