



School Safety Assessment Technical Memorandum

Greenleaf Elementary

6328 E 17th Street, Oakland, CA 94621

Oakland Unified School District

December 2022



The Alameda County Safe Routes to Schools Program is a program of the Alameda County Transportation Commission (alamedactc.org) and is funded with Alameda County's local sales tax Measure B, regional, state and federal funds.

Greenleaf Elementary School


A school safety assessment was conducted at Greenleaf Elementary School in Oakland during the morning arrival on Tuesday, December 13th. The assessment was attended by representatives from the City of Oakland, Alameda County Safe Routes to Schools staff, and Greenleaf Elementary staff and parents.

Participants included:

- Lucas Woodward, Engineer Oakland Department of Transportation
- Annika Rudback, Principal Greenleaf Elementary School
- Alejandra Gonzalez, Safe Passages, Greenleaf Elementary School
- Alejandra Espinoza, Safe Passages, Greenleaf Elementary School
- Carmen Lopez, Safe Passages, Greenleaf Elementary School
- Bianca Pelayo, Safe Passages, Greenleaf Elementary School
- Mario Valadez, School Site Coordinator, Alameda County SR2S team
- Valerie Haines, Engineer, Alameda County SR2S team
- Ben Frazier, Planner, Alameda County SR2S team
- Jesús Contreras, Planner, Alameda County SR2S team
- One school parent

School Information

Location & Enrollment


	Address:	6328 E 17 th Street, Oakland, CA, 94804
	Morning Bell(s):	8:45 am
	Afternoon Bell(s):	TK-5 <ul style="list-style-type: none">• 2:50 pm 6-8 <ul style="list-style-type: none">• 3:30 pm
	Grade Levels:	TK-8
	Enrollment:	639
	School Type (neighborhood/magnet/charter):	Neighborhood

Student Travel Data

Students' Proximity to School (school estimate):	<p>Less than ¼ mile (5-min. walk): 20%</p> <p>Between ¼ and ½ mile (5-10-min. walk): 60%</p> <p>Between ½ and 1 mile (10 to 20-min. walk): 15%</p> <p>Greater than 1 mile (more than 20-min. walk): 5%</p>
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Student Travel Mode Info:	School Estimate:	Recent SR2S Hand Tally Data: Spring 2019
	Walking: 30%	Walking: 25%
	Biking: 1%	Biking: 4%
	School bus: 0%	School bus: 4%
	Transit: 1%	Transit: 3%
	Carpool: 3%	Carpool: 10%
	Family Vehicle: 65%	Family Vehicle: 53%
		Other: 2%

Buses and Drop-off/Pick-up

Do local transit agencies serve the school? Are there stops within ¼ mile?	 <p>There are two bus stops within ¼ mile of the school.</p> <ul style="list-style-type: none"> • Seminary Ave and E 17th St • 63rd Ave and International Blvd <p>Students do not usually arrive by transit bus to campus.</p>
Does the school have special pick-up/drop-off policies/ procedures?	<p>The school Safety Patrol Team organizes a drop-off loop in front of the school's main entrance and helps students cross at E 17th St/62nd Ave.</p>

Note: Greenleaf Elementary is not served by school buses.

Street Profiles

Street Name	Width	Lanes	Posted Speed Limit	Notes
E 17 th Street	30 feet	1 lane	25 mph	One-way southbound
62 nd Avenue	30 feet	2 lanes	25 mph	
64 th Avenue	30 feet	2 lanes	25 mph	

Pedestrian- and Bicycle-Involved Collision Summary 2016-2020

The collision summary table shows all bicycle- and pedestrian-involved collisions within one-half mile of the school. These collisions may or may not be school-related travel.

Radius from School	Total Collisions	Fatal Collisions	Severe Injury Collisions	Visible Injury Collisions	Complaint of Pain Collisions	Pedestrian Collisions	Bicycle Collisions
< ¼ mi	28	1	2	5	20	22	6
¼ mi – ½ mi	48	0	7	6	35	34	14
Total	76	1	9	11	55	56	20

Source: UC Berkeley – Transportation Injury Mapping System, Safe Transportation Research and Education Center, University of California, Berkeley, 2021

Community Health and Demographics (Data from the census tract of school site)

Percent of Students Eligible for Free or Reduced Priced Meals ('20-'21 school year)	MTC Equity Priority Community Designation (2018)	Healthy Places Index Score (2021)	CalEnviroScreen 4.0 Percentile (2021)
91.2%	Highest	27.5	66

Sources: California Department of Education, Metropolitan Transportation Commission, Public Health Alliance of Southern California, and California Office of Environmental Health Hazard Assessment

Existing Conditions

Overview

Greenleaf Elementary School is located in East Oakland, two blocks east of State Route 185 - International Boulevard. The school's main entrance is on E 17th Street, which is a one-way street. Across the street is Alternatives in Action High School, a charter school with a parking lot entrance on E 17th Street. There is a drop-off zone in front of Greenleaf's main entrance. The Safety Patrol team meters traffic at the drop-off area and pedestrian crossings at the E 17th Street/62nd Avenue intersection.

The majority of students come from the northwest side of the school. Drivers travel eastbound on E 17th Street and most turn right onto 64th Avenue after dropping off. Cones are placed on E 17th Street to create a drop-off area in front of the school's main entrance, managed by the Safety Patrol team.

Alameda County Transportation Commission identifies International Boulevard as a Pedestrian and Bicycle High-Injury Network (HIN) street and 66th Avenue, and 62nd Avenue as Pedestrian High-Injury Network (HIN) streets, in the area immediately surrounding the school. Most collisions involving people walking or rolling have occurred in these three corridors.

Observations

Participants observed or reported the following conditions during the school safety assessment (SSA).

1. 62nd Avenue and Bromley Avenue *(Corresponds to #1 on improvement map)*
 - Bromley Avenue and 62nd Avenue is an offset intersection, creating two T-intersections.
 - There are cracks and potholes all along 62nd Avenue.
 - Between the intersections, there is a crumbling speed hump.
 - There is one high-visibility crosswalk across 62nd Avenue on the westernmost Bromley approach.
 - During the observation, a large box truck was parked near the crosswalk and obstructed the view of people waiting to cross.
 - The crosswalk is also fading.
 - Vehicles were parked on the corners of Bromley Ave at the west T-intersection, obstructing the visibility of people crossing the street.
 - There were a few abandoned vehicles along the southern side of 62nd Avenue.



Top Left: Large box truck obstructing visibility of the crosswalk and intersection corner.

Top Right: Aerial view of the intersection. Image: GoogleMaps



Bottom: Crumbling speed hump with a gap from utility trench on 62nd Avenue

Recommendations:

The following infrastructure recommendations are proposed to improve the existing conditions described above:

- Updating existing: Re-paint high-visibility crosswalks and install appropriate crosswalk signage.
- Update existing: Repave 62nd Avenue and update speed humps with current CA MUTCD marking.
- Install new: Paint red curbs approaching each intersection crossing in compliance with the recently passed Daylighting to Save Lives Bill (section 22500 of the California Vehicle Code).
- Study for: RRFB across 64th Avenue.

2. E 17th Street and 62nd Avenue intersection (Corresponds to #2 on improvement map)

- ◆ This is a four-way intersection, all-way stop-controlled.
 - There are high-visibility crosswalks at all crossings.
- ◆ Drivers were seen unloading students in the red curb areas at the intersection corners.
- ◆ Drivers frequently stopped on the crosswalks, either waiting to enter or stopping before they could clear the intersection.
 - The school's Safety Patrol helps students and families cross at this intersection.
 - Some drivers ignored the instructions of the Safety Patrol.
- ◆ Drivers heading west on 62nd Avenue were seen speeding after passing through the intersection.

- ◆ School staff and caregivers reported that most students reach the school campus through this intersection, whether driving or walking.
- ◆ During the observation, there was a large backup of vehicles along 62nd Avenue and 17th Avenue as drivers waited to access the school's main entrance.



Left: Safety Patrol team stopping traffic to help students cross.

Right: Driver failing to yield and stopping in the crosswalk trying to get ahead of vehicle queue.



Left: Traffic backup west of the intersection

Right: Right-turning driver encroaching on the crosswalk as students are crossing

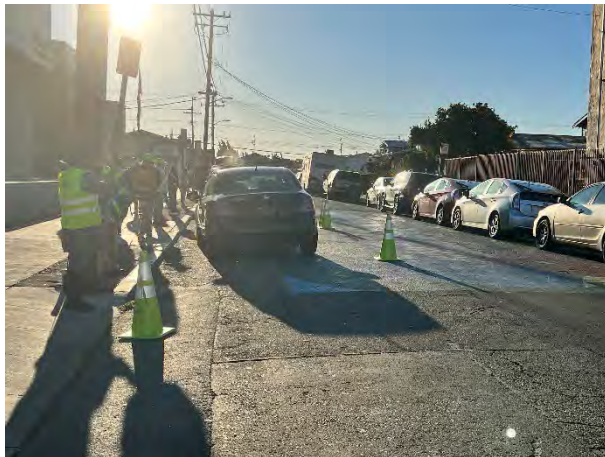
The following infrastructure recommendations are proposed to improve the existing conditions described above:

- Refresh existing: Re-paint high-visibility crosswalks.
- Construct new: Bulb-outs at all intersection corners. Note: The intersection's current drainage infrastructure may complicate the construction of curb extensions. If drainage adjustments are cost-prohibitive, consider paint-and-post as an alternative.

- Install new: Repave 62nd Avenue and update speed hump with current CA MUTCD markings.

3. E 17th Street Campus Main Entrance *(Corresponds to #3 on improvement map)*

- ◆ E 17th Street becomes a one-way street between 62nd Avenue and 64th Avenue heading south.
- ◆ The main entrance to Greenleaf is on the east side of the street, halfway down the block.
- ◆ There is a large digital variable message sign displaying a “School Zone” message in front of the school’s main entrance.
 - The sign was partially blocking the entrance to the drop-off zone.
- ◆ The Safety Patrol team places cones between the travel and the parking lane in front of the school’s main entrance to designate the drop-off zone.
 - The Safety Patrol team guides drivers through the drop-off zone, and student valets help unload students from their vehicles.
- ◆ Impatient drivers were seen going around the queue of vehicles waiting to enter the drop-off zone.
 - Drivers were perceived to be speeding between the drop-off loop and the stop sign at E 17th Street and 64th Avenue.
- ◆ Drivers were seen dropping off students in front of the driveway entrance to Greenleaf just north of the drop-off zone.
- ◆ Vehicles were seen dropping students off in front of the driveway entrance to Alternatives in Action High School across the street
- ◆ School staff and caregivers reported that the overlapping curb signage for parking restrictions for street sweeping and school hours is confusing and complicates the traffic flow as drivers park in parking-restricted areas.



Top Left: Drop-off zone in front of the school



Top Right: Digital school zone sign just before the drop-off zone



Bottom Left: Safety Patrol team metering the drop-off zone



Bottom Right: Students and caregivers walking on the sidewalk

Recommendations:

The following infrastructure recommendations are proposed to improve the existing conditions described above:

- Programmatic: Consider moving the large digital variable message sign to the other side of the street.
- Construct new: Speed humps along E 17th Street.

4. E 17th Street and 64th Avenue (Corresponds to #4 on improvement map)

- ◆ E 17th Street meets 64th Avenue at a T-intersection.
- ◆ There is a high-visibility crosswalk across 64th Avenue on the western approach and another across E 17th Street (north approach).
- ◆ The one-way sign at the northeast corner is bent and facing the wrong direction and is difficult to read for the desired direction of traffic.
- ◆ Vehicles were seen parked near the crosswalk on the southern side of 64th Avenue.
- ◆ Drivers were seen dropping students off at the intersection corners.
- ◆ Drivers from E 17th Street had limited visibility due to the sun's glare and vehicles parked near the intersection corners.
 - Drivers encroached onto the crosswalk across E 17th Street to get a better view of oncoming traffic from 64th Avenue.
- ◆ Most drivers from E 17th Street turned right.
 - The western crosswalk across 64th Avenue created conflicts with crossing pedestrians and turning vehicles as most vehicles made a right turn. Furthermore, with the existing crosswalk configuration, pedestrians crossing 64th Avenue must also cross E 17th St to reach the campus's main entrance.
- ◆ School staff and caregivers reported that drivers make U-turns on E 17th Street and travel in the opposite direction, despite E 17th Street being one-way.
- ◆ Drivers were perceived to be speeding on 64th Avenue.



Left: E 17th Street and 64th Avenue intersection looking west.

Right: Bent and mis-angled one-way road sign and mis-angled stop sign at the northwest corner.

Recommendations:

The following infrastructure recommendations are proposed to improve the existing conditions described above:

- Refresh existing: Replace damaged One-Way sign.
- Construct new: Traffic diverter at the southern approach of E 17th Street. (Refer to the image below.)
- Construct new: Speed humps on 64th Avenue.
- Install new: Two “DO NOT ENTER” signs on both sides of the street at the southern end of E 17th Street.
- Install new: High-visibility crosswalk across the northeastern approach.

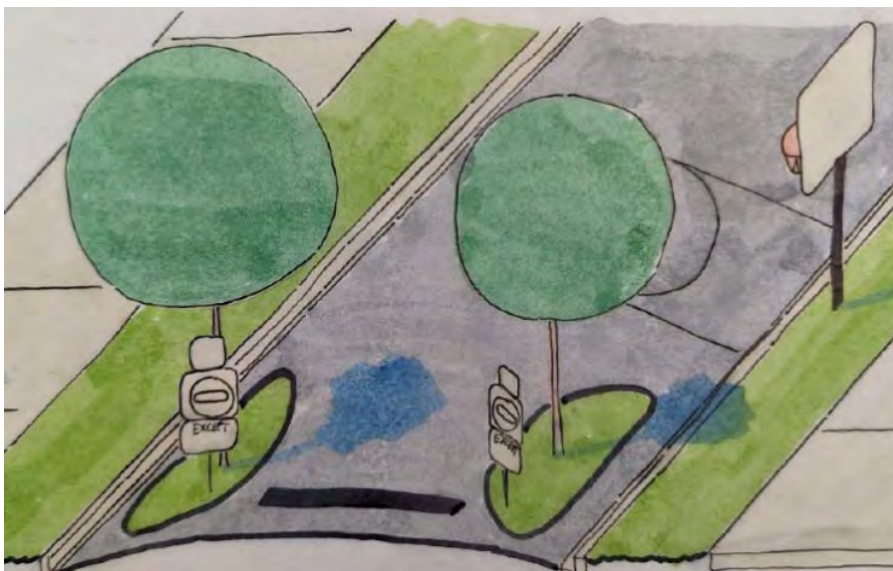


Illustration of a traffic diverter prohibiting vehicles from driving the wrong way down the one-way street.

5. E 17th Street and Seminary Avenue (*Corresponds to #6 on improvement map*)

- ◆ E 17th Street and Seminary Avenue is a 4-way intersection controlled by a traffic light.
- ◆ There are two high visibility crosswalks across Seminary Avenue and one across the southern approach of E 17th Street.
 - The crosswalk striping is fading away.
- ◆ School staff reported that students and their caregivers walk through this intersection to reach the school.

Recommendations:

The following infrastructure recommendations are proposed to improve the existing conditions described above:

- Refreshing existing items: Repaint existing high-visibility crosswalks and refresh red curb paint.

Participant Comments

School staff and caregivers reported that most students live north of the school campus. The Safety Patrol helps students and families cross at the E 17th Street and 62nd Avenue intersection. However, when the Safety Patrol team cleans up, late drivers travel at higher speeds.

The similar bell times with Alternatives in Action High School intensify the traffic congestion as schools have access points on E 17th Street.

School staff reported issues with the curb and traffic signage around the school. It was reported that caregivers get confused with the overlapping curb signage for street sweeping and school parking restrictions in front of the campus's main entrance. Additionally, the one-way sign on E 17th Street and 64th Avenue is bent and difficult to read.

Recommendations

Engineering Recommendations

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

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 the campus community at Greenleaf Elementary School.

The School Site Coordinator for Greenleaf Elementary is Mario Valdez. 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:

Mario Valdez, mvaldez@alamedacountysr2s.org

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 Greenleaf 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 and 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.
- ◆ Encourage Parents to Park and Walk from Designated Locations
 - A potential park and walk location has been identified on the Improvement Plan Map.
 - 62nd Avenue
 - The school should encourage parents to utilize these locations to reduce congestion in and near existing drop-off/pick-up locations.
- ◆ 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, monthly, or 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 increase the visibility of these road users and reduce barriers to walking or biking for some families while making it fun and exciting for the students.
- ◆ Schedule Pedestrian Rodeos and Bicycle Rodeos
 - These interactive rodeos are great educational opportunities to teach and refresh safe walking and bicycling behavior. These workshops cover many 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.

Non-transportation Related Recommendations

Many factors contribute to transportation decisions that students and families make about traveling to and from school, and transportation infrastructure is essential in that decision-making process. Still, the School Safety Assessment process may identify other factors that impact travel decision-making, including personal safety and the environment. The SR2S Program will work closely with the jurisdiction's staff to ensure that these non-transportation recommendations are directed to appropriate city departments.

1. Abandoned Vehicles

- ◆ Report abandoned vehicles online through OAK311 by visiting <https://seeclickfix.com/us-ca-oakland>. Removing abandoned vehicles around the school campus can have the following benefits:
 - Create additional curbside space for parking or loading areas.
 - Improve sightlines for pedestrians.
 - Clear walkways on sidewalks.

Safe Routes to Schools Improvement Plan
Greenleaf Elementary
Oakland

School Safety Assessment held December, 2022

Improvement Detail

- 1a. Repaint high-visibility crosswalk accross 62nd Ave at Bromley Ave (western-most 62nd Ave/Bromley Ave approach).
- 1b. Reconstruct speed hump at 62nd Ave and Bromley Ave. 62nd Ave is in need of repaving.
- 2a. Repaint all high-visibility crosswalks at the corner of E 17th St and 62nd Ave.
- 2b. Consider installing bulb-outs at block corners of E 17th St and 62nd Ave. Note: The intersection's current drainage infrastructure may complicate the construction of bulb-outs. Paint-and-post may be an option if drainage issues are cost-prohibitive to concrete bulb-outs.
- 2c. Install speed humps (per neighborhood petition process) on 62nd Ave between International Blvd and Bromley Ave.
- 3a. Install speed humps (per neighborhood petition process) on E 17th St between 62nd Ave and 64th Ave.
- 3b. Consider moving the large variable messaging sign at the northern side of E 17th St to the southern side to improve traffic flow into the curbside drop-off.
- 4a. Replace the damaged One Way sign at the western corner of E 17th St and 64th Ave. Install two "DO NO ENTER" signs on both sides of the street at the southern end of E 17th St.
- 4b. Install a high-visibility crosswalk accross 64th Ave on the eastern approach.
- 4c. Install speed humps (per neighborhood petition process) on 64th Ave between Bromley Ave and E 17th St.
- 4d. Consider installing a traffic diverter at the northwestern approach. Note: the crosswalk will need to be moved slightly northwest to make room for the traffic diverters. Red curbs should be painted on both sides of the crosswalk.
- 5a. Consider designating 62nd Ave as an alternative park and walk location.
- 6a. Repaint existing high-visibility crosswalks and install advance yield markings. Refresh red curb paint.



The above items are recommendations only and based on Safe Routes to Schools site assessment best practices. Feasibility determination, final design, accessibility, funding, and implementation of any recommended improvements is the responsibility of the appropriate governing agency.
**Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards. Red curb not symbolized on map.
This figure is intended only for reference, conceptual planning, and informational purposes. This figure should not be used to establish boundaries, property lines, location of objects, or to provide any other information typically needed for final design, construction or any other purpose when engineered plans are required.

0 80 160 ft

Improvements not to scale

The Alameda County Safe Routes to Schools Program is a program of the Alameda County Transportation Commission (alamedactc.org) and is funded with Alameda County's local Measure BB sales tax, and regional, state, and federal funds.