5 Circulation and Streetscape


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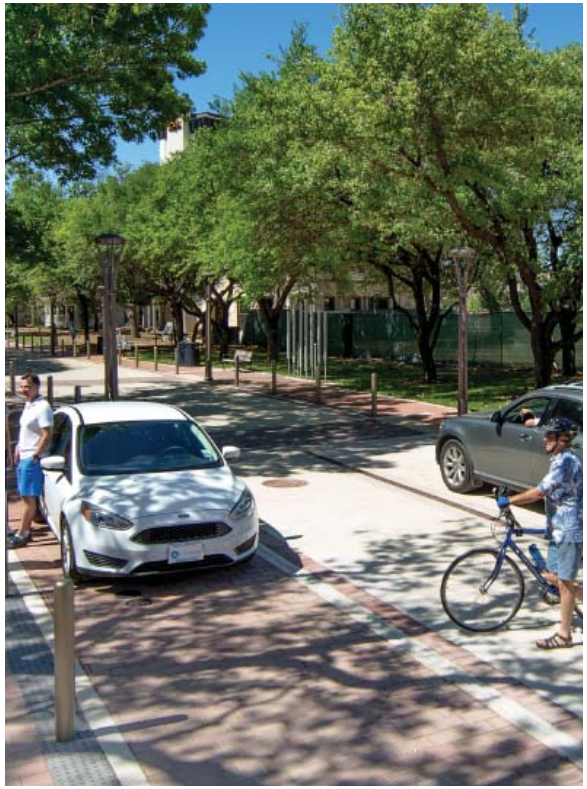


IN THIS CHAPTER...

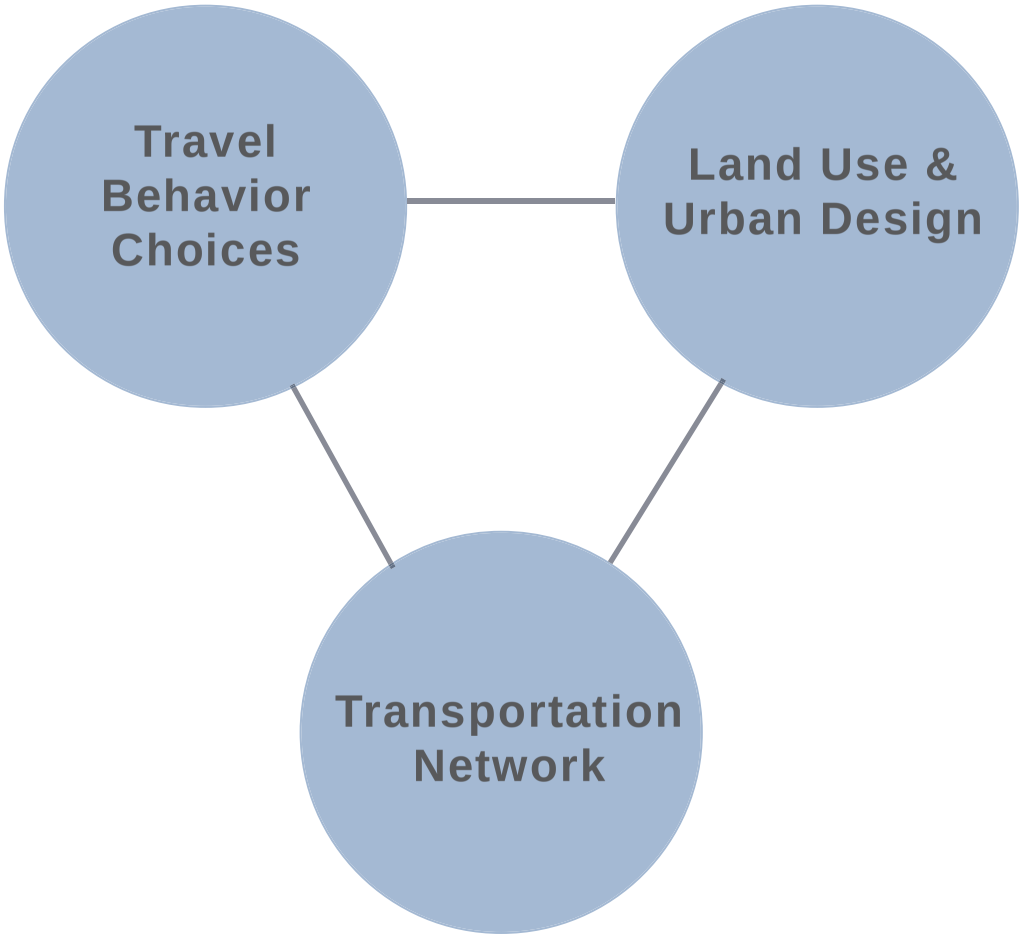
Chapter Five

INTRODUCTION

Stevens Creek Boulevard is a key thoroughfare in West San Jose that serves as a commercial corridor. It provides critical access to adjacent neighborhoods, regional destinations and freeways and is a heavily-used transit corridor. The Stevens Creek Urban Village Plan seeks to leverage these assets and create a more walkable, bikeable and transit-friendly community while maintaining vehicle mobility. Circulation and streetscape improvements are critical to supporting the evolution of the Steevns Creek Urban Village into a mixed-use job center with diverse, accessible amenities and land uses.

Stakeholder, community and technical input was used to develop the recommendations presented in this chapter. However, all ideas, particularly those closely tied to traffic flow and roadway improvements, should be further explored. A detailed traffic analysis was not part of the scope of this Plan, but will be conducted at a later date. The recommendations in this Urban Village Plan are intended to support a flexible approach to roadway design and multi-modal circulation that can be implemented over time and adapted as conditions and needs evolve.

Figure 5-1: Transportation Solution - Three-Legged Stool



An inherent challenge in planning for this Urban Village is that the boundary between the Cities of San Jose and Santa Clara runs down the center of Stevens Creek Boulevard. For the purposes of planning future conditions, this process evaluated and developed recommendations for the entire Boulevard, but recognizes San Jose only controls a portion of the roadway. The City of Santa Clara was actively engaged in the development of this Urban Village Plan and is expected to continue to partner with San Jose staff in implementing improvements.

In general, transportation-based solutions involve decisions in land use planning, urban design, choices and changes in behavior, and the transportation network. The traditional approach to encouraging alternative forms of travel was to simply improve infrastructure for bicycles, pedestrians, and transit riders. However, a more comprehensive solution considers how changes in land use planning, urban design, the transportation network, and travel behavior choices influence the entire system. This concept is known as the “transportation solution three-legged stool” and is illustrated in Figure 5-1.

Relevant Plans and Policies

ENVISION SAN JOSE 2040 GENERAL PLAN

San Jose's Envision 2040 General Plan contains several transportation goals and policies relevant to the Urban Villages. In addition to establishing varying street "typologies" such as Grand Boulevards, Main Streets and other street types, the General Plan includes policies supporting substantial increases in walking, bicycling and transit trips, and it envisions San Jose becoming a walking and bicycling-first City.

SAN JOSE COMPLETE STREETS DESIGN GUIDELINES

San Jose recently developed Complete Streets Design Guidelines in order to provide additional street design guidance and to further articulate the General Plan street typology goals. The Complete Streets Design Guidelines support the creation of streets that are people-oriented, connected and resilient. The Design Guidelines are currently in draft form and are expected to be finalized by the end of 2017.

VISION ZERO SAN JOSE

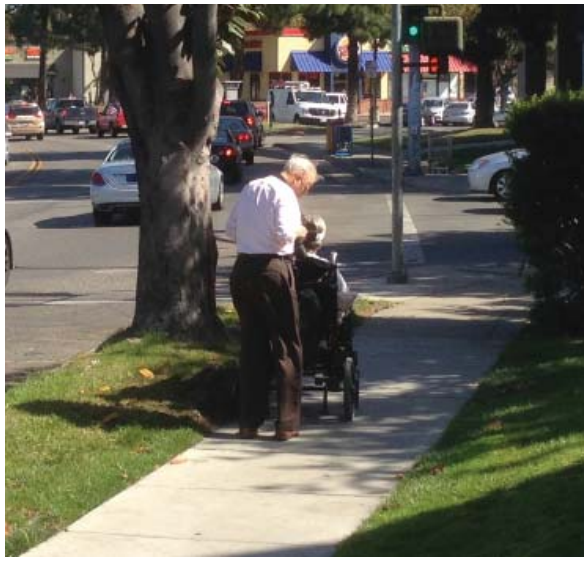
Vision Zero San Jose is the City's commitment to prioritize street safety for all users. It was established in 2015 with the goal of reducing and eventually eliminating all traffic fatalities in the City.

BIKE PLAN 2020

Bike Plan 2020 defines the City of San Jose's vision to make bicycling an integral part of daily life in San Jose. To achieve this vision, the Plan identifies five broad Goals as well as several Strategies and specific Actions. Bike Plan 2020 defines a 450-mile network of bikeways. While this network includes both onstreet and off-street bikeways, its primary focus is the on-street network and connections to the off-street network.

Figure 5-2: Logo for Vision Zero San Jose

Figure 5-3: Cover Image for San Jose Bike Plan 2020



Stevens Creek Boulevard should accomodate all users

VALLEY TRANSPORTATION PLAN (VTP) 2040

Adopted in 2014, the Valley Transportation Plan (VTP) 2040 is the long-range transportation plan for Santa Clara County. This plan highlights the projects and programs that will be pursued in partnership with Member Agencies in the next 25 years, including Complete Streets, Express Lanes, Bus Rapid Transit including Stevens Creek, and Bicycle/Pedestrian Improvements. VTP 2040 also includes a detailed discussion on planning activities that will take place during the life of the plan.

West San Jose Transportation Planning

Several regional transportation planning efforts are currently being led by VTA that could affect future travel patterns and conditions within the Plan area. These include the VTA Next Network study, which is a multi-year effort aimed at improving the overall efficiency and performance of VTA's transit network. Additional regional studies include the VTA I-280 Corridor Plan and the I-280/Winchester Boulevard Interchange Improvement study, both of which are looking at strategies to reduce traffic congestion on I-280 and support multimodal travel options.

Other future transportation planning efforts led by the City of San Jose are expected in the Plan area subsequent to this Urban Village Plan, including a Multi-Modal Transportation Improvement Plan (MTIP)and transportation analysis, and an Area Development Policy (ADP) and Environmental Impact Report (EIR) for the Urban Villages areas in West San Jose.

As a result of the on-going and future planning efforts in the region, this Plan supports multi-modal travel by creating a well connected environment that is safe, usable, and accessible for all ages and abilities.

Area Development Policy (ADP)/Multi-Modal Transportation Improvement Plan (MTIP)

The general strategies and key recommendations in this chapter are intentionally high-level and broad. Ultimately, these strategies are intended to be incorporated into future, more detailed plans and accompanying implementation policies, such as a Multi-Modal Transportaiton Improvement Plan (MTIP) and an Area Development Policy (ADP) for West San Jose. The Envision San Jose 2040 defines the City's desires "to provide a safe, efficient, and environmentally-sensitive transportation system that balances the needs of bicyclists, pedestrians, and public transit with those of automobiles and trucks." As a result, this Plan addresses all transportation modes in a manner that is representative of community values and provides guidance to achieve a balanced transportation network.

Wide sidewalks with planters, transit stops, and memorable signage can create a pleasant walking experience

Stevens Creek Boulevard (above) and Cypress Avenue (below) serve different types of roadway users

ROADWAY NETWORK

Existing Hierarchy and Configuration

The Stevens Creek Urban Village is served by a mix of local and regional roadways. Roadway types include expressways, Grand Boulevards (arterial streets), city connectors, and local collector streets.

Expressways

Expressways are major thoroughfares that connect several communities within Santa Clara County to destinations within and beyond San Jose. San Tomas Expressway and Lawrence Expressway are auto-oriented streets that connect to important regional destinations including Pruneridge Shopping Center, Kaiser Permanente Medical Center, employment centers, the Lawrence Caltrain Station, Highway 101 to the north, Highways 280 and 17 to the south; and many public and private schools.

Grand Boulevards

Within the Urban Village, Stevens Creek Boulevard and Saratoga Avenue are classified as Grand Boulevards. These are major transportation corridors that are primarily auto-oriented and where transit has priority and provides local access as well as connections to regional destinations such as Valley Fair Mall, Santana Row, Downtown San José, Westgate Center Shopping Mall, and major employment centers.

City Connectors

Within the Urban Village, Kiely Boulevard is a city connector street. On city connector streets, automobiles, bicycles, pedestrians, and trucks are prioritized equally in this roadway type. Transit use, if any, is incidental. Pedestrians are accommodated with sidewalks.

Local Collectors

Local collector streets connect arterials to local streets, and include Cypress Avenue, Boynton Avenue, Albany Drive, and Northlake Drive.

A majority of roadways within the area are classified as local streets, providing direct access to residential parcels.

Roadway Goals and Policies

The Stevens Creek Urban Village community values the access and connectivity that the roadway network offers, and understand the key role Stevens Creek Boulevard plays in helping people reach their local and regional destinations.

Goal CS-1

Redesign the right-of-way on Stevens Creek Boulevard to create a complete street that provides for all modes of travel, encourages destination travel to enhance economic development, and supports the access needs of local businesses and residents.

Policy CS-1.1 Redesign travel lanes to create additional space for pedestrian and bicycle safety improvements.

Policy CS-1.2 Maintain the curb-to-curb road right-of-way along Stevens Creek Bouelvard, Saratoga Avenue, and Albany Drive to minimize capital improvement costs.

Policy CS-1.3 Improve traffic flow along Stevens Creek Boulevard through the use of adaptive signal technology, signal timing, or other technology.

Policy CS-1.4 Remove parking along Stevens Creek Boulevard where appropriate to accommodate a protected bicycle lane to ensure a safer and more comfortable level of bicycle travel for people of all ages.

Policy CS-1.5 Use the roadway center lane for pedestrian refuges at crosswalks, while also maintaining the center left-hand turn lanes and/or truck loading and unloading at appropriate locations.

Bicycle specific signage and separated bikeways could help Stevens Creek Boulevard feel more like a complete street

Stevens Creek Boulevard bus route (above) and multimodal street example (below)

TRANSIT NETWORK

Existing Transit Network

Stevens Creek Boulevard serves as the second busiest transit corridor in the county. The Valley Transportation Authority's (VTA) bus Route 23 and supplemental Limited Route 323 provide access to De Anza College to the west and the Alum Rock Transit Center to the east. Route 23 carries about 8,600 daily riders, representing approximately 10% of VTA's countywide ridership. Route 323, introduced in 2012, is a limited-stop route intended to relieve the over-capacity of Route 23 buses and meet the demand for faster, more direct travel between Downtown San José and De Anza Community College in the City of Cupertino. Additionally, Kiely Boulevard is served by Routes 57 and 58, providing connections to Saratoga/West Valley Community College, the Santa Clara Tasman Drive area (Route 57), and North San Jose (Route 58) within this Urban Village.

Planned Transit Improvements

VTA is planning to comprehensively redesign its transit operating plan in late 2017 to coincide with the start of BART service to Santa Clara County. Once this plan is adopted, Stevens Creek Boulevard will see modifications in the level of bus service. VTA plans to adjust Route 23 weekday frequencies to provide 15-minute all day service, and Sunday service frequencies at 15 to 20 minutes. Route 323 would be upgraded to Rapid Service Route 523 and would connect Lockheed Martin Transit Center, Downtown Sunnyvale, De Anza College, Vallco, Valley Fair, Santana Row, Downtown San José, Mexican Heritage Plaza, and the Berryessa BART Station. Route 523 would have a 15-minute frequency seven days a week.

Transit Goals and Policies

To support existing and planned transit systems this Plan aligns mulit-modal circulation improvements and activity nodes to support mixed-use transit-oriented development around transit stops. The goals and policies of this plan are intended to support high-capacity urban transit service, such as Express Bus or Bus Rapid Transit along the Stevens Creek Boulevard Corridor. The Plan assumes that no expansion of the roadway is needed to accommodate existing and planned transit services.

Goal CS-2

Make transit a more desirable option within the Urban Village to support mode shifts.

Policy CS-2.1 Where appropriate, locate bus stops at the far side of intersections to allow optimal traffic flow.

Policy CS-2.2 Develop safe and direct pedestrian and bicycle connections (sidewalks or pathways) between transit stops and local destinations.

Policy CS-2.3 Improve roadway crossings through high-visibility treatments and shorter crossing distances, especially where transit stops are located.

Policy CS-2.4 Enhance the environment around transit stops.

Policy CS-2.5 Encourage transit shelters that are comfortable and pedestrian and bicycle friendly. Enhance bus stops with seating, shade, and lighting that make users feel comfortable.

Existing bus stop for Route 23 and 323 on Stevens Creek Boulevard

BICYCLE AND PEDESTRIAN NETWORK

Existing Network

The bicycle and pedestrian network within the Stevens Creek Urban Village has significant challenges that impede bike and pedestrian connections between the surrounding neighborhoods and local destinations. These include long crossing distances across Stevens Creek Boulevard and between blocks along Stevens Creek Boulevard. There is also a shortage of bicycle facilities within the Urban Village area. West of the Lawrence Expressway in the City of Cupertino, Stevens Creek Boulevard has striped bike lanes. The only other roadway within the Stevens Creek Urban Village that has bicycle facilities installed is San Tomas Expressway.

Sidewalks exist throughout the Urban Village, but are often directly adjacent to the roadway without a landscaped buffer, which can make walking loud and uncomfortable.

Figure 5-3: Existing conditions in the Urban Village

Planned Network

The planned bicycle and pedestrian network includes a new traffic light on Stevens Creek Boulevard at Henry Avenue. This will allow for safer pedestrian and bicycle crossings of this commercial and retail area of Stevens Creek Boulevard. VTA is currently updating the Santa Clara Countywide Bicycle Plan, with a draft of recommended projects expected in summer 2017. This Urban Village Master Plan should take those recommendations into account as Plan implementation moves forward.

With the Stevens Creek Urban Village expected to transition over time from an auto-centric corridor to an area that accommodates all modes of transportation, new private development can contribute incremental improvements. The goal of these developments should be to ensure that people who walk or bicycle can easily access the various buildings and parks within the area. Additionally, bicycle- and pedestrian-friendly amenities should be included in the design, including sufficient lighting, places to sit, and bicycle parking.

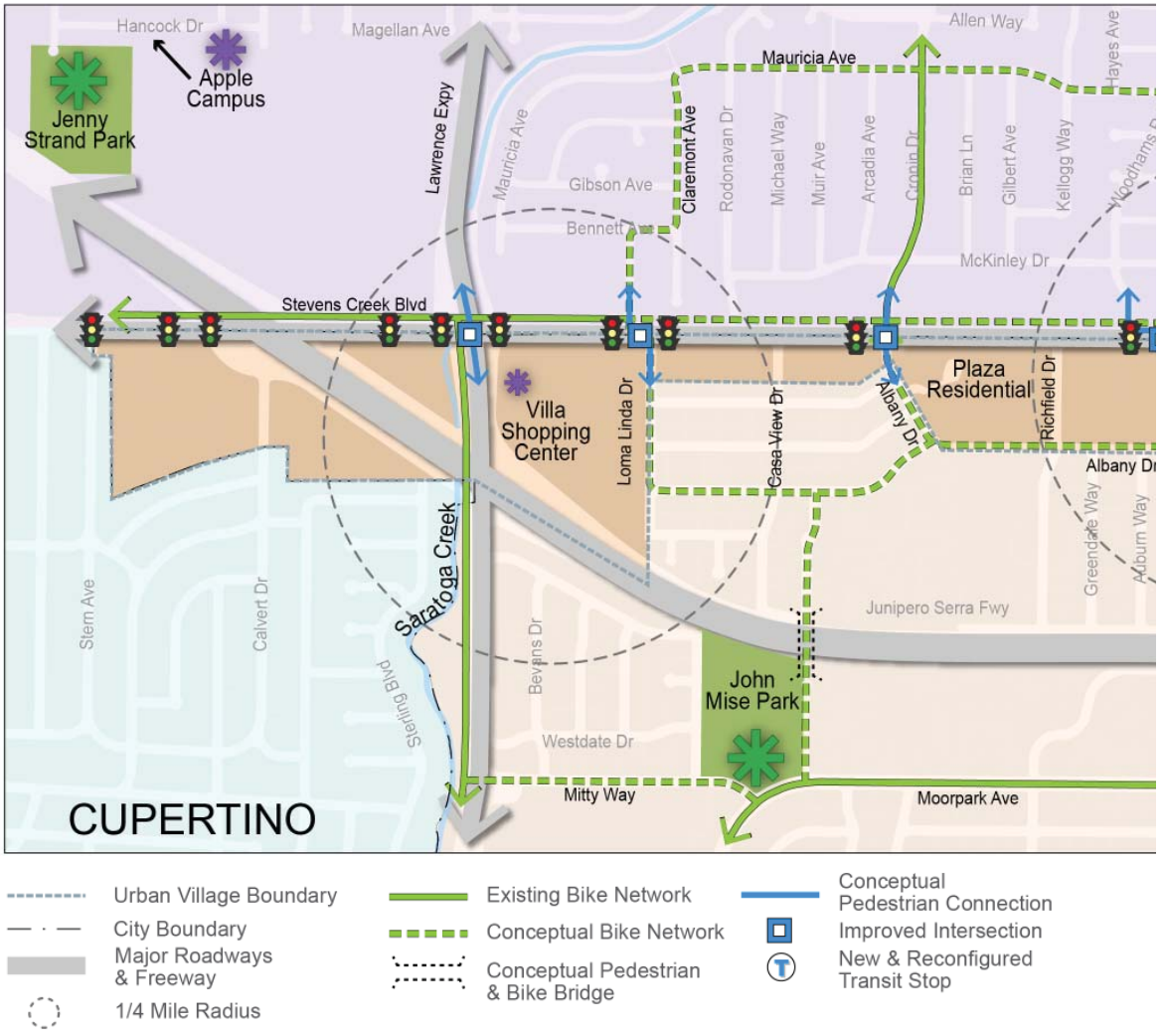
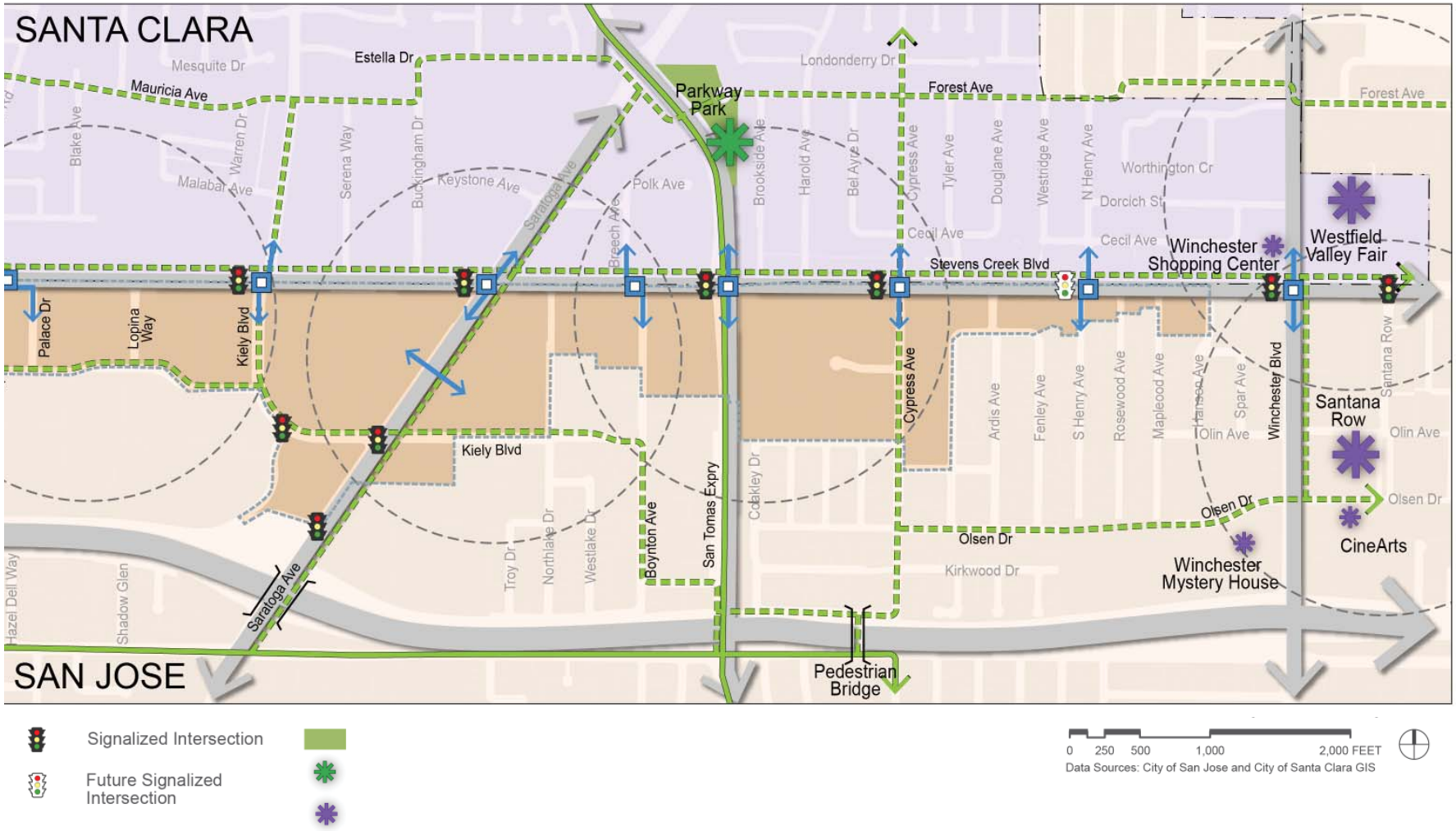


Figure 5-4: Draft bicycle and pedestrian network in the Urban Village



Examples of bicycle improvements for intersections, including green paint, skip lines, and bike boxes

Improvements should create a seamless transition between private developments and the public right-of-way for bicyclists and pedestrians. Enhance links between the public right-of-way and private developments through accessible, bicycle- and pedestrian-friendly features such as well-maintained pathways separate from driveways, bike parking, and green space. All future developments within the Urban Village should also consider these goals during the design phases and comply with the design guidelines presented later in this chapter.

Bicycle Network Goals and Policies

Proposed recommendations for the bicycle network emphasize improvements to facilities in the public right-of-way, to enhance safety, comfort and connectivity for people who bicycle. The overarching strategies to enhance the bicycle infrastructure in the Stevens Creek Urban Village are to:

1. Improve north-south bicycle and pedestrian connections;
2. Enhance key intersections for pedestrian and bicycle movements;
3. Improve the safety and comfort of bicycle infrastructure on Stevens Creek Boulevard; and
4. Provide alternative bicycle routes parallel to Stevens Creek.

GOAL CS-3

Create a bicycle-friendly street network that provides access throughout the Urban Village to improve a) bicyclist safety and comfort, b) encourage mode shift to bicycle and c) maximize bike traffic to encourage economic development of local businesses.

Policy CS-3.1 Provide bicycle facilities for all users by installing bikeways along major and local streets, typically without reducing the number of travel lanes.

Policy CS-3.2 Expand Class II bicycle lanes on Stevens Creek Boulevard and install protected bike lanes where feasible.

Policy CS-3.3 Create comfortable crossings for people on bicycles across Stevens Creek Boulevard and other major roads through intersection improvements.

Policy CS-3.4 Encourage local businesses and developers to provide amenities such as bicycle parking, water bottle refilling stations, showers, and repair stations at developments within the Stevens Creek Urban Village.

Policy CS-3.5 Install high-quality bicycle racks near building entrances to help accommodate and encourage bicyclists to frequent businesses and services to improve the economic vitality in the area.

Well placed bicycle facilities can encourage people to ride their bikes more

Different bicycle facility classifications can be used by different types of bicyclists

Proposed Bicycle Network Improvements

The proposed bicycle network is intended to improve north-south bicycle connections and enhance conditions for riders on Stevens Creek Boulevard as well as provide alternative east-west bike routes. This will create a connected network of north-south and east-west routes through the Urban Village and to nearby destinations (see Figure 5-4). The Plan also addresses strategies for overcoming existing barriers, including a potential crossing over San Tomas Expressway. Proposed routes are composed of Class II facilities (on-street bicycle facilities with dedicated space for bicyclists designated by signage and striping), Class III facilities (on-street bicycle facilities that share space with cars and may be designated by signage and a shared-lane/ “sharrow” marking), and Class IV facilities (on-street bicycle lanes with vertical separation between the bicycle lane and vehicle lanes). These routes are consistent with recommendations identified in the San José Bike Plan 2020.

PORPOSED BICYCLE NETWORK IMPROVEMENTS

1. Install Class IV separated bikeways to create a regional link under Lawrence Expressway, thereby providing access to Cupertino to the west and Santana Row to the east (see street sections in the Streetscape Design Guidelines section at the end of this chapter).

2. Explore the improvement of the intersections of Stevens Creek Boulevard at Lawrence Expressway, Loma Linda Drive/Cabot Avenue, Boynton Avenue/ Breech Avenue, Cypress Avenue, and Henry Avenue to better accommodate bicyclists through shortened crossing distances and improved bicycle signal detection and timing.

3. Explore alternative east-west Class II and Class III facilities on Albany Drive/Kiely Drive/Boynton Avenue/Constance Drive/ Olsen Drive to the south of the Urban Village. These would connect to existing and planned facilities on Moorpark Avenue and Winchester Boulevard as well

as to the bicycle and pedestrian bridge at Cypress Avenue over I-280.

4. Explore the installation bicycle facilities along Claremont Avenue/Loma Linda Drive, Cronin Drive/Albany Drive, Kiely Boulevard, Saratoga Avenue, and Cypress Avenue to create a bicycle grid throughout the Urban Village.

5. Improve the access and visibility of the bicycle route along Cypress Avenue, which crosses over Highway 280 to the south and provides a connection to existing facilities on Moorpark Avenue.

6. Explore using Caltrans right-of-way for a bicycle and pedestrians bridge over San Tomas Expressway between Greenlee Drive and Constance Drive.

Separated and protected bike lanes can encourage more community members to ride for fun

Easy to read signage can make the public realm more inviting for pedestrians

Pedestrian Network Goals and Policies

A successful pedestrian environment is attractive, well-connected, and accessible. Recommendations for the pedestrian network strive to make walking along Stevens Creek Boulevard and in the surrounding Urban Village safer, more comfortable and welcoming. Improvements to the pedestrian network are intended to support multiple objectives of the Urban Village Plan, including supporting economic development, creating a more vibrant street atmosphere and ensuring safety and comfort of people traveling by foot. Improvements are focused on key intersections aligned with activity nodes, transit stops and bicycle routes.

GOAL CS-4

Enhance the pedestrian environment and connectivity along and across Stevens Creek Boulevard and other major roadways in the Urban Village to a) improve pedestrian safety, comfort, and convenience b) encourage more people to walk, and c) maximize foot traffic to encourage economic development of local businesses.

Policy CS-4.1 Improve pedestrian spaces along Stevens Creek Boulevard by widening sidewalk space, adding street trees and landscaping, providing shade structures, installing pedestrian scale lighting, and seating.

Policy CS-4.2 Ensure all future development projects provide a 20-foot wide minimum sidewalk along Stevens Creek Boulevard, Saratoga Avenue, and Kiely Boulevard. All other streets should have a minimum 12-foot sidewalk width and ideally achieve a sidewalk

width of 15 feet. Allow exceptions only in the case of economic hardship on shallow lots or constrained sites.

Policy CS-4.3 Provide safe crossings of Stevens Creek and other major roadways through high-visibility elements and shorter crossing distances.

Policy CS-4.4 Focus pedestrian improvements on key intersections and routes to and from transit stops and neighborhood destinations.

Policy CS-4.5 Install signage and wayfinding to direct visitors to nearby destinations and create a cohesive sense of place throughout the Stevens Creek Urban Village.

Policy CS-4.6 Expand the pedestrian space within private development properties where appropriate, such as near transit stops and activity nodes.

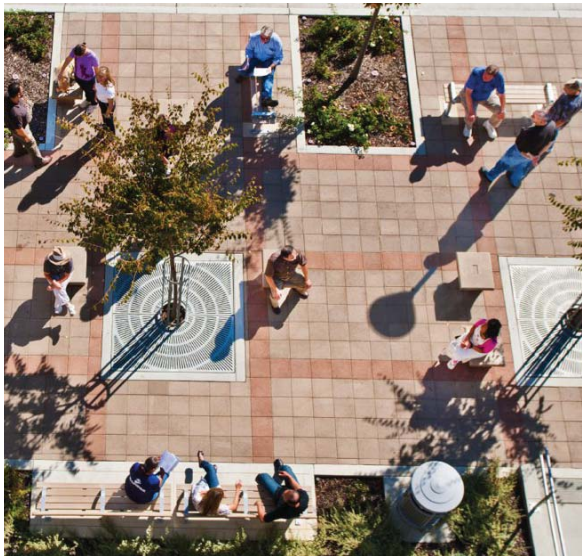
Proposed Pedestrian Network Improvements

1. Create a high-visibility mid-block crossing of Saratoga Avenue between Stevens Creek Boulevard and Kiely Boulevard to allow for shorter, formalized crossings between land uses.

2. Explore inproving the pedestrian infrastructure at intersections of Stevens Creek Boulevard at Lawrence Expressway, San Tomas Expressway, Loma Linda Drive/Cabot Avenue, Boynton Avenue/ Breech Avenue, Cypress Avenue, and Henry Avenue in coordination with improvements for cyclists.

3. Install a pedestrian/bicycle-only bridge over I-280 at John Mise Park.

4. Install medians and curb extensions at intersections and mid-block crossings to narrow the roadway, calm traffic,



Highly-visible crosswalks coupled with different types of sidewalk materials can make it safer and more inviting for pedestrians

On-street parking along Stevens Creek Boulevard and bicycle parking can serve local businesses without parking lots

and create shorter pedestrian crossing distances where feasible and appropriate.

PARKING

The Urban Village public realm includes on-street parking along much of Stevens Creek Boulevard. This parking serves area businesses, although the corridor overall has abundant off-street surface parking for most developments. Community input throughout the planning process showed support for removing some on-street parking along Stevens Creek Boulevard to create space for a protected bike lane on the roadway. Parking strategies for private development (see Chapter 4) are intended to provide adequate off-street vehicle parking while supporting the efficient use of land and other modes of travel.

Parking Goals and Policies

GOAL CS-5

Balance on-street parking with space needs for other modes of travel.

Policy CS-5.1 Remove on-street parking in locations along Stevens Creek Boulevard where its removal support optimal transit stop location and function and is needed to create a continuous protected bicycle facility, while also meeting the needs adjacent businesses.

PLACEMAKING AND STREET CHARACTER

The character of the existing Stevens Creek corridor is dominated by automobile traffic. Inconsistent and limited landscaping along sidewalks, large surface parking lots fronting the roadway, and fast-moving traffic create dangerous and uncomfortable streetscape conditions. The future Urban Village is envisioned as a vibrant place with people walking, bicycling, taking transit, and driving safely around the area, with easy access to and from community destinations. The following strategies, combined with the recommendations in this Plan, support the creation of a multi-modal corridor with a distinct sense of place.

PROPOSED STRATEGIES

1. Create a consistent row of street trees to provide shade and buffer pedestrians and cyclists from automobile traffic.

2. Accomodate wider sidewalks through Right-of-Way acquisition, building setbacks, and/or easements to ensure adequate space is provided for a comfortable and vibrant pedestrian environment (see Chapter 4).

3. Enrich and activate the bicycle and pedestrian environment with small gathering spaces and streetscape amenities such as seating, improved lighting, interesting paving materials, landscape planters, broad-canopied shade trees and public art.

4. Explore “re:Streets” strategies such as mobility, social gathering and commerce to leverage broader opportunities along the street (see Placemaking and “re:Streets” Activation in the Streetscape Design Guidelines at the end of this Plan).

Protected bicycle lanes and places to sit and rest can improve safety and comfort

Cleaning trucks can help maintain a healthy and inviting sctreetscape

Trash Management

GOAL CS-6

Improve the aesthetics and cleanliness of the Urban Village through improved waste management.

Policy CS-6.1 Incorporate street sweeping and adjust parking times to accommodate adequate access and trash removal.

Policy CS-6.2 Require installation of full trash capture devices (i.e. hydrodynamic separators) to prevent trash originating from the Urban Village from passing through the storm sewer system to local waterways.

Policy CS-6.3 Encourage and support the establishment of a Business Improvement District, or similar mechanism, to fund litter removal and street cleaning.

Fiber-Optic Communication Backbone Extensions

GOAL CS-7

Improve transportation system operations through the use of technology.

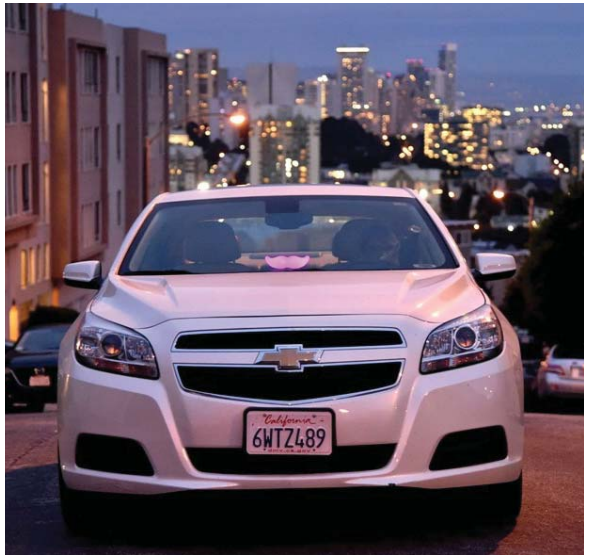
Policy CS-7.1 Implement traffic signal coordination, transit signal priority along transit priority corridors, and real-time adaptation to contribute to safe and efficient traffic flow.

Policy CS-7.2 Pedestrian and bike sensors should be incorporated into the signal system to support reliable signal priority for active travel modes.

Policy CS-7.3 Traffic detection systems should be upgraded from traditional in-pavement loops to video detection technologies that more readily support bike detection and are less immune to poor pavement conditions.

Policy CS-7.4 Support additional technology features of fiber communications that will allow the system to collect real-time data and provide users of the transportation network with useful information.

Real-time information for public transportation and bicycle facilities can make them easier to use



Car-shares and infrastructure that adapts to new transportation types can help an area attract new businesses and residents

Shared Mobility Services

Shared mobility services by Transportation Network Companies (TNCs) provide prearranged rides using a digital platform to connect passengers with drivers. These companies are increasingly used in the San Francisco Bay Area for a variety of trip purposes. Shared mobility services typically require that vehicles pull up to the curb on a street to pick up and drop off passengers. In addition, transit stations are popular beginning or end points for shared mobility trips, which suggests that these activities will be a well-used travel mode in between regional transportation services and the Urban Village. The proposed street network considers the need to accommodate all types of vehicle trips, including shared mobility trips.

GOAL CS-8

Create a circulation system that facilitates the use of TNCs and discourages drivers stopping within bike lanes.

Policy CS-8.1 Support strategies to promote convenient Transportation Network Company (TNC) passenger pick-up and drop-off in the Urban Village area, especially near activity centers.

ACTION CS-8.2 Examine the feasibility of incorporating proposed drop-off and pick-up locations in the Urban Village area.

Autonomous Vehicles

Autonomous vehicles, also termed automated, driverless, self-driving and robotic vehicles, are those which can sense their own environments in order to perform at least some aspects of the safety-critical control without direct human input. In the future, autonomous vehicles may become increasingly common.

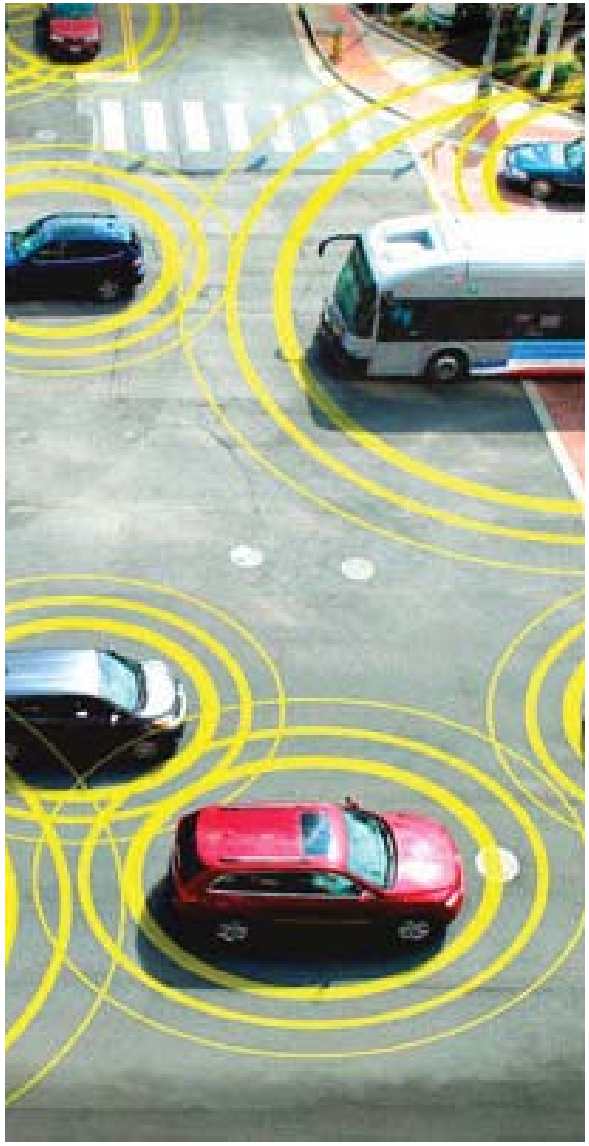
One of the City of San José's top Joint Federal and State's Legislative Priorities for 2017 is to develop a general framework to accommodate future forms of vehicle travel, such as autonomous vehicles, that may emerge in the future.

GOAL CS-9

Support the mobility, safety, community, and economic benefits of autonomous vehicles by supporting regulatory and legislative efforts to encourage their development when there is a net benefit to the community.

Policy CS-9.1 Assess the current readiness of the transportation network for, and potential impacts of, autonomous vehicles

Policy CS-9.2 Design new development to accommodate autonomous vehicles in ways that provide a net benefit to the community.



Autonomous cars can begin to change how pedestrians and drivers use the street

New technologies and environmentally focused design can create interesting and pleasant experiences for users

CIRCULATION AND STREETSCAPE DESIGN GUIDELINES

Introduction

The streets, sidewalks, and open spaces in the Stevens Creek Urban Village are critical to how it functions as well as how it is experienced and perceived. Transforming the public realm in the Stevens Creek Urban Village into a "Great Street" requires specific strategies to encourage a walkable, bikeable, and transit friendly environment, which also support the mix of uses envisioned in the corridor. The VTA, in partnership with cities, conducts cross-jurisdictional corridor studies that include planning and conceptual design work to improve one or more of the alternative modes along the corridor (i.e. bicycle, pedestrian, and/or transit). Currently, VTA's Next Network Transit Plan and I-280 Corridor Study are in progress. These studies may result in several recommended improvements for transit operations, pedestrian, and bicycle safety and connectivity, transit travel time, transit rider amenities, and/or traffic calming measures.

The circulation and streetscape design guidelines that follow are intended to guide improvements in the public realm that support community goals and accommodate the needs of multiple modes of travel. They encourage and will help staff implement Complete Streets concepts and design standards for Stevens Creek Boulevard and adjoining local streets.

The image on the left shows existing conditions along Stevens Creek Boulevard while the image on the right shows what it could look like with shade trees and a bike lane

Circulation Improvements

The following roadway and streetscape design improvements are intended to support vehicle flow along Stevens Creek while fostering a bicycle and pedestrian-friendly environment. While the curb-to-curb distance of the roadway will be maintained, narrowing traffic lanes can provide flexibility to enhance pedestrian, bicycle and transit infrastructure.

Different roadway designs may apply at different points along the Boulevard. Where the opportunity exists in both Santa Clara and San Jose, replace parking along Stevens Creek Boulevard to achieve a protected or buffered bicycle facility.

While the ultimate goal of this Plan is to fully implement the circulation and streetscape designs described, a number of actions may be taken in the interim to phase in the changes. A potential phasing concept for Stevens Creek Boulevard is further detailed in the following phased proposed improvements.

Stevens Creek Boulevard

PHASE I - PROPOSED IMPROVEMENTS

1. Narrow travel lanes and remove on-street parking on one or both sides of the roadway to accommodate the installation of one-way separated bikeways on either side of Stevens Creek Boulevard.
2. Provide additional bicycle routes and lanes on designated east-west corridors.
3. Install high-visibility crosswalks at key locations that include curb extensions, landscaping, pedestrian refuge islands, and high-visibility paint.
4. Relocate Stevens Creek Boulevard transit stops at Lawrence Expressway to Cabot Avenue and at San Tomas Expressway to Cypress Avenue.
5. Improve transit stops by expanding sidewalk space (where available), providing landscaping and shelter, and adding a bench to the eastbound Harold Avenue stop.
6. Install landscaped center medians along Stevens Creek Boulevard to provide refuge for pedestrians crossing the street, but still provide left-turn lanes for vehicles at key locations.

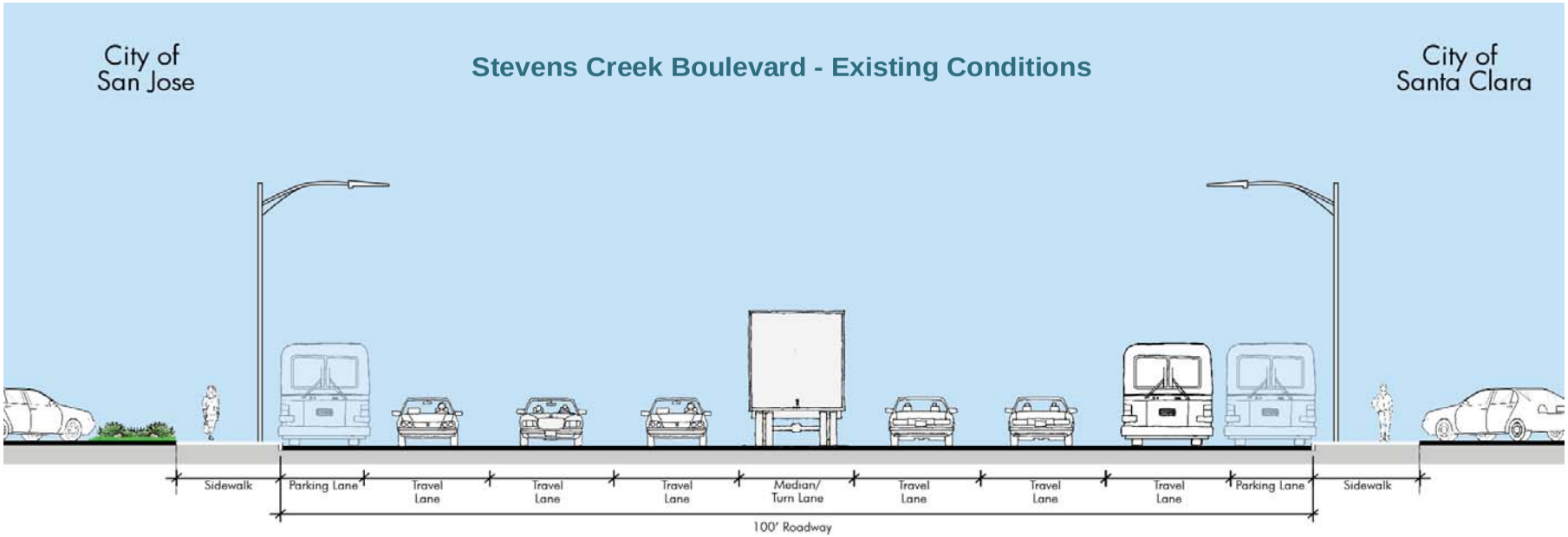
ACTION

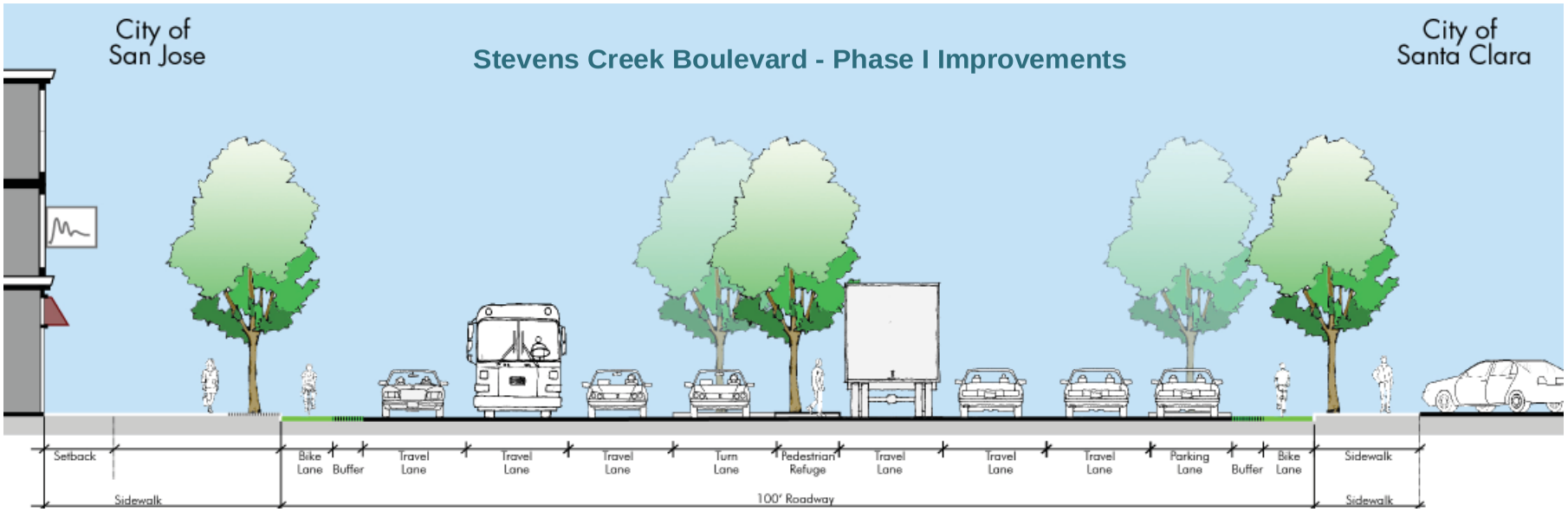
1. Partner with the City of Santa Clara to develop a Master Streetscape Plan that will provide a refined and mutually agreed upon improvement plan for Stevens Creek Boulevard.

PHASE II - PROPOSED IMPROVEMENTS

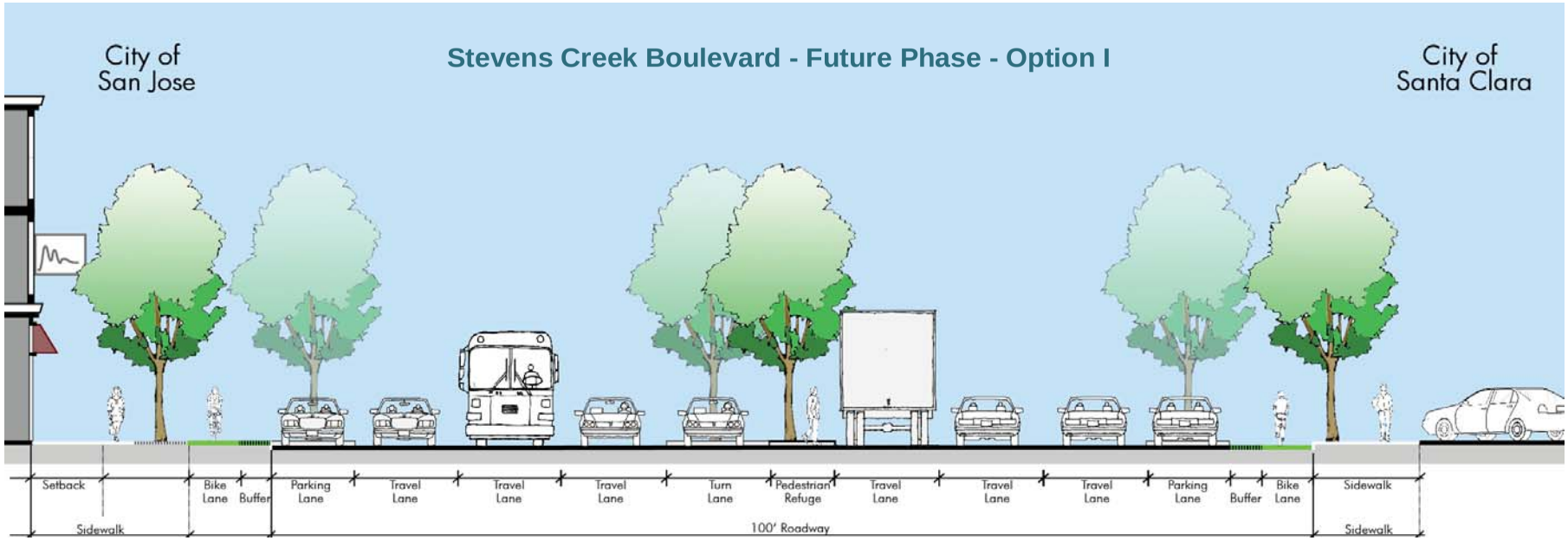
1. Convert one vehicle travel lane in each direction into a transit/taxi/TNC if future mode share supports this change.

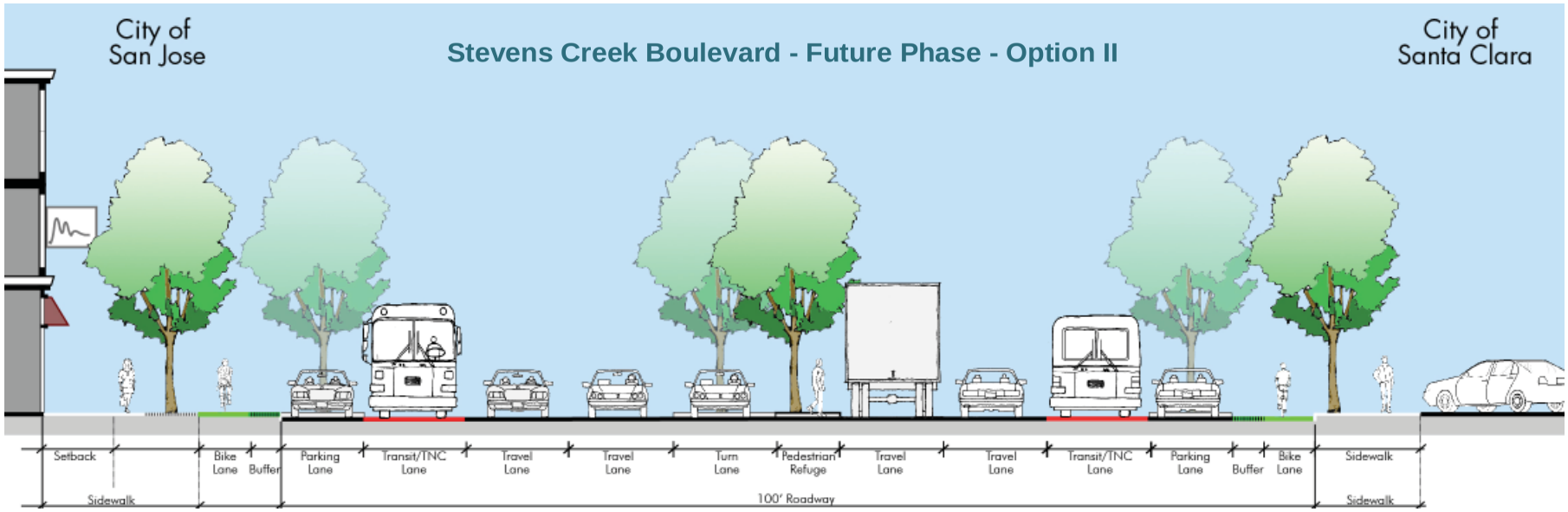
The image on the left shows existing conditions along Stevens Creek Boulevard while the image on the right shows what it may look like with shade trees and a bike lane





The above image shows existing conditions along Stevens Creek Boulevard while the image below shows the Phase I improvements





The above images show further options for making Stevens Creek Boulevard more pedestrian and bicycle friendly

Active streetscapes can support all modes of transportation, and green infrastructure medians create a protected bike lane

ROADWAY, BICYCLE FACILITIES AND PARKING GUIDELINES

1. Maintain the existing curb edge along Stevens Creek Boulevard.
2. Consider narrowing travel lanes to accomodate enhanced pedestrian and bicycle infrastructure.
3. Allocate extra space in the roadway to center medians / pedestrian refuges and protected bicycle lanes.
4. Provide adequatly sizeded pedestrian refuges in the center median at intersections along Stevens Creek, where appropriate.
5. Provide a pedestrian refuge in the center median at potential mid-block crossings along Stevens Creek.
6. Maintain the center lane for turning movements and truck loading/unloading in the roadway where medians are not provided.
7. Provide a continuous protected bike lane, including a buffer area for parked vehicle doors along San Jose's Stevens Creek Boulevard.
8. Provide an adequate landscaped buffer between the protected bike lane and adjacent travel lane along Santa Clara's Stevens Creek Boulevard, where feasible.
9. Provide on-street parking as needed while also ensuring adequate space for a protected on-street bicycle lane along San Jose's Stevens Creek Boulevard.
10. Explore opportunities to use building setbacks to create protected bicycle facilities along on-street parking. See photosims on page 29 and 30, and sections on pages 32-33 for examples.

SIDEWALK GUIDELINES

1. Future development projects along Stevens Creek Boulevard should provide a 20-foot wide sidewalk, especially at key activity nodes, and on Saratoga Avenue, and Kiely Boulevard.

2. All other streets should provide a 12 – 15-foot sidewalk width. Allow exceptions only in the case of economic hardship on shallow lots or constrained sites.

3. Ensure that all streets have continuous wide sidewalks with unobstructed paths of travel and are Americans with Disabilites Act (ADA) compliant.

4. Plant street trees at outer edges of sidewalks to buffer vehicle traffic and parking from pedestrians.

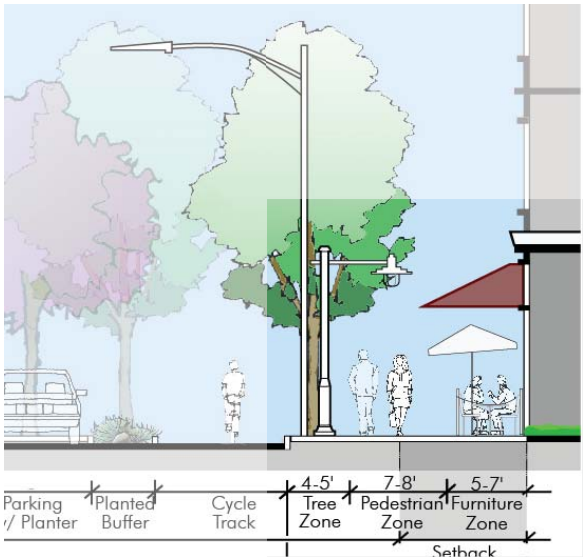
5. Plant trees within existing and new sidewalks.

6. Encourage a minimum 4-foot clear planting area for all trees.

7. If feasible, incorporate well-designed tree grates in tree wells to ensure a level sidewalk.

8. Ensure sidewalks connect to bus stops.

9. Widen sidewalks near transit stops, where possible.



The area right outside a building can entice pedestrians to stay for awhile

Wide and highly-visible crosswalks and medians can increase pedestrian safety

CROSSWALKS, MID-BLOCK CROSSINGS, AND MEDIANS GUIDELINES

1. Provide minimum 10-foot wide crosswalks at all controlled intersections, at intersections of key streets, and other mid-block crossings. Encourage 15-foot-wide crosswalks at heavy foot traffic intersections along Stevens Creek Boulevard (e.g. Saratoga Avenue and Kiely Avenue).

2. Ensure that all crosswalks are ADA compliant.

3. Locate mid-block pedestrian-crossing facilities along Stevens Creek Boulevard to support direct and desired pedestrian routes that connect to destinations such as new site developments and transit stations.

4. Provide bulb-outs and refuge islands at intersections and mid-block crossings, where appropriate.

5. Use special paving materials, colors and/or patterns to increase the visibility of crosswalks, when feasible and appropriate.

6. Reduce the size and number of curb-cuts along Stevens Creek Boulevard to support bicycle connectivity and minimize conflicts between vehicles and pedestrians.

7. Add landscaped medians to serve as pedestrian refuges at key intervals along Stevens Creek Boulevard, aligned with multi-modal intersection improvements and transit stops wherever possible.

8. Provide a center median for pedestrian refuges, where appropriate.

9. Incorporate pedestrian activated signals at mid-block crossings when appropriate.

PLACEMAKING AND RE:STREET ACTIVATION GUIDELINES

The following guidelines support public realm improvements that go beyond mobility to create destinations, activity hubs and distinctive environments that contribute to a “Great Street”. Small parks, plazas and events spaces in the right of way can activate the street while providing neighborhood amenities. Placemaking features will help create a cohesive and distinct identity for the Stevens Creek Urban Village.

Street Furniture and Lighting

1. Provide seating, trash receptacles and shade elements in open spaces and at transit stops along Stevens Creek Boulevard.
2. To activate the streetscape, allow and encourage outdoor dining and goods display of selected goods (e.g., fruit stands, flowers, clothing racks) on sidewalks that are sufficiently wide.
3. Use consistent design and materials for bicycle racks, trash receptacles, seating, lighting posts and utility boxes.
4. Provide both pedestrian and auto-oriented street lighting.
5. Prioritize pedestrian-scale lighting along sidewalks, pathways, and in open spaces to provide a safe, comfortable pedestrian environment.

re:Streets Approach

1. Provide space within sidewalks, plazas and other portions of the public right of way, for social gathering, play and activities that appeal to variety of ages including adults, teens and children.
2. Support and seek opportunities for community events (e.g., markets, food truck festivals) that can take place in the public realm to activate space, building community cohesion and support small businesses.
3. Encourage inclusion of temporary market areas for vendors (such as food trucks and retail kiosks in parking lanes) to encourage commerce within the public right-of-way, if feasible.

Surface materials and street furniture can make the sidewalk and plaza spaces more enjoyable for users

Stormwater-collecting planters (above) and solar-powered sidewalks (below) can be inviting and fun for users

SUSTAINABILITY AND STORMWATER MANAGEMENT GUIDELINES

These guidelines are intended to encourage practices to protect the environment, ensure safety and preserve public investments.

1. Use stormwater-collecting planters, swales and other features to improve percolation, water quality, and minimize stormwater runoff.

2. Integrate stormwater management in the design of medians, bikeway buffers, sidewalk landscaping, bulb-outs, parks and plazas, where appropriate.

3. Minimize the use of impervious surfaces by using permeable or porous surfaces to allow the infiltration of stormwater wherever feasible and appropriate.

4. Provide waste-collection and recycling receptacles throughout the Urban Village to minimize waste and reduce litter in the Urban Village.

5. Encourage the use of street furniture, shade shelter and transit structures made from recycled materials.

6. Consider light pollution impacts when selecting and/or designing lighting elements.

Creating safe passage for pedestrians and bicyclists along a street can encourage and promote the community to use alternative modes of transportation