School Safety Assessment
Technical Memorandum

Redwood Heights Elementary School
Oakland Unified School District

Assessment Held:
November 2018
Redwood Heights Elementary School

A school safety assessment (SSA) was conducted at Redwood Heights Elementary in Oakland during the morning arrival on Thursday November 8, 2018. The assessment was attended by representatives from the City of Oakland, Alameda County Safe Routes to Schools Staff, and Redwood Heights staff and parents.

Participants included:

- Beaver Boonsook, Engineer, Oakland Department of Transportation
- Jing Jing Lin, Engineer, Oakland Department of Transportation
- Cynthia Bagby, Principal, Redwood Heights Elementary School
- Aleida Andino-Chavez, Alameda County SR2S Team
- Joe Paull, Engineer, Alameda County SR2S Team
- Courtney Wood, Planner, Alameda County SR2S Team
- Ben Frazier, Planner, Alameda County SR2S Team
- 6 Redwood Heights School parents (including 2 PTA members and the SR2S Champion)

School Information

Location & Enrollment

<table>
<thead>
<tr>
<th>Address:</th>
<th>4401 39th Avenue Oakland, CA 94619</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Levels:</td>
<td>Kindergarten-Fifth Grade</td>
</tr>
<tr>
<td>Enrollment:</td>
<td>362</td>
</tr>
<tr>
<td>School Type</td>
<td>Neighborhood</td>
</tr>
<tr>
<td>(neighborhood/ magnet/charter):</td>
<td></td>
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</tbody>
</table>

Student Travel Data

Student Travel Mode Info:

- Walking: 28%
- Biking: 0%
- School bus: 0%
- Transit: 0%
- Carpool: 5%
- Family Vehicle: 64%
- Other: 4%

Recent SR2S Hand Tally Data:

Spring 2018
# Bikes, Buses, and Drop-off/Pick-up

<table>
<thead>
<tr>
<th>Does the school have bike racks? What is the capacity? Is it secure bike parking?</th>
<th>There is no bike parking on campus.</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do school buses interact with the school?</td>
<td>Redwood Heights is served by 3 small school buses. There is currently 32 feet of yellow curb in front of the school. They utilize this area and the surrounding frontage.</td>
</tr>
<tr>
<td>Does the school have special pick-up/drop-off policies/procedures?</td>
<td>The northern frontage along 39th Avenue immediately west of Aliso Avenue is used as the school’s drop off lane. The area is coned off and staffed by volunteers.</td>
</tr>
</tbody>
</table>

Redwood Heights Elementary School is not directly served by public transit buses.

Redwood Heights Elementary is located in the Oakland Hills, just west of Highway 13 near Redwood Road/35th Avenue. Most pickup and drop off activity occurs along the school’s 39th Avenue frontage. At the time of the SSA, there was an active Walking School Bus that brought students to campus from the north/northwest. The school does not have a formal drop off loop, but utilizes curb frontage on 39th Avenue, which is coned off and served by student and parent volunteers. The school has a high number of students with mobility impairments. The current designated blue curb area (20 feet) is not sufficient to accommodate the need for closer access to the school’s entrance.
Existing Conditions

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

1. **Aliso Avenue/39th Avenue**
   - This is a T-intersection; the 39th Avenue approach is stop controlled.
   - There are currently two marked yellow transverse crosswalks across the north and west approaches.
   - Drivers sometimes park near the southwest corner, which disrupts the drop off lane flow.
   - At/near the intersection, drivers will sometimes perform U-turns into or out of the drop off lane.
   - The crosswalk at the west approach connects to the Redwood Road overpass across Highway 13.
   - Drivers reported that there are poor sightlines when trying to turn off of 39th Avenue on to Aliso Avenue (both directions).
     - They reported similar experiences at Aliso Avenue/Anderson Avenue.

   ![Left: The two transverse crosswalks at the Aliso Avenue/39th Avenue intersection, looking west. Right: Looking down 39th Avenue, towards the drop off loop. The advance stop markings are very faded at the approach.](image)

2. **39th Avenue (School Frontage)**
   - The western frontage of 39th Avenue, close to the Aliso Avenue intersection, is used as a drop off lane for students in the mornings and afternoons. The drop off lane is staffed by both parent and student volunteers who help students into/out of the car and try to keep the cars moving.
   - Assessment participants reported that parent drivers will sometimes cut into the drop off loop or make abrupt turns out of the loop, disrupting the flow of vehicles.
   - Instead of utilizing the drop off lane or other curb space, some drivers will double park and let their child(ren) out of the car without pulling to the curb while blocking traffic.
   - Assessment participants also noted that drivers will remain parked in prohibited areas during arrival and drop off periods, which disrupts operations.
This can be especially problematic for students with mobility impairments who need closer access to the school.

West of the drop lane, on 39th Avenue, there is about 40 feet of red curb followed by 20 feet of blue curb and 32 feet of yellow curb.

- Both the yellow and blue curb spaces are very important to Redwood Elementary.
  - The school is served by 3 small school buses.
  - There are over one dozen students who are in wheelchairs; these students arrive via both private family vehicle and the Oakland Unified School District buses.

- Assessment participants reported that parents with students in wheelchairs will regularly have to utilize curb space further away from the entrance due to limited amount of dedicated space.

- Some parents use curb space across the street (fronted by single family homes) and walk across the street with their child to the school.

Left: The drop off lane on 39th Avenue, looking towards Aliso Avenue. 
Right: The colored curbs directly in front of the school. At this location there is 38 feet of red, 20 feet of blue, and 32 feet of yellow curb.

Left: The drop off lane on 39th Avenue, looking towards Aliso Avenue. 
Right: An OUSD bus using a combination of the blue and yellow curb to alight students.
3. 39th Avenue/Reinhardt Drive

- This intersection is frequently utilized by school-related traffic for westbound left turns. Many drivers that exit the drop off lane make a left on to Reinhardt and then another left on Anderson Avenue to return to Aliso Avenue.
- This T-intersection is all-way stop controlled. The south and east approaches are marked with yellow transverse crosswalks.
  - The crosswalk markings are very worn/faded.
- Multiple drivers performed U-turns at this intersection.
- Drivers routinely park in the red curb areas, too close to the intersection, limiting pedestrian visibility.

4. Aliso Avenue/Redwood Road

- This intersection is used by the school’s walking school bus as they walk to/from school.
- The intersection is signalized. There are two marked crosswalks; both yellow transverse crosswalks across the west and south approaches.
  - Both marked crossings are long (over 70 feet each).
- The crosswalk across Redwood Road has a pedestrian refuge island.
5. Aliso Avenue

- School Safety Assessment participants reported that drivers regularly speed along Aliso Avenue.
  - This was also attributed to part of the difficulty turning onto Aliso Avenue (noted on Item #1).
Recommendations

Engineering Recommendations
Recommendations to improve infrastructure and/or operations surrounding Redwood Heights Elementary School can be seen on the conceptual improvement plan found attached to this document.

Policy & Program Recommendations
The Alameda County Safe Routes to Schools Program, in addition to engineering improvements, has many encouragement and educational activities that can benefit students and the campus community at Redwood Heights.

The School Site Coordinator for Redwood Heights 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, concerns or wish to move forward with additional programming activities.

Programs
The following improvements are recommendations for policy and program implementation at Redwood Heights Elementary to increase safety and active commutes to school.

♦ Develop Walk Route Maps
  o The SR2S Program can create recommended Walk Route Maps. These maps illustrate preferred routes to school for walking. Maps also provide safety tips to encourage better travel behavior. These maps can also be used as a part of Walking Schools Buses (WSB) or other Walk and Roll to School activities. Park and Walk and WSB meeting locations are also shown on these maps where appropriate.

♦ Encourage and Help Facilitate Carpooling
  o 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.

♦ Expand Walking School Buses
  o Walking School Buses (WSBs) are groups of students, led by parent chaperone(s), that meet at designated locations and times to gather and walk to school together. WSBs 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. Redwood Heights already has one active WSB route. SR2S staff can assist with the planning, coordination, and execution of additional WSBs or expanding the current one. Walking in groups with parental supervision can not only increase the visibility of these road users, but can reduce barriers to walking for some families while making it fun and exciting for the students.
♦ Schedule Pedestrian Rodeos/Bicycle Rodeos/Drive Your Bike
   o 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. The Drive Your Bike workshop has both a middle school and high school version.

♦ Schedule the Rock the Block Assembly
   o Rock the Block is fun, interactive assembly that teach lessons about safely walking and bicycling to and from school.

♦ Participate in International Walk and Roll to School Day (IRW2SD), the Golden Sneaker Contest (GSC), and Bike to School Day (B2SD)
   o 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 middles 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.
Existing Conditions

Recommendations

- City of Oakland

1. **39th Avenue/Aliso Avenue**
   - Restripe the two existing crosswalks as high visibility crosswalks
   - Refresh advance stop markings at the western approach
   - Install advance yield markings around the Aliso Avenue crosswalk
   - Update existing school zone signs with School Assembly D signs

2. **39th Avenue (school frontage)**
   - After the existing red curb, mark 40 feet of blue curb with R99 Disabled Parking Only sign(s)
   - After the blue curb, mark 60 feet of yellow curb with R24A School Bus Loading Only sign(s)
   - Along the drop off lane, install R25D, time limited, School Loading Only sign(s)

3. **39th Avenue/Reinhardt Drive**
   - Upgrade the two existing crosswalks to high visibility crosswalks
   - Refresh the advance stop markings at all three approaches
   - Construct a paint and post curb extension at the southeast corner to shorten crossing distance, square-up the approach, and discourage U-turns

4. **Redwood Road/Aliso Avenue**
   - Restripe the existing crosswalks at the western and southern approaches as high visibility crosswalks
   - Construct a paint and post curb extension at the southwest corner to shorten crossing distance and square-up the approach

5. **Aliso Avenue**
   - Consider implementing traffic calming measures on Aliso Avenue such as speed bumps, speed feedback signs, neighborhood traffic circles, and/or other measures to slow/cool traffic along the corridor

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.

Improvements not to scale