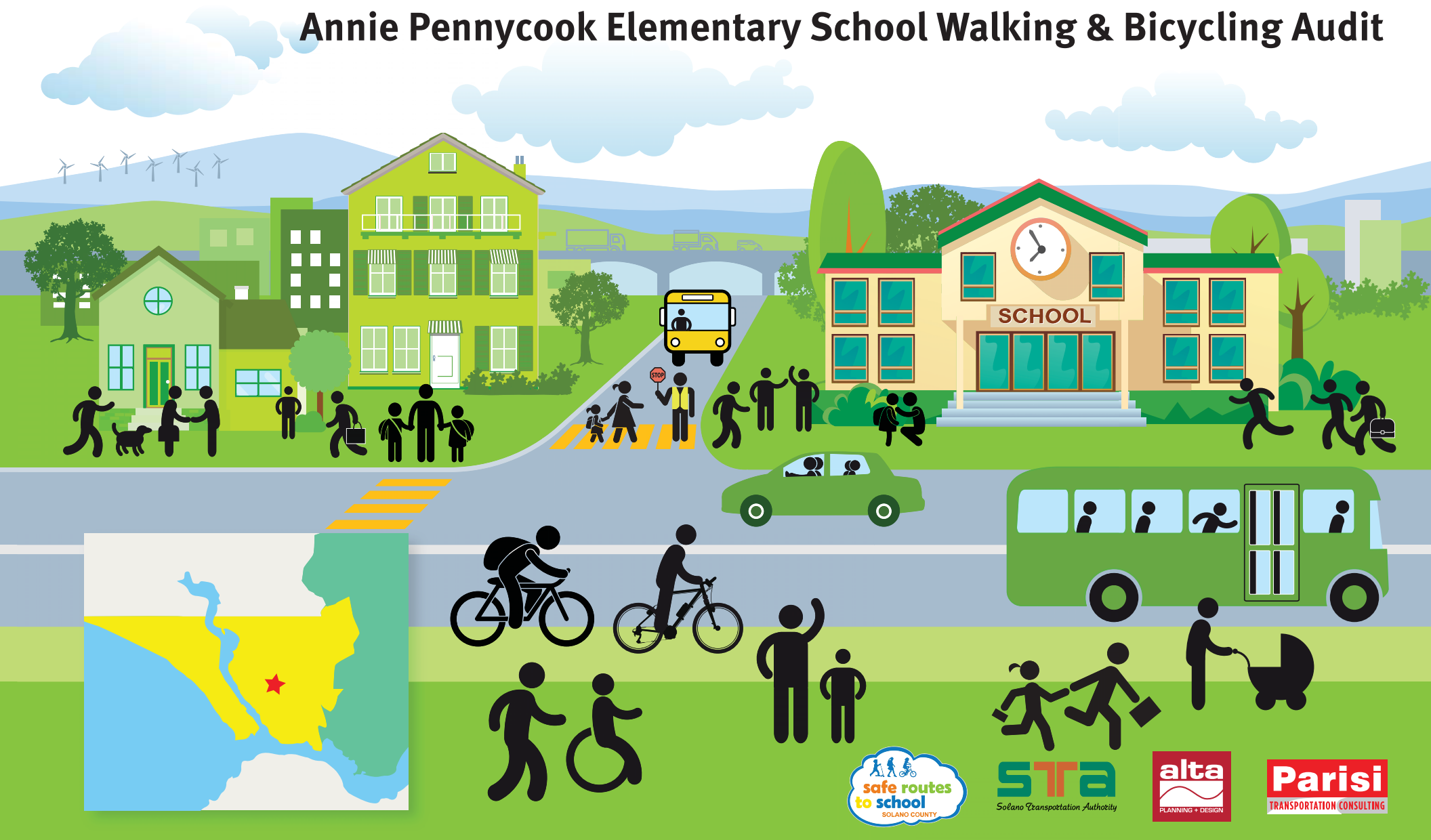


APRIL 2019

VALLEJO CITY UNIFIED SCHOOL DISTRICT

Annie Pennycook Elementary School Walking & Bicycling Audit



Annie Pennycook Elementary School Walking and Bicycling Audit

School Information



Annie Pennycook Elementary School (Pennycook) is an elementary school in the Vallejo City School District.

School Profile

Address: 3620 Fernwood Drive, Vallejo, CA 94591
Grades: K – 5th
Number of Students: 512



Access

Pedestrian and bicycle access to and from Pennycook is provided via the school entrance along Fernwood Drive. Pedestrians and bicyclists can also access campus through a gate on Baywood Drive.

Vehicular access to and from campus is provided via Fernwood Drive, a collector road running in the North-South direction.

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

- ➔ **Fernwood Drive on-street parking.** Fernwood provides the primary drop-off and pick-up zone. The school parking lot on the east side of Fernwood is used by a mix of staff and guest parking. Street parking on the west side is used during peak hours for drop-off and pick-up.
- ➔ **Baywood Drive passenger loading zone.** Supplemental access gate located on the south-west corner of campus along Baywood Drive. The area is also used as a bus loading zone.



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. Pennycook has participated in International Walk to School Day since 2013.

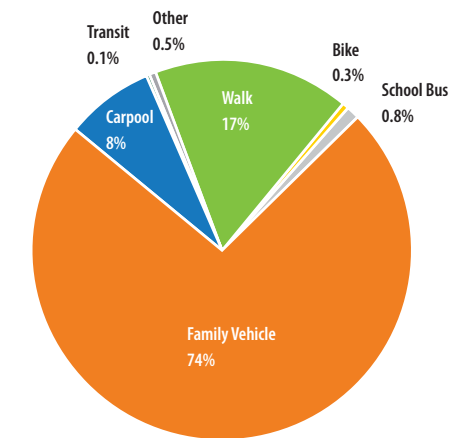
		Encouragement					Education			Evaluation	
	Program Activity	Bike to School Day	Walk to School Day	Poster Contest	Walk or Wheel Day	Walking School Bus	Bike Helmet Education/ Distribution	Bike Rodeo	Safety Assembly	Fall Travel Tally Surveys	Spring Travel Tally Surveys
School Year	2010-11									●	
	2011-12									●	
	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 surveys conducted during the 2016 to 2017 school year is shown below.

- **Approximately 81 percent of students are driven to/from school.** 74 percent of students travel in vehicles carrying a single student, referred to as "family vehicle" trips. Eight percent of students travel to school by carpool. Generally, there are about 440 students who are driven to school.
- **About 18 percent of students travel to/from school in an "active" way.** On average 17 percent of students reported traveling either to or from school by walking. About one-half percent of students travel by bicycling or "other" rolling means (e.g., scooter, skateboard etc.)
- **Approximately 26 percent of students travel to/from school using a sustainable mode of travel.** In addition to the 17 percent of students walking, bicycling, and rolling to school, and eight percent of students who carpool, less than one-half percent of student ride public transit and one percent take the school bus. These are the travel modes promoted by the SR2S program.



Source: Vallejo City Unified School District, N=584 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 Wednesday, May 2, 2018. In attendance were the Pennycook principal and the schools academic support provider. The walk audit was led by Parisi Transportation Consulting Traffic Engineers with assistance from Alta Planning + Design staff.

Audit participants made observations during the morning drop-off period as students arrived for class. Observations included driver, bicyclist, and pedestrian travel behavior as students arrived at school. A follow-up visit was conducted by Parisi staff to review afternoon after-school conditions around the school area.

INFRASTRUCTURE OBSERVATIONS

- Sidewalks around the school feature cracked and uneven paving and may present tripping hazards (see photo 5).
- Existing sidewalks along Fernwood Drive, Baywood Drive, Rollingwood Drive, and Georgia Street are narrow and do not adequately accommodate large groups of traveling students (see photo 11).
- There is limited sight distance for vehicles turning right from Fernwood Drive onto Georgia Street. Walk audit participants reported near misses from motorists unable to see children crossing Georgia Street.
- Staff parking spaces are designated by curb paint that is not easily visible for incoming vehicles (see photo 9).
- There is a supplemental parking lot located at the northeastern portion of the campus. Walk audit participants reported that motorists find it difficult to turn left in to the lot due to the high volumes of vehicles traveling southbound along Rollingwood Drive.

- The corner curb radius at the Fernwood Drive and Baywood Drive intersection is large and could be reduced using bulbouts that would shorten crossing distance.
- Curb ramps at the Rollingwood Drive and Georgia Street intersection are not ADA-compliant.
- The crosswalk along Georgia Street by Fernwood Drive is setback from the intersection (see photo 3).
- Existing crosswalk at the Fernwood Drive and Baywood Drive intersection lacks high visibility striping (see photo 12).

BEHAVIORAL OBSERVATIONS

- During the peak pick-up periods, on-street parking is often at capacity and vehicles are double-parked along Fernwood Drive (see photo 2).
- Walk audit participants reported that in the afternoon there is a popular ice cream truck that parks along the southwest corner of the Fernwood Drive and Baywood Drive intersection and 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.
- Drivers make U-turns along Fernwood Drive after stopping by the school entrance for drop-offs and pick-ups.
- High travel speeds and heavy vehicular volumes along Georgia Street increases potential conflicts between vehicular traffic and pedestrians and bicyclists.

Observations



Walk audit participants discuss safety concerns around the school.



Vehicles double-parked along Fernwood Drive with some motorists driving on the wrong side to maneuver around parked vehicles.



Crosswalk set back from the Georgia Street and Fernwood Drive intersection.



Parking lot located at the northeastern edge of the campus that could potentially be used as an alternative student drop-off location.



Cracked and uneven paving along nearby sidewalks present potential tripping hazards for pedestrians.



Passenger loading zone along Baywood Drive.



Sidewalk along Georgia Street features rolled curbs.



School bus driving along Baywood Drive.



Staff parking spaces designated by curb painting.



School bus driving along Baywood Drive.



Walking along narrow sidewalks on Rollingwood Drive is obstructed by existing posts and signage in the middle of the sidewalk.



Existing crosswalk at the Fernwood Drive and Baywood Drive intersection is transverse and difficult to see.

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 Annie Pennycook 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:

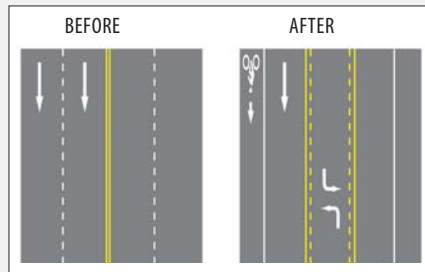
- **Short-term improvements** are lower cost improvements that can typically be implemented within a year.
- **Mid-term improvements** are improvements that may require additional planning efforts and funding and can typically be implemented within a three-year range.
- **Longer-range improvements**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

Potential Safe Routes to School Improvements at Annie Pennycook Elementary School, Vallejo



LEGEND

Short-term Improvements

- 1** Install yellow high visibility crosswalk markings
- 2** Install double-sided school crosswalk signage
- 3** Install stop bar in advance of crosswalk
- 4** Install 25' of red zone striping on both sides of crosswalk
- 5** Install "Right Turn Yields to Pedestrians" sign
- 6** Install double yellow lines to prevent U-turns
- 7** Introduce targeted parking enforcement
- 8** Consider reintroduction of student drop-offs at this location

Mid-term Improvements

- 9** Upgrade curb ramps to meet ADA compliance
- 10** Install ADA-compliant curb ramps
- 11** Reduce corner curb radii

Longer-range Improvements

- 12** Consider widening the sidewalks to better accommodate pedestrian travel

