December 2024

draft VISION STUDY

Stevens Creek Boulevard Corridor VISION

Prepared by **Iteris, Inc. and Winter Consulting**

ACKNOWLEGEMENTS

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We want to send a special thank you for all who participated in the project through online, webinars, surveys, interviews and pop-up events.

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CORRIDOR VISION

The nine-mile Stevens Creek Boulevard/West San Carlos Street corridor (Corridor) from Foothill Boulevard to Diridon Station is vital to Santa Clara Valley. The Corridor currently serves 100,000 residents and 80,000 jobs within ½ mile of the roadway. By 2040, these populations are expected to increase to 120,000 residents and 100,000 jobs.

- One-third of corridor residents are under 18 years old, forecast to rise to over 40 percent by 2040
- Almost 20 percent of corridor residents have an annual household income under $50,000.
- 65 percent of households speak languages other than English and over 30 percent have low English proficiency.
- 7.5 percent have a disability
- 5.5 percent live in households without an automobile

The Cities of Cupertino, Santa Clara, and San José, Santa Clara County, and the Santa Clara Valley Transportation Authority (VTA)—the local government agencies responsible for transportation in the Stevens Creek Boulevard Corridor—are committed to continuous investment for pedestrians, cyclists, transit users, and drivers. We recognize that to unlock the corridor's full potential, it is essential to have a shared vision for long-term transportation goals.

Figure 1: The Stevens Creek Boulevard Corridor Vision Study Area

Recognizing the need for a unified approach, the Cities, County, and VTA partnered to develop this Vision Statement. This Vision will guide the future of the corridor, ensuring cohesive planning and the coordinated management of transportation improvements.
A Steering Committee of elected officials from the participating agencies, a community advisory group, residents, businesses, and community groups provided the necessary leadership in a cooperative planning process to create a strong and sustainable Vision to guide corridor transportation investments for the next 50 years.

Vision Statement

The Stevens Creek Boulevard Corridor transportation infrastructure changed little in the past 50 years while the area it serves grew into a worldwide hub of innovation. Therefore, we envision the transportation corridor our community deserves to support continued residential and commercial vibrancy: safe and enjoyable travel for people of every age, ability, and chosen mode.

Residents, businesses, and visitors would be served by:

- A high-capacity transit system supported by station access enhancements to connect the Cities of Cupertino, Santa Clara, and San José from Diridon Station and Downtown San José to De Anza College within twenty minutes, with connection to Foothill Boulevard, for reliable travel to local and regional destinations. Station areas would be well-maintained and inviting community assets.

- A stress-free and enjoyable walking and bicycling environment. High-quality pedestrian and bicycle infrastructure would be prioritized to connect neighborhoods to the corridor within ½ mile or 20-minute walk of transit stops.

- Safe and efficient vehicle travel would be accommodated for connections to neighborhoods, businesses, and expressways and freeways.

This Vision would be implemented by a continuous, open, and inclusive evaluation process to promote equitable access and use.

Figure **2: Rendering of Before and After Example of Potential High-Capacity, Separated Transit in the Corridor**

Values and Guiding Principles

The Corridor Vision would be implemented in steps. The committed shared purpose, vision, and values of the Cities of Cupertino, San José, and Santa Clara, Santa Clara County, and the Santa Clara Valley Transportation Authority (VTA) will guide the Vision implementation process:

Ongoing Collaboration

- Continually engage and collaborate with corridor users and decision-makers.

- Incrementally improve access, comfort, speed, and reliability of transit.
- Embrace technological innovations.

Safety of All Corridor Users

- Eliminate transportation-related fatalities and severe injuries.
- Allow safe passage for vulnerable road users along and crossing the corridor.
- Reduce the level of stress and increase the accessibility of walking and biking,

Create a Sustainable Environment to Prioritize People

- Design for all ages, abilities, and incomes of users.
- Maintain the corridor as a clean and inviting place.
- Provide green space and shade, and support native wildlife and plants.
- Foster enjoyable public space.
- Support reduction in greenhouse gas emissions from transportation.

A Transit Corridor

- Increase transit frequency and speed.
- Favor transit travel time over auto travel time in roadway operations.
- Improve access and comfort of waiting for transit.
- Implement a high-capacity, separated transit service in the corridor.

Convenience and Connectivity

- Improve the convenience of travel for people.
- Ensure access and connectivity for all travelers through investment to meet resident and business needs.
- Enhance neighborhood and business access.

Figure 3: An Aerial View of the Corridor Looking West

IMPLEMENTATION PLANNING PROCESS

The Vision Implementation Plan serves as a framework for actions to achieve a shared Vision for the Corridor. Implementation will occur incrementally on separate project development timelines, involving distinct processes and leadership. Some items will be addressed through routine maintenance or administrative actions at the agency level, while others necessitate months or years of design and development, requiring newly identified funding sources and multijurisdictional cooperation.

Regardless of the specific implementation approach, each component of the Corridor Vision contributes to the overarching goal of safe and enjoyable travel for people of all ages, abilities, and chosen modes. The implementation planning process aligns with the Vision Statement, assessing various options. Strategies and improvements are drawn from the VTA Community Design and Transportation Manual, refined to match local City and County specifications and standards, ensuring alignment with the area's unique character.

Engagement

The Vision Statement for the Corridor was developed through extensive community input. Key community needs identified included addressing excessive vehicle speeds, improving safety, enhancing walkability, and achieving a better balance of transportation modes. To realize this vision, the community prioritized improved transit service, complete streets, better integration with the local community, and enhanced connections within the Corridor. Implementation efforts focus on key priorities such as upgraded bicycle lanes, improved streetscape design (including shade trees), transit infrastructure and service investments, and safer pedestrian crossings.

IMPLEMENTATION PLAN

The Vision would be implemented by a continuous, open, and inclusive evaluation process to promote equitable access and use.

The Vision for the Stevens Creek Boulevard/West San Carlos Street Corridor will be implemented cooperatively among Corridor jurisdictions, transportation agencies, and the Corridor residential and business communities.

Investment in improving the multimodal transportation conditions in the Corridor should not wait for separated high-capacity transit, near-term actions can start to improve conditions for today's users while creating an environment that better leverages future long-term investments. The six (6) recommended implementation components provide a structure to deliver near-term and long-term benefits of the Corridor Vision are:

Near Term (actions with about a 5-year development period) – These actions can be implemented in short timeframes with near-term benefits.

1. Implement corridor identity and maintenance program(s) to support Corridor businesses and neighborhoods.
2. Improve bus transit speed, reliability, and experience.
3. Implement walking and bicycling infrastructure on the Stevens Creek Boulevard/West San Carlos Street Corridor with an emphasis on physically protected bicycle lanes while maintaining access to driveways.
4. Build out and enhance pedestrian and bicycle network parallel, across and connecting to the Corridor.

The near-term actions would also include the initiation of project development and funding for the high-capacity, separated transit service.

Near to Medium Term (actions with about a 10-year development period) – These actions require more development time due to their complexity and cost. Actions within the next five years will initiate priority projects.

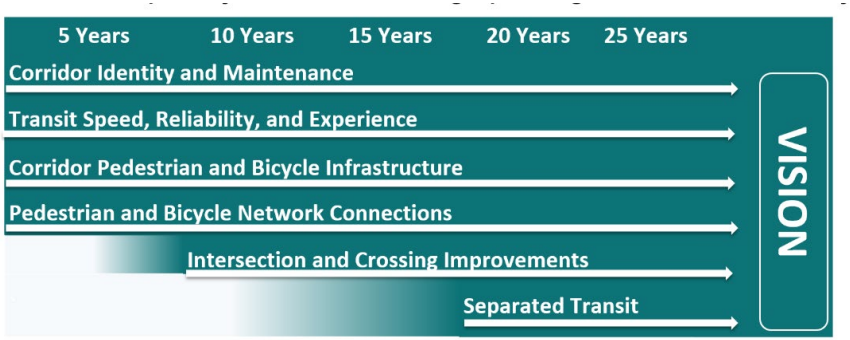
5. Improve intersections and crossings to minimize inconvenience and maximize safety for all users.

Long Term (actions with at least a 20-year development period) – The Vision of a separated, high-capacity transit service in the Corridor will require considerable time, effort and funding from each Corridor agency. The next step in the project development process is to secure funding for preliminary engineering and alternatives analysis, environmental review and the selection of a locally preferred alternative (LPA).

6. Separate transit from other vehicle operations for high-capacity transit service.

While individual projects would have their own development process with rigorous public engagement, the Corridor agencies should continue their cooperation at the staff and elected official level to bring the Corridor Vision to reality as shown in Figure 4.

Figure 4: Incremental Actions to Reach the Corridor Vision



1. Corridor Identity and Maintenance

The Corridor businesses, neighborhoods, civic groups and government agencies will define a Corridor brand identity(ies) as a premier regional destination to live, work, and shop. These groups will also collaborate to maintain the historic resources, condition of infrastructure and cleanliness of the Corridor.

Transportation infrastructure that complements the community supports environmental, economic, and social considerations to create value to the people who live, work, and shop in the Corridor. Maintenance of an attractive and clean environment to leverage the unique corridor identity for the enjoyment of residents, workers, and shoppers requires organization and resources.

Corridor Plans

The City of Cupertino Heart of the City and Monta Vista Specific Plans, City of Santa Clara Stevens Creek Boulevard Focus area and City of San José Stevens Creek, Valley Fair/Santana Row, and West San Carlos Urban Villages each envision as streetscape that accommodates more walking, biking, rolling and transit activity. The plans will be implemented through a variety of physical infrastructure and placemaking development actions consistent with the character of a multimodal commercial street. VTA's Community Design and Transportation Manual further details the relationship of transportation and public life that inform the recommendations of the Corridor Vision Implementation.

Historic Preservation of Signs

The Stevens Creek Boulevard and West San Carlos Street Corridor is home to several vintage and historic signs—predominately in the googie, mid-century style. Current historic signs in the Corridor such as the Safeway (former Futurerama Bowl) Sign, Western Appliance Sign, and the Y Not Sign continue to define a future-looking aesthetic.

Figure 5: Historic Signs in the Corridor

Transportation Service Signage

The identity of the transportation services and connections of the Corridor have limited visibility. Transit identity can take a larger role in the Corridor's identity through wayfinding signage, real-time transit information, and better identified transit stops which allow for better awareness and utilization of the Corridor transportation assets. Wayfinding signage can be used to direct travelers from the Corridor to routes which provide connections across barriers such as the Cypress Avenue Bridge over I-280.

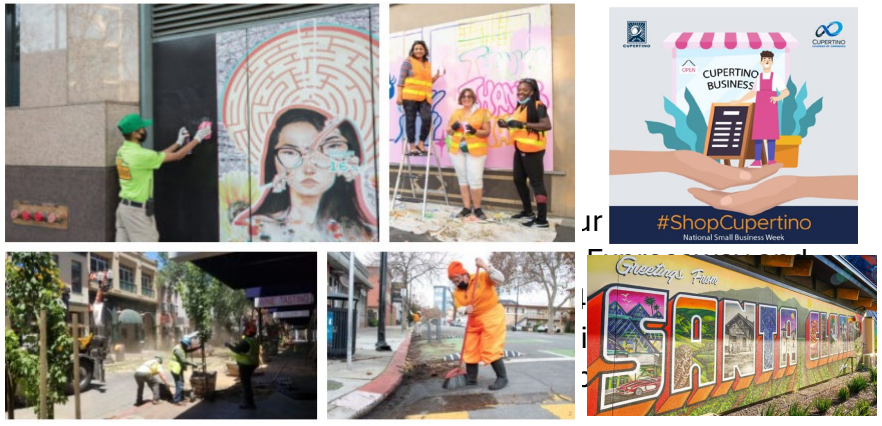
Figure 6: Wayfinding Signage at Meridian

District Management and Maintenance Organizations

Management of public space is usually conducted by municipalities or adjacent landowners, however in some parts of the Corridor, business districts and chambers of commerce were formed to provide business development, clean and maintain public space, provide beautification, create a civic forum, and sponsor events and promotions. These organizations include:

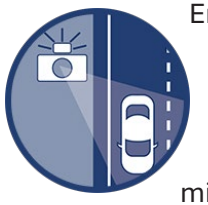
- West San Carlos Street Neighborhood Business District Association
- Winchester Neighborhood Business District
- Cupertino Chamber of Commerce

Figure 8: Corridor Maintenance and Identity Programs



Source: San José Business Improvement District, Discover Santa Clara, Cupertino Chamber of Commerce

Vehicle Speed Reduction Enforcement and Education



Enforcement of speed limits and traffic safety education can improve safety and comfort for residents, workers and visitors to the Corridor. The physical character of the roadway gives the impression of a higher-than-posted speed limit of 35 miles per hour (40 miles per hour from Lawrence Expressway to Harold Avenue). In advance of implementing infrastructure to actively or passively reduce vehicle speeds, enforcement can be an effective near-term action to address vehicle speed in the Corridor. Speeding is the largest primary traffic collision factor in the Stevens Creek Boulevard Corridor (30% of collisions), followed by related driver factors of failure to heed traffic signals or signs (19%), improper turning (19%), and violations of vehicle right-of-way (12%). Deployment of periodic speed enforcement and vision zero education campaigns complement physical infrastructure countermeasures to reduce vehicle speeds.

Figure 7: Slow Speed Public Education on Stevens Creek Boulevard in San José

On-Street Parking

On-street parking can be an important component of a vibrant commercial corridor. A significant portion of the Stevens Creek Boulevard/West San Carlos Street has on-street parking in the Cities of San José and Santa Clara sections of the roadway. A parking utilization survey in May 2024 analyzed the use of 1,736 parking spaces: 885 directly on Stevens Creek Boulevard/West San Carlos Street, and 851 spaces within 200 feet of the Corridor on adjacent streets. Parking utilization ranged from 30 percent of spaces to 70 percent of spaces depending on location and time of day. As shown in Table 1, the highest utilized section on the Corridor was between Lincoln Avenue and Shasta Avenue and the highest utilized side streets were in the Saratoga Avenue to Richfield Drive section of the corridor.

Table 1: Corridor On-Street Parking Utilization

Segment	Average Parking Utilization	
	On Corridor	Adjacent to Corridor
Bird to Lincoln	45%	61%
Lincoln to Shasta	68%	44%
Shasta to I-880	48%	34%
I-880 to Cypress	45%	41%
Cypress to Saratoga	57%	17%
Saratoga to Richfield	53%	68%
Richfield to Lawrence Expy	38%	42%

Overall, on-street parking is well utilized throughout the Corridor, especially in areas where businesses are on small lots with limited off-street parking. Preservation of adequate parking is a key consideration for the overall design of the corridor roadway right-of-way, however curbside management which includes consideration of parking turnover, passenger vehicle and transit loading access, commercial loading, bicycle and pedestrian safety as factors should be continued practice to maximize access, mobility, and safety. Any proposed removal of on-street parking in the future should be studied further in coordination with the adjacent land uses/properties.

During the course of the study, the use of the median for car hauler loading and unloading was mentioned as part of the balance of use in the public right-of-way since alteration of this condition would push the activity to neighborhood side streets.

Recommended Corridor Identity and Maintenance Implementation Actions

- Convene businesses and business groups to explore:
  - Joint advertising and branding opportunities.
  - Marketing and special events
  - Public safety and hospitality
  - Small business grants/loans
- Communicate business resources to Corridor businesses
- Coordinate street cleaning and maintenance including graffiti removal and sidewalk and vegetation maintenance
- Reduce the speed limit to 35 miles per hour from Lawrence Expressway to Harold Avenue
- Coordinate vehicle speed enforcement and speed education efforts
- Develop a process for ongoing community input and engagement for corridor issues through the Stevens Creek Boulevard Corridor Steering Committee

2. Bus Transit Speed, Reliability, and Experience

The Corridor Cities and the County will work with VTA to implement bus speed, reliability and experience improvements in the Corridor.

Buses provide the primary transit mode along the Stevens Creek Boulevard Corridor—the lines serving the corridor are on VTA's Frequent Network. The improvement of service speed, reliability, and experience is the responsibility of VTA and the Cities and County that own and operate the infrastructure utilized by the bus system. Since buses in the corridor share the roadway infrastructure with other vehicles, designing and operating the roadway with transit vehicles and riders at the forefront can bring better service, encourage more transit riders, and support affordable and environmentally friendly transportation.

Buses primarily operate in the outside (3rd) lanes of the Corridor with a frequency of about every 10 minutes between the 23 and 523 service. More than 80 percent of the bus stops are locations where the bus stops in the 3rd lane or in a bicycle lane area which blocks the 3rd lane vehicles behind it during stops. The speed limit of 35mph on Stevens Creek can have safety implications for mixed lane operations: in 2020 a motorist fatally rear-ended a VTA bus which was slowing down for a bus stop.

The City of San José General Plan designated the Corridor a Grand Boulevard where the needs of transit vehicles and riders are given priority over other modes of travel. In 2022, the City of San José passed a "Transit First Policy" which further motivates San José to improve transit operations and access on Grand Boulevards.

There are 89 intersections and 74 bus stops (both directions) along the Corridor. The Cities of Cupertino and Santa Clara, as well as San José, partnered with VTA to implement new shelters, seating, lighting, and associated improvements at VTA Rapid 523 bus stops in 2018. The Rapid 523 service operates approximately 22 percent faster than the Local Route 23 service due to stop consolidation, all-door boarding, and limited signal priority operations. In addition, through VTA's Bus Stop Balancing program six eastbound and four westbound low ridership or redundant stops were removed.

Other transportation services operating in the corridor include the public Silicon Valley Hopper on-demand shared service in Cupertino and Santa Clara, private employee buses for large employers, and private transportation network companies. Efficiency through the intersections and access to and quality of the bus stops are the focus of the following bus speed, reliability, and user experience improvements.

Figure 9: Rapid 523 Stop Enhancements at De Anza Boulevard

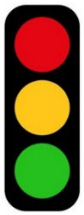
Transit Signal Priority

Traffic signals that adjust signal green time based on transit vehicle proximity currently have limited implementation in the Corridor, despite corridor-wide infrastructure and technology in place. An administrative policy for the four agencies operating signals in the Corridor (the Cities of Cupertino, Santa Clara, and San José and the County of San José) to cooperate with VTA to implement a corridor-wide transit signal priority through a centralized system would be expected to reduce VTA Rapid 523 travel time by 14% and VTA Local

23/51 service by 12%, saving 5.5 minutes and 5.9 minutes for end to end trips respectively.

Queue Jump
A designated waiting areas for buses at the front of an intersection along with leading bus-only green time is referred to as a queue jump. This treatment would be effective at the San Tomas Expressway intersection because the intersection is synchronized north/south to the expressway and therefore could not be a part of the east/west Corridor transit signal priority. This queue jump treatment would be expected to save up to 12 seconds per bus trip through the intersection running east/west or a 0.5% travel time savings for Corridor end-to-end trips.

Figure 10: Traffic Signals in the Corridor by Operating Agency



Agency	Signals Operated
City of Cupertino	18
City of Santa Clara	7
County of Santa Clara	1
City of San José	21

Bus Boarding Islands
Bus boarding islands allow in-lane boarding and remove bus stops from bicycle lanes while providing additional safety protection for cyclists. Implementation of bus boarding islands reduces the amount time of buses spend at a stop and would move bus loading out of bicycle lanes along the Corridor. Full implementation in the Corridor is expected to reduce VTA Rapid 523 travel time by 2.1% and VTA Local 23/51 service by 6.1%, saving 50 seconds and 3.1 minutes for end-to-end trips respectively. The higher travel time savings for local service is due to the higher number of stops in the Corridor.

Real-Time Information
VTA provides real-time arrival and service alert information through a mobile app called Transit and at stop digital signage at light rail and bus rapid transit stations. Provision of this information on digital signs at stops in the Corridor would be a major improvement to rider comfort and understanding of vehicle arrival time.

Transit Experience Improvements
VTA and the Corridor municipalities recently made investments in transit user experience in the corridor through improved shelters, lighting, seating, accessibility, and bicycle racks on buses. Corridor municipalities continue to address fixing cracked sidewalks, tripping hazards, and adding concrete bus pads where asphalt has been impacted by frequent stopping. There will need to be periodic, ongoing capital maintenance activities to maintain the stop areas in a state of good repair.

Curbside Transit/Business Access Lanes
Transit lanes use pavement markings to prioritize buses for improvement to transit speed and reliability. Curbside bus lanes are accessible to emergency vehicles and any other vehicle for right-turns at intersections, driveways, parking maneuvers. Curbside transit lanes can also enhance the visibility and branding of transit service, and provide better visibility for vehicles entering and exiting the roadway from driveways and neighborhood side streets and can also be signed as Business Access and Transit Lanes. Given the width of the roadway and predominately three-lane in each direction configuration, curbside transit lanes could be implemented with limited change to current on-street parking.

Recommended Bus Speed, Reliability, and Experience Implementation Actions

- Complete an administrative policy for the four agencies operating signals in the Corridor (the Cities of Cupertino, Santa Clara, and San José and the County of San José) to

cooperate with VTA to implement a corridor-wide transit signal priority through a centralized system.

- Design and Transportation Manual (CDT) and VTA's Speed and Reliability Program. VTA will develop a speed and reliability improvement plan for the frequent network routes of 23, 51, and 523 with a Working Group of Corridor Agencies where priorities, funding and phased implementation.

3. Corridor Walking and Biking Infrastructure

Residents, businesses, and visitors would be served by a stress-free and enjoyable walking and bicycling environment through the implementation of protected, buffered, or separated bicycle facilities the length of the Corridor including protection at intersections. Where sidewalks are not to current standard, they will be improved through dedications of new development.

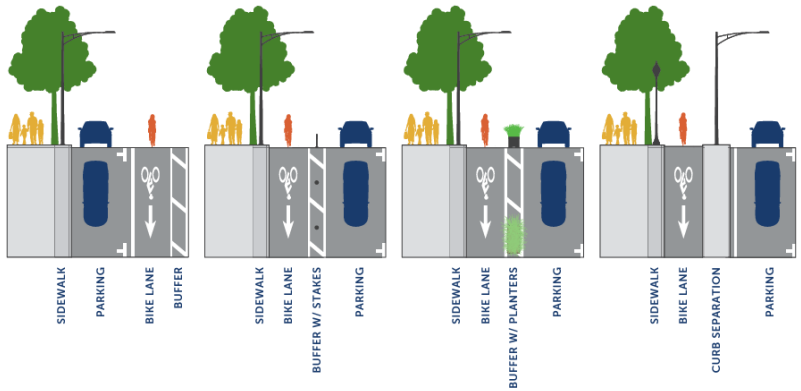
Balancing modes in the Corridor requires additional promotion of infrastructure for walking and biking. Investment in walking and bicycling infrastructure supports transit riders by providing easier and more pleasant stop access.

The streetscape of Stevens Creek Boulevard and West San Carlos Street has remained largely unchanged in the last 50 years, even as the communities it serves have grown and diversified. Key improvements to modernize and transform the roadway into a valuable community asset include upgrading bicycle facilities, ensuring sidewalks meet current width standards, and installing and maintaining shade trees.

Protection for Bicyclists

According to the National Association of City Transportation Officials (NACTO), protected bicycle lanes should be installed when vehicles travel at speeds of more than 25 miles per hour on a consistent basis. Given the speed limit is predominately 35 miles per hour or higher in the Corridor, the physical separation of bicycle lanes is prudent for safety and comfort. The City of Cupertino is currently implementing physically separated bicycle lanes along Stevens Creek Boulevard, and the Cities of Santa Clara and San José plan to implement bicycle separation along the Corridor.

Figure 11: Bicycle Lane Protection Options



Source: San José Better Bike Plan, City of San José

Physical bicycle lane separation would include clear space and clear sight lines for vehicles accessing driveways. It may also include additional safety treatment for vehicle egress/ingress at driveways.

Buildout Sidewalk Width

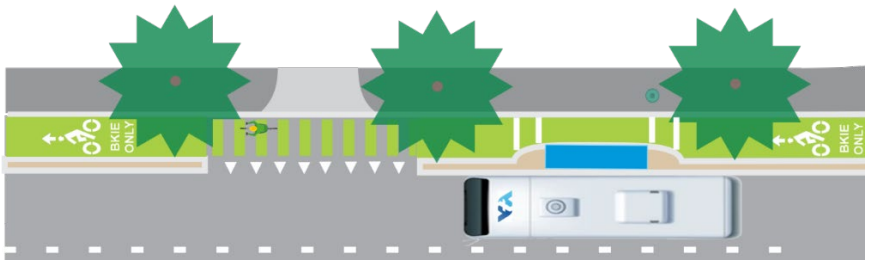
While sidewalks are present the entire length of the Corridor, 85 percent of the sidewalks are narrower than the standards within their respective City. Generally, the sidewalks in the Valley Fair/Santana Row area and parts of Cupertino are the widest in the Corridor. The Corridor has several legacy driveways which slope through the sidewalk area. Each of the Corridor Cities' current standards separate the sidewalk area from the driveway apron to provide for minimal sloping though the pedestrian walking space which should be implemented as adjacent buildings are developed.

Pedestrian Infrastructure Enhancements

Whether someone is walking to a restaurant, business, or residence from a parked car or bike, from an adjacent neighborhood, or from a transit stop, high-quality pedestrian infrastructure is important. Sidewalk extensions can be used to shorten intersection crossing distances and improve pedestrian visibility. Median refuge islands

are a treatment at physically large, busy signalized intersections with long crosswalks. These facilities can provide a safe midpoint for two-stage intersection crossings. Leading pedestrian intervals at signalized intersections allow pedestrians to cross at intersections before vehicles are given a green signal and gives pedestrians priority over turning-vehicles. While conventional street lights are intended to illuminate the roadway for vehicles, pedestrian-oriented lighting illuminates sidewalks and crosswalks to enhance the comfort and safety of walking at night.

Figure 12: Concept of Physically Separated Bicycle Lanes, Shade Trees and Bus Island on Corridor



Shade Trees

Shade trees are sparse in the Corridor. Only 45 percent of blocks have any trees present, and only 23 percent of blocks have trees on both sides of the roadway. Maintenance of a healthy urban forest and green infrastructure lowers the temperature at ground level, reduces glare, reduces stormwater run-off, and provides for native wildlife.

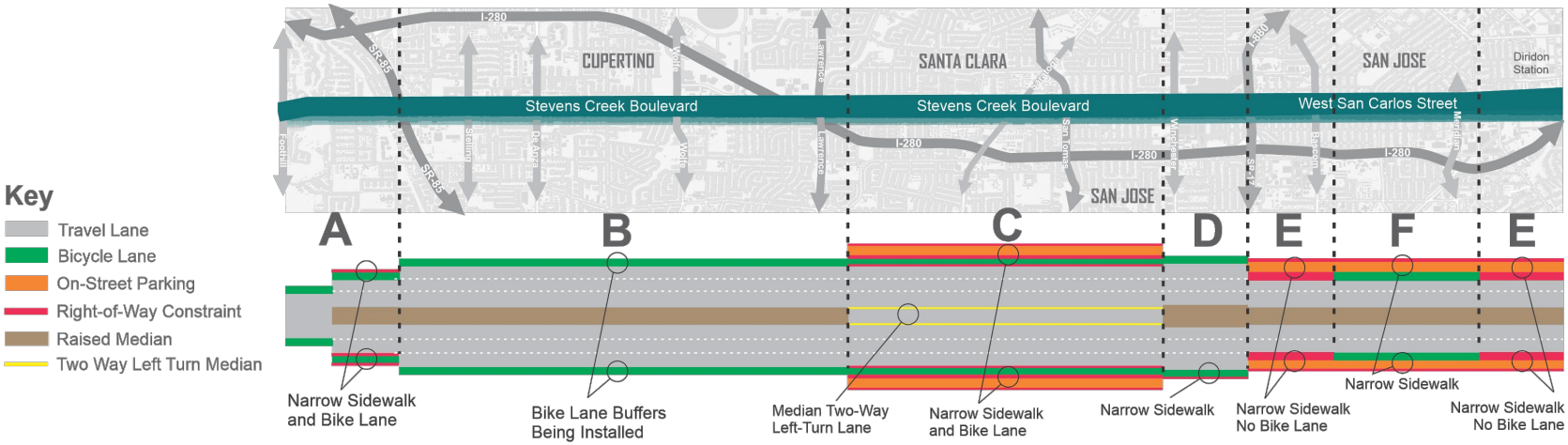
Right-of-Way Constraints

The corridor right-of-way varies block-to-block; however, the Corridor can be characterized by seven generalized segments by the types of transportation infrastructure in place:

A. Cupertino two to four lanes
B. Cupertino six lanes
C. San José/Santa Clara six lanes
D. Valley Fair/Santana Row six lanes
E. West San Carlos Street four lane no current bicycle lane
G. West San Carlos Street four lane with bicycle lane

When applying sidewalk, bicycle lane, and vehicle lane standards to the existing right-of-way, areas with constrained right of way are indicated in several sections of the corridor as shown in Figure 13.

Figure 13: Corridor Areas with Right-of-Way Constraints for Sidewalk and Bicycle Lane Implementation



While these constraints do not limit the feasibility of implementing improvements in the current corridor right-of-way, they do indicate some deviation from standard design may be necessary to meet mobility goals without impacting adjacent land use.

Corridor Walking and Biking Infrastructure Recommended Implementation Actions

- Physically protect/separate/buffer bicycle lanes on Stevens Creek Boulevard and West San Carlos Street to provide separation of bicyclists from vehicle while maintaining access to driveways.

- Widen sidewalk widths consistent with City standards through dedications by new land use development.

- Plant shade trees on the sides of the Stevens Creek Boulevard and West San Carlos Street Corridor. This would be developed within an urban forestry framework with sustainable funding for tree maintenance.

- Review locations for installation of median refuge islands

- Review the potential for leading pedestrian intervals at signalized intersections (LPIs).

- Implement pedestrian-oriented lighting when street lighting is installed or replaced in the corridor.

4. Walking and Biking Network Connections

Residents, businesses, and visitors would be served by high-quality pedestrian and bicycle infrastructure prioritized to connect neighborhoods to the corridor within a 20-minute walk of transit stops through the implementation of bicycle and pedestrian plans.

The Vision of the Corridor as a multimodal roadway is to be supported by strong connections to walking and bicycling networks. This allows non-motorized travel for access to transit services and commercial and residential areas.

Each Corridor agency provide improvements to walking and bicycling infrastructure in the Corridor area (within ½ mile of the Corridor). The current and planned status of bicycle infrastructure based on each of the Corridor City's bicycle plans is shown in **Table 2**. Overall, the bicycle network is planned to be expanded by 50 percent –from approximately 80 miles of facilities to 120 miles of facilities. This expansion includes a major investment in 68 miles of new or converted trails and protected, buffered, or separated bikeways. This would bring the proportion of the separated bikeway network from 11 percent to 63 percent in the Corridor area.

Table 2: Current and Planned Corridor Area Bicycle Facilities (in Miles)

Bicycle Facility Type	Current	Planned
Trail	4.5	12.6
Buffered/Separated Bikeway	4.6	64.5
Unbuffered Bike Lane	52.6	14.3
Bicycle Boulevard/Route	18.9	30.2
Subtotal – Protected Network	9.0	77.0
Total	80.5	121.5

Implementation of Bicycle and Pedestrian Plans

Each Corridor agency has plans to design, fund, and construct projects to implement bicycle and pedestrian improvements. These are also supplemented by safety planning such as Local Roadway Safety Plans, Safety Action Plans, Safe Routes to School, Vision Zero Programs, and the VTA Bicycle Technical Guidelines.

Implementation of active transportation improvements should consider the accommodation of electric powered bicycle, scooters, and other micromobility to ensure emerging modes support, not conflict with walking and bicycling.

Priority Implementation Actions

The following is a sample of the 70+ parallel and connecting walking and biking network improvements prioritized by the Community Advisory Committee:

- Pruneridge Avenue Complete Streets Project (City of Santa Clara)
- Moorpark Avenue Traffic Safety Project (City of San José)
- De Anza Blvd Buffered Bike Lanes (City of Cupertino)
- Lawrence Mitty Park Trail (City of Cupertino)

Figure 14 Existing Bicycle Network in the Corridor Area

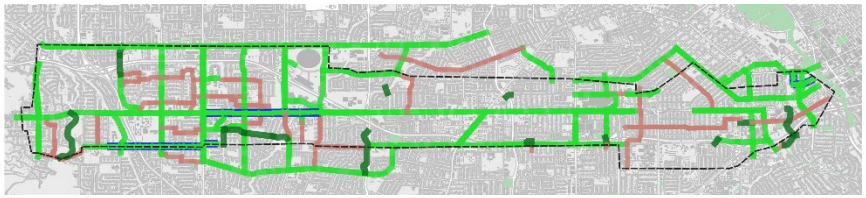
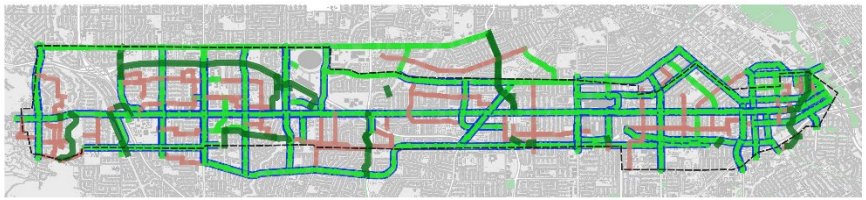


Figure 15: Planned Bicycle Network in the Corridor Area



5. Crossings

Crossings in the Corridor Area will be upgraded for accessible, consistent infrastructure that protects vulnerable users, considers transit access, and ensures direct connections. Safe and efficient vehicle travel would also be accommodated for connections to neighborhoods, businesses, and expressways and freeways.

Crossings of the Corridor whether at intersections, at midblock locations or across natural barriers, are important to maintain connectivity among neighborhoods, parks, commercial areas and access to corridor transit services.

From 2016 to 2022 there was an average of 188 collisions per year in the Corridor overall and 23 collisions per year involving bicycles or pedestrians—75 percent of which occurred within 250 feet of an intersection. Half of vehicle/vehicle collisions resulted in injuries, while 93 percent of collisions involving bicycles and 97 percent of collisions involving pedestrians resulted in an injury. Collisions involving a bicycle or a pedestrian were also five times as likely to result in a serious injury or fatality. Therefore, special attention to the treatment of vulnerable road users at these crossings should be made to ensure conflicting movements do not become collisions.

The Corridor Cities and the County are conducting Local Roadway Safety Plans (LRSPs), Safety Action Plans and Vision Zero Plans with specific actions to address intersection and systemic safety. For example, three Corridor intersections for recommended improvements identified in the City of Cupertino's LRSP: Stevens Creek Boulevard at De Anza Boulevard, Bandley Drive and Blaney Avenue.

Enhanced Crossings for Pedestrians and Bicycles
Marked and highly visible crosswalks help define where pedestrians can conveniently and predictably cross streets. While the California Vehicle Code requires drivers to yield to pedestrians in any crosswalk, whether marked or unmarked.

Streetscape design should prioritize crosswalks as an essential element of the pedestrian environment, rather than interruptions to vehicles. Due to the low approach angle at which drivers view pavement markings, incorporating parallel stripes alongside or instead of standard perpendicular markings can greatly enhance the visibility of crosswalks for oncoming traffic. Therefore, to improve crosswalk visibility 'standard' crosswalks delineated by two lines perpendicular to the vehicle lanes should be replaced with 'continental' crosswalks with lines parallel to the roadway or 'ladder' crosswalks with both the standard perpendicular delineation lines and the parallel continental lines or 'zebra' crosswalks with diagonal lines.

Currently 79 percent of crosswalks across Stevens Creek Boulevard/West San Carlos Street are high-visibility continental or ladder crosswalks, while only 47 percent of crosswalks along (across side streets) are high visibility crosswalks.

Other enhancements for crossings include pedestrian-oriented lighting, audible cues announcing roadway location (as installed at the Kiely Boulevard/Stevens Creek Boulevard intersection) , tactile or colored waiting areas and crossings, automatic detection of pedestrians and bicyclists and adjusted crossing times that vary with the crosser.

Curb Extensions and Protected Intersections
Intersections are primarily designed for processing vehicles and managing vehicle conflicts. Bicycle and pedestrian oriented intersection treatments narrow the crossing length and provide dedicated intersection space for vulnerable users.

- **Curb Extensions** widen the sidewalk area into the intersection, narrowing the roadway, decreasing the speed

of right-turning vehicles, and creating shorter crossings for pedestrians. They also improve the visibility of pedestrians to drivers.

- **Protected Intersections** for bicycles create additional space on the sides and through intersections for bicyclists and pedestrians. Buffers, generally raised curbs, separate bike lanes on the sides and corners of the intersection and bicycle lanes are striped next to crosswalks through the intersection. Similar to curb extensions, these treatments create waiting areas while making vulnerable users more visible to slower right-turning vehicles.

Figure 16: Protected Crossing on McClellan Road in Cupertino

Source: City of Cupertino

Connections Across Barriers

The Stevens Creek Boulevard Corridor is the longest continuous east/west roadway in the study area: other than I-280, there is not a parallel roadway which makes the full connection from Cupertino to San José in the study area.

The physical barriers in the Corridor, both natural and man-made from west to east are:

- Stevens Creek
- Union Pacific Rail Tracks
- State Route 85
- Calabazas Creek
- Saratoga Creek
- Lawrence Expressway
- San Tomas Expressway
- I-880/State Route 17
- Los Gatos Creek
- VTA Green Line and Blue Line Light Rail Tracks

Stevens Creek Boulevard and West San Carlos Street cross over or under each of these physical barriers. Other facilities which cross barriers in the Study Area are:

- Saratoga Creek Pedestrian Bridge in Santa Clara
- Cypress I-280 Overcrossing in San José
- Tisch I-280 Overcrossing in San José
- Midtown-Fruitdale I-280 Crossing in San José
- Los Gatos Creek Trail I-280 Undercrossing in San José
- Parkway Park San Tomas Expressway Overcrossing in Santa Clara

Improved wayfinding and identifying signage of these important crossings can enhance their usage and access among Corridor area routes for bicyclists and pedestrians.

Planned crossings in the study area for pedestrians and bicycles are:

- SR-85 Overcrossing from Grand Ave to Mary Ave in Cupertino
- Saratoga Creek Trail north of Sterling-Barnhart Park and create a feasible pedestrian and bicycle connection design

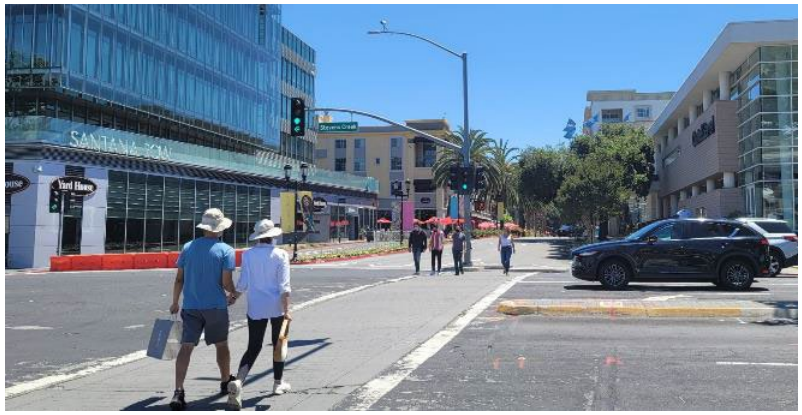
to Stevens Creek Boulevard under I-280 and adjacent to Lawrence Expressway connecting the cities of Cupertino, San José, and Santa Clara
- San Tomas Expressway Overcrossing (Greenlee Drive to Coakley Drive/Constance Drive) in San José
- Carmen Road Bridge in Cupertino

Corridor Crossings Recommended Implementation Actions

Initiate priority intersections and crossings projects to minimize inconvenience and maximize safety for all users. These include:

- Implement enhanced, high-visibility crossings for pedestrians and bicyclists.
- Implement curb extensions and protected intersections.
- Prioritize crossings of barriers for pedestrians and bicycles
- Review key hot spots for crossing improvements such as Monroe Street and Stevens Creek Boulevard at I-880 for potential reconfiguration to accommodate clearer travel patterns for all modes.

Figure 17: Crossing Stevens Creek Boulevard Between Valley Fair and Santana Row



6. Separated, High-Capacity Transit

Residents, businesses, and visitors would be served by a high-capacity transit system supported by station access enhancements to connect the Cities of Cupertino, Santa Clara, and San José from Diridon Station and Downtown San José to De Anza College within twenty minutes, with connection to Foothill Boulevard, for reliable travel to local and regional destinations. Station areas would be well-maintained and inviting community assets.

A high-capacity transit system separated from the roadway would allow for a 20-minute connection from De Anza College in Cupertino to Diridon Station and/or Downtown San José. Potential stations could be at Diridon Station or Downtown San José, Meridian, Bascom, Winchester, Saratoga. Lawrence, Wolfe, and De Anza College.

The key components of the system would be easy access to a system to carry large numbers of people quickly along the Corridor. The vibrant public spaces and central hubs characteristics of a separated, high-capacity transit system highlight the tradeoffs between transit and personal automobile travel. While automobiles will continue to play a significant role in the transportation system, they cannot address future transportation demands without increasing congestion. In contrast, a high-capacity system offers unique opportunities to meet these needs while delivering high-quality service that aligns with principles of human-scale design, universal accessibility, and support of activity centers.

This system could provide reliable and safe connections among major connections in the South Valley with short travel times in an environmentally friendly way without adding to traffic congestion. The high initial capital cost is the primary barrier to implementation. However long-term cost savings to users and value to supporting neighborhoods and businesses with a sustainable, high-quality transportation service bring enduring benefits to the community.

At-grade separated transit could be side or center running transit separated / delineated either with hardscape (i.e., concrete curbs or plantings) or quick-build materials such as paint and plastic posts.

Preliminary analysis included in Appendix B indicates elevated transit in the Corridor would cost approximately $1.7 billion while underground transit in the Corridor would cost about $2.8 billion. Combined with bus speed, reliability, and experience improvements, the number of transit users in the Corridor would be expected to double over current conditions.
While the placement of guideway and type of vehicle used is not specified in this Vision Study, there was a clear community preference for an elevated fixed-guideway transit service.

Figure 18: Conceptual High-Capacity, Separated Transit Alignment and Stations in the Corridor

Alternate Alignment Along I-280

In response to the City of Cupertino's Resolution No. 19-089, an alternate high-capacity transit alignment along I-280 is being considered. This alignment aims to address concerns regarding potential traffic impacts on Stevens Creek Boulevard that may result from Plan recommendations, while meeting the goal of enhancing regional connectivity. The I-280 corridor offers unique opportunities for integrating a high-capacity transit system that minimizes disruptions to surface street operations.

The proposed I-280 alignment would complement, rather than replace, the Stevens Creek Boulevard route. While the Stevens Creek Boulevard alignment focuses on connecting key local destinations with frequent stops, the I-280 route could provide a faster route between De Anza College and Diridon Station. This dual-corridor approach allows for a more flexible system that meets both local and regional transportation needs.

Key connections will be established through Cupertino's well-developed bicycle and pedestrian network, including the 3-mile off-street Tamien Innu Trail stretching from Mary Avenue to Vallco Parkway. Separated bikeways along Mary Avenue will offer a direct north-south route from the Don Burnett Bridge to De Anza College. Additionally, Class IV bikeways surrounding the Wolfe Road interchange modernization project will provide convenient access for both shoppers at Main Street Cupertino and visitors to the redeveloped Vallco Shopping Center.

Further analysis is recommended to evaluate the feasibility and potential benefits of a high-capacity transit alignment along I-280. Including this alignment in future studies could enhance the Corridor Vision by providing additional options to meet transportation demands.

Implementation Approach

Implementing a new transit line is complex and requires sustained effort by champions at the agency staff and elected official levels. As the County's transit agency, VTA is best positioned to be the lead agency for the project. However, partnership with the Corridor municipalities is necessary for successful implementation as major improvements such as any grade separation would need Council or Board approval by individual agencies.

The project would likely be a part of the Federal Transit Administration (FTA)'s Capital Investment Grant/Expedited Project Delivery (CIG/EPD) Pilot program. Fortunately, VTA, the County of Santa Clara, San José and Santa Clara have experience with this program as the BART Silicon Valley Phase II Project was part of the CIG/EPD pipeline.

Paraphrasing FTA's key factors for successful project implementation[1] of a major transit capital program involves adequate project management and project control practices to manage:

- Input during planning, design and scoping phases
- Right-of-way acquisition
- Schedule
- Cost Estimating and budget
- Public engagement, information and communication
- Fair and comprehensive contracting documents
- Adequate underground investigation during preliminary engineering
- Successful coordination with public utilities
- Realistic and independently determined constraints and expectations.

[1] https://www.transit.dot.gov/regulations-and-guidance/key-factors-successful-project-implementation

Figure 19: Conceptual Graphic of Before and After Implementation of Elevated High-Capacity Transit System, West of I-280

Specific considerations for implementation of an elevated transit service in the Stevens Creek Boulevard/West San Carlos Street Corridor based on engagement are:

- Elevated transit stations could also provide crossings above Stevens Creek Boulevard for bicyclists and pedestrians.
- Spacing between pillars/footings should be adequate to maintain a two-way left turn lane in the shared Santa Clara/San José section of Stevens Creek Boulevard for the loading and unloading of car carriers serving car dealerships.
- Light rail as well as innovative vehicle and service models should be explored.
- Coordination with the SJC Airport Connector[2] project which could be expanded into the corridor.
- Review potential connections options to Diridon Station and Downtown San José.
- Collaborate with Corridor partners to study the feasibility of a parallel high-capacity transit alignment along I-280.
- Assess how the I-280 alignment could integrate with the primary Stevens Creek Boulevard route through various connections, offering a variety of transit options for local access.

[2] https://www.sanjoseca.gov/your-government/departments-offices/transportation/transit/airport-connector

Recommended High-Capacity Transit Implementation Actions

The next phase of project development consists of preliminary engineering and alternatives analysis, environmental review and the selection of a locally preferred alternative (LPA). This would be followed by the funding commitments to complete engineering and final design and then a full funding grant agreement from outside funding partners (generally FTA) for construction.

As a new project, securing funding for development and construction will be vital to implementation. The high-capacity, separated transit concept was included in Plan Bay Area 2050 (as a placeholder light rail service expansion) through the joint cooperation of Corridor agencies. It is currently being evaluated for inclusion in the upcoming Plan Bay Area 2050+. However, inclusion in these documents does not guarantee funding. Furthermore, Santa Clara County Measure A funds likely could not be used for further development of a separated transit option as the funds for transit are focused on bus speed and efficiency improvements.

Therefore, the best option is to secure competitive state or federal grant funds through programs such as: SB 1 programs of Solutions for Congested Corridors Program or Local Partnership Program administered by the California Transportation Commission or the Federal Transit Administration Pilot Program for Transit-Oriented Development Planning or Accelerating Innovative Mobility Program or US Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity Program.

It is recommended a cooperative grant funding strategy be pursued by the Corridor agencies to place the high-capacity, separated transit service project forward for multiple competitive grant funding programs.

Example Project Development Timeline

A project development timeline was developed based on the Eastridge to BART Regional Connector[3] timeline:

- Preliminary Engineering of three years (2025-2028)
- Design and Engineering of two years (2029-2030)
- Environmental Clearance of five years (2031-2036)
- Utility Relocation of two years (2037 – 2039)
- Construction of five years (2040-2045)

Figure 20: Conceptual Graphic of Before and After Implementation of Elevated High-Capacity Transit System, West of Winchester Boulevard

3 https://www.vta.org/projects/eastridge-bart-regional-connector#accordion-environmental-documents

7. Implementation Action Summary

1 Corridor Identity and Maintenance Implementation

Table 3: Recommended Corridor Identity and Maintenance Implementation Actions

	Action	Responsible agencies	Next Step
1.1	Corridor Business Forum	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Convene Corridor Business Forum
1.2	Street cleaning and maintenance coordination	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Staff-level coordination of maintenance activities
1.3	Set the speed limit to 35 miles per hour from Lawrence Expressway to Harold Avenue	Cities of Santa Clara and San José	Conduct Engineering and Traffic survey
1.4	Communicate business resources to Corridor businesses	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Develop summary of eligible grants and loan programs for businesses
1.5	Coordinate vehicle speed enforcement and speed education efforts	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Implement Vision Zero and Speed Reduction Public Education

2 Bus Speed, Reliability, and Experience Implementation

Table 4: Recommended Bus Speed, Reliability, and Experience Implementation Actions

	Action	Responsible agencies	Next Step
2.1	Complete an administrative policy for corridor-wide transit signal priority through a centralized system	Cities of Cupertino, Santa Clara, and San José, County of Santa Clara, and VTA	Administrative policy for the four agencies operating signals in the Corridor (the Cities of Cupertino, Santa Clara, and San José and the County of San José) to cooperate with VTA to implement a corridor-wide transit signal priority through a centralized system.
2.2	Develop a program of Corridor bus speed, reliability and experience improvements	Cities of Cupertino, Santa Clara, and San José, County of Santa Clara, and VTA	Work with VTA to develop improvement plan in partnership with a Working Group composed of Corridor agencies

Table 5: Capital Project Components and Cost Estimate Range

Potential Capital Component	Responsible Agencies	Unit Cost	Quantities	Cost Estimate Range
Develop Transit Signal Priority Policy	Cities of Cupertino, Santa Clara, and San José with VTA	Implemented through staff coordination		
Queue Jump at San Tomas Expressway	County of Santa Clara with VTA)	$1.25m - $1.5m	San Tomas Expressway	$1.25m - $1.5m
Bus Bulbs/Islands	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	$270k-$400k	Twenty 523 stops	$5.4m-$8m
Real-Time Information	VTA	$40k-$75k per stop	Twenty 523 stops	$800k-$1.5m
Transit Experience Improvements	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara with VTA	$5k-$50K per stop	Twenty 523 stops and 74 23/51 stops	$470k-$4.7m
Curbside Transit/Business Access Lanes	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara with VTA	$500k-$1m per mile	2.5 miles in San José	$1.25m-$2.5m
			2.5 miles in Santa Clara/San José	$1.25m-$2.5m
			4 miles in Cupertino	$2m-$2m
			Total Cost Estimate Range	**$13.4m-$27.7m**

3 Corridor Walking and Biking Infrastructure Implementation

Table 6: Recommended Corridor Walking and Biking Infrastructure Implementation Actions

	Action	Responsible Agencies	Next Step
3.1	Physically protected/separated/buffered bicycle lanes on Stevens Creek Boulevard and West San Carlos Street to provide physical separation of bicyclists from vehicle while maintaining access to driveways.	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Implement corridor improvements
3.2	Widen sidewalk widths consistent with City standards	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Require sidewalk widening as part of development dedications as needed
3.3	Plant shade trees on the sides of the Stevens Creek Boulevard and West San Carlos Street Corridor	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Develop urban forestry framework with sustainable funding for tree maintenance
3.4	Install median refuge islands	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Review locations for installation of median refuge islands
3.5	Install leading pedestrian intervals at signalized intersections	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Review the potential for leading pedestrian intervals at signalized intersections
3.6	Install Pedestrian-oriented lighting	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Implement pedestrian-oriented lighting when street lighting is installed or replaced in the corridor.

The ongoing implementation of physically protected/separated/buffered bicycle lanes along Stevens Creek Boulevard Corridor will be completed through incremental projects and funded through a variety of sources, for most projects the funding is not identified as shown in **Table 7**.

Table 7: Physically Protected Bicycle Lane Projects to Compete Corridor

Responsible Agency	Project	Cost Estimate ($2024)	Funding Source
City of Cupertino	Stevens Creek Boulevard Class IV Bikeway (Phase 2A) Wolfe Road to De Anza Boulevard	$1.6m	City General Fund, One Bay Area Cycle 2 Grant Program
	Stevens Creek Boulevard Class IV Bikeway (Phase 2B) De Anza Boulevard to Mary Avenue	$1.6m	City General Fund, One Bay Area Cycle 2 Grant Program
	Stevens Creek Boulevard Class IV Bikeway (Phase 3)	TBD	TBD
	Stevens Creek Blvd/SR-85 NB Protected Intersection	TBD	TBD (development project)
City of San José	Stevens Creek Boulevard Protected Bike Lanes - Winchester Boulevard to Monroe Street	TBD	TBD - Better Bike Plan - 5-Year List
	Stevens Creek Boulevard Protected Bike Lanes - Monroe Street to Macarthur Avenue	TBD	TBD - Better Bike Plan - 5-Year List
	Stevens Creek Boulevard Protected Bike Lanes - Macarthur Avenue to Bascom Avenue	TBD	TBD - Better Bike Plan - 5-Year List
	West San Carlos Street Protect Bicycle Lanes - Bascom Avenue to Woz Way	TBD	TBD - Better Bike Plan - 5-Year List
	West San Carlos Urban Village Streets Improvements from I-880 to McEvoy	$10m	TBD
	Stevens Creek Blvd Physically Separated Bike Lanes (south side) - Winchester Boulevard to Lawrence Expressway	$2m	TBD
City of Santa Clara	Stevens Creek Blvd Physically Separated Bike Lanes (north side) - Winchester Boulevard to Lawrence Expressway	$2m	TBD

4 Walking and Biking Network Connections Implementation

Table 8: Recommended Walking and Biking Network Connections Implementation Actions

	Action	Responsible agencies	Next Step
4.1	Support the continued development and implementation of walking and biking network improvements in parallel and connecting corridors to the Stevens Creek Boulevard Corridor	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Continue to develop, fund, and implement priority projects (over 70 identified in the study area) such as: • Pruneridge Avenue Complete Streets Project (City of Santa Clara) • Moorpark Avenue Traffic Safety Project (City of San José) • De Anza Blvd Buffered Bike Lane (City of Cupertino) • Lawrence Mitty Park Trail (City of Cupertino)

5 Corridor Crossings Implementation

Table 9: Recommended Corridor Crossings Recommended Implementation Actions

	Action	Responsible agencies	Next Step
5.1	Implement enhanced, high-visibility crossings for pedestrians and bicyclists.	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Identify and implement enhanced, high-visibility crossings
5.2	Implement curb extensions and protected intersections.	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Identify and implement curb extensions and protected intersections such as the Stevens Creek Blvd/SR-85 NB Protected Intersection in Cupertino
5.3	Prioritize crossings of barriers for pedestrians and bicycles	Cities of Cupertino, Santa Clara, and San José	Continue to develop, fund, and implement priority projects such as: • Safety improvements at the intersections of Stevens Creek Boulevard at De Anza Boulevard, Bandley Drive and Blaney Avenue (City of Cupertino) • Crossing of SR-85 from Grand Avenue to Mary Avenue (City of Cupertino) • Crossing of I-280 at Mitty Park (John Mise Park) (City of San José) • Crossing of San Tomas Expressway at Greenlee Drive/Coakley Drive/Constance Drive (City of San José) • Saratoga Creek Trail north of Sterling-Barnhart Park to Stevens Creek Boulevard under I-280 and adjacent to Lawrence Expressway (Cities of Cupertino, San José, Santa Clara, and the County of Santa Clara)
5.4	Review key hot spots for operational and crossing improvements	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Review the intersection of Monroe Street and Stevens Creek Boulevard at I-880 for potential reconfiguration to accommodate clearer travel patterns for all modes

6 Separated, High-Capacity Implementation

Table 10: Recommended Separated, High-Capacity Recommended Implementation Actions

	Action	Responsible agencies	Next Step
6.1	Include project in Plan Bay Area 2050+	Cities of Cupertino, Santa Clara, and San José, the County of Santa Clara, and VTA	Advocate for project inclusion in Plan Bay Area 2050+ and future Plan Bay Area cycles
6.2	Secure funding commitments	Cities of Cupertino, Santa Clara, and San José, the County of Santa Clara, and VTA	Develop framework funding strategy
6.3	Work with VTA to initiate project development process	Cities of Cupertino, Santa Clara, and San José, and the County of Santa Clara	Obtain resources to initiate preliminary engineering and alternatives analysis, environmental review and the selection of a locally preferred alternative (LPA) in a community engagement process
6.4	Include corridor-specific considerations in project development process	Cities of Cupertino, Santa Clara, and San José, the County of Santa Clara, and VTA	Include the following in the project development process: • Light rail as well as innovative vehicle and service models should be explored • Coordination with the SJC Airport Connector project which could be expanded into the corridor • Review potential connections options to Diridon Station and Downtown San José • Analyze an alternative alignment along the I-280 corridor in Cupertino • Review coordination of corridor transit connections for local and regional access

Preliminary estimates of the capital costs for various separated, high—capacity systems and service types are shown in **Table 11**.

Table 11: Preliminary Estimate for Capital Cost of Separated, High-Capacity Transit Systems

Potential Capital Component	Description	Cost Estimate (in $2024)	Estimated Corridor Travel Time	Estimated Daily Ridership
Existing Conditions	Current peak hour conditions for average VTA Lines 523 and 23 in the corridor	-	39.4 minutes for Line 523 50.4 for Line 23	9,800
Transit/Business Access Lane	Early action option as part of Bus Speed, Reliability and Experience Improvements	$13.4m-$27.7m	30.4 minutes	12,600
At-Grade Side Running Separated Transit Lane	Includes development of 10 side station areas	$53m	29.3 minutes	12,950
At-Grade Side Running Separated Transit Lane – Excluding Cupertino Section	Includes development of 10 side station areas—with limited improvements at non-separated lane sections	$29m	31.9 minutes	12,650
At-Grade Center Running Transit Lane	Includes development of 10 center station areas	$95m	27 minutes	12,600
Elevated Transit Line	Includes development of 8 stations including Downtown San José or Diridon Station	$1,750m	20 minutes	20,200
Elevated Transit Line - I-280 alignment in Cupertino	Includes development of 8 stations including Downtown San José or Diridon Station	$1,750m	20 minutes	19,250
Underground Transit Line	Includes development of 8 stations including Downtown San José or Diridon Station	$2,800m	20 minutes	20,200