



School Safety Assessment Technical Memorandum

August Schilling Elementary School

Newark Unified School District

December 2018



The Alameda County Safe Routes to Schools Program is funded by the Alameda County Transportation Commission. Your transportation dollars at work!

August Schilling Elementary School

A school safety assessment (SSA) was conducted at Schilling Elementary School in Newark during the afternoon dismissal on Wednesday December 12, 2018. The assessment was attended by representatives from the City of Newark, Alameda County Safe Routes to Schools staff, and Schilling Elementary staff.

Participants included:

- Jayson Imai, Engineer, Newark Public Works
- Dr. Wendy Castandea-Leal, Principal, Schilling Elementary School
- Sarah Terry, Newark Unified School District
- Leslie Lara-Enriquez, Alameda County SR2S Team
- Aleida Andrino-Chavez, Alameda County SR2S Team
- Jeannette Cooper, School Site Coordinator, Alameda County SR2S Team
- Joe Paull, Engineer, Alameda County SR2S Team
- Otto Melara, Planner, Alameda County SR2S Team
- Ben Frazier, Planner, Alameda County SR2S Team
- Three Schilling Elementary School teachers/staff

School Information

Location & Enrollment

	Address:	36901 Spruce Street Newark, CA 94560
	Morning Bell(s):	8:10 AM
	Afternoon Bell(s):	Transitional Kindergarten: 12:10 PM Kindergarten - Grade 6: 2:32 PM (1:05 PM early)
	Grade Levels:	Transitional Kindergarten - Grade 6
	Enrollment	413
	School Type (neighborhood/magnet/charter):	Neighborhood

Student Travel Data

Students' Proximity to School (school estimate):	Less than ¼ mile (5-min. walk): 50% Between ¼ and ½ mile (5-10-min. walk): 40% Between ½ and 1 mile (10 to 20-min. walk): 10% Greater than 1 mile (more than 20-min. walk): 0%
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Student Travel Mode Info:	<p style="text-align: right;">School Estimate:</p> <p>Walking: 60%</p> <p>Biking: 3%</p> <p>School Bus: 0%</p> <p>Transit: 0%</p> <p>Carpool: 10%</p> <p>Family Vehicle: 27%</p> <p>Other: 0%</p>
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Note: Recent hand tally data is not available for Schilling Elementary School.

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

<p>Does the school have bike racks? What is the capacity? Is there secure bike parking?</p> <p>On a typical day, what percentage of racks are used?</p>		<p>Schilling does have secure bicycle parking on campus. There are three “schoolyard” style bike racks within the gated area of campus.</p> <p>There were few bikes present on the day of safety assessment.</p>
<p>Does the school have special pick-up/drop-off policies/procedures?</p>		<p>Kindergarteners must be picked up from their classroom. Other students are dismissed to the drop-off lane, meet their parents in front of the school, or walk/bike home.</p>

Notes: Schilling Elementary School is not served by school buses nor are there AC Transit stops within close proximity of the school.

Frontage Streets

Street Name	Width	Lanes	Average Daily Traffic (2012)	Posted Speed Limit	Existing Traffic Calming
Thornton Avenue	62 feet	3 lanes	Between Willow & I-880: 20,239	35 mph	School Zone 25 MPH signs
Spruce Street	42 feet	2 lanes	Between Jarvis & Wells: 1,633	25 mph	Speed bumps

Existing Conditions

Schilling Elementary is located in Newark off Thornton Avenue, with its primary frontage along Spruce Street. Schilling Elementary School families utilize the drop-off lane and park-and-walk as the primary methods for picking up and dropping off their child(ren). There is a locked rear entrance to the campus, accessible from Peachtree Avenue. Most pick-up and drop-off activities occur along Spruce Street and near the Thornton Avenue/Spruce Street intersection.

The following existing conditions were observed or reported by participants during the SSA.

1. Spruce Street

- ◆ Spruce Street is the primary location for most pick-up and drop-off related activities for Schilling Elementary.
- ◆ The drop-off lane and staff parking lot (discussed in greater detail in Item #5) has three driveways along Spruce Street (from north to south): entry driveway, exit driveway, entry/exit driveway (most direct access to parking).
- ◆ Spruce Court is small cul-de-sac off of Spruce Street.
 - Many families were observed using this cul-de-sac as an area to turn around.
 - Cars commonly double park to load/unload and block private driveways.
- ◆ Spruce Street is used as a park-and-walk location for families. Families utilize both sides of Spruce Street in front of the school to park.
 - There are marked crossings of Spruce Street at Thornton Avenue and Sunset Avenue.
 - Many families crossed mid-block, near where they parked.
 - There are two speed humps on Spruce Street between Thornton Avenue and Sunset Avenue, both with ladder-style pavement markings (not current markings with the CA MUTCD).
 - Families were observed using the speed hump closest to Spruce Court as a “de-facto” raised crosswalk.
- ◆ Vehicles were observed loading and unloading students from the Spruce Street travel lane, without pulling to the curb.
 - Some vehicles would stop mid-block and parents would call their students from the sidewalk to the car.
 - The relatively heavy congestion, combined with the high volume of cars pulling to/from the curb can create multiple threats and blind spots for these pedestrians.

- ◆ School staff reported that the majority of school-related traffic for Schilling Elementary on Spruce Street comes from the Thornton Avenue direction.



Left: Congestion on Spruce Street during the afternoon pick-up period.

Right: The speed hump closest to Spruce Court that is sometimes used as a crossing for families.

2. Spruce Street/Thornton Avenue

- ◆ Spruce Street/Thornton Avenue is a four-way signalized intersection.
 - All four legs have yellow transverse crosswalks.
- ◆ A crossing guard is stationed at this intersection.
 - School staff reported the crossing guard primarily crosses students at the western and southern legs.
 - The crossing guard avoids crossing students through the eastern crossing because it experiences the most school-related vehicular traffic; generating pedestrian-vehicle conflicts and delays.
 - The majority of school traffic heads south on Spruce Street and then makes a southbound left on to Thornton Avenue.
- ◆ Some families use the curb space along the school frontage of Thornton Avenue, for loading/unloading.
 - This curb space is currently signed for no parking anytime. There is a fire hydrant and an AC Transit FLEX stop near the intersection of Spruce Street.
 - Students who are dropped off along this curb space enter campus through a small gate near the western side of the parking lot.
 - Staff reports the students typically filter through the parking lot to reach the campus, as there is no pedestrian walkway.
- ◆ A few students were observed walking west on Thornton Avenue.
- ◆ Two pedestrians and one bicyclist were observed crossing Thornton Avenue at Poplar Street.
 - There is no marked crossing across Thornton Avenue at this location.
- ◆ Seven vehicles performed eastbound-to-westbound U-turns at this intersection. This is an allowed movement at this intersection.
 - Many of these cars utilized the Thornton Avenue curb space; making a U-turn to access the curb space along the frontage.



Above: The Thornton Avenue/Spruce Street intersection, looking east towards Thornton Avenue.

3. Thornton Avenue/Maple Street

- ◆ Thornton Avenue/Maple Street is a T-intersection; the Maple Street approach is stop-controlled.
- ◆ There are two yellow marked crossings at this intersection.
 - A transverse crossing across Maple Street, and a ladder crosswalk (recently upgraded from transverse) across Thornton Avenue are present.
- ◆ There was not a lot of pedestrian traffic at the location. However, when pedestrians did attempt to cross, driver yield compliance was very poor.
- ◆ There was a bicycle collision at this intersection in 2015.
- ◆ Speeds on Thornton Avenue were observed to be faster than the 25-mph posted school zone area.



Above: Thornton Avenue, looking west towards the Maple Street crossing.

4. Spruce Street/Sunset Avenue

- ◆ Spruce Street/Sunset Avenue is an uncontrolled T-intersection.
- ◆ There are currently two yellow transverse crosswalks at the southern and eastern approaches.
- ◆ There is existing red curb along the western side of the street, extending from near the fire hydrant to the school's first entry driveway. It is very faded.
- ◆ Double parking during loading/unloading is extremely common at this intersection.
- ◆ SSA participants reported that southbound cars are typically traveling fast along Spruce Street in the segment (especially around the bend north of the intersection) and sometimes fail to yield to waiting pedestrians.
- ◆ Multiple U-turns were also observed at this intersection.



*Left: The Sunset Avenue/Spruce Street intersection from the southeast corner, looking east.
Right: Looking south down Spruce Street towards the Spruce Street crossing at Sunset Avenue.*

5. Drop-off Lane/Staff Parking Lot

- ◆ Schilling Elementary’s drop-off lane is shared with the school’s parking lot.
 - There are three driveways that provide access/egress to this area.
 - The northern-most driveway is entry only and is the primary entry point for the drop-off lane.
 - The middle driveway is an exit-only driveway and is the primary exit for the drop-off lane.
 - The southern-most driveway allows both entries and exits. This driveway is the primary access point for the parking area.
 - There is also angled parking between the northern and middle driveways. The parking area south of the southernmost driveway is coned off and reserved for staff only.
 - All driveway exits are signed for right turns only.
- ◆ Within the on-site drop-off lane, most curb frontage is painted yellow for loading/unloading. The curb area immediately inside the first driveway is painted red and usually coned off to encourage drivers to pull forward.
- ◆ Schilling Elementary staff currently place cones at some of the driveways to discourage left-turns and U-turns.
- ◆ School staff reported that when unattended by staff, parent behavior in the loop can be detrimental to its function. This behavior can include parents idling well before the bell, not moving forward, cutting in line, etc.

Recommendations

Engineering Recommendations

Recommendations to improve infrastructure or operations surrounding Schilling Elementary 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 the campus community at Schilling.

The School Site Coordinator for Schilling Elementary is Jeannette Cooper. 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:

Jeannette Cooper, jcooper@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 Schilling Elementary 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 they can 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 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.
- ◆ Schedule Rock the Block Assembly
 - Rock the Block is a fun, interactive assembly that teaches lessons about safely walking and bicycling to and from school. The Rock the Block assembly is 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 Student Valet Program
 - Currently, the drop-off lane at Schilling Elementary is monitored by school staff. During the assessment, staff reported that when they are not able to fully supervise the drop-off area, parental behavior changes and the loop works less effectively. One program that can improve the functionality of the drop-off area and add consistency is a Student Valet Program. With a student valet program, students, with staff or parent supervision, open/close car doors and encourage cars to pull forward. Volunteer students do not step off the curb nor control traffic. SR2S staff can be of assistance with setting up and helping to source volunteers for this type of program.

Safe Routes to Schools Improvement Plan

August Schilling Elementary School, Newark

Site Assessment held December 2018



- 1 Spruce Street**
 - Restripe the speed bumps on Spruce Street with current CA-MUTCD standard markings
 - Install R3-4 No U-Turn signage along Spruce Street
 - Install 10 feet of red curb around each school driveway. Install R26S No Stopping Signs at these locations
 - Consider installing a Speed Feedback Sign north of Sunset Avenue
- 2 Spruce Street/Thornton Avenue**
 - Install paint-and-post curb extensions at the two western corners of the Spruce Street/Thornton Avenue intersection
 - Upgrade the crosswalks at the northern, southern, and western approaches to high visibility crosswalks
 - Install 20 feet of red curb at all intersection approaches with R26S No Stopping signage
 - Modify the traffic signal to add leading pedestrian intervals to increase pedestrian visibility
- 3 Thornton Avenue/Maple Street**
 - Install red curb around the Thornton Avenue crosswalk
 - Install a Rectangular Rapid Flashing Beacon at the Thornton Avenue crosswalk
 - Refresh existing high visibility crosswalk and advance yield pavement markings
- 4 Spruce Street/Sunset Avenue**
 - Refresh the red curb paint on the school side of Spruce Street near the intersection
 - Upgrade the two existing crosswalks to high visibility crosswalks
- 5 Drop-off Lane/Staff Parking Lot**
 - Complete the sidewalk path connecting the parking lot to the gate on Thornton Avenue
 - Initiate a Student Valet Program (additional details in existing conditions report)

0 120 ft
 Improvements not to scale



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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.