

SAN LORENZO VALLEY SCHOOLS

Access Study

July 2023





SAN LORENZO VALLEY SCHOOLS ACCESS STUDY

Acknowledgements

The San Lorenzo Valley Schools Access Study was funded through a memorandum of understanding between the Santa Cruz Regional Transportation Commission (RTC) and the San Lorenzo Valley Unified School District (SLVUSD). The RTC, in collaboration with multidisciplinary partner agencies and stakeholders, collaborated to develop the San Lorenzo Valley Schools Access Study (Study) to increase roadway safety for people traveling on Highway 9. The study was managed by Brianna Goodman and Sarah Christensen, PE, of RTC, in coordination with a Circulation Project Management Team (CPMT). A consulting team led by Mark Thomas assisted the RTC and CPMT in preparing the San Lorenzo Valley Schools Access Study.

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Introduction

Executive Summary

Highway 9 is a Caltrans-managed State Route within the Counties of Santa Clara and Santa Cruz. The corridor connects between the Cities of Saratoga and Los Gatos in Santa Clara County to the North and the City of Santa Cruz to the South, becoming River Street at the intersection with Highway 1. Highway 17 is the primary route for vehicle traffic between the two counties while Highway 9 is a comparatively lower-speed facility carrying lower volumes of traffic to local destinations. Highway 9 provides access to Santa Cruz County communities Felton, Ben Lomond, and Boulder Creek via intersecting local, collector, and arterial roadways. The majority of intersections on Highway 9 are side-street stop controlled.

In 2019 the Santa Cruz Regional Transportation Commission (RTC), in partnership with California Department of Transportation (Caltrans), the County of Santa Cruz (County), and Santa Cruz Metropolitan Transit District (METRO), completed the Highway 9/San Lorenzo Valley Complete Streets Corridor Plan (SLV Plan) to help coordinate and prioritize transportation investments on Highway 9. The primary purpose of the SLV Plan was to create an actionable short-term and longer-term multimodal complete streets corridor plan to address transportation challenges for all modes of transportation along the Highway 9 corridor and within the town centers. In evaluating potential transportation projects, the SLV Plan considered how well projects address objectives identified by the community.

The SLV Plan is a community-based plan, developed based on evaluation of existing corridor conditions, physical and regulatory constraints, and public outreach efforts to identify the needs of the community. With extensive input from surveys, focus groups, and at public meetings from 2017 to 2019 the SLV Plan was adopted June 27, 2019. With the primary goal of enhancing safety for users of Highway 9 and connecting county roads by enhancing facilities for all modes of transportation on the corridor, the SLV Plan also prioritized actions to address key transportation challenges.

The SLV Plan identified the Highway 9 corridor adjacent to, and the circulation within, the San Lorenzo Valley Unified School District (SLVUSD) elementary, middle, and high schools combined campus (SLV Schools) as a top priority in need of dedicated active transportation facilities, improved access to transit, and optimized vehicle throughput. The SLV Plan identified Projects 9, 10, 11, and 12, which were the focus of the SLV Schools Circulation and Access Study.



In January 2022, RTC entered a Memorandum of Understanding with SLVUSD, Caltrans, METRO, and the County to coordinate delivery of the SLV Schools Access Project. RTC staff, in conjunction with Caltrans and the SLVUSD, identified the need to prepare thorough analysis for Highway 9 between Graham Hill Road and the southern intersection with Glen Arbor Road as an addendum to the SLV Plan. The SLV Schools Complex Circulation and Access Study (Study) serves as the next step toward implementing a potential SLV Schools Access Project.

In June 2023, the RTC Commission unanimously approved an amendment to the SLV Plan and combined it with the Caltrans 05-1M550 Highway 9 Complete Streets Project Initiation Document. The combined documents are now referred to as the Highway 9 Complete Streets Action Plan. This Study will be an addendum to the Highway 9 Complete Streets Action Plan when completed.

In partnership with San Lorenzo Valley community members, the Study was led by RTC and funded by state planning grants leveraged by Measure D, with additional funding support provided by SLVUSD.



1. Project Area

Study Location

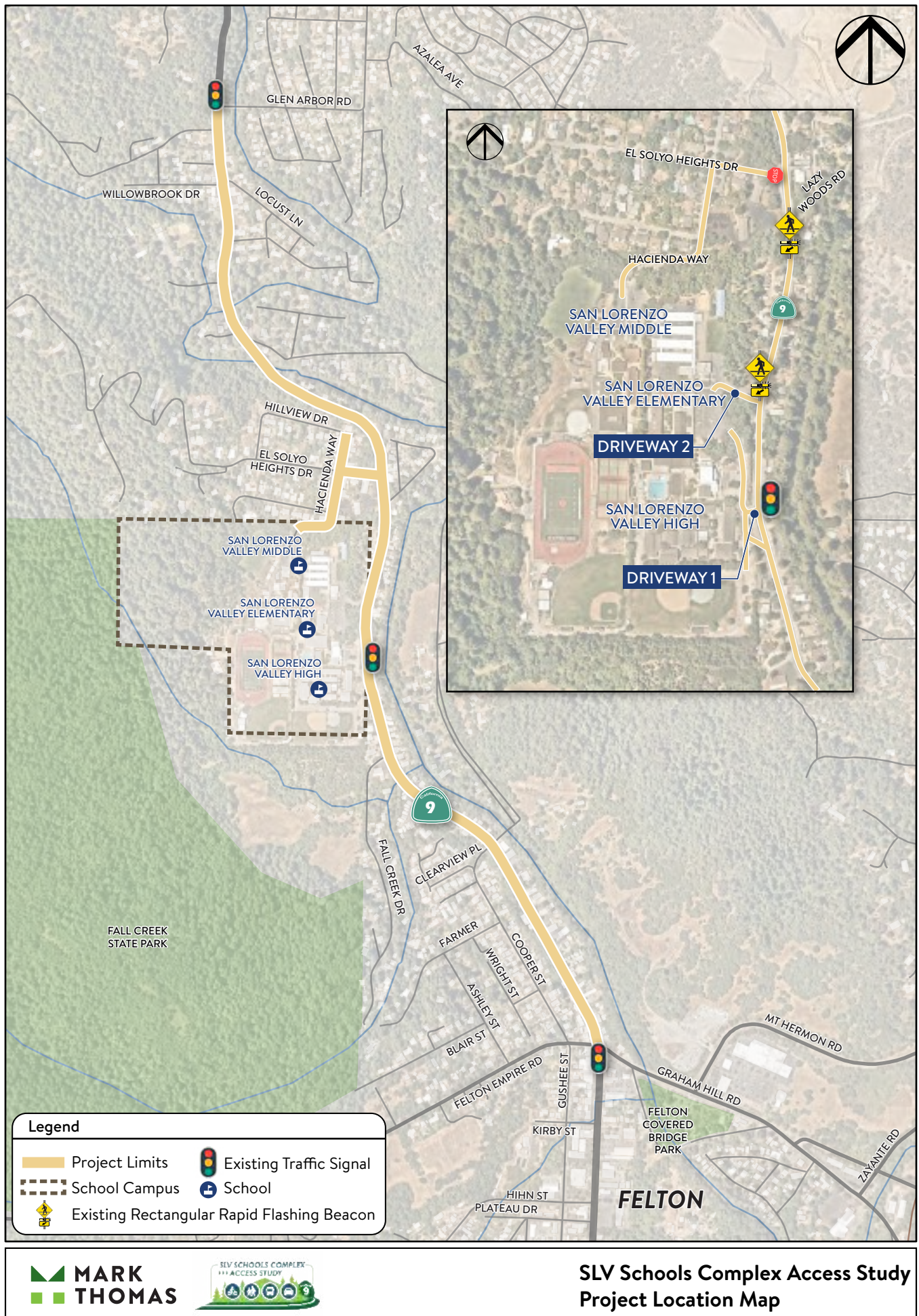
The SLV Schools Complex Circulation and Access Study project area covers Highway 9 between Graham Hill Road and the southern intersection of Highway 9 and Glen Arbor Road. It includes site access and circulation at the three SLV schools within the study area.

The project area is constrained due to topography, protected natural habitats, and surrounding private properties. With three separate entrances to each school campus, the existing layout results in delays on Highway 9 during student pick-up and drop-off times, particularly when coinciding with the morning commute. SLV High School and SLV Elementary School entrance driveways intersect with Highway 9 which is owned and operated by Caltrans as State Route 9 (SR 9). The entrance to SLV Middle School is located in a residential neighborhood and visitors use County-managed roads for access, as shown in Figure 1.

Highway 9 serves as the backbone for movement of people and goods throughout the communities of the San Lorenzo Valley. The highway is characterized by horizontal curves, limited right-of-way, environmental and topographical constraints, and protected habitats. The lack of consistent and uniform bicycle and pedestrian facilities, and challenging access to transit stops results in limitations for people who are not traveling in an automobile.

The study included coordination with Caltrans staff already evaluating opportunities to improve walking and cycling along Highway 9 between Felton and the SLV Schools Complex in the Caltrans 05-1M400 Safety Project, to align improvements at the SLV Schools with any Caltrans-led improvements along Highway 9 to the south.

Figure 1: Study Project Location Map





Highway 9/San Lorenzo Valley Complete Streets Corridor Plan

The 2019 Highway 9/San Lorenzo Valley Complete Streets Corridor Plan (SLV Plan) provided a vision, guiding principles, and strategies to enhance transportation through the San Lorenzo Valley, including the communities of Felton, Ben Lomond, Brookdale, Boulder Creek, and surrounding unincorporated areas of the County of Santa Cruz.

The SLV Plan was developed as a Complete Streets plan, intended to serve as a toolkit and guide for Highway 9 developments and enhancements for serving mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function on context of the facility.

Measure D

RTC's Measure D is a countywide sales tax, passed in November 2016, through approval by over two-thirds of Santa Cruz County voters. The sales tax funds a comprehensive and inclusive package of transportation improvements, including:

- Safe routes to schools for local students
- Mobility and independence for seniors and those with disabilities
- Bicycle and pedestrian pathways and bridges
- Repaving roadways, repair potholes, and safety improvements on local streets
- Improving traffic flow on highways and major roadways
- Projects that reduce the pollution that causes climate change

Annually, the RTC updates the Measure D 5-Year Plan, identifying the distribution of Measure D funding toward various transportation improvements, based on need and public input. A total of ten million dollars (\$10,000,000) from Measure D revenue is specifically designated for projects in the San Lorenzo Valley/Highway 9 corridor to improve safety for:

- pedestrians, bicyclists and motorists;
- access to schools, businesses, and bus stops;
- traffic operations, pavement conditions, drainage and other important travel needs.

Figure 2 SCCRTC Measure D Logo



Analysis of traffic circulation, biking and walking facilities at the SLV Schools in Felton is included in the designated funds, as well as bicycle and pedestrian facilities in Felton, Ben Lomond, Brookdale and Boulder Creek, and priorities identified by the community in the Highway 9/SLV Complete Streets Corridor Plan.



Caltrans Felton Safety Project (05-1M400)

Caltrans is currently advancing the Felton Safety Project (05-1M400) which is planned to improve the westerly side of Highway 9 to provide a continuous shoulder and sidewalk between the Highway 9/Graham Hill Road/Felton Empire Road intersection and the SLV High School Driveway.

Relevant SLV Plan Findings

The Study project area geographically includes four priority projects identified in the SLV Plan (Projects 9, 10, 11, and 12). This study evaluated findings from the SLV Plan pertaining to the four priority projects to inform recommendations moving forward :

Project 9 – Pedestrian and Bicycle Connections to San Lorenzo Valley Schools Campus from Felton

This project focuses on pedestrian and bicycle enhancements between Felton and the SLV Schools and has consistently been identified as one of the highest priority projects in the San Lorenzo Valley. Three potential solutions were identified, including enhancing bicycle and pedestrian access along Fall Creek Drive, Farmer Street, and Cooper Street, a bike connection on Clearview Place between Highway 9 and Cooper Street, or bicycle and pedestrian facilities along Highway 9 to the intersection with Graham Hill Road.

Project 10 –San Lorenzo Valley Schools Campus Site Access

This project focuses on re-organizing access to and enhancing traffic flow to, from, and around the schools campuses. Potential solutions identified include on-campus circulation redesign, such as relocation of staging areas and expanding vehicle lanes. Solutions also considered grading and retaining wall construction ideas to merge the high school and elementary schools' traffic flows.

Project 11 – North San Lorenzo Valley Schools Pedestrian and Bicycle Connections

This project focuses on providing pedestrian, bicycle, and transit connections from the schools' campuses to the north. Potential solutions identified include sidewalk, trails, a multiuse path, pavement markings, transit amenities, and formalizing an existing footpath through acquiring an easement.

Project 12 – Willowbrook Drive Commercial Area Improvements and Glen Arbor Bike/Ped Connection

This project focuses on providing pedestrian and bicycle connections between Highway 9 and the surrounding business and residential areas. Potential solutions identified include connection north to the southern intersection of Highway 9 and Glen Arbor Road, enhanced pedestrian pavement markings and signage, an off-street multiuse path, and providing bicycle parking for businesses.

Primary challenges within the project area include residences, retaining walls, and redwood groves adjacent to Highway 9 and limited right of way opportunities to expand for inclusion of additional roadway enhancements. Potential solutions at each of the four SLV Plan projects are discussed in greater detail in this Study, as described in the recommendations chapter.



Background Documents Review

Background documents were reviewed to establish an understanding of relevant agency documents regarding transportation planning and travel safety. As part of the Study, the project team compiled and summarized key data from planning documents adopted by local agencies. The findings were applied to inform the infrastructure and non-infrastructure recommendations, detailed further in this Study. Details on the review are included in Appendix A: Background Documents Review and include the following documents:

- Santa Cruz County Regional Transportation Commission - Highway 9 San Lorenzo Valley Complete Streets Corridor Plan
- Santa Cruz County Capital Improvement Program
- Santa Cruz County General Plan
- Santa Cruz County Draft Active Transportation Plan
- Felton and Ben Lomond Town Plans
- San Lorenzo Valley Trail Feasibility Study
- Caltrans District 5 - 05-1M400 Caltrans State Route 9 Felton Safety Improvements
- Caltrans 05-1M550 Caltrans Complete Streets Effort
- Caltrans 05-1K890 Caltrans Capital Preventative Maintenance
- Caltrans District 5 Active Transportation Plan
- Santa Cruz Metropolitan Transit District Short Range Transit Plan
- Santa Cruz Metropolitan Transit District Comprehensive Operational Analysis
- Santa Cruz Metropolitan Transit District Unmet Transit and Paratransit Needs List (2021)
- San Lorenzo Valley School District Student Handbooks
- San Lorenzo Valley School District Bus Route Map and GIS Data
- San Lorenzo Valley School District Transportation Department Bus Pass Guidelines
- San Lorenzo Valley School District Student-Operated Vehicle Permit Rules & Regulations
- Santa Cruz METRO Bus Pass Guidelines

2. Existing Conditions

The San Lorenzo Valley High School, Middle School, and Elementary School (SLV Schools) is located immediately west of Highway 9 in Felton, California, and includes numerous buildings, recreational fields, and parking lots which serve the three schools during school hours. On weekday afternoons and weekends, the SLV Schools are an open campus, allowing members of the community free access to use of facilities for recreational purposes. Therefore, the schools campuses serve both educational and recreational needs for the community.

Highway 9 is a north-south two-lane undivided highway serving access to the SLV schools, residential, and commercial properties, and is owned and operated by Caltrans. According to Caltrans 2021 traffic volume data, annual average daily traffic on Highway 9 North of Graham Hill Road is approximately 18,000 vehicle per day, and South of Glen Arbor is 18,800 vehicles per day. Highway 9 is also known for having higher rates (5-6%) of truck traffic, particularly logging trucks.

Bicycle, Pedestrian, and ADA Facilities

There are no dedicated bicycle facilities on Highway 9 within the project area. Right of way (ROW) and topographical conditions have constrained widening of Highway 9 to provide uniform bicycle facilities. Intermittent shoulders on Highway 9 allow for “strong and fearless” riders to travel along the corridor but limit use of the corridor by hesitant bicyclists. Shoulders are at times constrained by plant and other organic debris that could be addressed through supplemental maintenance.

Figure 3 Bicyclists on Highway 9 in the Project Area



Pedestrian facilities near the SLV Schools are comprised of sidewalks and crosswalks. Sidewalks are infrequent along Highway 9; except for the Fall Creek Bridge south of the SLV Schools. Nearly all portions of Highway 9 near the SLV Schools have narrow shoulders with no sidewalks. An unpaved walking path along the west side of Highway 9 connects the SLV High School Driveway one block to a commercial area, including a deli café popular among students, south of the SLV Schools. Sidewalks are not currently provided on El Solyo Heights Drive and Hacienda Way.

Figure 4 Sidewalk End on Highway 9 (Left) and Lack of Sidewalks Accessing SLV Middle School (Right)



Figure 5 Constrained shoulders on southbound Highway 9 approaching Graham Hill Road intersection (Left and Right)



There are three marked pedestrian crossings across Highway 9 near the SLV Schools. Crosswalks with Rectangular Rapid-Flashing Beacons (RRFB) are located 200 feet south of the Highway 9/El Solyo Heights Drive intersection and on the North leg of the Highway 9/Elementary School Driveway. The third marked pedestrian crossing and ADA pedestrian curb ramps are provided at the signalized Highway 9/High School Driveway intersection.

Figure 6 RRFB at SLV Elementary School Driveway/Highway 9 (Left) & 200-feet South of El Solyo Heights Drive/Highway 9 (Right)



Current existing pedestrian facilities include access to the SLV Schools via non ADA-compliant Fall Creek trails directly west and south of the campus. These trails connect to other neighborhoods and local roads and provide routes that do not intersect with Highway 9. These routes are comparable to hiking trails and connect to the SLV Schools through indirect paths. These circuitous trails increase the distance students and families would need to travel compared to road-adjacent alignments. ADA-compliant routes are provided for circulation within the Schools property.

Figure 7 Pedestrians in on-campus transit area (Left) and unpaved pathway on the westerly side of Highway 9 (Right)



Figure 8 ADA-Compliant Curb Ramps on Highway 9 intersections with Graham Hill Rd (Left) & High School Driveway (Right)



Transit Services & Amenities

Public bus services in the project area are operated by the Santa Cruz Metropolitan Transit District (METRO). Metro fixed Route 35 serves two bus stops at the intersection of Highway 9 and the SLV High School Driveway and two bus stops near the intersection of Highway 9 and El Solyo Heights Drive. Additionally, some Metro buses travel onto the High School campus and load students before returning to Highway 9 via the signalized intersection of Highway 9 and the High School Driveway. Most of the bus stops along Highway 9 in this area are paved but do not have connecting sidewalks to provide further connectivity to adjacent land uses.

METRO Highway 9/Scotts Valley Route 35

Per current METRO Route 35 scheduling, Weekday routes (Monday to Friday) run from 6:53 AM to 11:26 PM with a headway of 32 minutes. Weekend routes (Saturday to Sunday) run from 8:44 AM to 10:59 PM with a headway of 65 minutes. Santa Cruz METRO will enact service changes to Route 35, and other service routes, aligning resources with ridership levels. Service headways and timeframes are subject to change, riders can receive updates via Schedule-by-Stop alerts, Subscriber alerts, and METRO's quarterly publication, *Headways*. SLV High School provides 31-day passes for \$48 and 15-ride passes for \$27 for Santa Cruz METRO buses and free passes to students with financial need.

Figure 9 METRO Route 35 Bus on Glen Arbor Rd (Left) & Loading Departing Students in On-Campus Transit Area



SLVUSD Routes

The SLVUSD also serves students with district-managed buses. During student pick-up and drop-off periods, these buses access the Elementary School parking lot via the Elementary School Driveway, circulate through parking lots, and exit via the High School Driveway after picking up or dropping off students. Due to sharp corners, narrow lanes, and high parking lot congestion on campus during morning and afternoon peak hours, school buses face circulation issues during student pick-up and drop-off. SLV Schools teachers and administrators typically direct traffic in these parking lots during student pick-up and drop-off to improve circulation and help manage congestion.

Figure 10 SLVUSD Buses Exiting Campus (Left) & Queuing in On-Campus Transit Drive Aisle



Campus Parking and Student Pick-Up/Drop-Off

The SLV Elementary School, Middle School, and High School are each accessed by separate driveways or roadways connected to Highway 9. During weekday mornings and afternoons when school is in session, motorists enter campus via these access points, move to established student pick-up or drop-off points, and exit the SLV Schools. The Elementary School and High School parking lots are connected by single drive lane with diagonal parking on both sides. While the direction of angle parking orients northbound direction of vehicle travel, SLVUSD staff sometimes will allow motorists to travel southbound towards the High School Driveway depending on the immediate needs of campus circulation.

Figure 11 Student Pick-up at Elementary School (Left) & High School (Right)



Student drivers will also drive personal vehicles to campus and park in designated student parking spaces near the High School sports fields to the south of campus. Students are required to display parking permits acquired from SLVUSD and are prohibited from parking in staff parking lots near the schools' administrative offices. Permits are provided without cost annually to youth drivers.

Figure 12 High-School Student-Designated Parking Lot Near Campus Ball Fields





SLV Elementary School

At the SLV Elementary School Driveway, a 150-foot long left turn pocket is available to turn west into campus from Highway 9 for northbound traffic. Eastbound vehicles entering Highway 9 northbound traffic have an approximately 50-foot long acceleration lane on Highway 9 to allow two-stage left-turns onto northbound Highway 9.

The Elementary School Driveway provides two entry lanes that merge into one approaching the campus buildings slowing the traffic flow. School buses entering the campus mix with congestion from motorists at the Elementary School Driveway. The school related traffic congestion overflows to Highway 9 with motorists filling the available queue storage in the northbound direction and blocking the shoulder in the southbound direction.

A drive aisle is provided for exclusive use by SLVUSD buses for students to board or exit the buses. The bus drive aisle is wide enough to accommodate bus parking and through lanes; however, buses must park diagonally to prevent parents from improperly driving through the bus only loading area.

SLV Middle School

SLV Middle School is accessed via County-managed residential streets, El Solyo Heights Drive and Hacienda Way. The El Solyo Heights Drive and Hacienda Way intersection is two-way stop-controlled and has yellow continental crosswalks on all except the West leg.

Hacienda Way terminates on the south as it accesses the SLV Middle School. The roadway curves to the west at the SLVUSD property line and was recently widened to better accommodate motor vehicles traveling side by side. Additionally, a vehicular gate to the SLV Middle School is provided at the property line.

At the intersection of Highway 9 and El Solyo Heights Drive, northbound vehicles on Highway 9 can turn left via an approximately 100-foot long left-turn pocket. Eastbound vehicles turning left onto Highway 9 from El Solyo Heights Drive have an approximately 75-foot long acceleration lane on Highway 9 to allow two-stage left-turns onto northbound Highway 9.

Figure 13 San Lorenzo Valley Elementary School



Figure 14 San Lorenzo Valley Middle School





SLV High School

At the SLV High School Driveway, 125- and 100-foot long turn pockets are available to turn into campus from Highway 9, for Northbound and Southbound traffic, respectively. Eastbound vehicles entering Highway 9 from the High School driveway are provided a left-turn and right-turn lane at the existing traffic signal. Due to the proximity of nearby school buildings and adjacent fenced yards, the signalized High School Driveway west leg curves near the traffic signal, constraining efficient egress and storage in the two travel lanes. Southbound traveling vehicles approaching the signalized intersection from the High School northern parking lot must yield to vehicles coming from the southern parking lot. The layout of the internal connecting roadways, illustrated in Figure 15 Traffic Flows at Highway 9 and High School Driveway, provides a one-way stop-controlled intersection just west of the Highway 9/High School Driveway signal, reducing the flow of motorists exiting the campus when the traffic signal is green for the west leg.

School buses exit the SLV Schools via the signalized High School Driveway intersection. Since the school buses arrive from north of the High School Driveway, they do not have right-of-way and must wait for a break in traffic to access the signal; which is aggravated by the lack of queue storage available.

SLVUSD staff frequently manage on-campus traffic flows to help with students crossing in an on-campus crosswalk. Narrow lanes in the High School parking lots prohibit opportunities for passing zones between buses stopped at the bus stop and personal vehicles.

SLVUSD-dedicated northbound Santa Cruz METRO buses enter the SLV Schools via a bus-only driveway located approximately 100-feet south of the High School Driveway intersection. The METRO buses enter the bus-exclusive driveway and immediately pull-up to a transit loading zone on the High School campus which serves any school students. The METRO buses exit the school campus using the signalized High School Driveway intersection to access Highway 9. The bus-only driveway is signed for northbound only Santa Cruz METRO buses and does not serve other motorist traffic. Southbound METRO buses pull into the unpaved shoulder to access the transit stop along Highway 9, and re-enter southbound traffic without entering the High School campus.

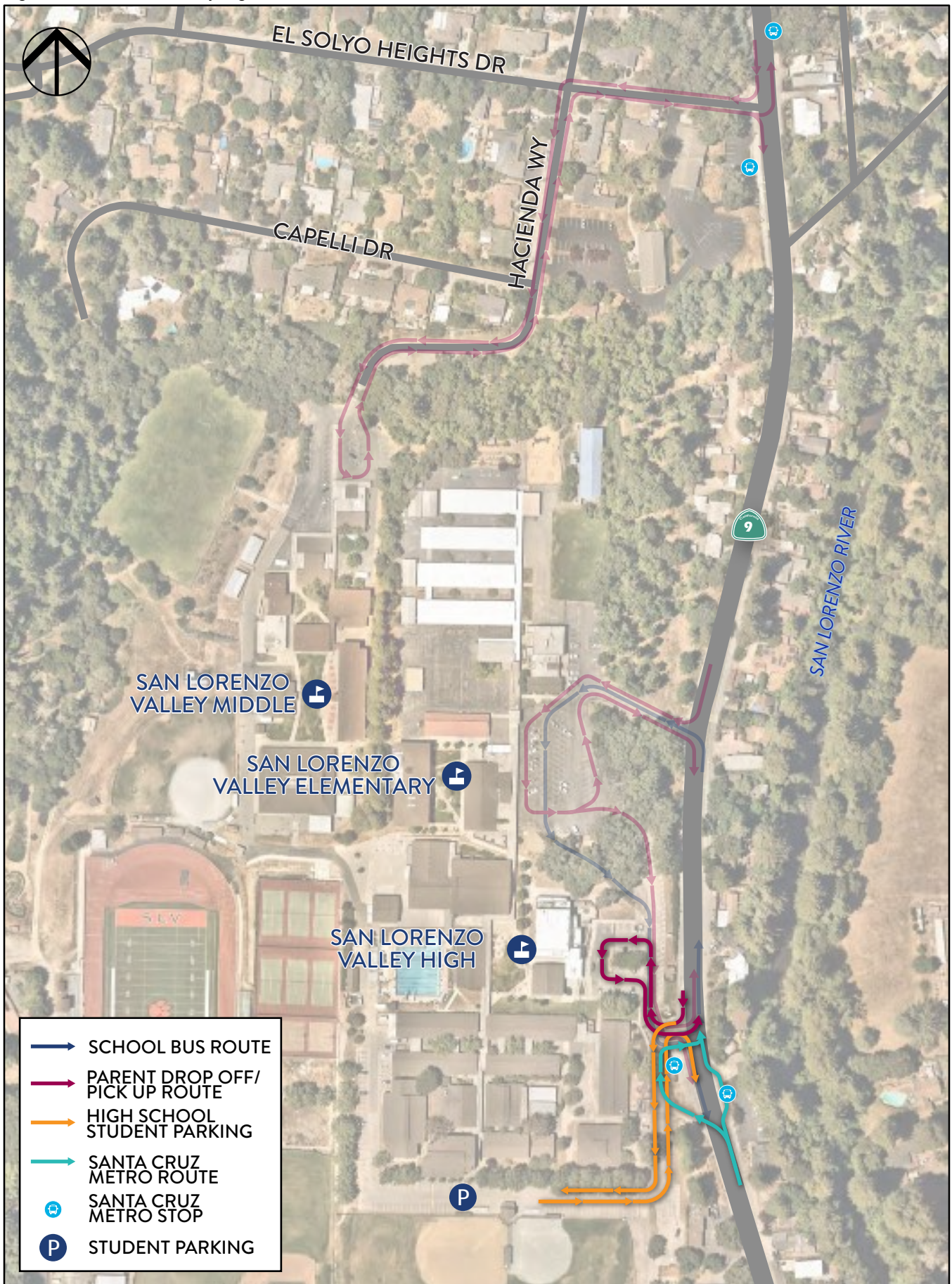
SLV Campus for Public Recreation

SLVUSD is required to maintain public access to the SLV Schools properties during nights, weekends, and while school is out of session for access to the recreational facilities at the schools. This role in providing public access to park facilities limits the ability of SLVUSD to restrict access to the SLV Schools but also provides an opportunity for grant funding pursuits that improve access to parks and public recreational facilities.

Figure 15 Traffic Flows at Highway 9 and High School Driveway



Figure 16 San Lorenzo Valley High School





Existing Traffic Control

The intersection of Highway 9 and Graham Hill Road is the southernmost intersection of the project area and is a signalized intersection. Caltrans is planning improvements at the Highway 9/Graham Hill Road intersection related to 05-1K890. 05-1K890 is a Capital Preventative Maintenance (CAPM) Project Initiation Document (PID) for repaving Highway 9 from Santa Cruz through Felton, which will incorporate many of the Complete Streets elements identified in the SLV Plan. The southern intersection of Highway 9 and Glen Arbor Road is the northernmost intersection of the project area and is a signalized three-way intersection.

The intersection of Highway 9 and the SLV High School Driveway is signalized. The Elementary School Driveway intersection with Highway 9 is side-street stop controlled. Drivers travelling to or from SLV Middle School access the campus through a residential neighborhood along El Solyo Heights Drive and Hacienda Way. Drivers travel through Highway 9/El Solyo Heights Drive intersection and El Solyo Heights Drive/Hacienda Way intersection, both of which are also side-street stop controlled.

Three uncontrolled pedestrian crosswalks are located within the project area to support pedestrian crossing of Highway 9, at the following locations:

1. Elementary School Driveway – A Rapid Rectangular Flashing Beacon (RRFB) and yellow continental crosswalk striping is provided at the Highway 9/Elementary School Driveway intersection.
2. Lazy Woods Road – A RRFB and yellow transverse crosswalk striping is provided at the Highway 9/Lazy Wood Road intersection.
3. Transit stops south of Glen Arbor Road - At the transit stops located approximately 1,000-feet south of Glen Arbor Road (or 150-feet north of Sunnycroft Road), pedestrian crossing signage is posted. There are no marked crosswalks in the vicinity of Sunnycroft Road.



3. Community Engagement

Circulation Project Management Team

Membership and Project Role

The Study was initiated with a kick-off meeting including key agency stakeholders from the California Department of Transportation (Caltrans), Santa Cruz County Regional Transportation Commission (SCCRTC), County of Santa Cruz Department of Public Works (DPW), San Lorenzo Valley Unified School District (SLVUSD), Santa Cruz Metro Transit District (METRO), Mark Thomas & Company, Inc. (MT), and subconsultant Fehr & Peers (F&P). This stakeholder group is jointly referred to as the Circulation Project Management Team (CPMT). The CPMT met monthly between March 2022 and January 2023 to review existing conditions, data analyses, and discuss potential infrastructure and non-infrastructure solutions. Additionally, the CPMT met in the field in May 2022 to observe operations during school morning arrival and afternoon dismissal.

Phase 1 Public Engagement

Public engagement was conducted in two phases and the first phase occurred during Spring and Summer of 2022. This phase of engagement included dedicated activities for students at the elementary school, middle school, and high school. The first phase of engagement also included a survey for SLV Schools campus staff, a survey for student parents and the SLV community, and a virtual public engagement workshop.

Dedicated Project Webpage

RTC has an existing webpage dedicated to the SLV Plan which was adapted to include information about the Study with a dedicated project Fact Sheet and point of contact for subsequent community questions (<https://sccrtc.org/slvplan>). The webpage was managed throughout the Study as a single source of information on the progress of the project. Refer to Appendix B to see the project Fact Sheet.

Elementary School Activity

The project team hosted an engagement activity with San Lorenzo Valley Elementary School (SLVES) students, grades 1-5, with support from the school principal. The activity occurred on the school blacktop on Monday, May 23, 2022, between 9:45 and 10:30 a.m., which aligns with Grades 4-5 recess at 9:45 a.m. and Grades 1-3 recess following at 10:05 a.m. Approximately 113 elementary school students participated in the event. SLVES students were prompted to think about their travel to and from school and to identify a type of shoe that they identify with. Refer to Appendix C to see the boards with sticker voting activity by elementary age students.



Middle and High School Survey

In coordination with SLVUSD, a digital survey was distributed to students at SLV Middle School and SLV High School. Between May 27 and June 1, 2022, a total of 105 responses were submitted with most respondents being in 6th Grade (45%), followed by 8th Grade (38%), and the remaining being in 7th Grade (17%). The student survey asked for input on mobility issues and concerns through multiple choice and open-ended questions. Refer to Appendix C to see the survey questions.

School Faculty Survey

In coordination with SLVUSD, a digital survey was distributed to faculty at the three SLV schools. Between May 25 and June 5, a total of 21 responses were submitted with most respondents self-identifying as Teachers (67%) and Maintenance Staff (14%). The school faculty survey asked for input on mobility issues and concerns through multiple choice and open-ended questions. Refer to Appendix C to see the survey questions.

Public and Parent Survey

RTC helped promote and distribute a digital survey to parents and public stakeholders within the SLV area. The public survey was promoted via paid advertisements on social media platforms, the RTC website, with local community based organizations, and posts in local newspapers. Between May 25 and June 30, 2022, a total of 201 responses were submitted. Of these participants, 18% had participated in engagement activities associated with the prior Highway 9/SLV Plan development. The public survey asked for input on mobility issues and concerns through multiple choice and open-ended questions. Refer to Appendix C to see the survey questions and methods to promote the public survey.

Virtual Workshop

A virtual public workshop was hosted on June 9, 2022, to introduce the Study, review completed and ongoing projects in the SLV area, project background, goals, and schedule, and existing conditions as well as potential improvements. The workshop included a Questions and Answer (Q&A) forum and Next Steps section with information on how to complete the concurrent public survey and stay informed on the project updates. Refer to Appendix C to see presentation slides from the June 2022 virtual workshop.



Phase 2 Public Engagement

The second phase of public engagement occurred during Fall of 2022, with presentations to local committees and the SLVUSD Board of Trustees, a virtual workshop, and an in-person public engagement workshop.

Committee Presentations

Presentations were provided by the project team to the following organizations and committees covering the Study overview, public input received, preliminary recommendations, and concepts:

- RTC Bicycle Advisory Committee, October 3, 2022
- Valley Women's Club of San Lorenzo Valley, October 18, 2022
- RTC Interagency Technical Advisory Committee, October 20, 2022
- SLVUSD Board of Trustees, October 26, 2022
- RTC Elderly & Disabled Transportation Advisory Committee, December 13, 2022

Virtual Workshop

The second virtual public workshop was hosted on November 2, 2022, to update the public on the progression of the Study. The presentation included updates from Caltrans on the Felton Pedestrian Safety Project (including proposed alignments and potential property acquisitions), background on the Study, a summary of public input received, draft engineering concepts, improvement phasing plans and discussion of funding strategies and next steps. The workshop included a Q&A forum for open discussion and promoted the in-person workshop the following evening. Refer to Appendix C to see presentation slides from the November 2022 virtual workshop.

In-Person Workshop

RTC hosted, for the project, its first in-person public meeting since COVID-19 shelter at home restrictions were set in place in March of 2020. The in-person workshop was hosted on November 3, 2022, at the Felton Community Hall between 6:00 and 7:30pm. The project team utilized the November 2nd online workshop presentation and provided engagement boards throughout the auditorium for members of the public to provide direct feedback through sticker voting and writing messages on post-it notes. A total of five stations were staffed by project team members to discuss and answer questions, record input, and provide instruction for the voting exercise. Workshop participants were provided approximately five stickers per concept board to place on individual improvements under "like", "dislike", and "neutral" columns. The presentation slides, boards, and a summary of Q&A was provided on the project website managed by RTC. Refer to Appendix C to see presentation slides and sticker voting results from the November 2022 in-person workshop.

Figure 17 Participation in Public Engagement Workshop Feedback (Left) and During Presentation (Right)



Figure 18 Members of the Public Engaging with Project Informational Boards and Project-related Discussion





4. Needs Analysis

Traffic Data Analysis

Collision History

A five-year history (January 1, 2015, to December 31, 2019) of reported collision data in the study area was evaluated using the published Statewide Integrated Traffic Records System (SWITRS). Within the study period, there were 49 total injury-involved reported crashes at the study locations shown in Table 1 Collision Data Summary, 11 of which occurred on Highway 9 between El Solyo Heights Drive and the High School Driveway. Of the reported crashes, the most common collision types are rear-end collisions, hit objects, and sideswipes. Figure 19 Highway 9 Collisions between Fall Creek Drive and El Solyo Heights Drive maps the collisions in the vicinity of the SLV schools, only.

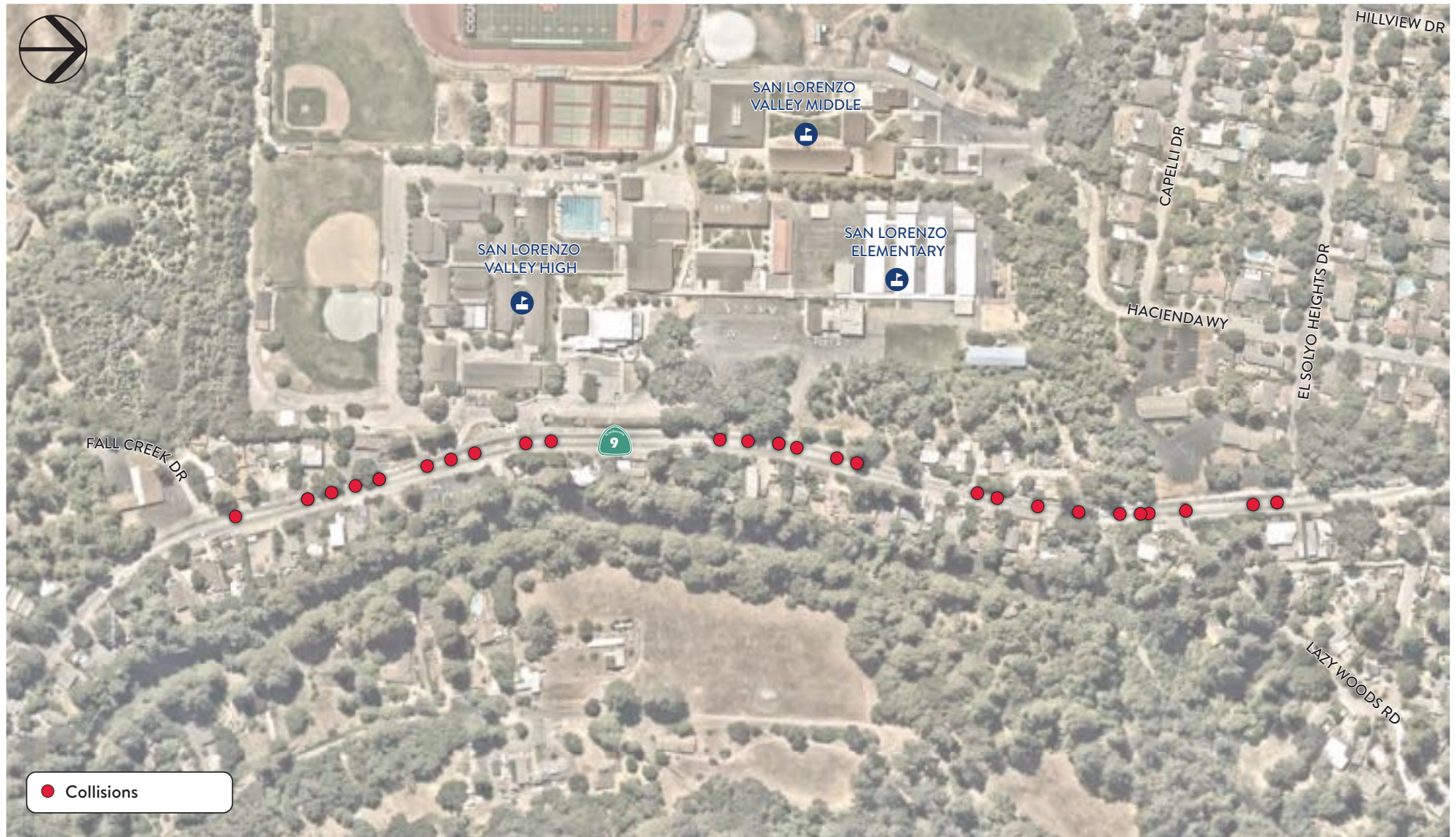
Table 1 Collision Data Summary

| Roadway Segment or Intersection | Injury Count | Fatality Count | Total | Crash Type | Pedestrians Involved | Bicyclists Involved |
|-----------------------------------------------------------------------------------------|--------------|----------------|-------|---------------------------------------------------------------------------------------------------|----------------------|---------------------|
| Highway 9 between the southern intersection with Glen Arbor Road and Willow Brook Drive | 8 | 0 | 8 | Rear End (6) Broadside (1) Sideswipe (1) | 0 | 0 |
| Highway 9 between Willow Brook Drive and El Solyo Heights Drive | 9 | 0 | 9 | Rear End (2) Sideswipe (3) Hit Object (3) Head-On (1) | 0 | 0 |
| Highway 9 & El Solyo Heights Drive Intersection | 3 | 0 | 3 | Rear End (1) Broadside (1) Pedestrian (1) | 1 | 0 |
| Highway 9 between El Solyo Heights Drive and Elementary School Driveway | 4 | 0 | 4 | Rear End (3) Sideswipe (1) | 0 | 0 |
| Highway 9 & Elementary School Driveway Intersection | 1 | 0 | 1 | Rear End (1) | 0 | 0 |
| Highway 9 between Elementary School Driveway and High School Driveway | 1 | 0 | 1 | Rear End (1) | 0 | 0 |
| Highway 9 & High School Driveway Intersection | 1 | 0 | 1 | Rear End (1) | 0 | 0 |
| Highway 9 between High School Driveway and Cooper Road | 11 | 0 | 11 | Rear End (3) Broadside (1) Sideswipe (2) Hit Object (3) Head-On (1) Pedestrian (1) | 1 | 0 |
| Highway 9 between Cooper Road and Graham Hill Road | 10 | 1 | 11 | Rear End (4) Broadside (1) Sideswipe (1) Hit Object (3) Head-On (1) Pedestrian (1) | 1 | 0 |

Notes: Intersections associated with the SLV Schools are highlighted in green.

Source: TIMS/SWITRS, January 2015 through December 2019. Injury related crash data retrieved June 2022.

Figure 19 Highway 9 Collisions between Fall Creek Drive and El Solyo Heights Drive





Traffic Volumes

Traffic count data was collected at the three intersections providing access to the SLV School in May 2022, and identified the morning (AM) peak hour (7:30-8:30 AM) and evening (PM) peak hour (2:15-3:15 PM – coinciding with school dismissal times) at the three intersections. The peak hour at these intersections is earlier in the day than an average intersection due to higher traffic volumes associated with early afternoon school pick-up times (a situation common to most schools). Total traffic volumes drop by approximately 10% during typical afternoon commute times (4:00-6:00 PM) when compared to the after-school peak hour.

As shown on Figure 20 Existing Conditions AM Peak Hour Intersection Volumes and Figure 21 Existing Conditions PM Peak Hour Intersection Volumes, most vehicle traffic on Highway 9 near the SLV Schools is Highway 9 through traffic during peak AM and PM hours, where approximately 86-94% of vehicles do not turn into or out of SLV Schools driveways or access roads.

During the AM peak hour, school traffic at the Elementary School Driveway intersection and the El Solyo Heights Drive intersection has an approximately even split of inbound and outbound traffic. In contrast, 60% of vehicles using the High School Driveway are inbound, and 40% are outbound. This imbalance is due to the proportion of high school students driving and parking their personal vehicles at school. Overall, the total number of AM peak hour school trips are split roughly evenly between the three access points. In addition, across all three intersections during the AM peak hour, approximately 60% of school traffic on Highway 9 arrive from the north and 40% from the south.

During the PM peak hour, approximately 60% of school traffic is outbound and 40% is inbound at all three school access points. Overall, approximately 45% of school trips during the PM peak hour use the High School Driveway, and the remaining 55% of school trips are split evenly between the Elementary School Driveway and El Solyo Heights Drive access point. Across all three intersections during the PM peak hour, approximately 45% of school traffic on Highway 9 arrives from the north and 55% from the south.

High School Driveway

Morning inbound traffic volumes for the High School Driveway are approximately 280 vehicles for the peak hour and afternoon outbound traffic volumes are approximately 230 vehicles.

Elementary School Driveway

Morning inbound traffic volumes for the Elementary School Driveway are approximately 270 vehicles for the peak hour and afternoon outbound traffic volumes are approximately 150 vehicles.

Highway 9 and El Solyo Heights Drive

Morning inbound traffic volumes for the residential neighborhood and middle school are approximately 200 vehicles for the peak hour and afternoon outbound traffic volumes are approximately 140 vehicles. El Solyo Heights Drive serves residential homes west of Highway 9, so traffic volumes observed using the roadway are a mix of school and residential traffic.

Figure 20 Existing Conditions AM Peak Hour Intersection Volumes

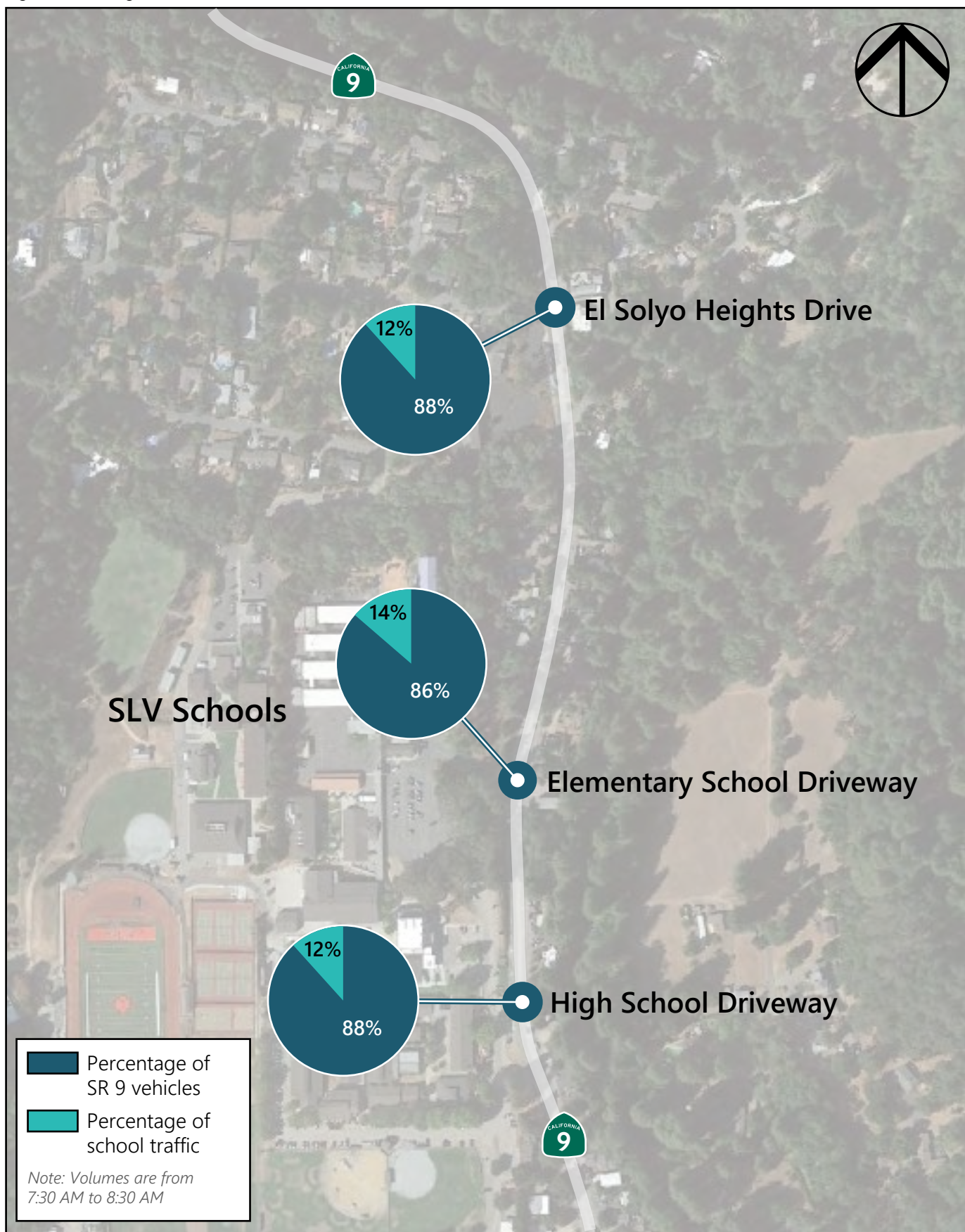
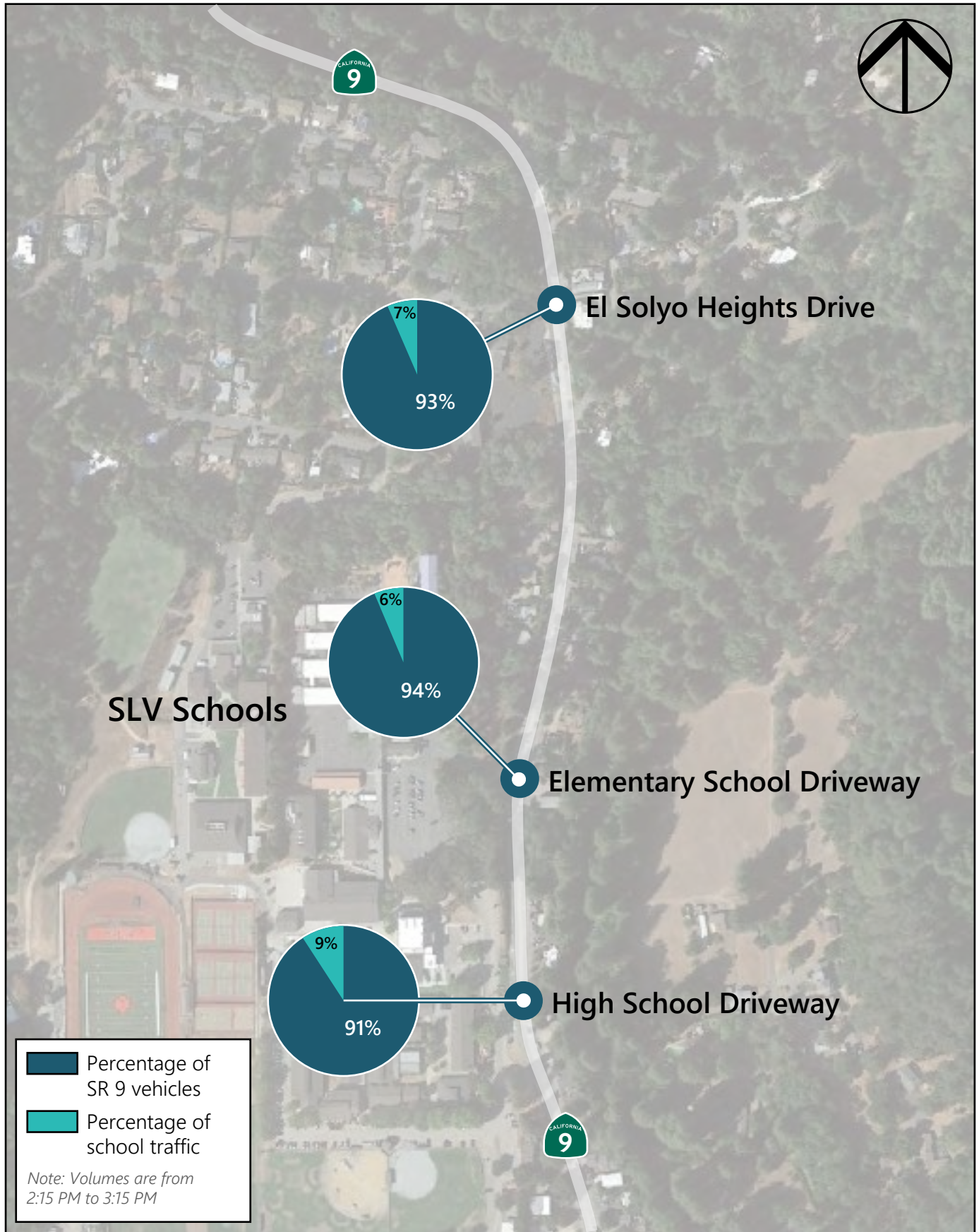


Figure 21 Existing Conditions PM Peak Hour Intersection Volumes





Intersection Level of Service

Currently, of the three intersections on Highway 9 which provide access to the SLV Schools, only the High School Driveway intersection is signalized. The other two intersections, the Elementary School Driveway and El Solyo Heights Drive, are unsignalized, with stop signs controlling side-street access to Highway 9.

Using the traffic counts and lane geometries observed at these three intersections, a Synchro software traffic analysis network was built to assess the existing intersection Level of Service (LOS). LOS is a letter rating from A to F representing the amount of vehicle delay to expect for a roadway facility or intersection (where a rating of LOS A indicates very low levels of delay, and a rating of LOS F indicates very high levels of delay). The LOS rating reflects an average of delay for signalized intersections and is based on the minor-street delay for stop-controlled intersections. The use of LOS has been decreasing over time in favor of multi-modal considerations, however, the LOS analysis is still commonly used to evaluate operations at intersections to align and demonstrate with the public views on congestion.

Under current conditions, the signalized High School Driveway intersection operates at LOS C during the AM peak hour and LOS B during the PM peak hour (which corresponds to afternoon school dismissal times). Both unsignalized intersections operate at LOS F during both the AM peak hour and the PM peak hour. LOS for a side-street stop-controlled intersection is measured based on the average delay for vehicles entering the intersection from the side-street. Due to a combination of high speeds and volumes on Highway 9 and high demand for eastbound left turns from the side-streets, average delay is very high at the 1-way stop-controlled intersections, resulting in the lowest possible rating of LOS F.

The Synchro software traffic analysis network was utilized to evaluate forecast LOS if either or both the Elementary School Driveway and El Solyo Heights Drive intersections were signalized. After updating the signalization for these intersections in Synchro and optimizing the signal timing based on existing traffic counts, the LOS improved at both intersections. The intersection of Highway 9 and the Elementary School Driveway is forecast to operate at LOS C in both the AM and PM peak hours. The intersection of Highway 9 and El Solyo Heights Drive is forecast to operate at LOS D in the AM peak hour and LOS C in the PM peak hour. These improvements indicate a significant drop in average delay for vehicles entering Highway 9 from the side-street, because eastbound movements would have their own protected phase allowing for turns onto Highway 9 during assigned right of way. Through traffic on SR 9 would experience some delay due to signalization, but this would partially be offset by a reduction in overall traffic queuing on the SLV Schools campuses.



Table 2 Forecast Intersection Level of Service Summary

| Intersection | Existing LOS | Forecast LOS |
|---------------------------------------------------------|------------------|------------------|
| Highway 9 & El Solyo Heights Drive | F (AM) F (PM) | D (AM) C (PM) |
| Highway 9 & Elementary School Driveway | F (AM) F (PM) | C (AM) C (PM) |
| Highway 9 & High School Driveway (Currently Signalized) | C (AM) B (PM) | C (AM) B (PM) |

Notes:

1. AM = morning peak hour (7:30-8:30 AM), PM = afternoon peak hour (2:15-3:15 PM)
2. The existing SR 9 & High School Driveway is already signalized.

Source: Fehr & Peers, 2022; Highway Capacity Manual, Transportation Research Board, 2016.

During completion of this study a series of storms in Winter 2023 caused flooding and multiple landslides in the project area, including a short-term closure of Highway 9 north of the project study area. While Caltrans continues to address the landslides and other impacts to Highway 9, roadway operations are constrained with temporary traffic signals north of the southernmost Highway 9/Glen Arbor Road intersection. Given the temporary traffic signals have metered traffic volumes and potentially reduced the overall number of motor vehicle trips on Highway 9, access to and from the SLV Schools has been improved. The temporary improved traffic operations reflects the complex relationship between Highway 9 traffic volumes and cross-traffic from the SLV schools and other streets intersecting Highway 9. It is expected that once Caltrans completes the repair to Highway 9 following the Winter 2023 storms, the traffic volumes and associated challenges accessing the SLV Schools will return to conditions observed prior to the recent storms.

Traffic Signal Warrant Analyses

One potential improvement to help improve circulation within the SLV Schools is the installation of a traffic signal at one or both of the unsignalized intersections associated with the SLV Schools. Caltrans policy requires consideration of alternative traffic control such as a half-signal serving turns or a roundabout if a new traffic signal is evaluated. This section is focused only on the evaluation of the California Manual on Uniform Traffic Control Devices (CA MUTCD) signal warrants for the Elementary School Driveway and El Solyo Heights Drive intersections with Highway 9. Future analysis can address the feasibility or applicability of other traffic control or a roundabout if the warrants are satisfied for a traffic signal. The following sections discussion reviews Warrant 2 (Four-Hour Vehicular Volume) and Warrant 3 (Peak Hour Vehicular Volume) for both the Elementary School Driveway and El Solyo Heights Driveway intersections with Highway 9. Traffic Warrants 2 & 3 have been prepared based on available traffic volume data, and additional warrants can be prepared during subsequent analysis. Additionally, increased multimodal travel to the schools may reduce the vehicular volume which is measured in signal warrants.



Warrant 2: Four-Hour Vehicle Volume

According to the CA MUTCD, "the [Warrant 2] Four-Hour Vehicular Volume signal warrant conditions are intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic signal." Warrant 2 is met if, for at least 4 hours of an average day, the vehicles per hour on the major street (as a total of both approaches) and the vehicles per hour on the minor street approach are both high enough to fall above a graphic curve included in CA MUTCD Figure 4C-1 and 4C-2.

Warrant 3: Peak Hour Vehicular Volume

Similarly, "the [Warrant 3] Peak Hour signal warrant is intended for use at a location where traffic conditions are such that for a minimum of 1 hour on an average day, the minor-street traffic suffers undue delay when entering or crossing the major street. This signal warrant shall be applied only in unusual cases, such as where facilities that attract or discharge large numbers of vehicles over a short time." Given the high concentration of traffic volumes associated with school pick-up and drop-off, this warrant was deemed appropriate for evaluation. Like Warrant 2, Warrant 3 is met if the number of vehicles per hour on the major and minor street approaches are high enough to fall above a graphic curve, which is included in CA MUTCD Figure 4C-3 and 4C-4.

Under both warrants, the satisfaction criteria change if "the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 35 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000." In this case, both intersections are present near two isolated communities in the Santa Cruz Mountains, Ben Lomond (with a population of about 7,400) and Felton (with a population of about 4,500). As a result, this reduction was applied for both warrants.

Elementary School Driveway and Highway 9 Intersection

The intersection of the Elementary School Driveway and Highway 9 is a side-street stop controlled intersection, where eastbound drivers exiting the SLV Schools must stop before turning either right or left onto Highway 9. The Elementary School Driveway approach has one left turn lane with a short 50-foot long right-turn pocket. The southbound Highway 9 approach is one through lane, and the northbound Highway 9 approach is one through lane with a 150-foot long left-turn pocket. Drivers turning left from the Elementary School Driveway onto northbound Highway 9 enter an approximately 50-foot long center receiving lane before merging into traffic.

Of the six hours from the available traffic counts, four hours satisfied both Warrant 2 and Warrant 3. Therefore, both warrants were satisfied overall for the Highway 9/Elementary School Driveway intersection. This indicates that minor street traffic in this location may experience enough delay and difficulty entering the major street to justify the implementation of a traffic signal.



El Solyo Heights Drive and Highway 9 Intersection

The intersection of El Solyo Heights Drive and Highway 9 is a side-street stop-controlled intersection, where eastbound drivers exiting the San Lorenzo Valley Middle School or the residential neighborhood north of the SLV Schools must stop before turning either right or left onto Highway 9. The El Solyo Heights Drive approach has one lane with no turn pockets. The southbound Highway 9 approach is one through lane, and the northbound Highway 9 approach is one through lane with a 100-foot long left-turn pocket. Drivers turning left from El Solyo Heights Drive onto northbound Highway 9 enter an approximately 50-foot long center receiving lane before merging into traffic.

Of the six hours from the available traffic counts, five hours satisfied Warrant 2 and four hours satisfied Warrant 3. Therefore, both warrants were satisfied overall for the Highway 9/El Solyo Heights Drive intersection. This indicates that minor street traffic in this location may experience enough delay and difficulty entering the major street to justify the implementation of a traffic signal. The potential exists for a "half-signal" that accommodates El Solyo Heights Drive turning maneuvers and maintains a green traffic signal illumination for northbound traffic through separation between the through movement from the turning movements.

Traffic Signal Warrants Summary

Based on this evaluation, two signal warrants were satisfied for both unsignalized intersections, meaning traffic signals may be appropriate at either or both locations. Given the unique characteristics of these intersections and their interaction with the SLV Schools, traffic signals could reduce delay for drivers during student pick-up and drop-off while also enhancing internal circulation on campus.

This analysis should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the remaining signal warrants can be investigated based on field-measured traffic data and a thorough study of traffic and roadway conditions. Furthermore, the decision to install a signal should not be based solely upon warrants, since the installation of signals can sometimes lead to certain types of collisions and may modify overall operations along Highway 9.

Other factors, like the distances between adjacent intersections, may also require further investigation. In this case, the Elementary School Driveway intersection is approximately 500 feet north of the signalized High School Driveway, and El Solyo Heights Drive is approximately 1,100 feet north of the Elementary School Driveway. Given the proximity of the three intersections, this Study recommends synchronization through a coordinated signal system if signalization occurs. Coordination can help manage throughput for motorists to receive green signal illumination at multiple locations oriented towards the predominant traffic flows and can help manage traffic queuing (or storage) at left-turn pockets based on available space.



The signalization of the two intersections also provides multimodal benefits to transit buses entering and exiting the schools and facilitates safe and comfortable crossing of Highway 9 for people walking and cycling.

Though this analysis shows that LOS would be improved if signals were implemented in both locations, a detailed engineering study would be necessary to confirm if a traffic signal is an appropriate treatment at either of these intersections. Therefore, it is recommended that the implementing agency further evaluate future intersection control at these two locations.

School Traffic

Students participating in the public outreach survey answered two questions: how they most often travel to school in the morning and how they most often travel home from school in the afternoon.

When traveling to school in the morning, students responded that they largely rely on personal vehicles (70%), followed by SLVUSD buses and METRO buses (24%), and a much smaller portion of students walk or use a wheeled device (6%). When traveling from school in the afternoon, the use of personal vehicles decreases compared to morning arrival (54%) while use of SLVUSD Buses and METRO buses comparatively increases (40%). The volume of students who walk or use a wheeled device is consistent in the afternoon (6%) with morning arrival.

Participants who travel to and from school by use of a personal vehicle (150) provided detail on which school entrance they are dropped-off and/or picked-up from. Of these students, all of which were enrolled in 6th through 8th grade, the most-utilized school pick-up/drop-off area is the Middle School (50%), followed by the Elementary School (25%), and the High School (15%). A small portion of students walk to/from a location near the SLV Schools for remote pick-up/drop-off (5%). Note that 5% of students traveling to/from school by personal vehicle selected the option for "Drive myself," which was intended to be used by High School students with drivers permits.

Participants who bus to and from school (70) were more likely to use the SLVUSD buses (77%) compared to Santa Cruz METRO Buses (23%). Of the few student participants who travel to and from school by active transportation modes (15), walking was more popular (67%) compared to using a bike, scooter, or other wheeled device (33%).



A notable change in travel mode was observed in student participant answers between morning drop-off and afternoon pick-up with students more likely to use the SLVUSD buses to travel home in the afternoon (31%) compared to how they arrived at school in the morning (18%). Use of personal vehicles decreased between morning arrival (42%) and afternoon pick-up (22%). This decrease was equal to the increased use of SLVUSD and METRO buses; alternatively, volumes of active transportation travel modes did not change between morning and afternoon.

Students answered a multiple-choice question inquiring which direction they travel after leaving campus in the afternoon. Of the participating students, a majority responded that they traveled north towards Glen Arbor Road (43%), followed by traveling south towards Graham Hill Road (38%), and the remaining participants answered that they traveled in another direction not listed (19%).

Students answered a multiple-choice question inquiring where they reside in comparison to campus. Most students responded that they live "far" (54%) or "very far" (26%) from campus, and a smaller proportion answered that they live "near" campus (20%). The descriptions of how far from campus students live was accompanied by naming of neighborhoods and communities to assist student selections.

Parking

There are several parking lots across the SLV Schools for use by teachers, students, administrators, and visitors. As mentioned previously, high school students are able to obtain on campus parking permits for personal vehicles.

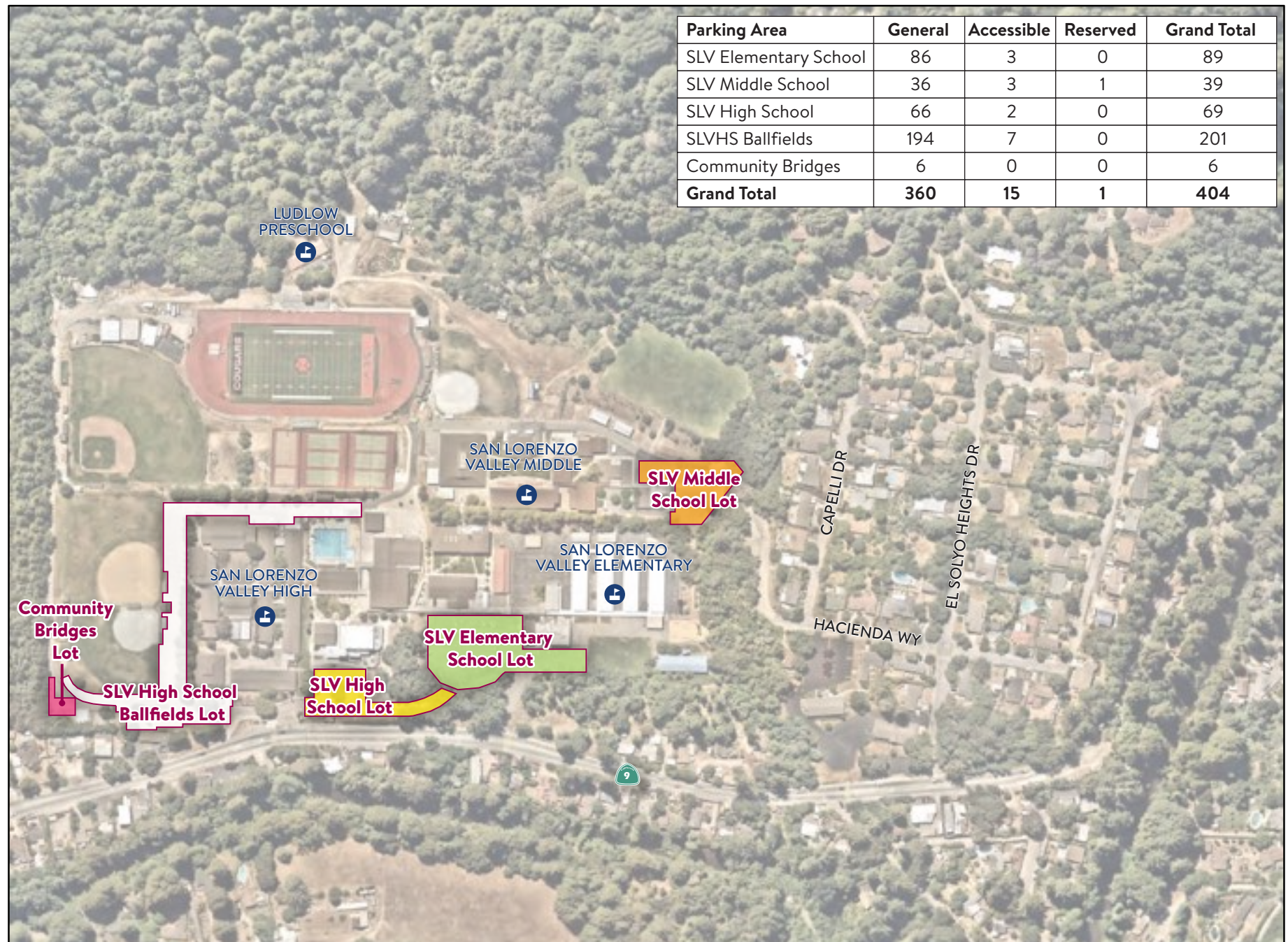
The parking lot on the southern edge of SLV High School, which can be accessed by turning left immediately after entering the High School Driveway, has 201 parking spaces for vehicles (including 7 ADA parking spaces) and wraps around several buildings associated with SLV High School. A second northern parking lot near the High School is accessed by turning right after entering the High School Driveway and holds 69 parking spaces (2 ADA). This parking lot connects to a third parking lot where Elementary School pick-up and drop-off occurs. This parking lot holds 89 parking spaces (3 ADA). The Middle School parking lot, accessed via El Solvo Heights Drive and Hacienda Way, holds 39 parking spaces (3 ADA, 1 reserved) and also hosts Middle School pick-up and drop-off.

The northern SLV High School parking lot, which is used by both school buses and parents for pick-up and drop-off, has about 75 feet of usable curb space for loading and unloading students. During site observations, some parents were also observed turning into the southern High School parking lot and dropping students in the middle of the parking lot, away from any established curbs for pick-up or drop-off. The Elementary School parking lot has approximately 150-feet of usable curb space for loading and unloading students. The Middle School parking lot has approximately 100-feet of usable curb space for student pick-up and drop-off.

Figure 22 Vehicle Parking Besides Drive Aisle between High School and Elementary School



Figure 23 Parking Space Supply





Community Engagement Data Analysis

Phase 1 Engagement Findings

Elementary School Activity Findings

The engagement activity involved two display boards prompting four questions. Students were provided four stickers and were instructed to place one sticker under their answer to each question. The first board asked students how they traveled to school that day and how they will travel home in the afternoon. The second board asked students to identify their favorite type of sneaker and their favorite type of bicycle.

The average distribution of travel mode between school arrivals and departures indicates travel by personal vehicle is the highest share (59%), followed by school bus (27%), bicycling (10%), and walking (5%).

Middle/High School Survey Findings

The Survey presented eight questions related to mode of transportation traveling to and from school, destinations students would be interested in walking or bicycling to, and direction of travel/home compared to school campuses. One open-ended question asked students what types of improvements they would like to see on campus.

A total of 88 unique responses were answered to the prompt: "What types of transportation improvements would you like to see on Highway 9 or in the school driveways or parking lots around the SLV schools?" Key themes, share of responses, and highlighted quotes are included in Table 3 Student Responses to Open-Ended Question Summarized.

Table 3 Student Responses to Open-Ended Question Summarized

| Theme | Share | Quotes |
|-------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No Changes | 43% | "Nothing different for me, I am fine with the metro and where I get picked up and dropped off." |
| Bicycling | 15% | "I would like to ride my bike to school, but Highway 9 is very busy and I don't really know if I should and/or I would like to find back roads or trails to school." |
| Car Traffic | 12% | "Less traffic. More bike trails. A sign that says 'drive as if your kids live here'" |
| Walking | 11% | "On highway 9 make more room for bikers and walkers so people aren't scared to get hit by a car." |
| Buses | 8% | "The METRO bus should be free because some parents can't pick up their students from school and not everyone can afford the bus" |
| Electric Vehicles | 2% | "Electric Cars, scooters, and bikes. I also want there to be a way to make electric cars but not in a factory so it doesn't pollute." |
| Helicopters | 2% | "I want helicopters and trains " |
| Rail/Train | 2% | "I think we are good but I do not want to rip up the railroads." |
| Other (combined) | 6% | "I would like to see an ice cream truck" |



Faculty Survey Findings

The Survey presented 11 questions related to mode of transportation used to travel to and from school. Of the questions, five focused on observed challenges, five focused on viable solutions to the challenges, and one question was open-ended to receive any additional input non-related to the prior ten. Table 4 Challenges and Solutions from Faculty Survey Results includes a summary of response themes.

Table 4 Challenges and Solutions from Faculty Survey Results

| Mode | Challenges | Solutions |
|-------------------|----------------------------------------------|---------------------------------------------|
| Personal Vehicles | Lack of parking spaces | Larger or more efficient parking lots |
| | Congestion during pick-up/drop-off | Student parking restrictions & enforcement |
| | Left turns without traffic signals | Improved lighting in pick-up/drop-off areas |
| Bicycles | Lack of bike lanes & infrastructure | Implement bike lanes & infrastructure |
| | Vehicle traffic and high volumes | Secure & supervised bike parking areas |
| | High vehicle speeds | Continuous biking paths on County roads |
| Pedestrians | Lack of sidewalks | Construct walking paths |
| | Vehicle traffic and high volumes | Additional crosswalks with RRFB's |
| | Inattentive drivers & pedestrians | Supervision during student pick-up/drop-off |
| SLVUSD Buses | Private vehicle congestion | Provide bus exclusive/priority lanes |
| | Lack of buses for high school students | Widen the bus ingress lanes |
| | Wide maneuvers buses need to make | Make no changes to the existing system |
| METRO Buses | Buses block access/view of personal vehicles | Provide bus exclusive/priority lanes |
| | Bus and student schedules are misaligned | Coordinate bus with student schedules |
| | Personal vehicles limit mobility of buses | Separate bus area from personal vehicles |

Public Survey Findings

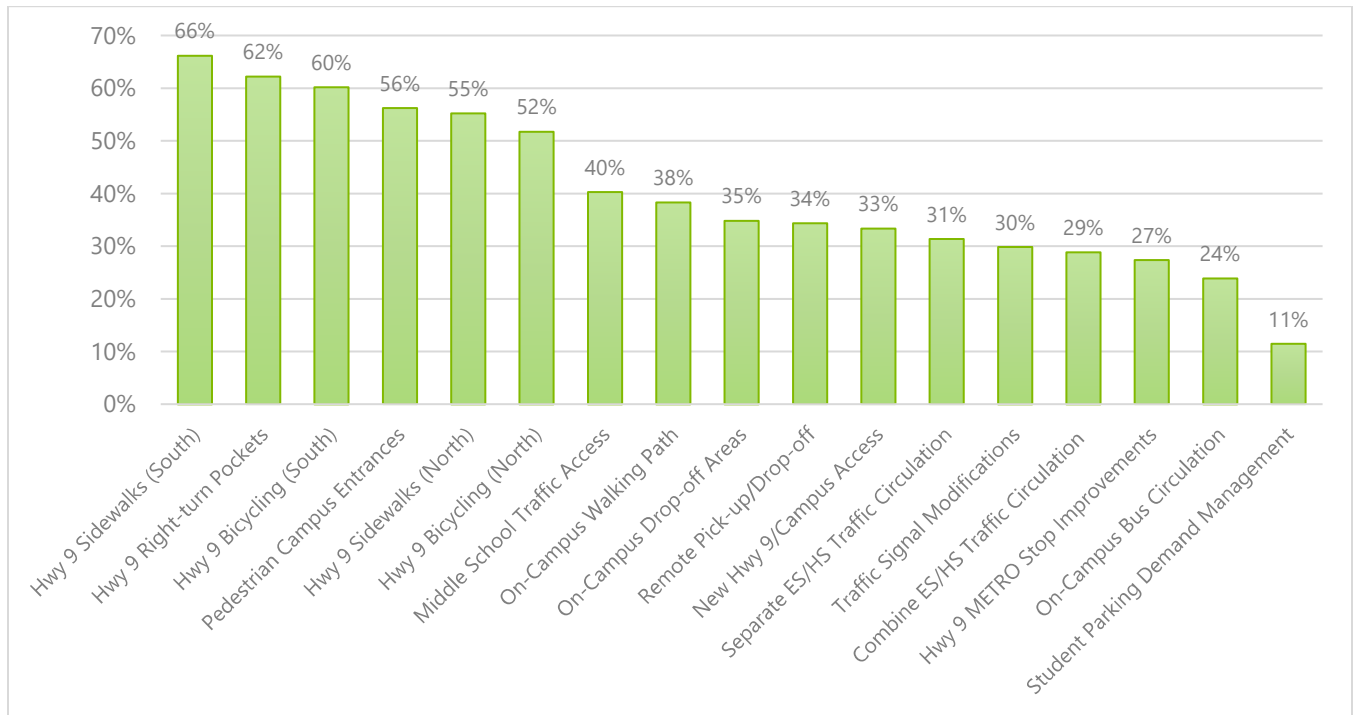
The survey presented four questions about traveling on Highway 9, to or past the school campuses, and related to concerns and opportunities for improvements. Participants who self-identified as having a child/student currently attending any of the campus schools were presented with an additional six questions related to student pick-up/drop-off and circulation on the school campus.

Participants answered an open-ended question "As you see it, what are the current issues with traveling past or within the SLV Schools area along Highway 9?" A total of 480 unique responses were provided. Analysis of public survey responses identified the most-common concerns included access between Highway 9 and SLV school campuses, lack of walking and bicycling facilities, congestion during student pick-up and drop-off, risky driving behaviors, and safe routes to school for students.

Participants were asked to identify which policies and solutions identified in the SLV Plan they would like further explored near the SLV Schools. The results found that the Top 3 policies and solutions identified were the addition of sidewalks for walking on Highway 9 from the South (Felton) by 66% of participants, the addition of right-turn pockets on Highway 9 into school entrances by 62% of participants, and shoulder improvements for bicycling on Highway 9 from the South (Felton) by 60% of participants. The outcomes of all options are shown in Figure 24 Favored Policies and Solutions, Percent of Participant Preferences.



Figure 24 Favored Policies and Solutions, Percent of Participant Preferences



Of the 201 participants who completed the survey, 54% had a child/student currently attending one of the SLV schools. Of these participants (109), approximately 65% have only one student currently enrolled, while approximately 35% have two or more students enrolled.

Participants answered the open-ended question: "What challenges do you currently face with the existing school pick-up/drop-off areas?" A total of 137 unique responses cited challenges with traffic circulation between Highway 9 and SLV school campuses, safety, and access to parking stalls.

Participants answered the open-ended question: "What challenges limit your student's use of yellow school district buses and/or Santa Cruz METRO bus service?" A total of 113 unique responses cited challenges with accessibility, inconvenience for students and/or parents, and personal safety.

Participants answered the open-ended question: "What challenges would you like improved to allow your student to walk or bicycle to school alone?" A total of 130 unique responses cited improvements such as enhancing safe routes to schools for students, increasing adult supervision, and enhancing traffic calming measures.

Participants answered the open-ended question: "What challenges would you like improved to allow your student to walk or bicycle to school within a group of students or with a chaperone?" A total of 99 unique responses cited interest in organizing walking or bicycling groups led by a chaperone and challenges with the lack of bikeways and walkways along Highway 9.



Phase 2 Engagement Findings

In Person Workshop

The stickers placed by workshop participants were tallied to identify the improvements features which were most “liked” and “disliked”. Key takeaways are described according to each concept board, below:

- Highway 9 North (School Campuses to the southern intersection of Highway 9 and Glen Arbor Road)
 - Most liked features include adding a northbound sidewalk between existing RRFB and existing transit stop, as well as providing a southbound sidewalk and bike lane on Highway 9 between school campuses and El Solyo Heights Drive.
- Highway 9 South (School Campuses to Graham Hill Road)
 - Identified improvements were equally favored.
- High School Campus
 - Most liked features include providing continuous sidewalk and bike lane on Highway 9 fronting the campus, as well as adding sidewalk to connect to the elementary school campus.
 - While outweighed by votes in favor, designating “bus only” travel lanes and relocating driveway to add “right only” exit received several votes in the “dislike” column.
 - “Connecting to Fall Creek Drive via bike and pedestrians” was added to the concept board by a participant using a sticky note and was highly voted in favor of by following participants.
- Middle School Campus
 - Most liked features include adding sidewalk along Hacienda Way and El Solyo Heights Drive, as well as widening El Solyo Heights Drive to provide a right turn onto southbound Highway 9.
 - While outweighed by votes in favor, paving the existing path to the elementary school and evaluating the potential for a traffic signal or roundabout at the Highway 9/El Solyo Heights Drive intersection were the least favored. Given the question linked the traffic signal with the roundabout, the general feedback from the community appeared to be negative towards a roundabout more than a traffic signal.
- Elementary School Campus
 - Most liked features include constructing a potential overflow parking lot (if needed) and widening the school driveway to provide a right turn exiting onto Highway 9.
 - While outweighed by votes in favor, evaluating the potential for a traffic signal or roundabout at the Highway 9/school driveway intersection was the least favored. Given the question linked the traffic signal with the roundabout, the general feedback from the community appeared to be negative towards a roundabout more than a traffic signal.



Draft Report Outreach

On May 5, 2023, RTC released the draft San Lorenzo Valley Schools Circulation and Access Study for review and public comment. The release was announced and promoted in a press release, via eNews to RTC subscriber lists, posted on RTC social media accounts, and echoed by local news agencies in online articles. Comments from stakeholders and the public were received through July 30, 2023, for consideration by the project team in the Final Report. RTC received numerous comments from the public with diverse comments and feedback, which were considered and/or incorporated in to the Final San Lorenzo Valley Schools Circulation and Access Study. Examples of feedback included comments highlighting existing traffic congestion, requests for additional traffic signage and pavement striping, support for bicycle and pedestrian facilities.

6. Recommendations

Based on the existing conditions review and analysis, as well as input from the public and key project stakeholders, a set of project recommendations have been developed to improve mobility and safety in the study area. The recommendations are categorized based on infrastructure and non-infrastructure strategies as described in the following sections.

Infrastructure Recommendations

The infrastructure recommendations provided in this Study are aligned with the four priority projects (Projects 9, 10, 11, and 12) within the completed the Highway 9/San Lorenzo Valley Complete Streets Corridor Plan. The project areas along Highway 9 between Graham Hill Road and Glen Arbor Drive are illustrated in Figure 25 Highway 9/San Lorenzo Valley Complete Streets Corridor Plan Project Areas. Further refinement will be needed to advance conceptual graphics included in this report to account for topographic survey data, stormwater management, utilities, vehicle turning radius evaluation, and other field constraints.

Figure 25 Highway 9/San Lorenzo Valley Complete Streets Corridor Plan Project Areas





SLV Plan Project 9 (Graham Hill Road to San Lorenzo Valley Schools)

The Highway 9/San Lorenzo Valley Complete Streets Corridor Plan identifies the Project 9 area as pedestrian and bicycle connections between Felton town center (Highway 9/Graham Hill Road/Felton Empire Road intersection) and the SLV Schools. The SLV Plan Project 9 focuses on pedestrian and bicycle enhancements and was consistently identified as one of the highest priority projects in the San Lorenzo Valley.

Highway 9 South Graham Hill Road to High School Driveway

The following recommendations align with SLV Plan Project 9 and are illustrated in Figure 25 Highway 9 Recommendations.

9-1. Provide Southbound Shoulder & Sidewalk Improvements (High School Driveway to Graham Hill Road, by Planned Caltrans Felton Safety Project)

This improvement is planned and programmed for implementation by Caltrans through the Felton Safety Project (05-1M400). As part of this Study, recommendations have been made to align with Caltrans' plans. The improvement will provide a continuous sidewalk on the westerly side (southbound direction), and bikeable shoulders between the High School Driveway and Highway 9/Graham Hill Road intersection.

9-2. Provide Northbound Continuous Bike Lane/Shoulder on Highway 9 (Graham Hill Road to Rockys Café)

This concept recommends changes on Highway 9 to implement a continuous width shoulder/Class II bike lanes for northbound travel. The treatment aligns with the recommended improvements planned by Caltrans in the southbound direction under Project 10 and are recommended for the northbound direction from Felton Town Center.



Fall Creek Drive Connection

9-3. Bicycle and Pedestrian Multi-Use Path

An improvement concept included in the SLV Plan was to provide a new path for pedestrian and bicycle access between the High School campus near the ballfields to link to Fall Creek Drive. The new path would be in addition to bicycle and pedestrian facilities along Highway 9 within the study area. During preparation of this plan, the Fall Creek Drive connection concept was discussed with the private property owner south of the SLV High School as shown in Figure 26 Fall Creek Drive Connection Concept.

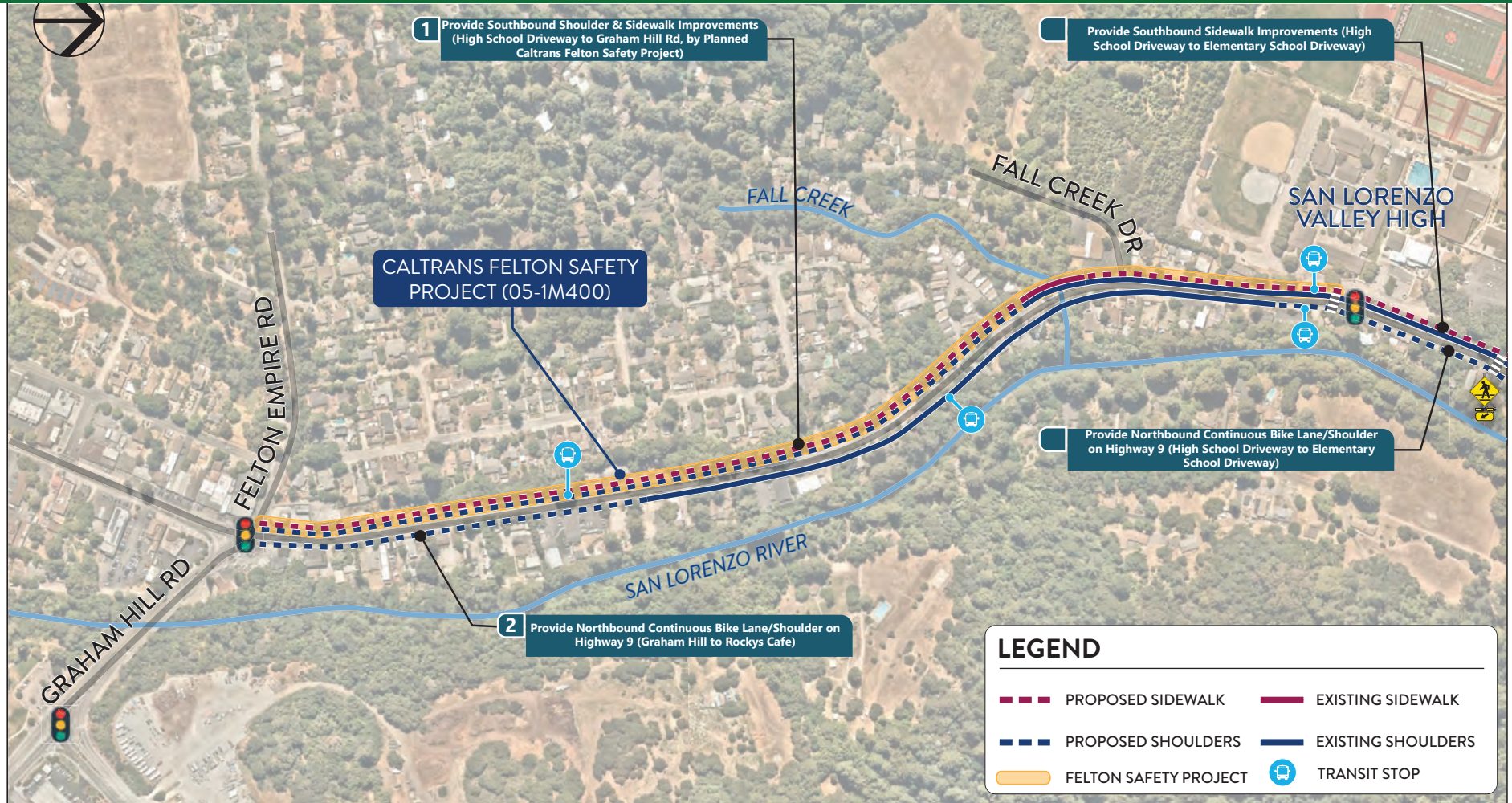
Currently the implementation of the connection to Fall Creek Drive appears constrained due to the following concerns and challenges:

- Safety and security from illicit activity
- Potential gate closure by school staff or through automation
- Potential lighting and video camera monitoring
- Quality of life impacts to adjacent properties
- Engineering design to avoid creation of a nuisance area
- Impacts to established trees
- Traffic impacts to Fall Creek Drive and the nearby Highway 9/Fall Creek Drive intersection
- Maintenance and operations by school district
- Funding for property acquisition and construction

It is recommended that agencies involved in the Study further monitor needs or opportunities to enhance the connection between Fall Creek Drive and the High School along Highway 9, as well and monitor use after Highway 9 improvements are implemented to determine if additional bicycle and pedestrian infrastructure or capacity is needed to establish a new path to Fall Creek Drive through private property.

Figure 26 Highway 9 South Concept

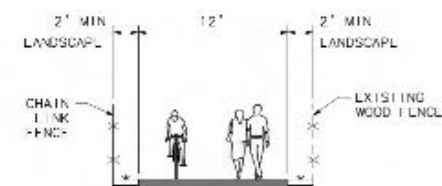
HIGHWAY 9 SOUTH



Draft concepts are subject to change based on subsequent environmental review, engineering design, permitting, property ownership review, and funding availability. Potential traffic signal or roundabout subject to traffic study in future design phase per Caltrans requirements.



Figure 27 Fall Creek Drive Connection Concept



BIKE AND PEDESTRIAN PATH

SCALE: 1" = 80'

CONCEPTS ARE SUBJECT TO CHANGE BASED ON
SUBSEQUENT ENVIRONMENTAL REVIEW,
ENGINEERING DESIGN, PERMITTING, PROPERTY
OWNERSHIP REVIEW, AND FUNDING AVAILABILITY.

SLV SCHOOLS CIRCULATION AND ACCESS STUDY
FALL CREEK DRIVE CONNECTION CONCEPT





SLV Plan Project 10 (San Lorenzo Valley Schools Campus Site Access)

The Highway 9/San Lorenzo Valley Complete Streets Corridor Plan identifies Project 10 as improved access to the SLV Schools involving the High School, Elementary School, and Middle School. The SLV Plan Project 10 was provided to improve traffic flow for traffic traveling past the campus.

The following are recommendations for the SLV Plan Project 10 area within the vicinity of all three schools. 10-ALL1 and 10-ALL2 were identified by staff through the faculty survey:

10-ALL1. Identify Staff Parking Spaces

Consider additional signage or pavement markings identifying staff parking spaces.

Figure 28 Example of Improvement 10-ALL1



10-ALL2. Lighting on School Campuses

Install additional lighting for pick-up/drop-off areas (loading zones).

10-ALL3. Add Secure Bicycle Parking Area Near Elementary School Bus Loading Zone

This treatment encourages bicycling to the SLV Schools through implementation of a secure bicycle parking area which will include bicycle racks and enclosed fencing to protect bicycles from theft. The facility could be located near the Elementary School bus loading zone and include other features such as a shelter covering the parking area and amenities such as bicycle maintenance equipment. The treatment could serve students and faculty at all three schools.

10-ALL4. Continuous Shoulder/Bike Lanes on Highway 9 Near SLV Schools

This concept recommends changes on Highway 9 to implement a continuous width shoulder/Class II bike lanes for travel in the vicinity of SLV Schools, between the High School driveway intersection and El Solyo Heights Drive.

High School Access

The following recommendations align with SLV Plan Project 10 for the SLV High School and are illustrated in Figure 30 SLV High School Concept.

10-HS1. Relocate Inbound Transit Driveway and Add "Right-Only" Exit

The improvement could relocate the inbound only transit driveway southerly and allow motorists access onto Highway 9, reducing the traffic congestion at the SLV High School traffic signal. METRO transit access to the SLV High School campus to load students would remain in operation. The implementing agency may need additional improvements along Highway 9 to accommodate the change as described including potential evaluation of adjacent private driveways. This improvement could enhance



circulation for the SLV High School and SLV Elementary School parking lots. See features "RELOCATED DRIVEWAY" and "TRANSIT ONLY INBOUND" on Figure 30 SLV High School

10-HS2. Designate "Bus Only" Travel Lanes On-Campus

METRO and SLVUSD buses could be provided exclusive lanes entering and exiting campus to streamline circulation during student pick-up/drop-off. The treatment will reduce or eliminate conflict between buses and personal vehicles. Three locations could be designated bus-only zones:

1. Northbound Highway 9 left-turn into SLV High School Driveway.
2. Drive aisle between the SLV northerly parking lot and the traffic signal for southbound traffic. See feature "BUS ONLY LANE" on Figure 30 SLV High School Concept.
3. The existing bus-only entrance from northbound Highway 9 accessing the transit loading zone could be relocated and maintain bus-only restrictions using engineering design features.

Treatment 10-HS2 is recommended to be linked with traffic control improvements identified at the SLV Elementary School (10-ES7 Evaluate Potential Traffic Signal or Roundabout). The improvement could enhance circulation between the SLV High School and SLV Elementary School loading zones.

10-HS3. Establish Student Loading Zone Only Outside High School Woodshop

Consider removal of approximately 5-7 vehicle parking stalls just south of the SLV High School Signal (adjacent the science classroom building) to create the additional proposed student loading zone. See Figure 28 High School Loading Zone.

10-HS4. Implement One-Way Drive Aisle Travel Between High School and Elementary School

Restrict travel in the drive aisle connecting the High School and Elementary School parking lots to northbound travel only permanently. Provide permanent signage and pavement markings consistent with northbound only travel. This treatment could only be implemented in coordination with 10-ES7 Evaluate Potential Traffic Signal or Roundabout to facilitate vehicles exiting the SLV Schools. This improvement could streamline traffic operations between the SLV Elementary School and SLV High School parking lots. See drive aisle located between the parking stalls in treatment "PRELIMINARY PROPOSED PARKING LOT" in Figure 30 SLV High School Concept.



10-HS5. Widen On-Campus Drive Aisle for Additional Car Parking

Slight widening of the drive aisle connecting between the SLV High School and SLV Elementary School parking lot can yield additional parking to offset any loss of parking and minimize double-parking activity. This treatment could increase available motor vehicle parking on campus. See treatment "PRELIMINARY PROPOSED PARKING LOT" in Figure 30 SLV High School Concept.

10-HS6. Enhance Transit Stops (On-Campus & Highway 9)

The improvement could improve the on-campus transit loading area with designated transit bays, loading zones, transit shelters, paved all-weather materials, and other amenities as determined by METRO. This treatment could enhance condition for youth and all transit riders accessing the bus stops on Highway 9. See on-campus treatments "TRANSIT STOP & SHELTER", "FORMALIZE BUS PULLOUT", and co-located PROPOSED 6' SIDEWALK", and "TRANSIT STOP AND BUS SHELTER" on Highway 9 in Figure 30 SLV High School Concept.

10-HS7. Improve Sidewalk on Northbound Highway 9 between Northbound Transit Stop and South Leg of Signalized Intersection

A sidewalk could be constructed to close the gaps in connectivity between the marked crosswalk at the signalized intersection and the northbound Highway 9 transit stop. This treatment could enhance multimodal connectivity in the project area. See treatment "PROPOSED SIDEWALK" in Figure 30 SLV High School Concept.

10-HS8. Restrict to Staff Parking Only Outside High School Woodshop

It is recommended that parking stalls nearest the SLV High School Driveway are limited to "staff only" to reduce congestion near the traffic signal associated with motorists parking maneuvers. This improvement could be implemented as an alternative to 10-HS3 Establish Student Loading Zone Only Outside High School Woodshop. See Figure 29 High School Staff Parking. SLVUSD will determine the preferred solution for additional loading or parking near the High School Woodshop Building.

10-HS9. Enforce No Turn On Red for Southbound Highway 9 into High School Driveway

This recommendation could minimize conflicting activity for motorists within the campus just west of the SLV High School signal, improving the ability for motorists to leave the campus. The "No Right on Red" engineering modification would be implemented with signage and would allow motor vehicles to leave the school campus and access Highway 9 more efficiently during a green light phase without conflicting entering traffic. Figure 31 High School Signal Before 10-HS9 and Figure 32 High School Signal After 10-HS9 illustrate how the internal conflict point could be minimized by restricting southbound right-turn traffic during the red phase. This solution may be implemented as a pilot to determine if the objectives are satisfied and review the engineering benefits.

Figure 29 High School Loading Zone



Figure 30 High School Staff Parking



Figure 31 SLV High School Concept

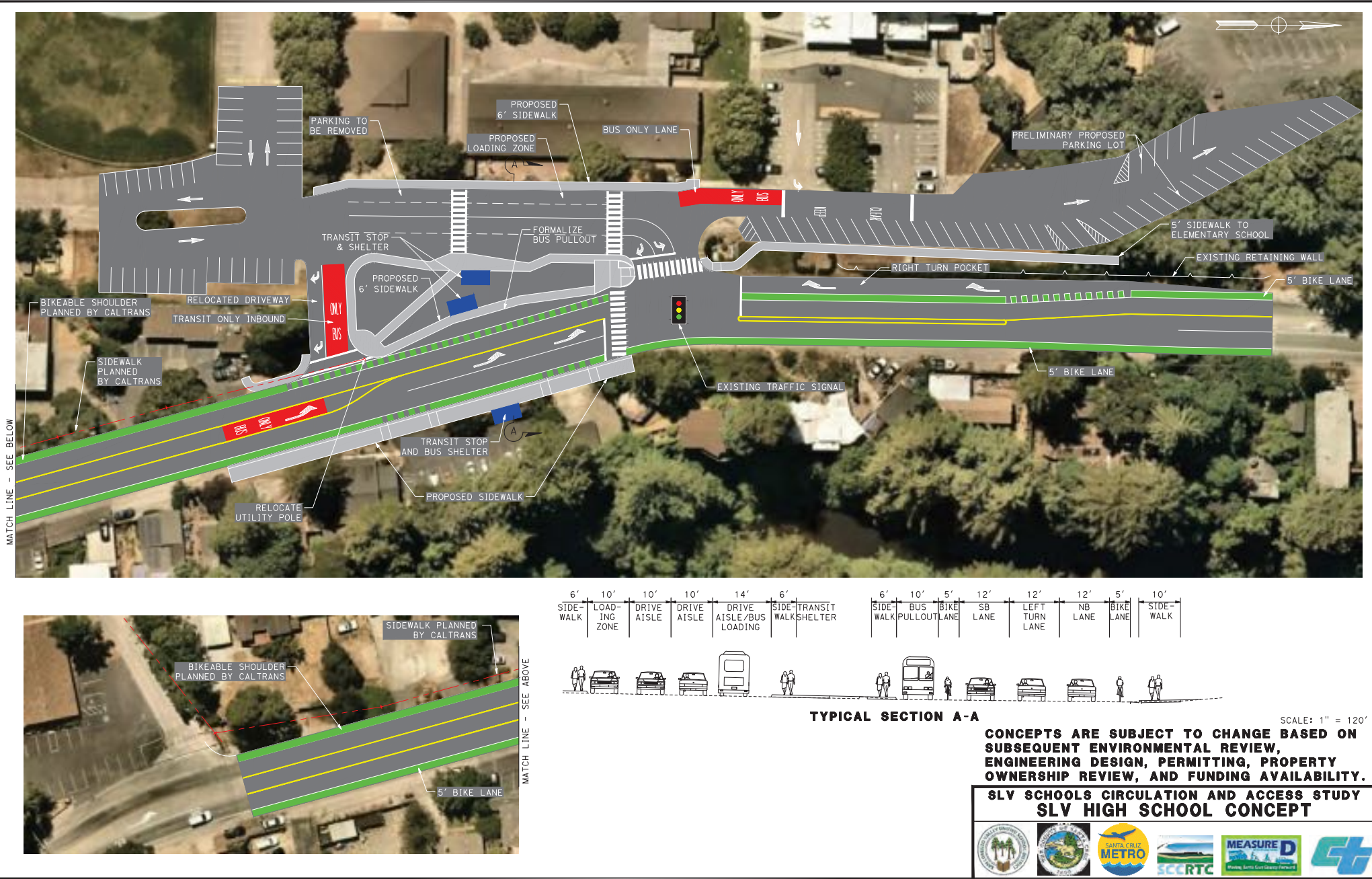


Figure 32 High School Signal Before 10-HS9



Figure 33 High School Signal After 10-HS9





Elementary School Access

The following recommendations align with SLV Plan Project 10 for the SLV Elementary School and are illustrated in Figure 35 SLV Elementary School Concept.

10-ES1. Provide Second Student Loading Zone at Elementary School

This treatment could increase efficiency with student loading through construction of a raised concrete median for a second student pick-up/drop-off platform parallel to the breezeway at the cafeteria. Marked crosswalks at both ends of the raised medians provide a pathway for students to access the breezeway adjacent the school buildings. The treatment will facilitate vehicle throughput and reduce queuing from the Elementary School Driveway onto Highway 9. See treatments "DROP OFF AREAS W/ ROOM FOR BYPASS" and "RAISED MEDIAN W/ PEDESTRIAN FENCE" in Figure 35 SLV Elementary School Concept.

10-ES2. Provide Dual Inbound Lanes to Elementary School Driveway

This treatment could improve circulation in the Elementary School parking lot area through minor widening and restriping to formalize a second inbound lane and eliminate the chokepoint which currently exists where two merge into a single driving lane to access the single loading zone.

10-ES3. Add Sidewalk To School Buildings from Highway 9

This treatment could provide pedestrian connectivity between the Elementary School buildings and the crosswalk at Highway 9/Elementary School driveway intersection. A potential future project could extend the sidewalk improvements northerly along Highway 9 towards El Solyo Heights Drive. See treatment "5' SIDEWALK TO SCHOOL BUILDINGS" in Figure 35 SLV Elementary School Concept.

10-ES4. Potential Overflow Parking Lot

This treatment could increase available motor vehicle parking on campus. Additional parking could enhance on-campus circulation during peak traffic volumes and on-campus events which induce higher volumes of parking demand. The additional parking lot could be designated for staff and faculty for daily use or for visitors based on further evaluation. See treatment "PRELIMINARY PROPOSED OVERFLOW/STAFF PARKING LOT MAY BE BASED ON SLVUSD NEEDS" in Figure 35 SLV Elementary School Concept.

10-ES5. Widen Elementary School Driveway To Add Right-Turn Lane onto Highway 9

The eastbound lane of the Elementary School driveway could be widened to provide a separate right-turn lane to separate left-turn and right-turn traffic accessing Highway 9. This treatment could increase efficiency in the campus parking lot by enhancing vehicle throughput. See treatment "RIGHT TURN POCKET" on Elementary School Driveway in Figure 35 SLV Elementary School Concept.



10-ES6. Widen Southbound Highway 9 To Add Right-Turn Lane onto Elementary School Driveway

The southbound direction of Highway 9 could be widened to provide a dedicated right-turn lane to enter the Elementary School Driveway, reducing queuing on Highway 9 and improving southbound vehicle throughput. Additionally, the design could provide adequate spacing for continuity of the southbound on-street bike lane. This treatment could increase efficiency on Highway 9 by preventing queued vehicles blocking Highway 9 through-traffic. See treatment "RIGHT TURN POCKET" on Highway 9 in Figure 35 SLV Elementary School Concept.

10-ES7. Evaluate Potential Traffic Signal Or Roundabout at Highway 9/Elementary School Driveway

The treatment could increase efficiency at the Highway 9/SLV Elementary School Driveway intersection through implementation of improved traffic control using a traffic signal or roundabout. The improved traffic control could better serve vehicular access from the Elementary School Driveway onto Highway 9 which currently requires motorists to wait for an adequate vehicular gap on Highway 9. As discussed under Traffic Signal Warrant Analyses, a detailed engineering study is required by Caltrans to evaluate a traffic signal or roundabout at this location. Based on preliminary traffic analysis, a new traffic signal is forecast to improve intersection LOS from grade from F to C and provide protected pedestrian crossing across Highway 9. Furthermore, the decision to install a signal should not be based solely upon warrants, since the installation of signals can sometimes lead to certain types of collisions and may modify overall operations along Highway 9. An interim improvement could be implemented to stripe "KEEP CLEAR" in the intersection by Caltrans. See treatment "POTENTIAL TRAFFIC SIGNAL" in Figure 35 SLV Elementary School Concept.

10-ES8. Add Sidewalk To Link To High School Driveway from Elementary School Driveway

This improvement could provide pedestrian connectivity through the project corridor while providing separation from Highway 9 through construction of a sidewalk along Highway 9 between the SLV Elementary School Driveway and the SLV High School Driveway. SLVUSD property may be required to implement the sidewalk gap closure by the implementing agency. See treatment "5' SIDEWALK TO HIGH SCHOOL" and "RETAINING WALL" in Figure 35 SLV Elementary School Concept.

10-ES9. Evaluate Relocation of Existing Power Pole to Extend Eastbound Right-Turn Lane

The treatment could serve as a secondary effort to extend the eastbound right-turn lane at the SLV Elementary School Driveway if needed. Given the costs and schedule implications of the relocation of the utility pole, this concept is subject to future need following other campus circulation improvements. This treatment could increase efficiency in the campus parking lot. See treatment "POTENTIAL FUTURE WIDENING FOR SECOND LANE" in Figure 35 SLV Elementary School Concept.

Additional short-term recommendations have been provided to improve circulation and access to the SLV Elementary School campus as described below.

10-ES10. Stripe Shoulder for Loading Zone

As shown in Figure 33 10-ES12 Shoulder Striping Example , implement 10' shoulder stripe to designate the loading zone adjacent the Elementary school breezeway leaving the remaining 10' as a bypass lane. Consider adding pavement delineations indicating:

- "Loading Zone Only"
- "Through Lane" with Arrows

Figure 34 10-ES12 Shoulder Striping Example



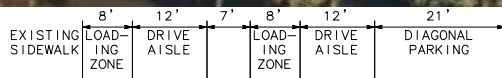
10-ES11. Re-slurry and Re-stripe On Campus Parking

Re-slurry parking lot and re-stripe parking stalls and drive aisles to avoid confusion with older striping configurations which may still be visible. Provide signage defining the drive aisles, loading and "no loading" zones as shown in Figure 34 10-ES12 Signage Example.

Figure 35 10-ES12 Signage Example



Figure 36 SLV Elementary School Concept



TYPICAL SECTION A-A

CONCEPTS ARE SUBJECT TO CHANGE BASED ON SUBSEQUENT ENVIRONMENTAL REVIEW, ENGINEERING DESIGN, PERMITTING, PROPERTY OWNERSHIP REVIEW, AND FUNDING AVAILABILITY.

SCALE: 1" = 120'

SLV SCHOOLS CIRCULATION AND ACCESS STUDY
SLV ELEMENTARY SCHOOL CONCEPT





Middle School Access

The following recommendations align with SLV Plan Project 10 for the SLV Middle School and are illustrated in Figure 36 SLV Middle School . SLVUSD is evaluating improvements to the SLV Middle School on an ongoing basis and has preliminary concepts for modification to the parking lot. The project team reviewed a concept plan provided by SLVUSD showing planned improvements to the SLV Middle School parking lot and circulation pattern and provided feedback. The draft concept expands the length of the loading zone for student drop-off/pick-up, provides bypass lanes, and modifies the parking layout. SLVUSD will continue to refine the concept for modifying the Middle School parking lot and circulation as funding and design plans advance. Given SLVUSD is already working to modify the Middle School parking lot and circulation, most of the recommendations related to the SLV Middle School are related to access and linkage to Highway 9.

10-MS1. Pave Existing Path to Elementary School

An existing path would be paved to provide ADA connection between the Elementary School gardens and playgrounds and Middle School parking lot student loading zone. During the preparation of this Study, SLVUSD implemented a soft-surface path that provides similar connectivity between the SLV Middle School parking lot and the SLV Elementary School playground area. This treatment could enhance multi-modal connectivity at the SLV Schools. See treatment "FORMALIZE TRAIL WITH 6' PATH" in Figure 36 SLV Middle School Concept.

10-MS2. Evaluate Potential Pedestrian Bridge Connection from Middle School Driveway to Elementary School Campus

The pedestrian bridge could replace a former bridge over the creek which provided access between the Middle School Driveway and Elementary School Campus. The bridge allowed pedestrians access to campus without entering the Middle School student loading zone. Due to surrounding topography, it is likely that a switchback configuration would be required to satisfy grade requirements and ADA compliance. This concept had previously been dismissed given the costs, complexity of permitting and design, and environmental review needed. Since the concept can provide improved connectivity to the campus it is identified as a potential future connection if appropriate funding opportunities become available. This treatment could enhance multimodal connectivity to the SLV campuses. See treatment "POTENTIAL PEDESTRIAN BRIDGE CONNECTION AND SWITCHBACK" in Figure 36 SLV Middle School Concept.

10-MS3. Improve And Formalize On-Campus Parking Area Northwest of Parking Lot

The current on-campus dirt parking stalls and footpath, located northwest of the Middle School parking lot, could be improved to provide formalized parking and an ADA accessible path. This treatment could enhance the existing parking lot on campus as well as multimodal connectivity. See treatment "FORMALIZE PARKING" in Figure 36 SLV Middle School Concept.



10-MS4. Add Sidewalk along Hacienda Way and El Solyo Heights Drive

A sidewalk could be constructed between Highway 9 and the SLV Middle School property on County-managed roads Hacienda Way and El Solyo Heights Drive. The treatment could provide access between the SLV Middle School, surrounding residences, and the transit stops on Highway 9. This treatment could enhance multimodal connectivity to the SLV Schools. See treatment "CURB, GUTTER & 6' SIDEWALK" on Hacienda Way & El Solyo Heights Drive in Figure 36 SLV Middle School Concept.

10-MS5. Add Bike Lanes along Hacienda Way and El Solyo Heights Drive

Class II bike lanes could be constructed between Highway 9 and the Middle School property line on County-managed roads Hacienda Way and El Solyo Heights Drive, providing access between the SLV Middle School, surrounding residences, and the transit stops on Highway 9. Connecting to the SLV Middle School, the bikeway may continue as Class II bike lanes or transition to a Class III bike route on campus property. This treatment could enhance multimodal connectivity to the SLV Schools.

10-MS6. Widen to Add Eastbound Right-Turn Lane on El Solyo Heights Drive

The eastbound approach to Highway 9 on El Solyo Heights Drive could be widened to create a separate right-turn lane onto southbound Highway 9. This treatment could increase efficiency in the project area by streamlining vehicle throughput at the intersection.

10-MS7. Provide ADA Access to Southbound Transit Stop

A sidewalk could be constructed between El Solyo Heights Drive and the Lazy Woods Road RRFB. This treatment could support universal access in the project area by removing the existing chain link fence and enhancing access to the existing transit stops in the vicinity of El Solyo Heights Drive. See treatments "CURB, GUTTER & 6' SIDEWALK" and "RETAINING WALL" on El Solyo Heights Drive connecting to "BUS PULL OUT & BUS STOP" in Figure 36 SLV Middle School Concept.

10-MS8. Add Sidewalk from Lazy Woods RRFB to Existing Northbound Transit Stop

A sidewalk could be constructed between the existing Lazy Woods Road RRFB and northbound transit stop on Highway 9, north of Highway 9/El Solyo Heights Drive intersection. The sidewalk would provide ADA accessibility between the schools, surrounding residences, and transit services. This treatment could enhance multimodal connectivity in the project area. See treatment "CURB, GUTTER & SIDEWALK" on Highway 9 in Figure 36 SLV Middle School Concept.



10-MS9. Evaluate Relocating Northbound Transit Stop to Lazy Woods Road

The existing northbound transit stop is approximately 480-feet north of Lazy Woods Road and could be relocated southerly near the existing RRFB. This treatment could shorten the distance needed to travel to and from the northbound transit stop for multi-modal users. If traffic control changes occur at the Highway 9/El Solyo Heights Drive intersection, then the bus stop would likely be site at the intersection. This treatment could enhance multimodal connectivity in the project area. See treatment "CONSIDER MOVING METRO BUS STOP 1533 HERE TO FAR SIDE OF LAZY WOODS" IN Figure 36 SLV Middle School Concept.

10-MS10. Evaluate Potential Traffic Signal or Roundabout at Highway 9/El Solyo Heights Drive Intersection

The treatment could increase efficiency at the Highway 9/El Solyo Heights Drive intersection through implementation of improved traffic control using a traffic signal or roundabout. The improved traffic control could better serve vehicular access from El Solyo Heights Drive onto Highway 9 which currently requires motorists to wait for an adequate vehicular gap on Highway 9. As discussed under Traffic Signal Warrant Analyses, a detailed engineering study is required by Caltrans to evaluate a traffic signal or roundabout at this location. Based on preliminary traffic analysis, a new traffic signal is forecast to improve intersection from grade LOS F to LOS D in the AM peak hour and LOS C in the PM peak hour. Furthermore, the decision to install a signal should not be based solely upon warrants, since the installation of signals can sometimes lead to certain types of collisions and may modify overall operations along Highway 9. An interim improvement could be implemented to stripe "KEEP CLEAR" in the intersection by Caltrans. See treatment "POTENTIAL TRAFFIC SIGNAL" in Figure 36 SLV Middle School Concept.

10-MS11. Provide Southbound Sidewalk and Continuous Bike Lane/Shoulder on Highway 9 (Elementary School Driveway to El Solyo Heights Drive)

This concept recommends changes on Highway 9 to implement a continuous sidewalk for southbound travel. Given the anticipated complexity of securing right-of-way, an alternate concept has been developed to bypass Highway 9 with a paved path between the SLV Elementary School Driveway and El Solyo Heights Drive, refer to the concept illustrated on Figure 37 Highway 9 Pedestrian Bypass Concept.

The dedicated path could bypass Highway 9 through construction on the SLVUSD property behind homes that front Highway 9 and could be constructed with a 12-feet wide paved surface serving bicycle and pedestrian travel. However, right-of-way would still be required for parcels north of the SLVUSD property to rejoin with Highway 9. Discussions with property owners north of the campus would need to continue to evaluate the feasibility of this bypass pathway.

Figure 37 SLV Middle School Concept

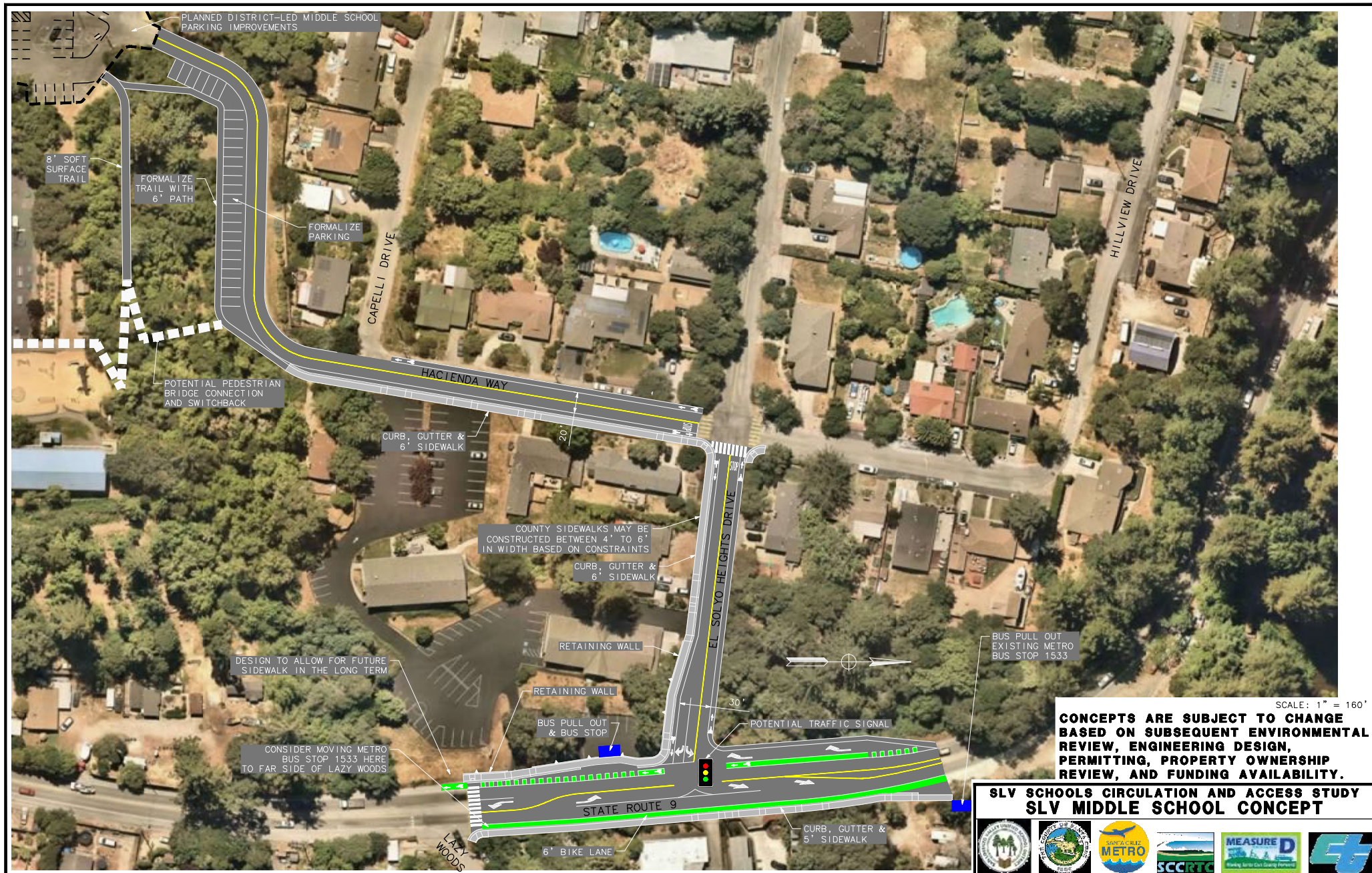
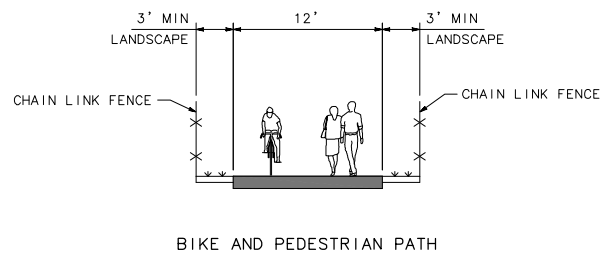


Figure 38 Highway 9 Pedestrian Bypass Concept



SCALE: 1" = 160'

**CONCEPTS ARE SUBJECT TO CHANGE BASED ON
SUBSEQUENT ENVIRONMENTAL REVIEW,
ENGINEERING DESIGN, PERMITTING, PROPERTY
OWNERSHIP REVIEW, AND FUNDING AVAILABILITY.**

**SLV SCHOOLS CIRCULATION AND ACCESS STUDY
HIGHWAY 9 PEDESTRIAN BYPASS CONCEPT**



SLV Plan Project 11 (North San Lorenzo Valley Schools Pedestrian and Bicycle Connections)

The Highway 9/San Lorenzo Valley Complete Streets Corridor Plan identifies the Project 11 as pedestrian and bicycle connections between the SLV Schools and Brackney Road.

Highway 9 Hillview Connection

11-1. Hillview Drive Trail from Highway 9

A 6-foot wide Decomposed Granite (DG) pathway is identified for potential implementation between Highway 9 and Hillview Drive. Given the path likely would be DG or dirt, and not provide all weather pavement, the facility could not satisfy ADA requirements but could still provide a bypass of Highway 9 to serve people walking as shown on Figure 38 Example 11-1 Signage. Signage would be posted advising bicyclists to Walk Bikes to maintain safety for all users on the pathway. This concept could enhance multimodal connectivity in the project area. See Figure 39 Highway 9 Hillview Drive Connection Concept.

Figure 39 Example 11-1 Signage



11-2. Continuous Shoulder/Bike Lanes on Highway 9 (El Solyo Heights Drive to Brackney Road)

This concept recommends changes on Highway 9 to implement a continuous shoulder/Class II bike lanes for travel in the vicinity of SLV Plan Project 11 area, between El Solyo Heights Drive and Brackney Road.

Figure 40 Highway 9 Hillview Drive Connection Concept





SLV Plan Project 12 (Willowbrook Drive Commercial Area Improvements and Glen Arbor Bike/Ped Connection)

The Highway 9/San Lorenzo Valley Complete Streets Corridor Plan identifies the Project 12 area as pedestrian and bicycle connections for businesses and neighborhoods in the vicinity of intersections with Highway 9 between Brackney Road and the southern intersection with Glen Arbor Road.

Highway 9 Elementary School Driveway to Glen Arbor Road

The following recommendations align with SLV Plan Project 12 and are illustrated in Figure 41 Highway 9 .

12-1. Provide Continuous Bike Lane/Shoulder On Highway 9 (Southern Intersection of Glen Arbor Road to Brackney Road)

This concept recommends changes on Highway 9 to implement a continuous width shoulder/Class II bike lanes for northbound and southbound travel between the southern intersection with Glen Arbor Road and Brackney Road.

12-2. Add Northbound Sidewalk (Existing Transit Stop to Glen Arbor Road)

The concept recommends construction of a sidewalk adjacent businesses south of the southern intersection of Glen Arbor Road and linking to the existing northbound transit stop on Highway 9. The sidewalk could provide ADA accessibility between the schools, surrounding residences, transit services, local businesses, and a nearby retirement community. This treatment could enhance multimodal connectivity in the project area.

12-3. Add Crossing Improvements at Willowbrook Drive/Highway 9 (RRFB & Crosswalk)

Upon further study, this treatment could enhance multimodal connectivity in the project area through crossing improvements including a new crosswalk and new RRFB at the Highway 9/Willowbrook Drive/Locust Lane intersection. The improvement could provide a formalized crossing opportunity across Highway 9 for students, residents, local businesses, and nearby retirement community.

12-4. Evaluate Relocating Two Transit Stops to Willowbrook Drive-Locust Lane/Highway 9 Intersection

This concept suggests evaluation of relocating the METRO transit stops, currently located approximately 150-feet north of the Highway 9/Sunnycroft Road intersection, further north near the recommended improved Highway 9/Willowbrook Drive/Locust Lane intersection. The treatment could enhance bicycle, pedestrian, and transit connectivity with recommended improvement 12-3 Add Crossing Improvements at Willowbrook Dr/Highway 9 (RRFB & Crosswalk).

12-5. Provide Southbound Sidewalk on Highway 9 (Glen Arbor Road to El Solyo Heights Drive)

This concept recommends changes on Highway 9 to implement a continuous sidewalk for southbound travel while maintaining the minimum widths determined necessary to accommodate commercial and large truck traffic. The sidewalk would typically be 5-feet in width with wider sections when adjacent vertical face retaining walls such as between the San Lorenzo River bridge and El Solyo Heights Drive.

12-6. Highway 9 "Twin Bridges" Updates

The SLV Plan Project 12 includes the Highway 9 "Twin Bridges" over San Lorenzo River at Caltrans post mile 7.75 (Bridge No. 36 0046) and post mile 7.87 (Bridge No. 36 0047). As of May 2022, both bridges were rated by Caltrans in good condition seismically and fair condition overall and were not scheduled for replacement in the near-term. If rated "poor" in future evaluations, a Caltrans process would begin to consider improvements or replacement which would have a major capital project multi-year schedule that would include community engagement opportunities. Therefore, it is expected that the bridges will remain unchanged for the next 5-10 years, subject to regular reviews.

This study recommends that future public engagement activities related to Twin Bridges replacements or enhancements incorporate scoping related to multi-modal, bicycle and pedestrian improvements. Near-term enhancements could include changes to the existing signage and striping alerting motorists to shared space between cyclists and motor vehicles, as shown in Figure 40 Shared Space Signage.

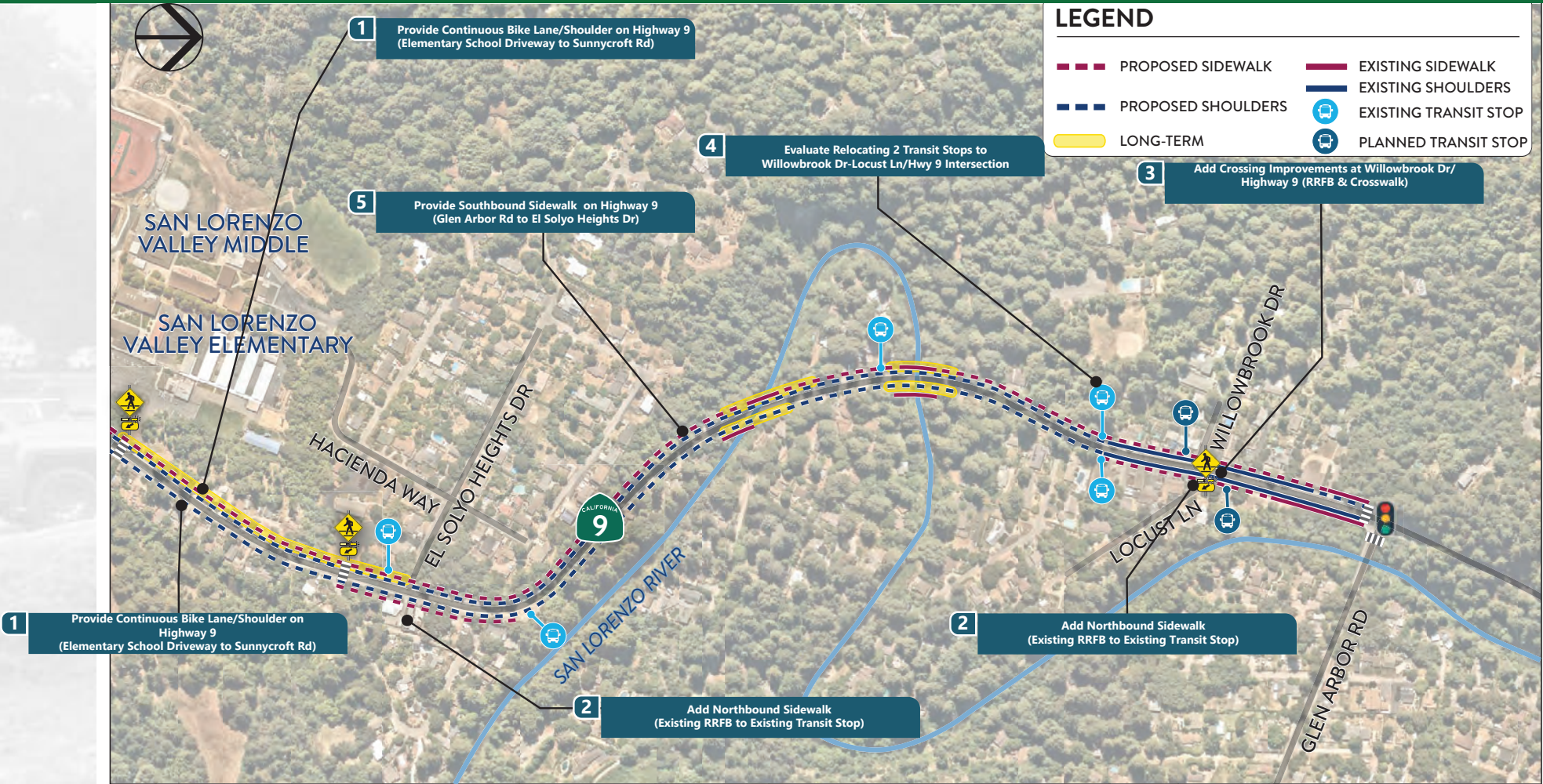
In addition, the San Lorenzo Valley experienced extensive damage resulting from winter storms in the early months of 2023. Damaged infrastructure included flooding and multiple landslides along Highway 9. This study recommends that transportation planning by the agency stakeholders consider these bridges for improvement or proactive replacement to improve multi-modal operations and resiliency from future severe storms and disasters.

Figure 41 Shared Space Signage



Figure 42 Highway 9 North Concept

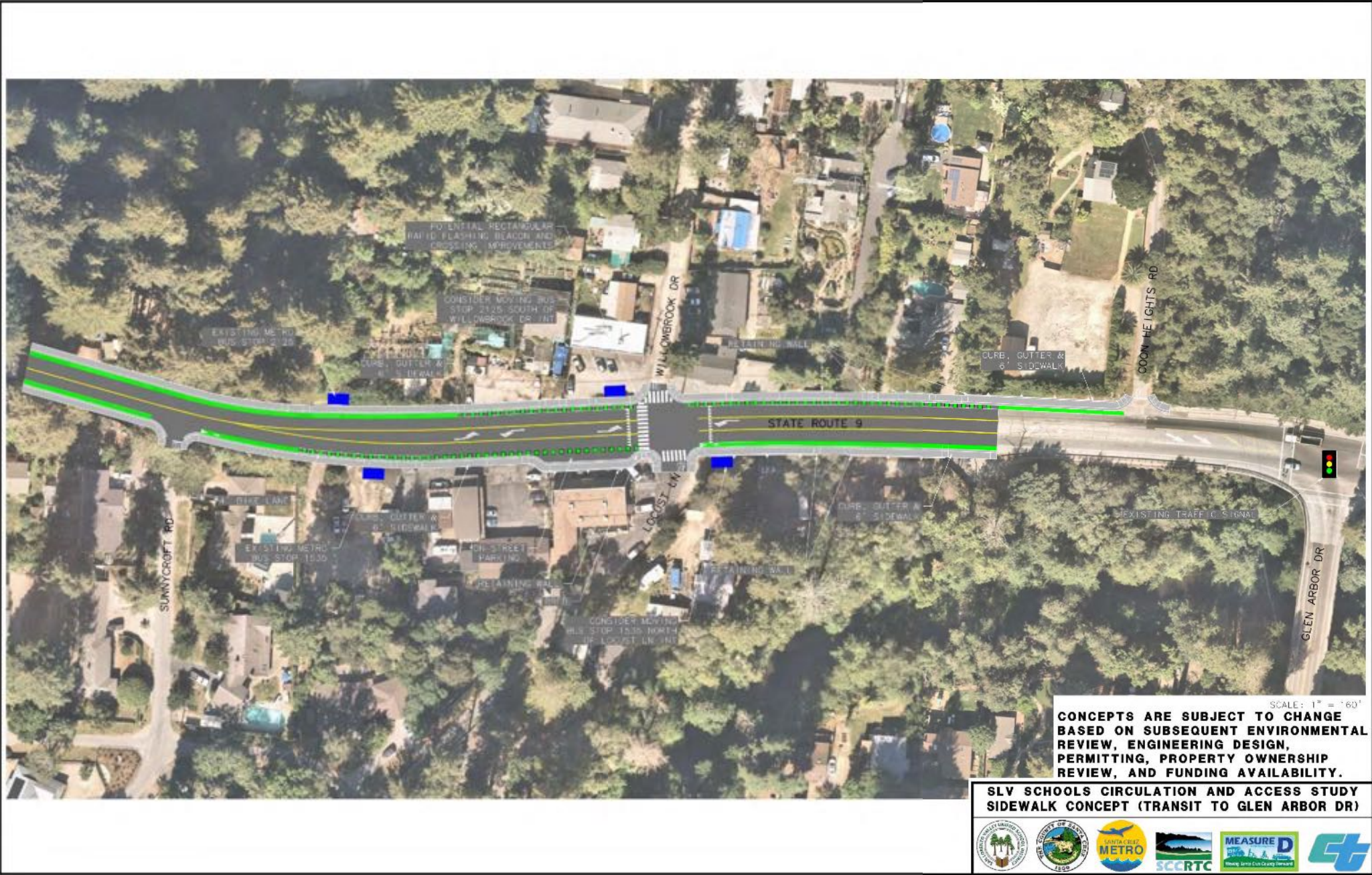
HIGHWAY 9 NORTH



Draft concepts are subject to change based on subsequent environmental review, engineering design, permitting, property ownership review, and funding availability. Potential traffic signal or roundabout subject to traffic study in future design phase per Caltrans requirements.



Figure 43 Northbound Sidewalk Concept (Sunnycroft Road to Glen Arbor Road)





Non-Infrastructure Recommendations

Recommendations discussed in this study include extensive consideration of modifications to the built infrastructure including driveways, circulation drive aisles, and parking lots. The infrastructure recommendations provided attempt to minimize conflict points, reduce congestion, and enhance public safety.

Additionally, non-infrastructure recommendations can help reduce the volume of personal vehicles that arrive at the school through multi-modal travel such as transit, walking, and cycling. Non-infrastructure recommendations can also include concepts such as carpooling and remote drop-off where students then walk the remaining short distance to the SLV Schools.

Parking at the SLV Schools campus and student pick-up/drop off by personal vehicle is incentivized due to low barrier of entry, compared to other travel modes. Below is a list of items that incentivize travel to the SLV Schools by personal vehicle:

- The cost of District and METRO bus passes are the highest among travel options available and applications must be submitted within limited timeframes.
- On-campus student parking permits are free and permit applications are accepted year-round.
- Parents/guardians are required to submit specific requests, and reach an agreement with the school administration, for their student to walk to and from school.
- Bicycling, skateboarding, and scootering are prohibited on campus. Skateboards and scooters must be checked-in to administrative offices. Bikes must be locked within bike racks, accessible for 10-minutes before and after school arrival and dismissal bells, respectively.
- Student pick-up/drop-off by personal vehicle does not require any registration and has no associated cost by SLVUSD.

This study recommends implementation of Transportation Demand Management (TDM) policies, Parking Demand Management (PDM) policies, and promotion and incentives to travel to school by bus, walking, bicycling, and other micromobility (scooters and skateboards).



Transportation Demand Management (TDM)

TDM strategies and policies can reduce travel from a specific mode, such as personal vehicles, by encouraging and support travel via other modes, such as bus, walking, bicycling, and vanpooling. The following strategies and policies are options presented for SLVUSD consideration and potential emphasis in alignment with near-term engineering solutions:

NI-1. Remote Parking Drop-off/Pick-Up Zones

- i. Form partnerships, with willing property owners, to allow remote drop-off in nearby parking lots to allow students to walk or use small mobility devices to travel the remaining distance to the campus.
- ii. The off-site loading activity can spread the vehicular demand at school driveways and parking areas. Engineering concepts provided in this Study highlight opportunities to strengthen pedestrian connections to properties north and south of the SLV Schools.

NI-2. Encourage Carpooling Activity

- i. Encourage parent/guardian carpooling activity with multiple youth in one car through ride-matching programs offered by local agencies. Parents can be encouraged to match rides with other parents/guardians at the beginning of each school year and periodically throughout the school year.
- ii. Cruz511 is a free traveler information service for up-to-the minute traffic, transit, bicycle and pedestrian information in Santa Cruz County via a mobile-responsive website. It was developed with the mission to provide comprehensive, accurate, reliable and useful multi-modal travel information to meet the needs of Santa Cruz County travelers.
- iii. GO Santa Cruz County is a key part of RTC's ongoing effort to reduce drive-alone trips and greenhouse gas emissions and play an active role in addressing climate change.
- iv. Both Cruz511 and Go Santa Cruz County are partially funded by voter-approved Measure D, which provides a balanced vision to improve, operate and maintain Santa Cruz County's transportation network. Additional information online at:
<https://cruz511.org/>
<https://gosantacruzcounty.org/>

NI-3. No Idling in the School Zone

- i. Adopt restrictions that prohibit vehicle idling while on school campus. Vehicle engines must be turned off while waiting for students prior to dismissal. Vehicles found idling may be cited and fined.
- ii. Incentivizes redistribution of student pick-up within a designated time frame, spreading peak traffic demands.
- iii. Potential benefit: reduces the amount of vehicle emissions impacting students in a learning environment.



Parking Demand Management (PDM)

PDM strategies and policies reduce parking demand, preserve parking for specific users, and redistribute demand to alternative modes, such as bus, walking, and bicycling. Since graduated licensing restricts carpooling by students (except for siblings), student carpooling is not recommended.

NI-4. Consider Collecting Fees for Student Parking Permits

- i. Consider a fee for student on-campus parking permits that is equal-to or higher-cost than other available modes (e.g. METRO transit passes), and provide a waiver-option for low-income families or through documented community service activity.
- ii. Potential benefit: school may pool funds for campus improvements, bus driver salaries, or offset the cost of district and METRO bus passes for students.

NI-5. Manage Availability of Parking Permits

- i. Incentivizing good behavior through parking permits could include requirement that students submit any of the following at least once during the school year:
 1. Proof that the student has a clean driving record;
 2. Proof of earning above a set-minimum GPA; and
 3. Utilize programs such as volunteering community service hours to offset violations or fees.

Promote and Incentivize Bus, Walking, and Bicycling

Promotion of bus, walking, and bicycling raises awareness of the availability of travel options beyond using a personal vehicle, and positively influences perspectives toward other modes. Incentivizing is the practice of providing rewards, benefits, or reduced costs for individuals who choose to travel by alternative modes. Santa Cruz METRO currently operates a pilot program where K-12 students can ride METRO buses at no cost.

NI-6. Utilize Strategies to Increase Transit Ridership

- i. Continue working with Santa Cruz METRO to provide bus routes servicing students accessing the SLV Schools.
- ii. Provide equal number of METRO trips to and from school in the morning and afternoon.
- iii. Allocate money earned that might be generated from parking permits or violation of parking restrictions towards SLVUSD bus operations.



- NI-7. Implement Strategies to Encourage Bicycle, Skateboard, and Scooter, and Micromobility Access
- iv. Increase the amount of time students have access to the secure bike parking area in the morning and in the afternoon.
 - v. Supply micromobility-specific and scooter-specific racks within the secure bike parking area.
 - vi. Reduce barriers to access by selling bicycle, scooter, and micromobility locks at the school concessionaires.
 - vii. Allow bicycling, scootering, and emerging micromobility modes on-campus within specific designated areas to make riding a more efficient mode of travel.
- NI-8. Flexible Pick-Up/Drop-Off Zones
- viii. Implement a program to allow student travel between campuses for pick-up/drop-off by parents and guardians.
- NI-9. Implement Safe Routes to School Programming
- ix. Implement programs and activities, under the umbrella program of Safe Routes to School, to increase mode shift from personal vehicles to transit and active transportation modes, such as:
 - 1. Remote pick-up and drop-off locations
 - 2. Carpooling
 - 3. Walking School Bus
 - 4. Bike Trains
 - x. Additional information available online at <https://www.saferoutespartnership.org/safe-routes-school>
- NI-10. Evaluate School Bell Schedule to Offset Pick-Up / Drop-Off Timeframes
- xi. Review and provide adjustments to school arrival and dismissal times to redistribute the load of vehicles arriving on-campus within a certain timeframe, spreading peak traffic demands.
 - xii. Increase the amount of time students are allowed on-campus prior to school arrival bell and after school dismissal bell.



7. Implementation

Recommended Phasing

Conceptual projects developed for the SLV Schools Access Study range from low-cost improvements, such as signing and striping, to high-cost capital projects, such as intersection signalization. The project partners can phase implementation of recommended concepts within the study corridor to continue momentum towards an improved transportation network. Projects have been organized into four phasing categories based on estimated time for implementation if desired:

1. Short-Term (0-1 Years) – Short Term concepts are anticipated to be implementable with low complexity, without need for grant applications or grant funding pursuits.
2. Near-Term (0-2 Years) – Near-term concepts are those concepts with relatively low complexity, high effectiveness, and likely require grant funding.
3. Medium-Term (2-5 Years) – Medium-term concepts are those concepts with medium complexity, high effectiveness, and likely require grant funding.
4. Long-Term (5+ Years) – Long-term concepts are those concepts with higher complexity, likely require grant funding, and might be monitored for need.

It is important to note the phasing is highly subject to availability of funding locally or through grants. The pursuit of grants can help reduce the financial burden on implementing agencies but will increase the schedule for implementation to account for grant competition, selection, and funding agreements. Once funding is secured then a project may still need to proceed through subsequent steps such as preliminary and final design, environmental review, right-of-way acquisition, permitting, and construction.

Additionally, this access study has been advanced through collaboration by multiple partner agencies, and approvals are often based on agencies with jurisdiction. For example, Caltrans as the owner and operator of Highway 9 (State Route 9), typically would provide oversight of locally sponsored improvements to the roadway. The collaboration by the five project partners provides opportunities for overlapping efforts by agencies with a lead organization potentially implementing improvements within the jurisdiction of supporting agency. Partner agencies will coordinate among departments and local organizations as needed to program improvement into annual maintenance and capital improvement programs.

There may be opportunities to incorporate elements of this study into the Caltrans State Highway Operation and Protection Program (SHOPP) funding and project scope. More often, the projects will be sponsored by others, by grant funding pursuits (as discussed subsequently), or by cooperative agreements.



Engineering cost estimates have been developed in current, non-escalated dollars, to reflect the anticipated cost of construction and overall costs likely would increase when accounting for the following items:

- Preliminary Design and Environmental Review
- Final Design
- Right of Way Acquisition (if needed)
- Permitting (if needed)
- Construction Management

Table 5 Recommended Improvements and Phasing provides a summary of the infrastructure project recommendations, estimated construction cost, phasing, and the likely lead and collaborative agency partners.



Table 5 Recommended Improvements and Phasing

| Improvement | Construction Cost | Recommended Phase | Phasing Reasoning | Lead Agency | Partner Agency |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------|---------------------------------------------------------------------------------|-------------|------------------------|
| 9-1 Provide Southbound Shoulder & Sidewalk Improvements (High School Driveway to Graham Hill Road, by Planned Caltrans Felton Safety Project) | N/A | Determined by Caltrans | N/A – Caltrans planning implementation through Felton Safety Project (05-1M400) | Caltrans | County, SCCRTC |
| 9-2 Provide Northbound Continuous Bike Lane/Shoulder on Highway 9 (Graham Hill Road to Rockys Café) | \$450,000 | Medium-term | Potential ROW impacts | Caltrans | County, SCCRTC |
| 9-3 Fall Creek Bicycle and Pedestrian Multi-Use Path | N/A | Long-Term | Engineering constraints and property impacts limit implementation. | SLVUSD | County |
| 10-ALL1 Identify Staff Parking Spaces | < \$5,000 | Short-term | Ease of implementation | SLVUSD | -- |
| 10-ALL2 Lighting on School Campuses | \$25,000 | Short-term | Ease of implementation | SLVUSD | -- |
| 10-ALL3 Add Secure Bicycle Parking Area Near Elementary School Bus Loading Zone | \$25,000 | Near-term | Ease of implementation | SLVUSD | -- |
| 10-ALL4 Continuous Shoulder/Bike Lanes on Highway 9 Near SLV Schools | \$75,000 | Medium-term | Potential ROW impacts | Caltrans | County, SCCRTC, SLVUSD |
| 10-HS1 Relocate Inbound Transit Driveway and add "Right-Only" Exit | \$150,000 | Near-term | Spread traffic demand and improve transit access | SLVUSD | Caltrans |
| 10-HS2 Designate "Bus Only" Travel Lanes On-Campus | \$70,000 | Long-term | Monitor need following other recommendations | SLVUSD | -- |
| 10-HS3 Establish Student Loading Zone Only Outside High School Woodshop | \$240,000 | Medium-term | Impacts to school building operations. | SLVUSD | -- |
| 10-HS4 Implement One-Way Drive Aisle Travel Between High School and Elementary School | \$15,000 | Near-term | Ease of implementation | SLVUSD | -- |
| 10-HS5 Widen On-Campus Drive Aisle for Additional Car Parking | \$70,000 | Near-term | Ease of implementation | SLVUSD | -- |
| 10-HS6 Enhance Transit Stops (On-Campus & Highway 9) | \$420,000 | Near-term | Benefit to transit use by students and public | Caltrans | SLVUSD |



| Improvement | Construction Cost | Recommended Phase | Phasing Reasoning | Lead Agency | Partner Agency |
|--------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|--------------------------------------------------------------|-------------|----------------|
| 10-HS7 Improve Sidewalk on Northbound Highway 9 between Northbound Transit Stop and South Leg of Signalized Intersection | \$180,000 | Near-term | Benefit to transit use by students and public | Caltrans | County, SCCRTC |
| 10-HS8 Restrict to Staff Parking Only Outside High School Woodshop | < \$5,000 | Short-term | Ease of implementation | SLVUSD | -- |
| 10-HS9 Enforce No Turn On Red for Southbound Highway 9 into High School Driveway | \$50,000 | Short-term | Ease of implementation and ability to test results | Caltrans | SLVUSD |
| 10-ES1 Provide Second Student Loading Zone at Elementary School | \$175,000 | Near-term | Benefit to traffic congestion | SLVUSD | -- |
| 10-ES2 Provide Dual Inbound Lanes to Elementary School Driveway | \$10,000 | Medium-term | Benefit to traffic congestion | SLVUSD | -- |
| 10-ES3 Add Sidewalk to School Buildings from Highway 9 | \$175,000 | Long-term | Subject to overflow parking lot and sidewalks on Highway 9 | SLVUSD | -- |
| 10-ES4 Potential Overflow Parking Lot | \$550,000 | Long-term | Subject to parking needs at Elementary School | SLVUSD | -- |
| 10-ES5 Widen Elementary School Driveway to Add Right-Turn Lane onto Highway 9 | \$160,000 | Near-term | Benefit to traffic congestion | SLVUSD | Caltrans |
| 10-ES6 Widen Southbound Highway 9 to Add Right-Turn Lane onto Elementary School Driveway | \$400,000 | Medium-term | Monitor following other recommended improvements | Caltrans | SLVUSD, SCCRTC |
| 10-ES7 Evaluate Potential Traffic Signal or Roundabout at Highway 9/Elementary School Driveway Intersection | \$800,000 | Medium-term | Implementation requires further Caltrans analysis and review | Caltrans | SLVUSD, SCCRTC |
| 10-ES8 Add Sidewalk to Link to High School Driveway from Elementary School Driveway | \$410,000 | Medium-term | Engineering complexity | Caltrans | SLVUSD, SCCRTC |
| 10-ES9 Evaluate Relocation of Existing Power Pole to Extend Eastbound Right-Turn Lane | \$90,000 | Long-term | Monitor following other recommended improvements | SLVUSD | -- |
| 10-ES10 Stripe Shoulder for Loading Zone | < \$5,000 | Short-term | East of implementation | SLVUSD | -- |



| Improvement | Construction Cost | Recommended Phase | Phasing Reasoning | Lead Agency | Partner Agency |
|----------------------------------------------------------------------------------------------------------------|-------------------|-------------------|--------------------------------------------------------------|-------------|----------------|
| 10-ES11 Re-slurry and Re-stripe On Campus Parking | \$50,000 | Short-term | East of implementation | SLVUSD | -- |
| 10-MS1 Pave Existing Path to Elementary School | \$15,000 | Near-term | Monitor to confirm need following recent improvements | SLVUSD | -- |
| 10-MS2 Evaluate Potential Pedestrian Bridge Connection from Middle School Driveway to Elementary School Campus | \$2,500,000 | Long-term | Implementation and permitting complexity | SLVUSD | County |
| 10-MS3 Improve and Formalize On-Campus Parking Area Northwest of Parking Lot | \$150,000 | Near-term | Engineering and permitting complexity | SLVUSD | -- |
| 10-MS4 Add Sidewalk along Hacienda Way and El Solyo Heights Drive | \$475,000 | Near-term | Potential ROW impacts | County | SLVUSD |
| 10-MS5 Add Bike Lanes Along Hacienda Way and El Solyo Heights Drive | \$20,000 | Medium-term | Potential ROW impacts | County | SLVUSD |
| 10-MS6 Widen to Add Eastbound Right-Turn Lane on El Solyo Heights Drive | \$200,000 | Medium-term | Potential ROW impacts | County | Caltrans |
| 10-MS7 Provide ADA Access to Southbound Transit Stop | \$400,000 | Near-term | Engineering and permitting complexity | Caltrans | METRO |
| 10-MS8 Add Sidewalk from Existing Lazy Woods RRFB to Existing Northbound Transit Stop | \$160,000 | Near-term | Potential ROW impacts | Caltrans | METRO |
| 10-MS9 Evaluate Relocating Northbound Transit Stop to Lazy Woods Road | \$30,000 | Medium-term | Potential ROW impacts | METRO | Caltrans |
| 10-MS10 Evaluate Potential Traffic Signal or Roundabout at Highway 9/El Solyo Heights Drive Intersection | \$600,000 | Long-term | Implementation requires further Caltrans analysis and review | Caltrans | County, SCCRTC |



| | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|--------------------------------------------------|----------|------------------------|
| 10-MS11 Provide Southbound Sidewalk and Continuous Bike Lane/Shoulder on Highway 9 (High School Driveway to El Solyo Heights Drive) | \$2,000,000 | Medium-term | Potential ROW impacts | Caltrans | SLVUSD, County, SCCRTC |
| 11-1 Hillview Drive Trail from Highway 9 | \$60,000 | Medium-Term | Potential ROW impacts | County | Caltrans |
| 11-2 Continuous Shoulder/Bike Lanes on Highway 9 (Southern Intersection of Glen Arbor Road to Brackney Road) | \$750,000 | Medium-term | Potential ROW impacts | Caltrans | County, SCCRTC |
| 12-1 Provide Continuous Bike Lane/Shoulder on Highway 9 (Brackney Road to Glen Arbor Road) | | | | | |
| 12-2 Add Northbound Sidewalk (Existing Transit Stop to Glen Arbor Road) | \$360,000 | Near-term | Potential ROW impacts | Caltrans | METRO, SCCRTC |
| 12-3 Add Crossing Improvements at Willowbrook Drive/Highway 9 (RRFB & Crosswalk) | \$80,000 | Near-term | Potential ROW impacts and engineering complexity | Caltrans | County |
| 12-4 Evaluate Relocating Two Transit Stops to Willowbrook Drive-Locust Lane/Highway 9 Intersection | \$40,000 | Near-term | Potential ROW impacts and engineering complexity | METRO | Caltrans, County |
| 12-5 Provide Southbound Sidewalk on Highway 9 (Glen Arbor Road to El Solyo Heights Drive) | \$5,000,000 | Medium-term | Potential ROW impacts | Caltrans | County, SCCRTC |
| 12-6 Highway 9 "Twin Bridges" Updates | N/A | Long-term | Engineering complexity | Caltrans | County, SCCRTC |

Figure 44 Elementary School Near Term



ELEMENTARY SCHOOL NEAR TERM



Draft concepts are subject to change based on subsequent environmental review, engineering design, permitting, property ownership review, and funding availability. Potential traffic signal or roundabout subject to traffic study in future design phase per Caltrans requirements.



Figure 45 Elementary School Near Term



MIDDLE SCHOOL NEAR TERM



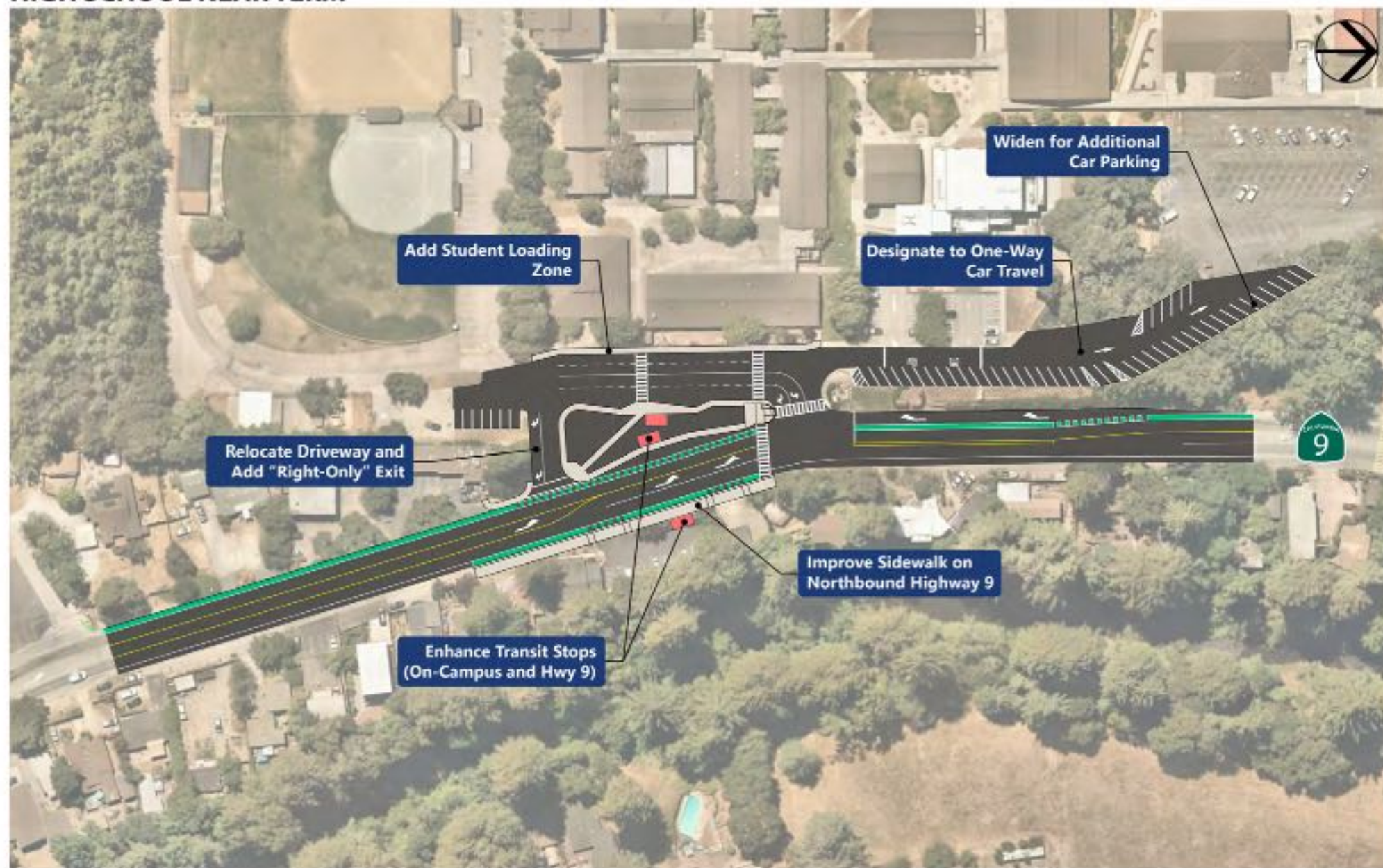
Draft concepts are subject to change based on subsequent environmental review, engineering design, permitting, property ownership review, and funding availability. Potential traffic signal or roundabout subject to traffic study in future design phase per Caltrans requirements.



Figure 46 High School Near Term



HIGH SCHOOL NEAR TERM



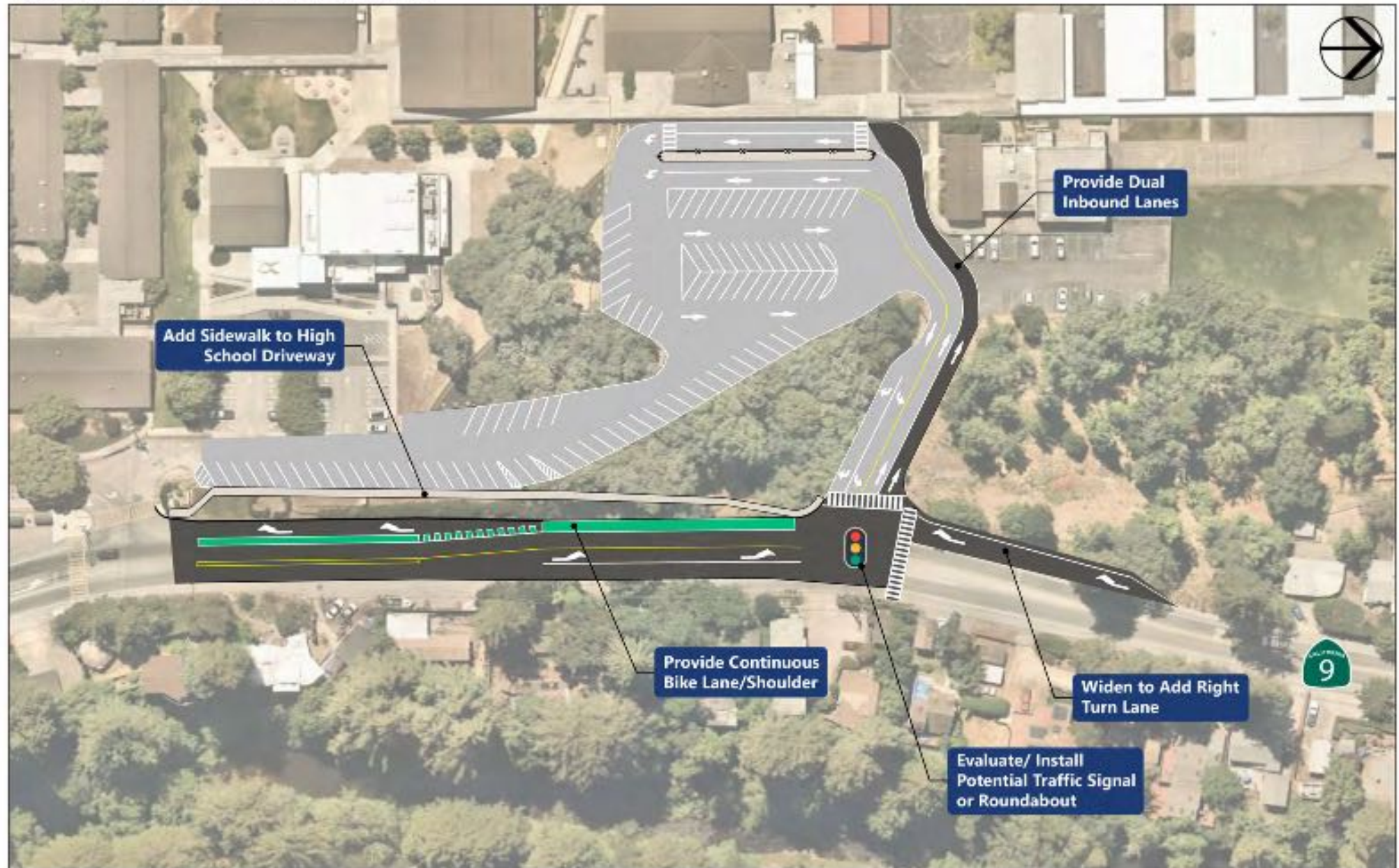
Draft concepts are subject to change based on subsequent environmental review, engineering design, permitting, property ownership review, and funding availability. Potential traffic signal or roundabout subject to traffic study in future design phase per Caltrans requirements.



Figure 47 Elementary School Mid Term



ELEMENTARY SCHOOL MID TERM



Draft concepts are subject to change based on subsequent environmental review, engineering design, permitting, property ownership review, and funding availability. Potential traffic signal or roundabout subject to traffic study in future design phase per Caltrans requirements.



MIDDLE SCHOOL MID TERM



Draft concepts are subject to change based on subsequent environmental review, engineering design, permitting, property ownership review, and funding availability. Potential traffic signal or roundabout subject to traffic study in future design phase per Caltrans requirements.



Figure 49 High School Mid Term

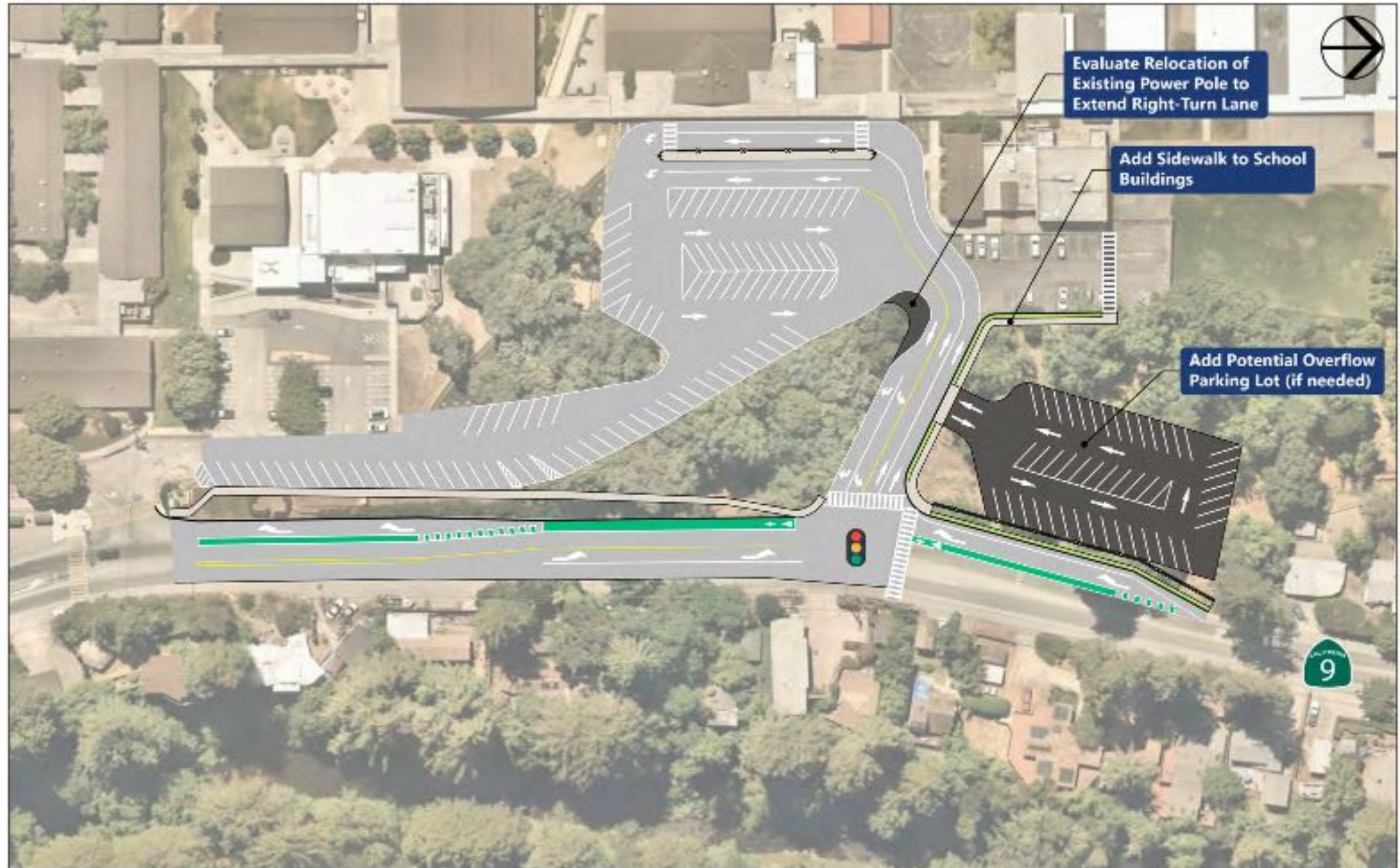
HIGH SCHOOL MID TERM



Figure 50 Elementary School Long Term



ELEMENTARY SCHOOL LONG TERM



Draft concepts are subject to change based on subsequent environmental review, engineering design, permitting, property ownership review, and funding availability. Potential traffic signal or roundabout subject to traffic study in future design phase per Caltrans requirements.



Figure 51 Middle School Long Term

MIDDLE SCHOOL LONG TERM



Draft concepts are subject to change based on subsequent environmental review, engineering design, permitting, property ownership review, and funding availability. Potential traffic signal or roundabout subject to traffic study in future design phase per Caltrans requirements.





Funding Opportunities

The following is a list of various funding opportunities that can be monitored for pursuit to close the gap in financial availability. The collaboration among agency partners to develop the recommended concepts identified in this Study illustrates a collective effort that typically improves funding competitiveness for grants. Potential funding sources are listed by the following three categories:

- State Funding Opportunities
- Federal Funding Opportunities
- Park-Focused State and Federal Funding Opportunities

State Funding Opportunities

- [Active Transportation Program \(ATP\)](#) - Increase use of active modes of transportation, such as walking and bicycling.
- [Clean California Local Grant Program \(CCLGP\)](#) - Funds local communities to beautify and improve local streets and roads, tribal lands, parks, pathways, and transit centers.
- [Local Highway Safety Improvement Program \(HSIP\)](#) - Achieving a significant reduction in fatalities and serious injuries on all public roads.
- [Local Partnership Program \(LPP\)](#) - Encourages projects that align with the state's climate and equity goals.
- [Local Transportation Climate Adaptation Program \(LTCAP\)](#) - Provides competitive grants to local agencies for the development and implementation of capital projects adapting local transportation infrastructure to climate changes.
- [Reconnecting Communities: Highways to Boulevards \(RC H2B\)](#) - Fund the conversion of key underutilized highways in the State into multi-modal corridors to reconnect communities divided by transportation infrastructure.
- [Regional Resilience Planning and Implementation Grant Program \(RRGP\)](#) - Funds regional climate resilience efforts, including identifying climate resilience priorities, building capacity, and implementing projects, that respond to a region's greatest climate risks.
- [Consolidated Regional Transportation Grants \(RTC\)](#) - Includes funds for STBG, RSTPX, STIP, HIP, CRRSAA, and SRRSAA-STBG.
- [Solutions for Congested Corridors Program \(SCCP\)](#) - Achieve a balanced set of transportation, environmental, and community access improvements to reduce congestion throughout the state.
- [Sustainable Transportation Planning Grants \(STP\)](#) - Planning efforts to reduce GHG emissions, develop climate adaptation plans, and address statewide, interregional, or regional transportation deficiencies on the State highway system.
- [State Transportation Improvement Program \(STIP\)](#) - Build climate preparedness, reduce GHG, prepare for uncertain climate impacts, and protect the State's most vulnerable populations.



Federal Funding Opportunities

- [Areas of Persistent Poverty \(AOPP\)](#) - Funds increased transit access for environmental justice populations, equity-focused community outreach and public engagement of underserved communities and adoption of equity-focused policies, reducing greenhouse gas emissions, and addressing the effects of climate change.
- [Rebuilding American Infrastructure with Sustainability and Equity \(RAISE\)](#) - Help communities build transportation projects that have significant local or regional impact and improve safety and equity.
- [Rural Surface Transportation Grant \(RSTG\)](#) through Multimodal Project Discretionary Grant Opportunity (MPDG)- Increase connectivity, improve the safety and reliability of the movement of people and freight, and generate regional economic growth and improve quality of life.
- [Strengthening Mobility and Revolutionizing Transportation \(SMART\)](#) - Conduct demonstration projects focused on advanced smart community technologies and systems in order to improve transportation efficiency and safety.
- [Safe Streets and Roads for All \(SS4A\)](#) - Funds planning or implementation efforts initiatives to prevent roadway deaths and serious injuries.

Park-Focused State and Federal Funding Opportunities

- [Habitat Conservation Fund \(HCF\)](#) - Funding to protect fish, wildlife, and native plant resources, to acquire or develop wildlife corridors and trails, and to provide for nature interpretation programs and other programs which bring urban residents into park and wildlife areas.
- [Land and Water Conservation Fund \(LWCF\)](#) - Funds the acquisition or development of land to create new outdoor recreation opportunities for the health and wellness of Californians.
- [Outdoor Equity Grants Program \(OEGP\)](#) - Expands outdoor access to all Californians through focused investments in open space infrastructure, outdoor programming, and improvements to permit applications, with a priority to expanding access in underserved communities.
- [Regional Park Program \(RPP\)](#) - Create, expand, or improve regional parks and regional park facilities.
- [Rural Recreation and Tourism Program \(RRT\)](#) - Create new recreation opportunities within rural communities to support health-related and economic goals.
- [Recreational Trails Program \(RTP\)](#) - Funds recreational trails and trails-related projects for pedestrians, bicyclists, and equestrians that may also serve as non-motorized transportation corridors.
- [Statewide Park Program \(SPP\)](#) - Create, enhance, and expand access to parks and recreations opportunities in critically underserved communities.



Table 6 State and Local Funding Sources

| Funding Program | Submittal Period | Eligible Phases /Costs | Match Req. | Key Considerations/Selection Criteria | Eligible Applicants |
|----------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| Active Transportation Program (ATP) ¹ | -Call for projects on even years -June/July deadline | -PA&ED ² -PS&E ³ -ROW ⁴ -CON ⁵ | No match requirement | DAC ⁶ , need, safety, public participation and planning, transformative projects, evaluation, and sustainability | -County -SCCRTC -Caltrans -METRO -SLVUSD |
| Clean California Local Grant Program (CCLGP) ¹ | -April deadline | -PA&ED -PS&E -ROW -CON | 0%-50% of project cost based on severity of disadvantaged | Partially or fully located in underserved community AND at least 75% of the population surrounding the project site must be underserved | -County -SCCRTC -SLVUSD -METRO |
| Local Highway Safety Improvement Program (HSIP) | -Call for projects on even years -September deadline | -PE -ROW -CON | Variable based on selected countermeasure | BCRs ⁷ , funding set-asides, HR3 ⁸ eligibility | -County -Joint Caltrans & County |
| Local Partnership Program (LPP) | -Call for projects on even years -November deadline | -CON | One to one match | Accessibility, air quality and GHG ⁹ , community engagement, safety, transportation, land use, and housing goals, VMT ¹⁰ | -SCCRTC -METRO |
| Local Transportation Climate Adaptation Program (LTCAP) ¹ | -Call for projects planned May 2023 | -PA&ED -PS&E -ROW -CON | 20% non-federal match | Climate resilience, consistency with relevant agency plans and reports, DAC outreach, and environmental equity | -SCCRTC -County -METRO |

¹ San Lorenzo Valley is less competitive for grant funding programs which emphasize benefits towards Disadvantaged Communities since the State does not designate the project area as disadvantaged. Grant program criteria and requirements are updated regularly; monitor to determine likelihood of securing funding from this program.

² Project Approval & Environmental Document

³ Plans, Specifications, and Estimates

⁴ Right-of-Way

⁵ Construction

⁶ Disadvantaged Community

⁷ Benefit Cost Ratios

⁸ HSIP Projects on High Risk Rural Roads

⁹ Greenhouse Gases

¹⁰ Vehicle Miles Traveled



| Funding Program | Submittal Period | Eligible Phases /Costs | Match Req. | Key Considerations/Selection Criteria | Eligible Applicants |
|------------------------------------------------------------------------|----------------------------------------------|--------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Reconnecting Communities: Highways to Boulevards (RC H2B) ¹ | -Late Summer/Early Fall deadline | -PA&ED -PS&E -ROW -CON | No match requirement | DAC, mobility and community connectivity, community partnerships | -Joint: Lead Caltrans or County -May partner with SCCRTC, SLVUSD, or METRO |
| Regional Resilience Planning and Implementation Grant Program (RRGP) | -July deadline | - planning and implementation grants | No match requirement | Climate resilience, consistency with State priorities and plans, community need and priority, co-benefits, community partnership, organizational capacity, budget, and equity | -County -SCCRTC -Districts |
| Consolidated Regional Transportation Grants (RTC) | -Last round in 2021 -October deadline | -CON | 11.47% non-federal match or in-kind donations | Safety, infrastructure condition, system performance/reliability, access for all, and/or health and equity | -County -SCCRTC -Caltrans -Metro -SLVUSD |
| Solutions for Congested Corridors Program (SCCP) | -Call for projects on even years | -CON | No match requirement | Safety, congestion, accessibility Economic development, job creation, and retention, air pollution and GHG reductions, efficient land use | -SCCRTC -County -Caltrans |
| Sustainable Transportation Planning Grants (STP) ¹ | -Annual call for projects -March deadline | -Studies or Plans | 11.47%-20% local match | GHG reduction, DAC, housing, land use and transportation planning | -SCCRTC -County |
| State Transportation Improvement Program (STIP) | -Call for projects every two years | -PA&ED -PS&E -ROW -CON | N/A | Programmed in conjunction with SCCRTC | -SCCRTC |



Table 7 Federal Funding Sources

| Funding Program | Submittal Period | Eligible Phases /Costs | Match Req. | Key Considerations/Selection Criteria | Eligible Applicants |
|----------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| Areas of Persistent Poverty (AOPP) ¹ | -March deadline | -Planning -Engineering -Development of technical or financial plans | Minimum federal share is 90% of total project cost | DAC | -Recipients or subrecipients located in APP |
| Rebuilding American Infrastructure with Sustainability and Equity (RAISE) ¹ | -Annual call for projects -February deadline | -Planning -PA&ED -PS&E -ROW -CON | Federal cost share may not exceed 80% | Safety, environmental sustainability, quality of life, mobility and community connectivity, economic competitiveness, partnership, innovation, and equity | -County -SCCRTC -Caltrans -METRO -SLVUSD -District |
| Rural Surface Transportation Grant (RSTG) | -May deadline | -PA&ED -PS&E -ROW -CON | Federal cost share may not exceed 80% | Regional economic, mobility, or safety benefits. At least 90 percent of Rural grant amounts must be at least \$25 million, and up to 10 percent of Rural grants may be for grant amounts of less than \$25 million | -SCCRTC -County |
| Strengthening Mobility and Revolutionizing Transportation (SMART) | -November deadline | -PA&ED -PS&E -ROW -CON | No match requirement | Safety and reliability, resiliency, equity and access, climate, partnerships, integration | -County -METRO -SCCRTC |
| Safe Streets and Roads for All (SS4A) ¹ | -September deadline | -Planning -PA&ED -PS&E -ROW -CON | 20% local match | DAC, Safety | -County -SCCRTC -Caltrans -METRO |



Table 8 Park-Focused State and Federal Funding Sources

| Funding Program | Submittal Period | Eligible Phases /Costs | Match Req. | Key Considerations/Selection Criteria | Eligible Applicants |
|---------------------------------------------------|----------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Habitat Conservation Fund (HCF) | -June deadline | -Acquisition -Development | 50% match | Focus on projects to preserve or enhance natural habitat as well as trails which bring urban residents into park or wildlife areas. | -County -Districts |
| Land and Water Conservation Fund (LWCF) | -June deadline | -Acquisition -Development | 50%-99% of the total project cost | Park access, facilities that support different interests (age groups and multi-generational activities), safety and beautification enhancements, features that support health, preserve outdoor recreation | -County -Districts |
| Outdoor Equity Grants Program (OEGP) ¹ | -Call for projects odd years -November deadline | -Program operating costs -Transportation costs -Not eligible for capital projects | No match req | DAC, community planning, outdoor program goals, service learning, career pathway, and leadership opportunities, partnerships, mentoring youth | -County -SLVUSD -Districts |
| Regional Park Program (RPP) ¹ | -TBD | -Acquisition -Pre-Construction -Construction | No match req | Competitive project site, significant regional attraction, type of project, design input, employment and volunteer opportunities, partnerships or committed funding, environmental design, hours of operation, benefits and readiness, DAC, CEQA ¹¹ completeness | -County |
| Rural Recreation and Tourism Program (RRT) | -TBD | -Acquisition -Development | 0%-20% of the total project cost | Project location and significance, community engagement, operation and maintenance considerations, challenges, benefits, and readiness | -County |
| Recreational Trails Program (RTP) | -June deadline | -Acquisition -Development | At least 12% of the total project cost | Deficiency, connectivity, linkages, number of project users, project user accessibility | -County -SLVUSD -Districts |
| Statewide Park Program (SPP) ¹ | -Postponed for 2023 | -Acquisition -Development | No match req | DAC, critical lack of park space, community challenges, project benefits and readiness | -County -Districts |

¹¹ California Environmental Quality Act



Next Steps

Transportation Project Implementation Process

Timelines to construct transportation projects vary depending on the complexity of the projects. As noted in the phasing section of this Study, the schedule and implementation of projects is highly subject to availability of funding locally or through grants. The following provides greater detail on steps to advance a project such as funding, preliminary and final design, environmental review, right-of-way acquisition, permitting, and construction:

Determine lead agency for project implementation:

A lead agency may be selected based on right of way ownership, eligibility for funding opportunities, connection to intended users of the improvements, staff availability, etc. The CPMT will coordinate to determine which agency will serve best as lead for implementation and identify agencies to serve as partner or support roles. Partner and or support agencies may be those which have right of way ownership over the property proposed for improvements. For example, the County may serve as lead on a project which provides improvements to both the County and SLVUSD properties, whereas SLVUSD would provide a partner/support role.

Project scoping and cost estimating (Project initiation document, project applications, etc.):

This SLV Schools Access Study serves as project scoping and cost estimating for the improvements identified in the Highway 9 Complete Streets Plan. High complexity and/or long-term projects may need additional scoping and cost estimating.

Secure funds:

Securing funds may include applications to state and federal funding programs, set-aside funding from general funds, allocations from facility improvement budgets, etc.

Environmental review and preliminary design with outreach to stakeholders, including public outreach in accordance with CEQA:

Projects are reviewed to determine the potential to cause significant environmental impacts per state, federal, and environmental standards. Certain transportation improvements projects are exempt from environmental review, whereas other projects such as the pedestrian bridge crossing the creek ([10-MS2 Evaluate Potential Pedestrian Bridge Connection](#)) likely would need in-depth analysis, study, and coordination with permitting agencies.

Final design engineering and specifications:

Engineering plans and specifications for the project are prepared in accordance with applicable lead/support agency standards. The plans and specifications are reviewed and approved by the lead/support agencies.



Securing permits:

Environmental review and preliminary design establish if/which environmental permits are anticipated from regulatory agencies (i.e. US Fish & Wildlife Service, US Army Corps of Engineers, State Water Resources Control Board, Central Coast Regional Water Quality Control Board, California Department of Fish & Wildlife). Permitting applications are prepared and submitted concurrently during engineering plan development.

Maintenance Agreements (if needed):

Lead/partner agencies establish maintenance agreements if an agencies' maintenance responsibility extends outside of the agencies' right of way ownership.

Encroachment Permits (if needed):

If non-Caltrans entity is the lead agency on a project upon the State highway right-of-way, an encroachment permit must be obtained for all proposed activities. Encroachment permits are obtained from the Caltrans Local District Encroachment Permits Office.

Utility and other right-of-way

Right-of-way needs to construct project improvements are determined. This could include temporary easements and/or permanent right of way acquisitions. Right of Way is appraised and negotiated with affected property owners. Locations of existing utilities are coordinated with utility companies. Utility locations are evaluated if they conflict with project improvements and documented per agency processes. Conflicting utility facilities are coordinated with utility companies and relocated/adjusted before or concurrent with construction.

Award construction contract

The lead agency advertises the engineering plans and specifications for bidding. Licensed construction contractors bid a total price to construct the project. The lead agency reviews contractor bids and awards the contract to a selected contractor.

Traffic management plan during construction – notify residents of construction schedule:

Constructing some project improvements could require shifting traffic during construction. Adjacent residents and commuters are notified of anticipated changes in traffic patterns.

Construction

The construction contractor builds the project per engineering plans and specifications. The lead agency provides construction oversight. Changes to the engineering plans during construction are documented and "as-builts" are prepared.

Ongoing maintenance

Lead/support agencies perform on-going maintenance per the maintenance agreement.



Conclusion

The recommended transportation network improvements align with RTC's 2045 Regional Transportation Plan Goals and Measure D initiatives centered around an enhanced and sustainable transportation network that serves users of all modes. The implementation of prioritized improvements contributes to safe mobility along the corridor and to schools for local students, and enhanced safety for the most vulnerable roadway users including people with disabilities, youth, and senior populations. Coordination with partner agencies to implement the multimodal solutions identified in this Plan, supports more travel choices and associated reduction in greenhouse gas emissions. Through continued partnerships, implementation of improvements identified in this plan can be phased over time to improve travel and safety for the community.

The SCCRTC will coordinate with CPMT agencies, San Lorenzo Valley residents and businesses, and local organization as needed to apply or co-apply for funding resources or grant applications. Collaboration within the San Lorenzo Valley will advance strategies and opportunities to implement the infrastructure and non-infrastructure recommendations proposed in the SLV Schools Access Study. Responding to transportation challenges within the San Lorenzo Valley is an SCCRTC priority and dependent on availability of funding. Measure D funding reserved for the San Lorenzo Valley helps to maintain momentum of planning, environmental review, design, and construction, through increasing access to resources as opportunities arise.

SLV SCHOOLS Access Study



Funded by:
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