

# School Safety Assessment Technical Memorandum

# LYDIKSEN ELEMENTARY SCHOOL

7700 Highland Oaks Drive, Pleasanton, CA 94588

Pleasanton Unified School District

February 2019

# LYDIKSEN ELEMENTARY SCHOOL

A school safety assessment was conducted at Lydiksen Elementary School in Pleasanton during the morning arrival on February 28, 2019. The assessment was attended by representatives from the City of Pleasanton, Alameda County Safe Routes to Schools staff, and two staff and parents.

### Participants included:

- Mark Candland, Engineering Technician III, City of Pleasanton
- Jacob Berg, Principal, Lydiksen Elementary School
- Liz Lyons, Vice Principal, Lydiksen Elementary School
- Leslie Lara-Enriquez, Alameda County SR2S Team
- Aleida Andrino-Chavez, Alameda County SR2S Team
- Carlos Valadao, Engineer, Alameda County SR2S Team
- Otto Melara, Planner, Alameda County SR2S Team

# **School Information**

#### **Location & Enrollment**

	Address:	7700 Highland Oaks Drive	
		Pleasanton, CA 94588	
	Morning Bell(s):	TK-Kindergarten:	
		8:20 AM (early arrival); 9:35 AM (late arrival); Wed 9:20 AM	
		Grade 1: 8:20 AM (early arrival); 9:05 AM (late arrival); Wed 9:20 AM	
903		Grades 2-5: 8:20 AM; Wed 9:20 AM	
LYDIKSEN	Afternoon Bell(s):	Kindergarten: 12:10 PM (early arrival); 1:25 PM (late arrival); Wed 12:40 PM	
		Grade 1: 2:00 PM (early arrival); 2:55 PM (late arrival); Wed 2:55 PM	
		Grades 2-5: 2:55 PM	
	Grade Levels:	TK-5	
	Enrollment	666	
	School Type (neighborhood/ magnet/charter):	School has enrollment boundary	

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# **Student Travel Data**

Students' Proximity to	Less than ¼ mile (5-min. walk): 30%		
School (school estimate):	Between ¼ and ½ mile (5-10-min. walk): 30%		
	Between $\frac{1}{2}$ and 1 mile (10 to 20-min. walk): 20%		
	Greater than 1 mile (more than 20-min. walk): 20%		

Student Travel Mode Info:	School Estimate:			
	Walking: 20%			
	Biking: 10%			
	School Bus: 5%			
	Transit: 0%			
	Carpool: 20%			
	Family Vehicle: 45%			
	Other: 0%			

Recent Hand Tally data is not available for Lydiksen Elementary.

# Bikes, Buses, and Drop-off/Pick-up

Does the school have bike racks? What is the capacity? Is it secure bike parking?

Yes, two bike racks are located at the school's main entrance. The racks have the capacity for approximately 24 bikes.

How do school buses interact with the school?

There is a school loading bus loading zone within the main entrance pick-up and dropoff loop.

Is the school served by transit agencies? Are there stops within ¼ mile?	N/A	No
Does the school have special pick-up/drop-off policies/procedures?		Yes - vehicles are not allowed to park inside of the main loading loop and can only actively load. A student and staff patrol assist with vehicle flow and ensure that the main loading loop is constantly moving.

# **Frontage Streets**

Street Name	Width	Lanes	Posted Speed Limit	Average Daily Traffic (ADT)**	Notes
Highland				West of Drywood	
Oaks Drive	40 feet	2 lanes	25 mph	1,082 (2014)	-
Sandalwood Drive*	35 feet	2 lanes	25mph	-	-
Foothill				At Highland Oaks	Bike
Road	48 feet	2 lanes	45 mph	9,174 (2012)	lanes
Muirwood Drive	40 feet	2 lanes	25 mph	-	-

<sup>\*</sup>No posted speed limit sign on Sandalwood Drive between Highland Oaks Drive and Muirwood Drive.

# Bicycle- and Pedestrian-Involved Collision Summary 2013-2017

Radius from School	Fatal Collisions	Severe Injury Collisions	Injury	Complaint of Pain Collisions	Pedestrian Collisions	Bicycle Collisions	Total Collisions
< 1⁄4 mi	0	0	0	0	0	0	0
½ mi - ½ mi	0	0	3	1	0	4	4
Total	0	0	3	1	0	4	4

Source: UC Berkeley – Transportation Injury Mapping System, Safe Transportation Research and Education Center, University of California, Berkeley, 2019

# **Existing Conditions**

#### Overview

Lydiksen Elementary School is located in a suburban setting and is surrounded by single family homes and local roads. The school's main entrance is located on Highland Oaks Drive and features a curbside loading zone loop. Drop-off and pick-up activity occurs on the loop on Highland Oaks Drive and in the back of the school on Sandalwood Drive. The school is located two blocks away from Foothill Road, a major arterial that runs north-south parallel to Interstate 680.

#### Observations

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

- 1. Foothill Road and Highland Oaks Drive
- Foothill Road is a major arterial corridor that feeds much of the school's vehicle traffic. This segment of Foothill Road has one travel lane in each direction, Class II bike lanes, and a posted speed limit of 45 miles per hour.
- The intersection of Foothill Road and Highland Oaks Drive is one-way stop controlled on the minor (westbound) approach.
  - Approximately 200 feet south of the intersection, the northbound Class
     II bike lane is dropped and becomes a right-turn lane.
  - Both corners consist of wide curb radii, which allow drivers to maintain a higher speed when making turns.
- The intersection has three approaches and includes an uncontrolled transverse yellow crosswalk across the south approach of Foothill Road. The crosswalk across the east approach is also transverse yellow and is angled out from the diagonal corner curb ramps. No advance stop bar is present.
  - Highland Oaks Drive has a small planted median at the intersection. The median includes an approximately three-foot tall juniper bush. The noses of the median extend into the crosswalk approximately two feet.
  - Drivers making a right turn onto Foothill Road were observed stopping over the crosswalk to have a better view of northbound Foothill Road traffic before making the right turn.
  - Although a crosswalk is present across Foothill Road, no sidewalk exists along the west side of Foothill Road. Beyond the Class II bike lane, the road's unpaved shoulder consists of dirt, foliage, and a property fence approximately 15 feet away from the edge of the pavement.
- Most drivers traveling through the intersection were observed making a right turn onto Highland Oaks Drive from the northbound approach on Foothill Road.

 Drivers turning left onto Highland Oaks Drive from southbound Foothill Road experienced a queue at the left turn pocket.



Above: The intersection of Foothill Road and Highland Oaks Drive



Above: A planted median on Highland Oaks Drive encroaches in the crosswalk

# 2. Highland Oaks Drive/Treewood Court

- The intersection of Highland Oaks Drive and Treewood Court has substantial vehicle, bicycle, and pedestrian activity during the school commute period
  - o Drivers approaching the school from Foothill Road begin to queue at this intersection as they wait to enter the drop-off loop.
  - A crossing guard is positioned on the northeast corner of the intersection to assist with students crossing either crosswalk.
  - Students on bicycles were observed riding from Driftwood Way onto Highland Oaks Drive to the front of the school. Families were also seen walking to school from Driftwood Way.
- There is a white painted curb along the school between the front parking lot driveway and Treewood Court. Posted signage indicates that no parking is permitted between 7:00 am and 9:00 am, and 1:00 pm and 3:00 pm on school days.
  - Drivers queue along this curb during drop-off and pick-up times before entering the front parking lot loading loop. Most students do not exit their vehicle in this area.
  - Drivers were observed driving around the queue and dropping off students on the curb adjacent to the grassy area in front of the school on Highland Oaks Drive.
- Children were observed walking and biking to school from Driftwood Way onto Highland Oaks Drive.
  - Most children on bicycles were observed riding on the sidewalk along Driftwood Way and Highland Oaks Drive.
- The uncontrolled crossing of Highland Oaks Drive at Treewood Court is one of the few marked crosswalks present across Highland Oaks Drive adjacent to the school.

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- A crossing guard stationed on the northeast corner of the intersection assists students crossing Treewood Court and Highland Oaks Drive. However, helping students cross Highland Oaks Drive is more critical given the volume of drivers passing through and the fact that it is an uncontrolled crossing.
- The crosswalks at this intersection have been updated to high visibility ladder crosswalks accompanied by a "Yield to Pedestrian" paddle signs located on the street's centerline.
- The crosswalk across Highland Oaks Drive does not align with the single curb ramp on the northwest corner.
- Students who are dropped off along the westbound curb of Highland Oaks Drive (side opposite of school) have been instructed to use the midblock crosswalk at the intersection of Treewood Court and Highland Oaks Drive with the assistance of the crossing guard.
  - Some students and/or parents did not follow this protocol and proceeded to cross the street midblock in front of the school given that the crossing at Treewood Court requires a longer walking distance.



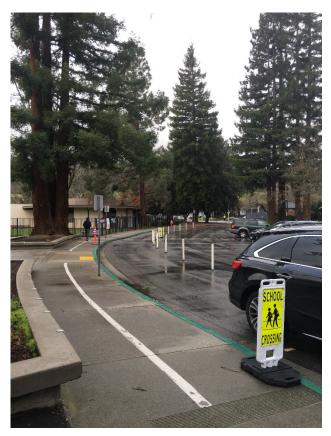
Above: Vehicle queue along Highland Oaks Drive prior to entering the main drop-off and pick-up loop in front of the school

# 3. Front of School (Highland Oaks Drive)

- The school's main vehicle entrance is located on Highland Oaks Drive and features a curbside loading zone loop and roughly 15 parking stalls for staff, visitors, and vehicles with ADA placards.
  - A bus only zone is painted on the asphalt towards the end of the loading loop.
  - Drivers must enter the front entrance loop at the west driveway and exit at the east driveway.
  - The exit driveway has two painted turn lanes, one for left turning drivers and one for right turning drivers. The paint is faded and could be refreshed. An "Exit Only" sign is posted at the driveway facing Highland Oaks Drive in order to deter drivers from entering in the opposing direction.
    - Exiting left-turning vehicles experience low visibility from loading vehicles parked along Highland Oaks Drive to the left of the exit driveway.
    - One vehicle length of curb on both sides of the exit driveway is painted red, helping drivers with visibility issues. However, leftturning vehicles were observed experiencing low visibility due to the loading vehicles parked along Highland Oaks Drive to the left of the exit driveway.
  - During drop-off and pick-up times, the loading zone is managed by school staff and student volunteers to help with the flow of drivers.

# 4. Highland Oaks Drive/Capewood Place

- Fast vehicle speeds and unsafe turning movements were observed along Highland Oaks Drive, particularly in front of Capewood Place cul-de-sac.
  - Speeding along Highland Oaks Drive was noted as an issue from school staff.
  - o Many drivers make U-turns on Highland Oaks Drive at the cul-de-sac.
- There are no crosswalks directly in front of the school across Highland Oaks Drive. Many students and families were witnessed crossing midblock after parking on westbound Highland Oaks Drive.
- There is no painted crosswalk across Capewood Place on Highland Oaks Drive. The crossing distance for pedestrians at this location is approximately 86 feet.



Above: The drop-off/pick-up loop in front of the school's entrance is managed as an active loading area during peak times. It is also staffed by a student and staff patrol.

# 5. Drywood Street/Highland Oaks Drive

- The T-intersection of Highland Oaks Drive and Drywood Street is an all-way stop-controlled intersection.
  - The intersection includes standard transverse crosswalks across two of the three approaches. Each crosswalk is met with diagonal ADA curb ramps at the corner.
    - The east approach of the intersection does not include a marked crosswalk across Highland Oaks Drive. A stop bar is present at this location for westbound vehicles. Vehicles were observed not fully stopping at the stop sign at this approach.
- A crossing guard is positioned on the northwest corner of this intersection.
   The crossing guard is able to assist students crossing both Highland Oaks
   Drive and Drywood Street.
  - Many student pedestrians and bicyclists were observed traveling on Drywood Street.

• Similar to other parts to Highland Oaks Drive, fast vehicle speeds were witnessed approaching this location.

# 6. Sandalwood Drive (Gate Entrance)

- Sandalwood Drive, behind the school, features a curbside loading zone and a
  pedestrian only gate entrance. The gate allows students to use a dirt path to
  cross a large grass field and enter the school from the back.
  - o The path across the grass field is adjacent to the fence line.
  - School staff open the gate at 8:05am to allow students to enter. The school keeps the gate closed during non-pick-up or drop-off times.
- "SLOW SCHOOL XING" pavement markings are installed along Sandalwood Drive.
- The corner of Sandalwood Drive and Highland Oaks Drive has a high visibility ladder crosswalk across Sandalwood Drive.
- The drop-off operations observed on Sandalwood Drive were calm and little conflict was experienced at this location.

# Recommendations

# **Engineering Recommendations**

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

# **Policy & Program Recommendations**

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

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

Jennifer Holmes-Ledet, <u>iledet@alamedacountysr2s.org</u>

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.

### **Programs**

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

- Develop Walk and Bicycle Route Maps
  - The SR2S Program can create recommended Walk and Bicycle Route Maps. These maps illustrate preferred routes to school for walking and biking. Maps also 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.
- 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/adult 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. 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 can reduce barriers to walking or biking for some families while making it fun and exciting for the students.

- 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. Cocoa for Carpools, held in the winter, is a fun event for high schools that rewards carpoolers with free hot chocolate when they arrive to school. 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.



# Safe Routes to Schools Improvement Plan

# Lydiksen Elementary School Pleasanton

Site Assessment held February 2019

### Foothill Road/Highland Oaks Drive

- Install paint and post curb extensions at the two eastern corners
- Paint green bicycle conflict markings at the northern approach
   Upgrade the two existing yellow transverse crosswalks to high visibility crosswalks
- Install advance yield pavement markings on Foothill Road Trim the landscaping in the median on Highland Oaks Drive to improve visibility in the intersection
  - Install CA-MUTCD R10-15 "Turning Vehicles Yield Here to
- Pedestrians" sign for westbound right turning vehicles

# **Highland Oaks Drive/Treewood Court**

- At the northwest corner, consider building a second curb ramp to better serve the crosswalk across Highland Oaks Drive
- Install a paint and post curb extension at the northeast corner Install CA-MUTCD School Assembly B signs and advance yield
- markings at both crosswalks
- Install appropriate red curb/parking restriction signage at this intersection\*\*

### **Highland Oaks Drive**

- Install a high visibility crosswalk across Capewood Place
   Install appropriate red curb/parking restriction signage at this intersection\*\*

# **Highland Oaks Drive/Drywood Street**

- Upgrade the two existing crosswalks to high visibility crosswalks
- Install a paint and post curb extension at the southwest corner
   Install appropriate red curb/parking restriction signage at this intersection\*\*

**Drop-off Loop Exit Driveway**- Consider closing off the left turn exit lane and restricting left turns out of the drop-off and pick-up area









Improvements not to scale