ALAMEDA COUNTY SAFE ROUTES TO SCHOOLS

# School Safety Assessment

## **Technical Memorandum**

February 2024



5280 Irene Way, Livermore, CA 94550 | Livermore Valley Joint Unified School District







METROPOLITAN TRANSPORTATION COMMISSION School Information and Existing Conditions

Arroyo Seco Elementary



# **School Information**

## Location & Enrollment

## 0

Address: 5280 Irene Way, Livermore, CA 94550

## 

Enrollment: 587

## 2

Morning Bell(s): 8:27 AM

## 9

Afternoon Bell(s): TK & Kindergarten 1:30 p.m.

**Grades 1 – 5** 2:50 p.m.

Wednesday 1:30 p.m.

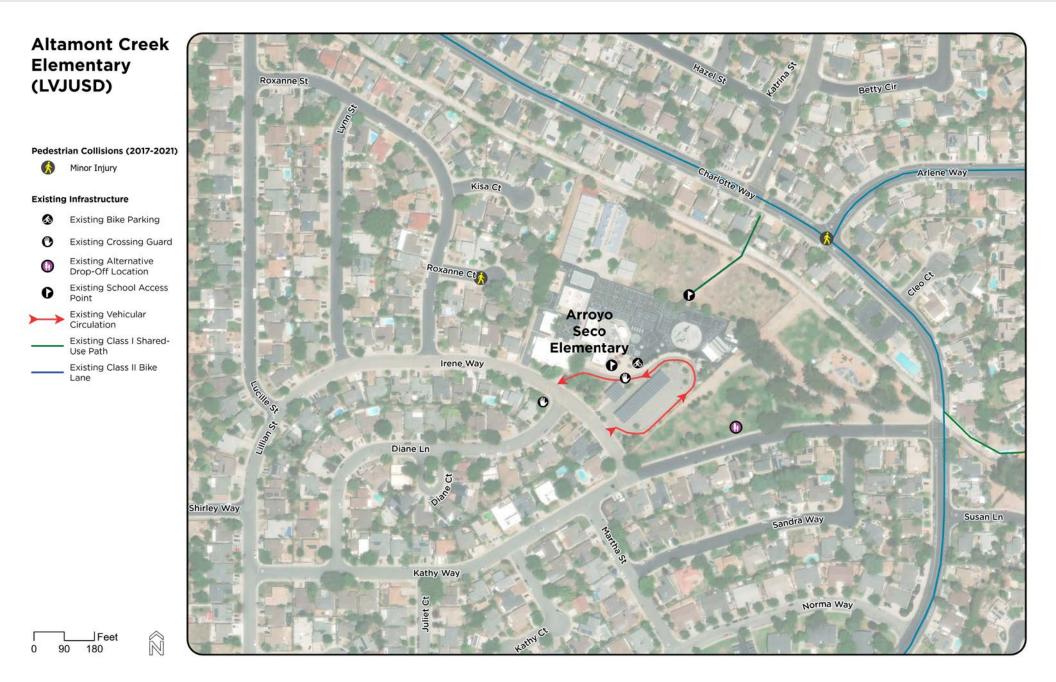
# 0

**Grade Levels:** TK – 5

School Type (neighborhood/ magnet/charter): Neighborhood



SCHOOL INFORMATION AND EXISTING CONDITIONS





# **Existing Conditions**

## Location and Transportation Overview

Arroyo Seco Elementary School is located in a residential neighborhood on the eastern side of Livermore just west of the Lawrence Livermore National Laboratory. The local street network includes many cul-de-sac and local streets, which feed into collector streets and arterials including Charlotte Way, East Avenue and Mines Road. The posted speed limit adjacent to the school is 25 mph (Table 1). Charlotte Way, a two-lane road with Class II bike lanes, provides students with access to the back entrance of the school via a short Class I multi-use path. The school has a parking lot for staff and visitors that is accessible via Irene Way. The parking lot is also used as a drop-off and pickup loop. Caregivers are expected to circulate counter clockwise along the edge of the parking lot when picking up or dropping off students. Some caregivers will park on Kathy Way or further down Irene Way and walk students to school.

The school also has a gated bike parking area east of the main office and can fit approximately 30 bikes.

Street Name	Width	Lanes	Posted Speed Limit	Traffic Volumes	Notes
Irene Way	40 feet	2 lanes	25 mph	N/A	
Kathy Way	37 feet	2 lanes	25 mph	N/A	
Charlotte Way	48 feet	2 lanes	25 mph	N/A	Class II Bike Lane

#### Table I. Street Profiles

### Collisions

Between 2017 and 2021, there were two collisions involving people walking within a quarter-mile radius of the school. An elderly woman suffered a minor injury while crossing Charlotte Way at Arlene Way and a twoyear-old suffered a minor injury from a vehicle backing up on Roxanne Court.

There were two collisions involving pedestrians crossing East Avenue just outside the quartermile radius, one of which involved a severe injury. Two other collisions occurred along North Mines Road where both victims suffered minor injuries: one involving a bicyclist at East Avenue and another involving a pedestrian at Dana Circle.

### **Community Health and** Pollution

### CalEnviroScreen 4.0

CalEnviroScreen 4.0 examines census tracts based on the combined indicators of pollution burden (e.g., exposures and environmental effects) and population characteristics (e.g., sensitive populations and socioeconomic factors). Pollution burden and population characteristics consist of a total of 21 statewide indicators ranging from low educational attainment to existing ozone levels (more information on each indicator is available from the Office of Environmental Health Hazard Assessment). Census tracts that score in the top 25th percentile are typically considered the most disadvantaged at the statewide level and have been targeted for greenhouse gas reduction funding through Senate Bill 535.

The census tract in which the school campus is located is in the 28th percentile of the CalEnviroScreen 4.0 ranking. This area experiences very little pollution and is not considered disadvantaged.

### **Healthy Places Index**

The Healthy Places Index, developed by the Public Health Alliance of Southern California, provides valuable insights into specific public policy and health considerations. The overall index is a composite of 25 individual metrics, which cover economics, education, social, transportation, healthcare access, neighborhood composition, housing and environmental factors.

The school is located in a census tract that scored in the 42nd percentile for the Healthy Places Index. This means the census tract has healthier conditions than 42 percent of other California census tracts.



Crossing guards at the drop-off loop



Gated bike parking



Drop-off loop in the school parking lot

## School Transportation Policies

The school parking lot is used as a drop-off and pick-up loop. Caregivers are expected to circulate counterclockwise along the outer edge of the parking lot. There is a gated bike parking area in front of the school. A crossing guard is stationed at the crosswalk in front of the main office to help pedestrians cross the drop-off loop travel lane. Another crossing guard is stationed at Irene Way and Diane Lane.

## **School Travel Data**

From the 2015-16 school year to the 2018-19 school year, active travel to school increased by eight percent. However, in 2019, still more than 40 percent of students got to school by car (not carpooling).

In the spring of 2023, the parent/caregiver survey asked Alameda County families about active travel to school. Caregivers said the primary reason they encouraged walking and biking to school was to promote an active and healthy lifestyle. Only 12 percent said they were not interested in walking and biking to school. Caregivers reported the primary barriers to walking or biking to school to be long travel times, poor driving behavior and the convenience of driving.

## School Engagement Activities

Between 2022 and 2023, Arroyo Seco Elementary participated in Bike to School Day and organized a Bike Train. In prior years, the school has not typically participated in any Safe Routes to School events.

# Community Input

What we heard from attendees throughout the assessment

# Summary of Process

Schools are selected for school safety assessments (SSAs) based on a number of selection criteria including collision data, Free and Reduced Price Meal data, and input from City staff or school district staff. Once schools are selected, the Safe Routes team contacts the school principal to schedule a date, and then school staff invite parents and distribute the online webmap. Once the SSA is scheduled, the project team completes an existing conditions analysis and prepares SSA materials. During the SSA, participants make observations of travel behavior during the pick-up or drop-off period and discuss challenges and opportunities related to school travel.

The SSA observations, combined with the existing conditions analysis and community input, directly inform the infrastructure and non-infrastructure recommendations.



# Key Themes

## Some of the most common themes:

Failure to Yield	Drivers do not stop for pedestrians or stop too close to the crosswalk.
Perceived Speeding	Drivers traveling too fast in school zones, failing to yield and failing to stop at stop signs.
Wide Corner Radii	Wide corners facilitate faster turns and make it easier for drivers to park at or near corners.

# Recommendations

Infrastructure and non-infrastructure recommendations near the school

# Infrastructure Recommendations

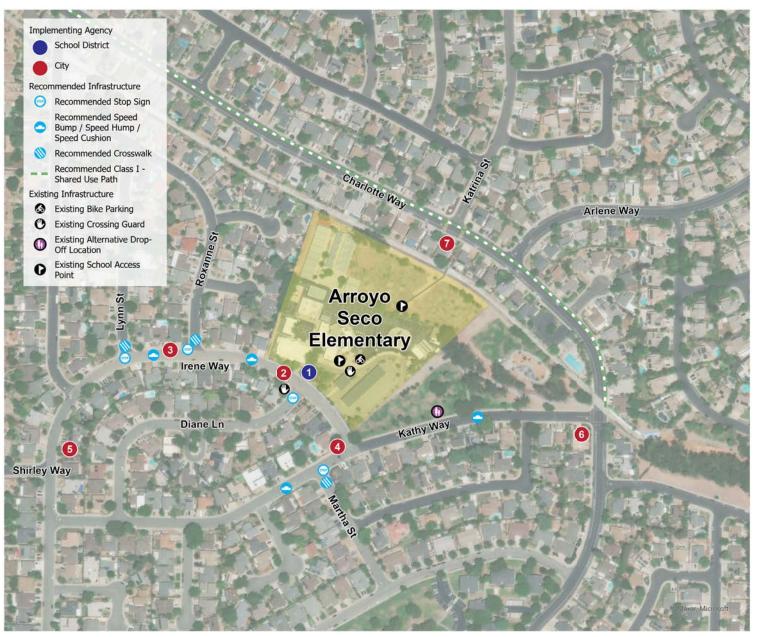
The following table describes the observations that were made during the SSA and ties each to a recommendation for improving the safety of students traveling to and from school. Agencies responsible for carrying out the recommendations are identified as the implementing agency or agencies.

#### Table 2. Infrastructure Recommendations

No.	Observation	Recommendation	Implementing Agency
1a.	Participants cited the 5-foot sidewalk along the west side of the parking lot exit as too narrow to accommodate people walking to school.	Consider narrowing the fenced area adjacent to the west side of the sidewalk to allow for a wider sidewalk on the west side.	Arroyo Seco Elementary
2a.	Drivers dropped off students at the curb ramp on the right side of the school parking lot exit driveway.	Construct curb extensions at the intersection corners of Irene Way and Diane Ln and at the northern end of the crosswalk across Irene Way in front of the school.	City of Livermore
2b.	The curb ramp on the north side does not line up with the crosswalk across Irene Way.	Align the curb ramp with the crosswalk and the sidewalk access to the school.	City of Livermore
2c.	Some drivers disregard the directions of the crossing guard at Irene Way and Diane Ln.	Install appropriate warning signs and upgrade the crosswalk across Irene Way at Diane Ln to a high-visibility.	City of Livermore
2d.	The Diane Ln approach to Irene Way does not have a stop sign.	Conduct a stop sign warrant analysis where Diane Ln approaches Irene Way.	City of Livermore
За.	Some drivers were perceived to be speeding on Irene Way.	Conduct a speed evaluation and implement appropriate traffic calming measures along Irene Way.	City of Livermore
3b.	The Roxanne St and Lynn St approaches to Irene Way do not have a stop sign.	Conduct a stop sign warrant analysis for Roxanne St and Lynn St where they approach Irene Way. Install standard marked crosswalks at the street approaches to Irene Way.	City of Livermore

# Infrastructure Recommendations, cont'd.

No.	Observation	Recommendation	Implementing Agency
4a.	Westbound drivers on Kathy Way often make fast right turns onto Irene Way.	Install curb extensions at the intersection corners of Irene Way and Kathy Way.	City of Livermore
4b.	Eastbound drivers on Kathy Way sometimes cut between crossing pedestrians when turning left onto Irene St.	Install appropriate warning signs and upgrade the crosswalks at Kathy Way at Irene Way to high- visibility crosswalks.	City of Livermore
4c.	The Martha St approach to Kathy Way is not stop- controlled.	Conduct a stop sign warrant analysis at the Martha St approach to Kathy Way. Install a standard marked crosswalk at the approach.	City of Livermore
4d.	Drivers were perceived to be speeding on Kathy Way.	Conduct a speed evaluation and install appropriate traffic calming measures along Kathy Way.	City of Livermore
5a.	Some drivers on Irene Way make fast turns onto Shirley Way.	Construct curb extensions at the intersection corners of Irene Way and Shirley Way. Install a marked crosswalk across Shirley Way.	City of Livermore
6a.	Drivers encroached the crosswalks and failed to make complete stops at Kathy Way and Charlotte Way.	Construct curb extensions, install high-visibility crosswalks and implement parking restrictions per AB 413.	City of Livermore
7a.	Many students cross Charlotte Way at Katrina St to access the multi-use path behind the school, and some drivers fail to make complete stops and encroach the crosswalks.	Install advanced stop bars at each intersection approach at Charlotte Way and Katrina St. Upgrade the existing crosswalk on the northern approach to a high-visibility crosswalk.	City of Livermore
7b.	Some drivers were perceived to be speeding on Charlotte Way.	Implement the Class I Shared-Use Path on Charlotte Way as outlined in the <u>2018 Active</u> <u>Transportation Plan</u> .	City of Livermore



#### Safe Routes to Schools Improvement Plan

Arroyo Seco Elementary

Livermore

School Safety Assessment held February 2024

#### **Improvement Detail**

- Consider narrowing the fenced area adjacent to the west side of the sidewalk to allow for a wider sidewalk on the west side.
- 2a. Construct curb extensions at all intersection corners at Irene Way/ Diane Ln and at the northem end of the crosswalk across Irene Way in front of the school.
- 2b. Align the curb ramp with the crosswalk and the sidewalk access to the school.
- Install appropriate warning signs and a high-visibility crosswalk for the crossing across Irene Way at Diane Ln.
- 2d. Conduct a stop sign warrant analysis for a stop sign were Diane Ln approaches Irene Way.
- Conduct a speed evaluation along Irene Way and implement appropriate traffic calming measures.
- 3b. Conduct a stop sign warrant analysis for Roxanne St and Lynn St where they approach Irene Way. Install standard marked crosswalks at the northern street approaches to Irene Way.
- Install curb extensions at the intersection corners of Irene Way/ Kathy Way.
- 4b. Install appropriate warning signs and upgrade the crosswalks at Kathy Way at Irene Way to high-visibility crosswalks.
- 4c. Conduct a stop sign warrant analysis at the Martha St approach to Kathy Way. Install a standard marked crosswalk at the approach.
- Conduct a speed evaluation and install appropriate traffic calming measures along Kathy Way.
- Construct curb extensions at intersection corners at Irene Way/ Shirley Way. Install a standard marked crosswalk across Shirley Way.
- Construct curb extensions, install high-visibility crosswalks, and implement parking restrictions at all approaches to Kathy Way/ Charlotte Way per AB 413.
- 7a. Install advanced stop bars at each intersection approach at Charlotte Way and Katrina St. Upgrade the existing crosswalk on the northern approach to a high-visibility crosswalk.
- 7b. Implement the Class I Shared-Use Path on Charlotte Way as outlined in the 2018 Active Transportation Plan.



The above items are recommendations only and based on Safe Routes to Schools site assessment best practices. Feasibility determination, final design, accessibility, funding, and implementation of any recommended improvements is the responsibility of the appropriate governing agency. \*\*Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards. Red curb not symbolized on map. This figure is intended only for reference, conceptual planning, and informational purposes. This figure should not be used to establish boundaries, property lines, location of objects, or to provide any other information typically needed for final design, construction or any other purpose when engineered plans are required.

RECOMMENDATIONS



A driver double parks adjacent to a red curb and crosswalk to drop off a student.



Missing stop sign, crosswalk and curb ramps at the Lynn Street approach to Irene Way.



Curb ramp misaligned with the northern end of the crosswalk across Irene Way at Diane Lane.



Driver turns right onto Irene Way from Kathy Way while a pedestrian is still in the crosswalk.



Caregivers parking on Kathy Way and walking students to school.



Students crossing Charlotte Way at Katrina Street.



Driver parked along the red curb on the south side of Charlotte Way at Katrina Street.

# Non-Infrastructure Recommendations

In addition to engineering improvements, the Alameda County Safe Routes to Schools (SR2S) Program has many encouragement and educational activities that can benefit students and the campus community at Arroyo Seco Elementary School.

The school site coordinator for Arroyo Seco Elementary is Emilio Elenes. The site coordinator can help schedule, organize and promote many of the program offerings of the Alameda County SR2S Program. The contact information for the site coordinator is below:

Emilio Elenes, eelenes@alamedacountysr2s.org

Please do not hesitate to reach out to the site coordinator if you have any questions or concerns or if you wish to move forward with additional programming activities.

#### Table 3. Non-Infrastructure Recommendations

Recommendation	Implementing Agency	
Develop Walk and Bicycle Route Maps	Arroyo Seco	
The SR2S Program can create recommended Walk and Bicycle Route Maps. These maps illustrate preferred routes to school for walking and biking and provide safety tips to encourage better travel behavior. These maps can also be used as a part of Walking School Buses (WSBs), Bicycle Trains (BTs), or other Walk and Roll to School activities. Park and Walk, WSB and BT meeting locations are also shown on these maps where appropriate.	Elementary School	
Source: alamedacountysr2s.org		
Encourage and Facilitate Carpooling	Arroyo Seco	
The SR2S Program can assist schools in connecting families with others who live nearby to increase the number of students carpooling. This can reduce congestion by reducing the number of vehicles coming to campus.	Elementary School	
Source: alamedacountysr2s.org		
Facilitate Walking School Buses and Bike Trains	Arroyo Seco	
Walking School Buses and Bike Trains are groups of students, led by parent or adult chaperones, that meet at designated locations and times to gather and walk or bike to school together. Walking School Buses and Bike Trains can be regular events, occurring daily, weekly, monthly, or in coordination with other events like International Walk and Roll to School Day or the Golden Sneaker Contest. SR2S staff can assist schools with the planning, coordination and execution of the Walking School Buses and Bike Trains. Walking and biking in groups with parental supervision can increase the visibility of these road users and reduce barriers to walking or biking for some families while making it fun and exciting for the students.	Elementary School	

Source: alamedacountysr2s.org

# Non-Infrastructure Recommendations, cont'd.

Recommendation	Implementing Agency
Participate in International Walk and Roll to School Day, Ruby Bridges Walk to School Day, the Golden Sneaker Contest and Bike to School Day	Arroyo Seco Elementary School
These are the four main countywide encouragement events that occur throughout the academic year. All schools can participate in International Walk and Roll to School Day, held in October every year. Schools can participate in the Ruby Bridges Walk to School Day which is held on November 14 each year. The Golden Sneaker Contest, held in spring, is for elementary and middle schools and is a two-week contest both within schools and across the county challenging classrooms to travel to and from school using active and shared modes. All schools can also participate in Bike to School Day, held in tandem with Bike to Work Day, which encourages schools to sponsor Energizer Stations and families to bike to school.	
Source: alamedacountysr2s.org	
Schedule Drive Your Bike These interactive workshops are great educational opportunities to teach and refresh safe walking and bicycling behavior. These workshops cover many relevant topics, from understanding traffic signals and signs to bicycle hand signals to how to safely cross the street. 150 minute programs for 5th graders are available to some schools.	Arroyo Seco Elementary School
Source: alamedacountysr2s.org	
School Zone Speed Limits	City of Livermore
California State Law AB 43 authorizes Cities by ordinance or resolution to reduce speed limits to 15 mph around school zones on all two-lane residential streets under the City's jurisdiction within 500 feet of the school upon the basis of an engineering and traffic survey.	
Daylighting	City of Livermore
In compliance with section 22500 of the California Vehicle Code, prohibit people from parking, stopping or leaving a motor vehicle unattended within 20 feet of the vehicle approach side of any marked or unmarked crosswalk or within 15 feet of any crosswalk where a curb extension is present. The City can prohibit this behavior by installing a red painted curb, curb extensions or signage.	

# Non-Infrastructure Recommendations, cont'd.

Recommendation	Implementing Agency
Repaving Plan	City of Livermore
Prioritize SR2S infrastructure improvements with the City and County repaving plan.	
Tree Canopy	City of Livermore
Prioritize adding street trees and other pedestrian-scale greening within school zones. <u>Caltrans</u> recognized street trees as traffic calming elements because they help visually narrow the street, which helps reduce vehicles travel speeds.	
No Idling in School Zone	City of Livermore
School and district staff can improve air quality around schools by promoting comprehensive "no idling" policies around schools.	

# Implementation

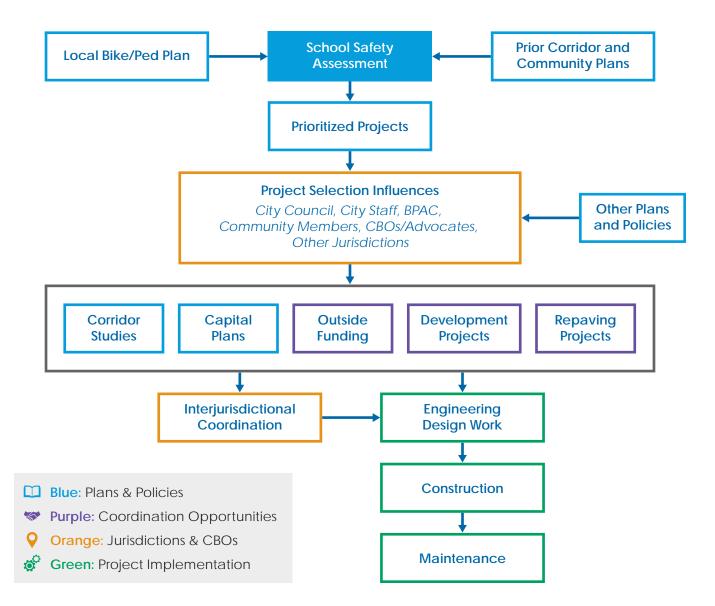
Setting schedules, securing funds, identifying alternatives and forming strong partnerships

# Project Timing

Projects can take a long time to get from "a line on a map" to being fully constructed. Limited staff time and resources may constrict how many projects can move forward at a given time and how fast those projects move. In some cases, funding for project phases (e.g., planning, engineering design and construction) is obtained separately, sometimes with years between phases.

# What Projects Move Forward Next?

Given the limited amount of staff time and budget for new projects, several factors will impact which projects move forward and when. The figure below shows the generalized development and implementation process for infrastructure projects.



# Implementation Strategies

The City of Livermore has numerous avenues to implement the proposed SR2S improvements. Based on the size, scope and priority of the recommended improvement, some may be implemented as part of regularly scheduled maintenance programs or dedicated annual funding streams, while others will require additional regional, state and federal funding.

While this SSA helps to identify the proposed improvements, the City of Livermore is responsible for prioritizing and programming projects into existing programs or obtaining grant funding for larger-scale improvements. The following descriptions highlight options for implementation that can be used based on the scale, scope and priority of the recommended improvement.

### Pavement Preservation and Rehabilitation Programs

Cities and counties regularly repave and maintain the roadway pavement. This presents a major opportunity to implement improvements at a lower overall cost due to project efficiencies. Improvements such as striping crosswalks, installing signs, painting red curbs and adding quick-build curb extensions may be combined with roadway resurfacing projects.

## **Programmed Projects**

High-priority improvements may be programmed directly as standalone projects into the City of Livermore's budget. This strategy would rely on existing funding streams and may be augmented by regional, state or federal grant funding. Collaboration with regional and local partners will be most focused on these projects.

## Development-Funded Improvements

Private developers help to construct the transportation network based on the existing standard roadway typologies. Adjusting the facilities that developers are required to construct in connection with a specific development will help address system gaps across the City of Livermore as development occurs. This strategy may be applied to high- or medium-priority projects if there is a nexus between the nearby development and improvements in and around the school site.

# **External Funding**

The proposed improvements included in this document will require funding for design (e.g., detailed engineering work) and construction. Funding for SR2S and safety infrastructure projects is available at all levels of government (local, regional, state, and federal) and from private sources. Project funding can take the form of competitive grants, formula-based allocations, tax measure-based funding, funds from private development and others. It may take one to two years to secure and access funding for implementing projects around the school. Project prioritization, therefore, is important for guiding City staff in selecting projects that will provide the most significant safety and overall community benefits.

Many competitive grants include collision history as a score factor. Some grants, including the Highway Safety Improvement Program and those from the Office of Traffic Safety, focus on responding to collision locations and other safety concerns. The following is a list of potential sources of funding for implementing SR2S projects:

## Local and Regional Funding Sources

### **Measures B and BB**

Measures B and BB are county transportation sales tax measures that provide monthly direct local distributions to local jurisdictions and transit agencies. Some of these funds are dedicated to pedestrian and bicycle projects.

Funds are programmed by the Alameda County Transportation Commission.

### **Transportation Development Act Article 3**

Transportation Development Act Article 3, or TDA 3, provides funding annually for bicycle and pedestrian projects. Two percent of TDA funds collected in the county are used for TDA 3. Metropolitan Transportation Commission (MTC) allows each county to determine how to use funds in their county. MTC requires that all projects submitted for funding be reviewed by a Bicycle Advisory Committee, and several jurisdictions in Alameda County use the Alameda County Transportation Commission Bicycle and Pedestrian Advisory Committee for this purpose.

Funds are programmed by the MTC.

### Transportation Fund for Clean Air, County Program Manager Fund

The Transportation Fund for Clean Air funds bicycle facilities including paths, lanes, routes, lockers and racks.

Funds are programmed by the Alameda County Transportation Commission.

### **One Bay Area Grant**

The One Bay Area Grant program emphasizes funding for projects within Priority Development Areas in the region that are in line with housing and land use goals. Projects that are within or provide access to these Priority Development Areas could qualify for One Bay Area Grants.

Funds are programmed by the Alameda County Transportation Commission.

### **Bicycle Facilities Grant Program**

Throughout the nine-county Bay Area, the Bicycle Facilities Grant program strives to reduce emissions from on-road vehicles and improve air quality by helping residents and commuters shift to bicycling and walking as alternatives to driving for short distances and first- and-last mile trips. The Bay Area Air Quality Management District has grant programs that fund both on-street facilities and bicycle parking facilities. Funding comes from the district's Transportation Fund for Clean Air.

Funds are programmed by the Bay Area Air Quality Management District.

### **Climate Initiatives Innovative Grants Fund**

MTC's Climate Initiatives Program promotes innovative ways to reduce greenhouse gas emissions in the Bay Area and taps federal funding for a pair of competitive grant programs. Innovative grants of \$1 million and up are used to support high-impact projects that can be replicated around the region.

Funds are programmed by the MTC.

### Impact Fees

Developer impact fees, typically tied to trip generation and traffic impacts from proposed projects, are another potential local source of funding. A developer may be required to help mitigate the overall impact of vehicular trips by paying an impact fee; the City should ensure that planning policies consider bicycle and pedestrian planning, design and construction costs to be an eligible use of these fees.

Funds are programmed by participating cities.

### Safe Routes to Schools Mini-Grant Program

In 2021, the Alameda County Transportation Commission (Alameda CTC) announced available funds for infrastructure improvements that were recommended through the Safe Routes to Schools School Safety Assessments process. The program was funded through measure B local transpiration sales tax program and Congestion Management Agency Transportation Improvement Program funds.

Funds are programmed by the Alameda County Transportation Commission.

### State and Federal Grant Programs

### California Active Transportation Program

California's Active Transportation Program funds infrastructure and programmatic projects that support the program goals of shifting trips to walking and bicycling, reducing greenhouse gas emissions and improving public health. Competitive application cycles occur every one to two years, typically in the spring or early summer. Eligible projects include construction of bicycling and walking facilities, new or expanded programmatic activities, or projects that include a combination of infrastructure and non-infrastructure components. Typically, no local match is required, though extra points are awarded to applicants who do identify matching funds.

Funds are programmed by the California Transportation Commission and MTC.

## Sustainable Transportation Planning Grants

Caltrans Sustainable Transportation Planning Grants are available to communities for planning, study and design work to identify and evaluate projects, including conducting outreach or implementing pilot projects. Communities are typically required to provide an 11.47 percent local match, but staff time or in-kind donations are eligible to be used for the match provided the required documentation is submitted.

Funds are programmed by Caltrans.

### Highway Safety Improvement Program

Caltrans offers Highway Safety Improvement Program grants every one to two years. Projects on any publicly owned road or active transportation facility are eligible, including bicycle and pedestrian improvements. The program focuses on projects that explicitly address documented safety challenges through proven countermeasures, are implementation-ready and demonstrate costeffectiveness.

Funds are programmed by Caltrans.

### Solutions for Congested Corridors Program

Funded by Senate Bill 1, the Congested Corridors Program strives to reduce congestion in highly traveled and congested roads through performance improvements that balance transportation improvements, community impacts and environmental benefits. This program can fund a wide array of improvements including bicycle facilities and pedestrian facilities. Eligible projects must be detailed in an approved corridorfocused planning document. These projects must include aspects that benefit all modes of transportation using an array of strategies that can change travel behavior, dedicate right-of-way for bikes and transit, and reduce vehicle miles traveled.

Funds are programmed by the California Transportation Commission.

### Office of Traffic Safety

Under the Fixing America's Surface Transportation (FAST) Act, five percent of Section 405 funds are dedicated to addressing non-motorized safety. These funds may be used for law enforcement training related to pedestrian and bicycle safety, enforcement campaigns and public education and awareness campaigns. Funds are programmed by the California Office of Traffic Safety.

### **Recreational Trails Program**

The Recreational Trails Program helps provide recreational trails for both motorized and nonmotorized trail use. Eligible products include trail maintenance and restoration, trailside and trailhead facilities, equipment for maintenance, new trail construction and more.

Funds are programmed by the California Department of Parks and Recreation.

### Affordable Housing and Sustainable Communities Program

The Affordable Housing and Sustainable Communities Program funds land use, housing, transportation and land preservation projects that support infill and compact development that reduces greenhouse gas emissions. Projects must fall within one of three project area types: transit-oriented development, integrated connectivity projects or rural innovation projects. Fundable activities include affordable housing developments, sustainable transportation infrastructure, transportation-related amenities and program costs.

Funds are programmed by the Strategic Growth Council and implemented by the Department of Housing and Community Development.

### **Urban Greening Grants**

Urban Greening Grants support the development of green infrastructure projects that reduce greenhouse gas emissions and provide multiple benefits. Projects must include one of three criteria, most relevantly: reduce commute vehicle miles traveled by constructing bicycle paths, bicycle lanes or pedestrian facilities that provide safe routes for travel between residences, workplaces, commercial centers and schools. Eligible projects include green streets and alleyways and nonmotorized urban trails.

Funds are programmed by the California Natural Resources Agency.

### **RAISE Grants**

The Rebuilding America Infrastructure with Sustainability and Equity (RAISE) program supports projects that improve transportation system safety, accessibility and sustainability. Eligible projects must have quantifiable environmental benefits, serve disadvantaged communities and address equity concerns in the project's design. Eligible projects range between \$5 million and \$25 million. RAISE grants can fund both planning and capital projects. The program requires a 20% local match except in rural areas. Cities should combine several Safe Routes to School improvements into one grant application.

Funds are programmed by the United States Department of Transportation.

### **CMAQ** Program

Congestion Mitigation and Air Quality Improvement (CMAQ) funding supports projects that reduce congestion and help jurisdictions meet National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter. Projects must be included in the local Metropolitan Planning Organization's transportation improvement plan.

Funds are programmed by Caltrans and the MTC.

# **Quick-Build Project Alternatives**

Many infrastructure improvements (especially pedestrian projects and intersection geometry changes) can be completed using signage, striping and other quick-build strategies. Facilities like curb extensions, medians and separated bikeways are examples of treatments that can be built with quick-build materials. These improvements can be left installed for several years with quick-build materials or used as short-term improvements until additional funding for design and construction can be secured for permanent, more expensive design installations. Constructing improvements with quick-build materials can result in more immediate safety and comfort enhancements at lower costs. Using quick-build materials also allows the City of Livermore to trial design changes before committing to long-term investments.

There are many resources available online that describe quick-build projects in more detail. The California Bicycle Coalition has a <u>guide</u> with details on how to move forward with these low-cost, high-impact project types.

# Partners

The City of Livermore is the primary, but not only, entity responsible for planning, designing and constructing walking, bicycling and rolling improvements around schools. Some of the recommended improvements included in this report may be located within the rights-of-way of other agencies, jurisdictions or private owners, such as Caltrans, East Bay Regional Park District or Livermore Valley Joint Unified School District. The City of Livermore will therefore need to coordinate with the appropriate stakeholders for planning, designing and securing funding before the implementation of these improvements begins. These partner agencies may require final approval on these projects, even if they are located within Alameda County. It will also be important to consider how to continue engagement with the school parent-teacher association and volunteers as they will be essential partners for the successful implementation of the proposed improvements.

### Arroyo Seco Elementary School

ALAMEDA COUNTY SAFE ROUTES TO SCHOOLS

# School Safety Assessment

**Technical Memorandum** 







METROPOLITAN TRANSPORTATION COMMISSION The Alameda County Safe Routes to Schools Program is a program of the Alameda County Transportation Commission (alamedactc.org) and is funded with Alameda County's local Measure BB sales tax, and regional, state and federal funds.