

APRIL 2019

FAIRFIELD-SUISUN UNIFIED SCHOOL DISTRICT

# Dan O. Root Health and Wellness Academy Walking & Bicycling Audit



## Dan O. Root Health and Wellness Academy Walking and Bicycling Audit

### School Information



Dan O. Root Health and Wellness Academy (Dan O. Root) is an elementary school within the Fairfield-Suisun Unified School District. The

school will enroll seventh graders in August 2018 and eighth graders in August 2019.

### School Profile

Address: 820 Harrier Drive, Suisun City, CA 94585

Grades: K – 6th

Number of Students: 640



### Access

Pedestrian and bicycle access to and from Dan O. Root is provided via the school entrances along Harrier Drive. Pedestrians and bicyclists can pass through Samuel W. Goepp Park adjacent to campus to access the southern entrance.

Vehicular access to and from campus is provided via Harrier Drive, a minor residential street generally running in the north-south direction.

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

→ **Loading zone in school parking lot.** The 500-foot long driveway provides access to a drop-off and pick-up driveway and on-campus parking lot in the interior of the campus. During the morning drop-off period, students are driven to the interior of the campus where they are let out of their vehicles. During the afternoon pick-up period, parents drive on to the campus and wait in their cars for their children.

→ **Gated pedestrian and bicyclist access along Harrier Drive.** This entrance is open before and after school for drop-off and pick-up activities. During the morning drop-off period, parents park their vehicles along Harrier Drive and either walk their children or watch as they walk on to campus. After school, parents park vehicles along both sides of Harrier Drive as they wait for their children to come out of school.



### 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. Dan O. Root has conducted travel surveys every fall since 2010.

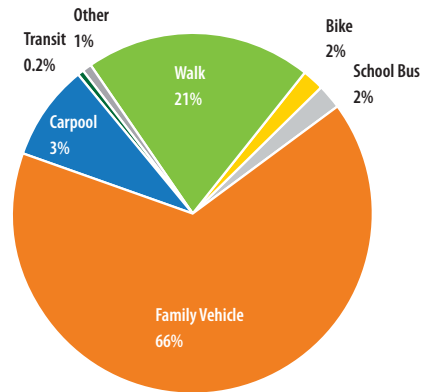
		Encouragement					Education			Evaluation	
School Year	Program Activity	Bike to School Day	Walk to School Day	Poster Contest	Walk or Wheel Day	Walking School Bus	Bike Helmet Education/ Distribution	Bike Rodeo	Safety Assembly	Fall Travel Tally Surveys	Spring Travel Tally Surveys
	2008-09										●
	2009-10										●
	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 2014 – 2015 and 2016 – 2017 school years are shown below.

- **Approximately 74 percent of students are driven to/from school.** Sixty-six (66) percent of students travel in vehicles carrying a single student, referred to as "family vehicle" trips. Nine percent of students travel to school by carpool. Generally, there are about 480 students who are driven to school.
- **About 24 percent of students travel to/from school in an "active" way.** On average 21 percent of students reported traveling either to or from school by walking. Two percent of students travel by bicycling or "other" rolling means (e.g., scooter, skateboard etc.)
- **Approximately 34 percent of students travel to/from school using a sustainable mode of travel.** In addition to the 21 percent of students walking, bicycling, and rolling to school, and nine percent of students who carpool, two percent take the school bus. Along with public transit, these are the travel modes promoted by the SR2S program.



Source: Fairfield-Suisun City Unified School District, N=640 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 24, 2018. In attendance were Dan O. Root's assistant principal and 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 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

- On-street parking creates visibility challenges for vehicles exiting the school drop-off loop (see photo 3).
- Vehicles parked adjacent to the crosswalks at the intersection of Pintail Drive and Crane Drive partially block the view of oncoming vehicles for pedestrians (see photo 6).

### BEHAVIORAL OBSERVATIONS

- Students are dropped off in the middle of the street and in bus zones.
- School staff and volunteers wave drivers forward into the loading zone. Student volunteers may participate in loading zone assistance on days with clear weather. In the loading zone, many drivers need encouragement to pull forward and make space for vehicles queued behind them. Some drivers load in disabled parking or on street when the loading zone is congested.
- Drivers will enter intersection of Pintail Drive and Harrier Drive while crossing guard is facilitating pedestrian crossings.
- Some vehicles in the school driveway drop-off students before entering the loading zone and then cut through staff and faculty driveway to exit more quickly.





## Observations



Walk audit participants discuss safety concerns around the school.



Crossing guard facilitates student crossings along Harrier Drive.



Drivers exiting the school parking lot driveway have limited sight distance for oncoming traffic due to vehicles parked along Harrier Drive.



School bus conducts drop-offs at passenger loading zone along Harrier Drive.



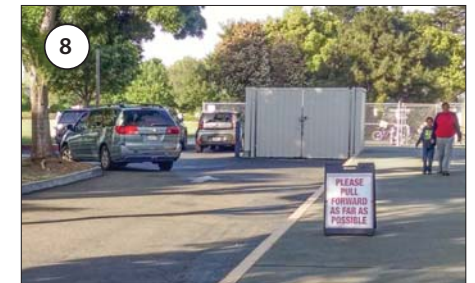
Students are dropped off at the designated loading area within the school driveway loop.



Vehicles parked adjacent to the crosswalk at Pintail Drive and Crane Drive partially block view of oncoming vehicles for pedestrians.



Walk audit participants discuss existing safety and enforcement concerns with Suisun City police officers.



Signs used to direct vehicles conducting on-site drop-offs and pickups in schools driveway loop.



Traffic congestion builds up as vehicles arrive on campus for student drop-offs.



School faculty volunteer to facilitate passenger loading and unloading activities along the schools driveway loop.



Some vehicles bypass the drop-off zone and immediately exit the school driveway through the cut through lane.



Crossing guard facilitates student crossing along Pintail Drive.

## 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 Dan O. Root Academy. 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:

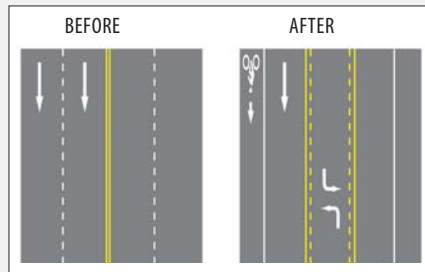
- **Short-term improvements** are lower cost improvements that can typically be implemented within a year.
- **Mid-term improvements** are improvements that may require additional planning efforts and funding and can typically be implemented within a three-year range.
- **Longer-range improvements** 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 Dan O. Root Health and Wellness Academy, Suisun City



### LEGEND

#### Short-term Improvements

- 1** Install or upgrade yellow high visibility crosswalk markings
- 2** Install double-sided school crosswalk signage
- 3** Install "No Parking 7 AM – 4 PM, M – F" Signs on both sides of approach
- 4** Install 25' of red zone striping on both sides of parking lot exit to improve sight-line
- 5** Cone off lane to force drivers through drop-off

#### Mid-term Improvements

- 6** Upgrade curb ramps to meet ADA compliance
- 7** Install ADA-compliant curb ramps
- 8** Construct bulb-out
- 9** Reduce curb radii

