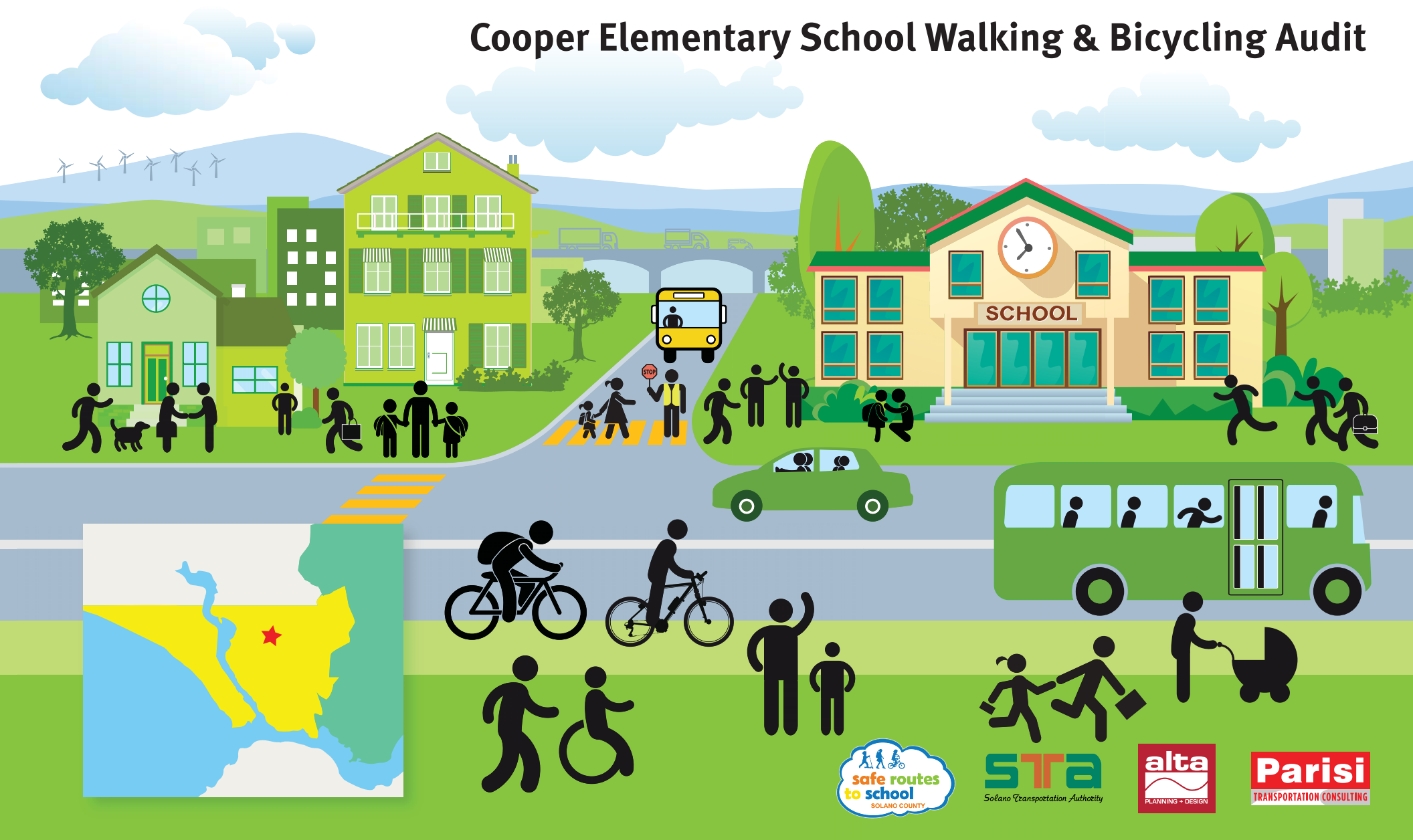


APRIL 2019

VALLEJO CITY UNIFIED SCHOOL DISTRICT

Cooper Elementary School Walking & Bicycling Audit



Cooper Elementary School Walking and Bicycling Audit

School Information



Cooper Elementary School (Cooper Elementary) is an elementary school within the Vallejo City Unified School District.

School Profile

Address: 612 Del Mar Avenue, Vallejo, CA 94589

Grades: K – 5th

Number of Students: 510

Access

Pedestrian and bicycle access is provided via the driveway entrances along Las Palmas Avenue and paved pathways leading to the interior of the school from Del Mar Avenue. There is also a gated entrance located along Tuolomne Street, approximately 450 feet north of Del Mar Avenue. This entrance is closed during school hours.

Primary vehicular access to and from the campus is provided via Las Palmas Avenue and Del Mar Avenue, two local roadways with one travel lane in each direction. Las Palmas Avenue is a north-south roadway that runs north from Del Mar Avenue to Serano Drive. There are three driveways along Las Palmas Avenue that provide access to the interior of the school.

Del Mar Avenue is an east-west roadway that runs east from Hermosa Avenue to its terminus at a cul-de-sac east of Fairgrounds Drive. Secondary vehicular access to the campus is provided via Tuolomne Street. Tuolomne Street is a north-south arterial roadway that runs from Broadway Street to Solano Avenue. One inbound driveway located approximately 150 feet north of Del Mar Avenue and one outbound driveway located

approximately 200 feet north of Del Mar Avenue serve a staff parking lot on the south western portion of the campus. An additional driveway located approximately 500 feet north of Del Mar Avenue provides staff only vehicular access to the campus.

There are three primary drop-off and pick-up locations used to access the school

→ **Driveways along Las Palmas Avenue.** Majority of drop-off and pick-up activity along this street occurs at the gated entrance located about 500 feet north of Del Mar Avenue. Vehicles will park along Las Palmas Avenue and wait for students to be released. A few drop-offs and pick-ups occur at the school parking

lot along Las Palmas Avenue. Vehicles are driven on to the campus via the inbound driveway, parents conduct drop-off / pick-ups along the one-way lane, and drive out of the lot via the outbound driveway.

→ **Pedestrian paths along Del Mar Avenue.** Vehicles will park along Del Mar Avenue and wait for their students to be released from school. Students will identify and board awaiting vehicles along the street.

→ **Gate pedestrian entrance along Tuolomne Street.** Student will leave school via the pedestrian gate located mid-block along Tuolomne Street and board awaiting vehicles parked in parking lane delineated by white striping along the east side of the Street.



Safe Routes to School (SR2S) Program Participation

The SR2S program, launched by Solano Transportation Authority (STA) in 2008, encourages students to walk and bike to school and supports these activities with educational events throughout the year.

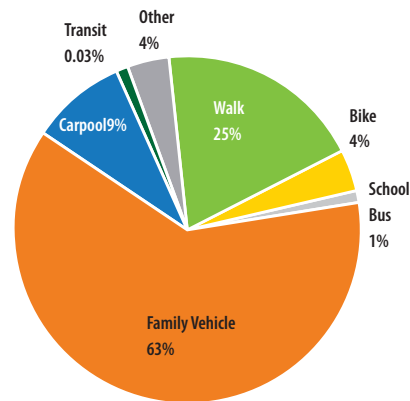
Program Activity	Encouragement					Education		Evaluation	
	Bike to School Day	Walk to School Day	Poster Contest	Walk or Wheel Day	Walking School Bus	Bike Helmet Education/ Distribution	Bike Rodeo	Safety Assembly	Fall Travel Tally Surveys
School Year	2010-11								
	2011-12								
	2012-13								•
	2013-14								
	2014-15		•			•			•
	2015-16	•	•						•
	2016-17	•	•						
	2017-18	•							
	2018-19		•						

Safe Routes to School Survey

As part of the Solano Transportation Authority's SR2S program student hand tally surveys are conducted regularly to understand the various travel modes students use to get to and from school. The travel surveys are a useful tool in measuring whether SR2S program goals are being met and identifying program resources that can be used to support walking, bicycling, taking transit, and carpooling as means of transportation to school. Surveys are generally conducted twice a year, once in the fall and once in the spring. The surveys are done over a three-day period (Tuesday, Wednesday, and Thursday). During each survey students are asked how they traveled to school that morning, and how they plan to travel back home after school.

Results from the most recent survey conducted during the 2015 to 2016 school year are shown below.

- **Approximately 66 percent of students are driven to/from school.** Fifty-seven (57) percent of students travel in vehicles carrying one student, referred to as "family vehicle" trips. Nine percent of students travel to school by carpool.
- **About 31 percent of students travel to/from school in an "active" way.** On average 20 percent of students reported traveling either to or from school by walking. On average four percent of students travel by bicycling or "other" rolling means (e.g., scooter, skateboard etc.)
- **Approximately 37 percent of students travel to/from school using a sustainable mode of travel.** In addition to the 31 percent of students walking, bicycling, and rolling to school, and nine percent of students who carpool, about one percent take the school bus or via public transit. These are the travel modes promoted by the SR2S program.



Source: Vallejo City Unified School District, N= 580 Students
Note: Percentages have been rounded and may not add up to 100%.

Walking and Bicycling Audit

A walking and bicycling audit was held on Tuesday, April 17, 2018. In attendance was the Cooper Elementary school principal, a school monitor, as well as representatives from the Solano Transportation Authority's SR2S program. The walk audit was led by Parisi Transportation Consulting Traffic Engineers with assistance from Alta Planning + Design staff.

Audit participants made observations during the afternoon period as students were picked up and/or left school for the day.

INFRASTRUCTURE OBSERVATIONS

- Tuolumne Street features wide shoulder lanes delineated by white pavement striping. The lanes are used for on-street parking. The lane along the western side of the street is used by parents as a passenger loading and unloading zone.
- There are speed humps provided along Las Palmas Avenue just south of the La Cienega Avenue and Las Palmas Avenue intersection.
- Existing crosswalks along Las Palmas Avenue, Del Mar Avenue, and Tuolumne Street are not high visibility.
- The mid-block crosswalk along Las Palmas Avenue and the crosswalk just south of La Cienega Avenue both lack ADA-compliant curb ramps (see photo 10).
- The existing red curb zones located adjacent to nearby intersections and at the school driveways feature fading paint and are not long enough to provide adequate sight lines for turning vehicles.
- Vehicles making a right-turn from La Cienega onto Tuolumne Street are not able to see pedestrians along the street due to landscaping and inadequate sight distance.

- Existing sidewalks along Tuolumne Street, Las Palmas Avenue, and Del Mar Avenue are narrow and do not adequately accommodate large groups of traveling students.

BEHAVIORAL OBSERVATIONS

- During the peak pick-up periods, on-street parking is often at capacity and vehicles are double-parked along Las Palmas Avenue, Del Mar Avenue, and Tuolumne Street. The behavior is particularly prevalent along Del Mar Avenue. This hinders through traffic movement and increases congestion along the roadways (see photo 3).
- Parents were observed calling their children to awaiting cars parked which caused students to run to the vehicles and jaywalking across the streets thereby increasing potential conflicts between students and vehicular traffic (see photo 8).
- Walk audit participants noted that there are very few students who bicycle to and from school.
- There is a popular ice cream truck that is often parked along Las Palmas Avenue that attracts students after school. Students run across the street and maneuver in between vehicles and other pedestrians to get to the truck increasing pedestrian safety hazards along the street (see photo 2).
- High travel speeds and heavy vehicular volumes along Tuolumne Street increases potential conflicts between vehicular traffic and pedestrians and bicyclists.

Observations



Walk audit participants discuss safety concerns around the school.



Students run across the street to access this ice cream truck parked along Las Palmas Avenue.



Vehicle maneuvering around double-parked vehicles along Del Mar Avenue.



Vehicle making illegal U-turn on Las Palmas Avenue.



Parked vehicles partially block crosswalk along Las Palmas Avenue while waiting for students.



Vehicles double-parked on Del Mar Avenue during afternoon pick-up.



Vehicles parked along red no parking zone on Del Mar Avenue.



Tuolomne Street and Del Mar Avenue intersection lacks left-turn signal phasing.



Vehicles conducting student loading in staff parking lot hinder egress for staff.



Existing crosswalk along Las Palmas Avenue is transverse and difficult to see, and lacks school area crossing signage and ADA-compliant curb ramps.



Bike sharrows along Sereno Drive facilitate bicycle access to and from the school.



Soltrans bus stop located along Tuolomne Street provides transit access to and from Cooper Elementary.

Safe Routes to School Improvement Recommendations

An important element of the SR2S program is providing infrastructure improvements that support and encourage safe walking and bicycling to and from school. This Walk Audit Report includes a series of recommendations for transportation infrastructure improvements around Cooper Elementary. These recommendations are based on observations made during the walking and bicycling audit, a post-audit engineering review, and a review of concerns raised by walk audit participants. The recommendations have been classified based on ease of implementation:

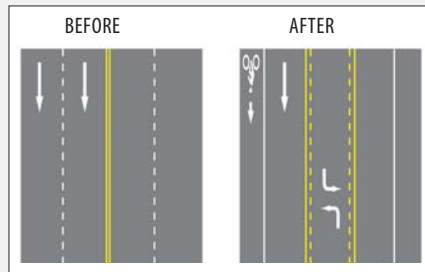
- **Short-term improvements** are lower cost improvements that can typically be implemented within a year.
- **Mid-term improvements** are improvements that may require additional planning efforts and funding and can typically be implemented within a three-year range.
- **Longer-range improvements** are substantial infrastructure improvements that would require additional funding and planning and can typically be implemented in a three to five-plus year range.

These improvements are summarized in the figure on the next page.

TOOLBOX OF POTENTIAL IMPROVEMENTS



High-visibility school crosswalks make it easier for motorists to see crossing pedestrians.



Road diets calm traffic provide space for bicyclists, and can provide pedestrian refuges.



Stop bars set back from crosswalk provide additional buffer between vehicular traffic and pedestrians.



Replace obsolete or inappropriate school area signs to keep school traffic control up to date.



Red curb paint designates areas where parking is prohibited.



Curb ramps provide access to disabled pedestrians and parents walking with strollers.



Curb extensions shorten pedestrian crossing distance and enhance visibility.



Rectangular Rapid Flash Beacons (RRFB) increase yield compliance at uncontrolled crossings.

