



School Safety Assessment Technical Memorandum

Amador Elementary School

2100 E. Cantara Drive, Dublin, CA 94568

Dublin Unified School District

January 2019

J.M. AMADOR ELEMENTARY SCHOOL

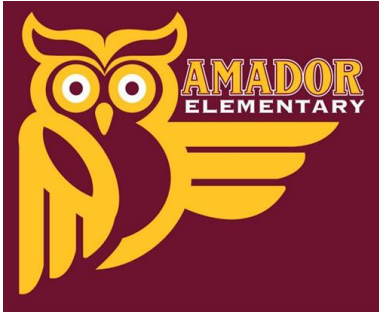
A school safety assessment was conducted at Amador Elementary School in Dublin during the afternoon dismissal on January 29, 2019. The assessment was attended by representatives from the City of Dublin, Alameda County Safe Routes to Schools staff, and Amador Elementary staff and parents.

Participants included:

- Sai Midididdi, Associate Civil Traffic Engineer, City of Dublin
- Holly Scroggins, Principal, Amador Elementary School
- Jennifer Ledet, School Site Coordinator, Alameda County SR2S Team
- Waib Shirigul, Parent, Amador Elementary School
- Hemal Parikh, Parent, Amador Elementary School
- Joe Paull, Engineer, Alameda County SR2S Team
- Otto Melara, Planner, Alameda County SR2S Team

School Information

Location & Enrollment


	Address:	2100 E. Cantara Drive Dublin, CA 94568
	Morning Bell(s):	Kindergarten: 8:35 AM Grades 1-5: 8:25 AM
	Afternoon Bell(s):	Kindergarten: 12:26 PM Grades 1-5: Mon, Tue, Wed: 2:00 PM; Thurs, Fri: 3:00 PM
	Grade Levels:	Kindergarten – 5 th Grade
	Enrollment	968
	School Type (neighborhood/ magnet/charter):	Neighborhood with enrollment boundary

Student Travel Data

Students' Proximity to School (school estimate):	<p>Less than ¼ mile (5-min. walk): 50%</p> <p>Between ¼ and ½ mile (5-10-min. walk): 30%</p> <p>Between ½ and 1 mile (10 to 20-min. walk): 3%</p> <p>Greater than 1 mile (more than 20-min. walk): 17%</p>
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Student Travel Mode Info:	<p>Recent SR2S Hand Tally Data: Spring 2017</p> <p>Walking: 40%</p> <p>Biking: 6%</p> <p>School bus: 0%</p> <p>Transit: 0%</p> <p>Carpool: 0%</p> <p>Family Vehicle: 53%</p> <p>Other: 1%</p>
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Bikes, Buses, and Drop-off/Pick-up

<p>Does the school have bike racks? What is the capacity? Is it secure bike parking?</p>	<p>The school has secure bike parking within the school's gates and can accommodate approximately 24 bicycles.</p>	
<p>On a typical day, what percentage of racks are used?</p>	<p>Only a handful of students bicycle regularly.</p>	
<p>How do school buses interact with the school?</p>	<p>One special education school bus drops off inside of the school loading loop. The school bus has a designated drop-off/pick-up zone.</p>	
<p>Is the school served by local transit agencies? Are there stops within ¼ mile?</p>		<p>Wheels Bus Routes 2 and 501 have stops within ¼ mile of the school. These transit stops are not often used by students.</p> <p>Elementary schools do not receive special school service like middle and high schools. Student transit passes are not available to elementary schools.</p>

Does the school have special pick-up/drop-off policies/procedures?		Vehicles enter the school's drop-off zone through one driveway (southern) and must exit through the school's second driveway (northern). Vehicles can also load along the Positano Parkway loading zone on the side of the school.
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Frontage Streets

Street Name	Width	Lanes	Posted Speed Limit	Traffic Volumes	Notes
Positano Parkway	56 feet	2 lanes	35 mph 25 mph School Zone	11,943 ADT (Fallon-Vinton)	Landscaped median, bike lanes
E. Cantara Drive	34 feet	2 lanes	25 mph	-	-
Central Parkway	56 feet	2 lanes	25 mph	5,682 (East of Fallon)	Bike lanes

Collision Summary 2014-2018

Radius from School	Fatal Collisions	Severe Injury Collisions	Visible Injury Collisions	Complaint of Pain Collisions	Pedestrian Collisions	Bicycle Collisions	Total Collisions
< ¼ mi	0	0	0	0	0	0	0
¼ mi – ½ mi	0	1	1	0	1	1	2
Total	0	1	1	0	1	1	2

Source: UC Berkeley – Transportation Injury Mapping System

Existing Conditions

Overview

Amador Elementary is located in Dublin on Positano Parkway; the school parking lot and main entrance is accessed from E. Cantara Drive. There are two drop-off/pick-up zones for the school. One zone is located within the school's parking lot and features a one-way curbside drop-off/pick-up area where vehicles are allowed to idle until during peak times. The group of student volunteers, called the Owl Patrol, works alongside school staff in this loading zone to help direct loading vehicles and open doors for students as they enter their cars. The second zone is located on Positano Parkway between Cantara Drive and Avanti Avenue and features a loading-only white-painted curb and installed loading-only signage. The loading zone on Positano Parkway is not staffed by the Owl Patrol or school staff.

The school does not allow students to be picked up or dropped off at the rear entrance on Positano Parkway at Avanti Avenue.

Observations

The following existing conditions were observed or reported by participants during the school safety assessment (SSA).

1. Cantara Drive/Positano Parkway/Valentano Drive

- ◆ Cantara Drive/Positano Parkway is a four-way, stop-controlled intersection.
 - All four approaches have yellow high-visibility crosswalks.
 - All approaches have an advanced limit line and 'STOP' pavement markings
- ◆ A crossing guard is stationed at this intersection during the morning and afternoon arrival/dismissal periods
 - The crossing guard is primarily positioned at the southeast corner of the intersection and crosses students along the northern and western crosswalks.
 - School staff reported few safety issues when the crossing guard is present. During the occasional times when he is unavailable due to sickness or other reasons, staff indicated that the intersection becomes more stressful/less friendly for children crossing.
 - This intersection experiences a high volume of drivers and pedestrians.
 - Most vehicles approach the intersection on Positano Parkway from the west (eastbound) and turn right (southbound) onto Cantara Drive.
 - Parents and school children walk along Cantara Drive to and from the adjacent neighborhood where many parents park their vehicles and walk their children to and from school.

- ◆ Drivers park very close to the crosswalk on the southeast corner of the intersection, on Cantara Drive. After the assessment, the City has already installed red curb in this area.
- ◆ The eastbound approach consists of one left turn lane pocket, one through lane, and a dashed Class II bicycle lane.
 - During school commute, the bicycle lane becomes a queue lane for right turning vehicles, making it difficult for any bicyclists to use the bike lane.
- ◆ Vehicle congestion typically occurs at this intersection along Positano Parkway in the eastward direction due to drivers wanting to turn right onto Cantara Drive which is backed up from vehicles waiting to enter the school's parking lot and loading area.
- ◆ Wheels Bus Route 2 bus stops are located on both sides of Positano Parkway, just east of the intersection. These stops include a bus pullout bay and covered shelter.
- ◆ Parking is prohibited on both sides of Valentano Drive between Positano Parkway and Haggerty Drive.
 - Parents were observed parking their vehicles one block north on Valentano Drive between Haggerty Drive and Forino Drive when picking up/dropping off their students. Parents would then walk to school's entrance to pick-up their students and walk back to their vehicles.
 - School parents reported that high vehicle speeds on Valentano Drive are an issue for pedestrians walking in the neighborhood.



Left: Crossing Guard instructing vehicle to stop as pedestrians cross Cantara Drive/Positano Parkway



Right: Vehicle backup on Cantara Drive causes backup on Positano Parkway at the intersection

2. Positano Parkway

- ◆ The observed segment of Positano Parkway is located along the northern edge of the school, between Cantara Drive and Avanti Avenue. This street segment features a designated school pick-up and drop-off zone between the hours of 7:00 am and 4:00 pm on school days for active loading only.

- There are no school staff present at this location.
- Two sets of “Loading Only” and “Student Drop-off” signs are installed at both ends of the loading zone.
- Signage suggests that drivers must remain in vehicle when picking up and dropping off students.
- The loading zone and the adjacent vehicle travel lane are distinguished by a solid white lane marking.
- The sidewalk along the loading curb comprises of a 6-foot-wide frontage zone with small trees spaced out every 40 feet and a 6-foot-wide travel path.
- ◆ Loading and unloading along Positano seems to run well with exception of driver’s not utilizing all of the available curb space as cars pull away from the curb.
 - As the school commute period begins, the first drivers to arrive generally utilize all available curbside space.
 - As the first group of vehicles depart, subsequent vehicles may not see available curbside loading space, creating a queue along Positano Parkway.
- ◆ This segment of Positano Parkway has Class II bike lanes, approximately 7 feet wide, landscaping between the street and the sidewalk, and a fire hydrant.
 - School officials and parents described that drivers will load/unload students even when the vehicle is outside of the loading zone. This activity occurs in the bike lane located between the loading zone and the Cantara Drive intersection.

3. E. Cantara Drive

- ◆ E. Cantara Drive is the primary location for most drop-off and pick-up activity at Amador Elementary.
 - Most of the vehicle traffic on E. Cantara Drive originates from Positano Parkway.
 - Congestion on E. Cantara Drive is caused, in part, by vehicles waiting to turn left into the school’s parking lot.
 - There are two school parking lot driveways on E. Cantara Drive. The loop flows in one direction: southern driveway is one-way in and the northern driveway one-way out with a right turn lane and a left turn lane.
- ◆ Drivers park along the east side of E. Cantara Drive and walk to the school’s entrance to pick-up their students.
 - The west side of E. Cantara Drive, abutting Sean Diamond Park, prohibits parking and has ‘NO PARKING’ signs and red painted curbs.
 - No drivers were observed parking along this portion of E. Cantara Drive.
 - Drivers that park too close to the exit driveway, on E. Cantara immediately north of the driveway, block visibility for drivers exiting the

- driveway onto E. Cantara Drive. These were typically drivers who were parking and walking to get their child(ren).
- ◆ Drivers were observed turning into the school's parking lot entrance from the northbound and southbound direction without being in a designated turning lane.
 - Nine vehicles driving in the southbound direction avoided the congested left turn pocket of approximately 40 feet and proceeded to turn left into the parking lot from the outer through lane.
 - 'KEEP CLEAR' pavement markings are installed on E. Cantara Drive at the mouth of both driveways.
 - Five vehicles driving in the northbound direction avoided the congestion on the shared through and right turn lane by driving around the queue of cars in the opposing travel lane, and turning right into the school's driveway.
 - Curbside parking is not prohibited between the driveway entrance and Spago Drive and vehicles were seen parked here.
 - Most drivers in the queue on E. Cantara Drive wait for spaces in the parking lot's loading zone to clear so they may pull forward and idle in a loading zone space.
 - Drivers that go around traffic and jump the queue, turning left from northbound travel lane on E. Cantara Drive, were observed loading students from the parking lot drive aisle.
 - ◆ On W. Cantara Drive, there is one marked transverse crosswalk at the W. Cantara Drive/Spago Drive T-intersection across N. Spago Drive and an uncontrolled crosswalk across W. Cantara Drive.
 - The crosswalk features a high-visibility school crossing sign.
 - Drivers were observed blocking the crosswalk while waiting in the queue of traffic.
 - ◆ Families and school children were observed crossing E. Cantara Drive mid-block near the school's driveways.
 - No crosswalks are available at these locations
 - Vehicle congestion and parked vehicles on E. Cantara Drive create blind spots for drivers as pedestrians cross mid-block.
 - ◆ Drivers were observed loading and unloading their students from E. Cantara Drive, without pulling to the curb, while waiting in traffic.
 - ◆ Despite the congestion witnessed on E. Cantara Drive, many drivers drove quickly along E. Cantara Drive between Spago Drive and Positano Parkway after picking up their students.

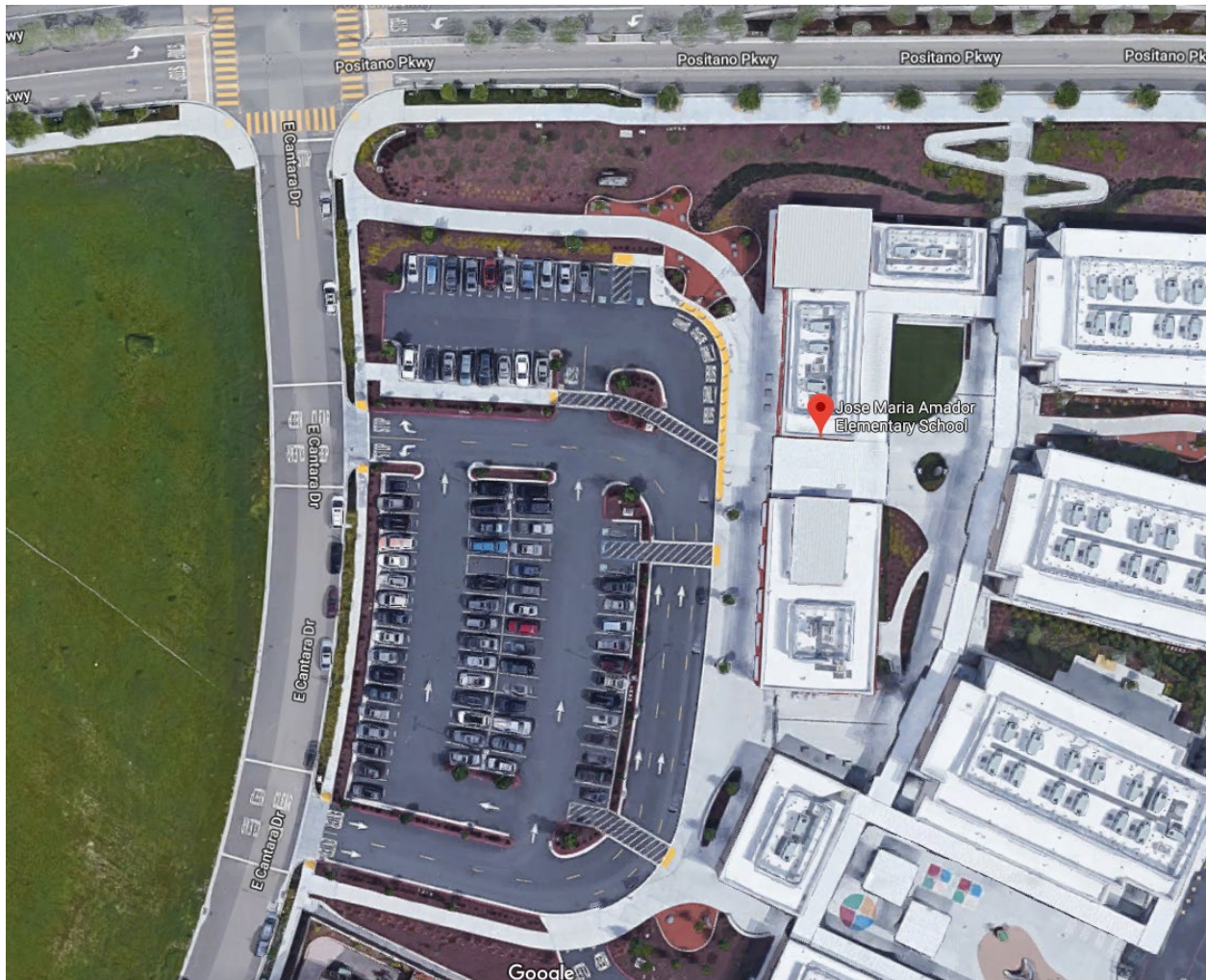


Above: Vehicles waiting to enter the school's parking lot and pick-up area along E. Cantara Drive

4. School Parking Lot/School Entrance

- ◆ The school parking lot is mostly comprised of staff parking but offers a row of visitor parking closest to the school building.
- ◆ The school parking lot has two one-way through vehicle lanes and one loading lane.
 - The loading zone is approximately 200 feet long.
 - A 100-foot-long school bus-only zone is located north of the parent loading zone.
 - Vehicles enter the parking lot from northbound and southbound E. Cantara Drive. Northbound vehicles use a through/right-turn lane while southbound vehicles use the left-turn pocket on E. Cantara Drive.
 - Owl Patrol volunteers work alongside school staff in the loading zone to help direct loading vehicles and open doors for students as they enter their cars.
- ◆ Drivers waiting in the loading zone cause back-up along E. Cantara Drive and on to Positano Parkway.
- ◆ The entrance driveway has two lanes leading to the loading zone.

- At the driveway, the curbside lane (closest to the school) is fully backed up with vehicles waiting along the loading zone.
- The second lane is clear and is used by vehicles accessing the parking lot.
 - Drivers use this lane to drive through the staff parking lot in search of an empty space.
 - Drivers also double park in the staff parking lot drive aisles until their student arrives.
 - Drivers were seen driving into opposing traffic on E. Cantara Drive in order to use the second outer driveway lane and enter the parking lot, avoiding the loading zone queue.



Above: Aerial view of the school's front parking lot, driveways, and loading zone.

5. Positano Parkway/Avanti Avenue

- ◆ Many drivers observed at this intersection turn north onto Avanti Avenue in order to drive westbound away from the school through the neighborhood.

- School staff mentioned that Forino Drive is used by vehicles driving away from the school wishing to avoid school related traffic congestion.
- ◆ There is not a high volume of pedestrian traffic at this intersection.
- ◆ This intersection has a driveway to the back of the school. Student pick- ups or drop-offs are restricted here.

Recommendations

Engineering Recommendations

Recommendations to improve infrastructure or operations surrounding Amador Elementary School can be seen on the conceptual improvement plan found on the following page.

Policy & Program Recommendations

The Alameda Safe Routes to Schools Program, in addition to engineering improvements, has many encouragement and educational activities that can benefit students and campus community at Amador Elementary.

The School Site Coordinator for Amador Elementary is Jennifer Ledet. The site coordinator can help schedule, organize, and promote many of the program offerings of Alameda SR2S. The contact information for the Site Coordinator is below:

Jennifer Ledet, jledet@alamedacountysr2s.org

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

Programs

The following improvements are recommendations for policy and program implementation at Amador Elementary School to increase safety and active commutes to school.

- ◆ Develop Walk and Bicycle Route Maps
 - The City of Dublin has developed walking and bicycle route maps to schools for Amador Elementary. These maps should be distributed to help encourage more students to walk and bike and encourage them to use preferred routes.
- ◆ Encourage and Help Facilitate Carpooling
 - The SR2S Program can assist schools in working with parents to connect them with other families who live nearby to increase the number of students carpooling. This can reduce congestion by reducing the number of vehicles coming to campus.
- ◆ Facilitate Walking School Buses and Bicycle Trains
 - Walking School Buses (WSBs) and Bicycle Trains (BTs) are groups of students, led by parent chaperone(s), that meet at designated locations and times to gather and walk and/or bike to school together. WSBs and BTs can be regular events, occurring daily, weekly, or monthly or occur in coordination with other events like International Walk and Roll to School Day or the Golden Sneaker Contest. These can also be coordinated with Amador Elementary's existing Monthly Walk and Roll

to School Days. SR2S staff can assist schools with the planning, coordination, and execution of the WSBs and BTs. Walking and biking in groups with parental supervision can not only increase the visibility of these road users, but also can reduce barriers to walking or biking for some families while making it fun and exciting for the students.

- Amador Elementary currently has regular Walk and Roll events, but no formalized WSB or BT.
- ◆ Schedule Pedestrian Rodeos/Bicycle Rodeos
 - These interactive rodeos/workshops are great educational opportunities to teach and refresh safe walking and bicycling behavior. These workshops cover a wide range of relevant topics from understanding traffic signals and signs, to bicycle hand signals, to how to safely cross the street. Pedestrian Safety Rodeos and Bicycle Safety Rodeos are geared towards elementary school students.
- ◆ Participate in International Walk and Roll to School Day (IRW2SD), the Golden Sneaker Contest (GSC), and Bike to School Day (B2SD)
 - These are the three 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. 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/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 students and families to bike to school.
- ◆ Start a Rolling Drop-off/Student Valet Program
 - A rolling drop-off program at Amador Elementary can improve the safety and efficiency of drop-off operations within the drop off loop and around campus. This program can build on the existing Owl Patrol. Students and staff/parent volunteers encourage cars to pull forward and all the way to curb, while expediting drop-off by opening doors for students and ushering them out of their cars. Students do not direct traffic and never step off from the curb.
 - This program can be supplemented with appropriate signs (“Please pull forward,” etc.) and pavement markings.
 - The SR2S Program can provide assistance to Amador Elementary setting up this program. The program can work with school staff to help develop the system and can create flyers and other collateral to introduce and educate the school community about the system.

Safe Routes to Schools Improvement Plan
Amador Elementary School
Dublin

Site Assessment held January 2019

- 1**Haggerty Drive/Valentano Drive**
 - Install paint-and-post curb extensions along Valentano Drive to reduce crossing distance and increase pedestrian visibility
 - Upgrade the two existing transverse crosswalks across Haggerty Drive to yellow high visibility crosswalks. Install School Assembly D signs on Haggerty Drive
- 2**Positano Parkway/Valentano Drive/E. Cantara Drive**
 - Install bicycle intersection crossing marking on Positano Parkway through the intersection
- 3**E. Cantara Drive**
 - Prohibit parking between the north school driveway and Positano Parkway. At the two locations indicated, install 20 feet of red curb around the school's driveway to increase visibility for turning vehicles and pedestrians
 - Extend the southbound left turning pocket to span the distance between the two school driveways
- 4**E. Cantara Drive/N. Spago Drive**
 - Install advance yield markings around the northern crosswalk
 - Install an advance stop line before the N. Spago Drive crosswalk
 - Install appropriate red curb/parking restriction signage at this intersection**
- 5**Positano Parkway/Avanti Avenue**
 - Upgrade existing transverse crosswalk markings to high visibility crosswalks
 - Restripe advance stop markings before the decorative pavement at all approaches
- 6**La Strada Drive (Diamond Park frontage)**
 - During pick-up and drop-off times, (7-9AM and 2-4PM) restrict parking to 20 minutes and encourage use of this space as a park and walk location for families
- 7**School Parking Lots & Driveways**
 - At the northern exit driveway, install a CA-MUTCD R61-19 Turn Instruction sign to accompany the existing pavement markings
 - In the entry aisle, during pick-up and drop-off, cone off the left turn into the parking lot to discourage queuing and waiting within the parking area
 - At the southern entry driveway, place delineators at the entrance to channelize the two entry movements into their own lanes
 - Inside the loop, restripe the drop-off lane's outer edge line as a solid white line
 - To increase efficiency within the drop-off loop, initiate a rolling drop-off/student valet. More details about this programmatic recommendation can be found in the Programs section of the attached technical memo

