To: Matthew Reeves, Safe Routes to School Coordinator and General Program Associate, Redwood City 2020

From: Dara O'Byrne, Planning Associate
Benjamin Frazier, Planner

Date: January 5, 2018

Re: Garfield Community School Walk/Bike Audit and Field Review

Overview of Process

A walk/bike audit and field review was performed at Garfield Community School on the morning of May 31, 2017 to assess the walking and biking safety conditions, needs, and opportunities at the school. 10 people participated in the walk audit and discussion. Participants included:

- Three parents of Garfield students
- Deputy C-M, San Mateo County Sherriff's Department
- Roselyn Miller, Redwood City 2020
- Matthew Reeves, Redwood 2020 Safe Routes to Schools Coordinator
- Theresa Vallez-Kelly, San Mateo County Office of Education Safe Routes to School Coordinator
- Iris Godines, Garfield Community School Coordinator
- Dara O’Byrne, Alta Planning + Design Planning Associate
- Benjamin Frazier, Alta Planning + Design Planner

Participants were positioned in strategic locations around the school before the morning bell to observe travel behavior, crossing safety, the condition of infrastructure, and other aspects impacting travel to the school. After the arrival period concluded, all participants met back in the gathering space and discussed observations and parents shared their regular observations and concerns. All of these items were recorded on a large plotted map (see below).

Alta staff took these concerns and observations and translated them into a series of recommended improvements to address concerns and issues. These recommendations are discussed in the following sections.
Background and Existing Conditions

Background Information

Garfield Community School is located on Middlefield Road between Semicircular Road and Ninth Avenue. Garfield Community was built in 1926 and was modernized in 1998; the school will undergo a major renovation in 2018. The current student population is about 650 students between Kindergarten and 8th grade.

Existing Conditions

The following existing conditions were observed or reported by participants during the walk audit:

Middlefield Road/Semicircular Road/Eighth Avenue/East Garfield Driveway

- The intersection has five approaches: two from Middlefield and one from each of the other streets
- All five crossings are striped as yellow ladder crosswalks
- A crossing guard is currently stationed at the intersection, but predominantly helps pedestrians cross the Semicircular Road leg
- Walk audit participants reported that the eastern Middlefield Road crossing is the least used, because it then forces school-bound pedestrian to cross a very active school driveway
  - Using the western Middlefield Road crossing and the Semicircular Road crossing gives pedestrians both the additional protection and visibility from the crossing guard, but also safer access to the school’s pedestrian path entrance
- Walk audit participants reported that it can sometimes be confusing for cars making a westbound left from Middlefield Road where they should go, as sometimes they will enter the school’s east driveway (which is supposed to be exit only) as opposed to turning onto Semicircular Road.
- The traffic signal at the north corner is blocked by vegetation

Garfield Parking Lot & Driveways

- The Garfield parking lot has two driveways off of Semicircular Road
  - The east driveway was discussed with the previous intersection
  - The western driveway is **100 feet wide**, which allows for high speed turning movements entering the driveway; creating additional, but avoidable, conflicts with pedestrians. This driveway is not striped with a crosswalk
- There are two sets of speedbumps in the parking lot
- Every morning, the California Highway Patrol volunteers assist with school drop off and set up a portable speed feedback sign in the parking lot by the western driveway for cars traveling eastbound on Semicircular Road
- There are two striped pedestrian paths that go through the parking lot
  - One path goes from near the western end of the wide western driveway, over a speed bump, and behind a row of parked cars to the main entrance of the school. This path is immediately parallel to the path cars use as they enter to drop-off children; there is very little to no separation between the two
  - The second path goes from a small plaza area off of Semicircular Road, crosses the car drop-off path, and then reaches the primary entrance. This path is most commonly used by pedestrians who are crossing Middlefield Road
• Along the east segment of the school’s northern border with Middlefield Road, there is a small parking lot
  o The parking lot’s entrance is along Middlefield Road
  o Cars exit the lot by crossing a sidewalk/pedestrian path and then merging back into the main parking lot
    ▪ Walk audit participants reported that many cars do not follow the intended exit path, creating safety conflicts with pedestrians and other vehicles

• Parking Lot Circulation
  o The two parking and drop off areas merged into the single exit driveway, creating congestion and conflict points for pedestrians
  o The layout and design of the main parking area was not streamlined
  o The main parking lot was full during the morning drop off time

Chavez Supermarket Parking Lot
• Walk audit participants reported that students and families regularly cut through the store’s parking lot

Semicircular Road
• Walk audit participants reported that cars regularly speed along Semicircular Road
• Many of the intersections along Semicircular Road do not have sufficient red curb around intersections, which reduces the visibility of pedestrians

Fifth Street Pedestrian Bridge

• The pedestrian bridge is commonly used by students and their families who live on the northwestern side of Fifth Avenue
• The bridge has no lighting
• On the eastern side of the bridge, access is via a pathway (created with brick pavers) from the cul-de-sac
  o This pathway is crossed by two driveways
  o Walk audit participants observed cars parked on the pathway (there is available width for separation of uses)

Arrowhead Lane/Semicircular Road (west intersection) & Semicircular Road/Fifth Avenue

• Walk audit participants reported that cars regularly speed around the corner turning from Arrowhead Lane onto Semicircular Road
• The crossing is currently striped with a yellow transverse crossing
• There is not sufficient red curb on both Arrowhead Lane and Semicircular Road to better ensure pedestrian visibility
• At the Fifth Avenue merge, cars traveling east on Semicircular Road have a stop. Cars stopping here may block the crosswalk as the crosswalk is before the stop bar
The crosswalk at the Fifth Avenue merge is accompanied by signs that have embedded flashing lights. Walk audit participants observed that they were not effective at encouraging vehicles to yield.

Summary of Recommended Improvements

Recommendations to improve infrastructure and operations within the Garfield Community School campus and within the surrounding neighborhoods can be seen on the conceptual improvement plan attached to this memorandum. Engineering cost estimates for the infrastructure improvements have also been provided.

Below are recommended policy and program improvements for increasing safety, health, and active commutes for the students, staff, and community of Garfield Elementary School.

Program and Policy Recommendations

- Send regular reminders to parents regarding their drop-off and pick-up location options and encourage parents to leave a few minutes earlier to prevent rushing.
- Distribute Recommended Walk/Bike Maps to students and their families in an effort to promote walking and biking to school on suggested routes. Safety tips should also be included on these maps to promote good behavior among bicyclists, pedestrians, and drivers.
- Emphasize and grow support for volunteer led walking school buses and bike trains.
- Join the countywide SR2S program and participate in events such as Bike Rodeos, Pedestrian Safety Rodeos, and International Walk and Roll to School Day.
- Work with parents to connect them with others who live nearby to increase the number of students carpooling, which may reduce the number of vehicles coming to campus.
- Consider creating a program with SamTrans to allow fare waivers for students on the school's priority routes.
- Consider coordinating with St. Anthony’s Church to arrange off-site drop off with walking school bus.
- Dedicate school parking spaces for public safety officers.
- Continue to support crossing guard at Middlefield Road / Eighth Avenue / Semicircular Road.
- Continue partnering with the California Highway Patrol and San Mateo County Sherriff’s to provide a presence and portable speed feedback signs in the area to encourage drivers to slow day and be more cautious around the school.
Redwood City School District Facilities Master Plan Recommendations

A facilities master plan was created for the Garfield Community School Campus as part of “Long Range Planning for the Future of Our Schools” Project and as a measure to transform the campus. The master plan addresses the program and infrastructure needs of the site. High-level recommendations for the parking lots, drop off locations, school sidewalks, and other transportation infrastructure on the school campus have been developed as part of the facilities plan.

The facilities master plan can be found at: http://www.rcsdk8.net/Page/6104

The following are recommendations for the master plan to help improve safety for pedestrians and bicyclists:

- In the proposed renovation plan for Garfield Community School, the pick-up and drop-off area off of Semicircular Road is unchanged. It is recommended that this area be modified to improve pedestrian safety and reduce conflicts with vehicles. The western driveway is about 100 feet wide, which is unnecessarily wide. This opening should be reduced to a standard width.

- Given the frequent presence of law enforcement vehicles on campus (California Highway Patrol and San Mateo County Sheriff), consider dedicating one or two parking spots for these vehicles that do not block the pedestrian pathway or crosswalk. These parking spots can be in the front of the school, visible from the street. Currently, law enforcement vehicles park in the pedestrian pathway, forcing students into the congested drop-off lane.
The above items are recommendations only and based on Safe Routes to Schools site assessment best practices. Feasibility, determination, final design, acquisition, funding, and implementation of any recommended improvements is the responsibility of the appropriate governing agency.

**Garfield Community School**

**Redwood City**

**Safe Routes to Schools Improvement Plan**

**FINAL - January 2018**

**Site Assessment held May 2017**

1. **Middlefield Road / Sixth Avenue**
   - Install advance yield lines on the approaches from Middlefield Road for the existing crosswalk
   - Install R1-5 “YIELD HERE TO PEDESTRIANS” signs adjacent to recommended advance yield lines on Middlefield Road
   - Install advance “STOP” markings and stop bars on the approaches from Sixth Avenue
   - Install R1-5 “YIELD HERE TO PEDESTRIANS” signs adjacent to recommended advance yield lines on Middlefield Road

2. **Middlefield Road / Sixth Avenue**
   - Conduct a feasibility study for the installation of RRFBs to enhance the visibility of the existing crosswalk on Middlefield Road
   - Paint curb red next to the existing driveway entrance in order to increase visibility at the intersection
   - Install advance yield lines on the approaches of Middlefield Road for the existing crosswalk
   - Install advance “STOP” markings and stop bars on the approaches from Sixth Avenue

3. **Middlefield Road / Eighth Avenue / Semicircular Road**
   - Paint curb red on the eastern corner of the intersection
   - Trim vegetation on the northern corner of the intersection to increase signal visibility and pedestrian visibility for vehicles turning right from Eighth Avenue

4. **Garfield Community School Drop Off Loop**
   - Extend sidewalks on both sides of the school's entrance to narrow the driveway
   - Short Term: Paint ladder striping along striped pedestrian pathway through the drop off loop to create higher visibility. Place cones along the edge to delineate the path.
   - Long Term: As part of the facility improvements, connect the sidewalk from Semicircular Road to the school through a raised, curbed pedestrian pathway running in front of the school. Remove the parking in front of the school and create a loading zone.

5. **Semicircular Road / Arrowhead Lane / Sixth Avenue**
   - Paint curb red near the corners of the intersections to increase visibility
   - Install advance yield line on Arrowhead Lane approach
   - Install R1-5 “YIELD HERE TO PEDESTRIANS” sign adjacent to recommended advance yield line on Arrowhead Lane

6. **Semicircular Road / Arrowhead Lane / Fifth Avenue**
   - Paint curb red near the corners of the intersection to increase visibility
   - Install advance yield lines on the approaches for Semicircular Road for the existing and proposed crosswalks
   - Install curb extensions on both sides of the Arrowhead Lane approach
   - Install high visibility crosswalk on the southern leg of the fork in Semicircular Road
   - Modify existing median to extend curb on Semicircular Road to increase pedestrian visibility, decrease crossing distance, and prevent parking over crosswalk
   - Replace existing illuminated pedestrian warning signs with RRFBs on the northern leg of the fork in Semicircular Road

7. **Semicircular Road / Fifth Avenue Pedestrian Bridge**
   - Repave the path connecting the Fifth Avenue Pedestrian Bridge and Semicircular Road
   - Install lighting on Fifth Avenue Pedestrian Bridge
   - Create separated spaces for pedestrians and bicyclists along the existing fence line and create space for vehicles to access the existing residential driveways.

8. **Corridor Recommendations**
   - Fifth Avenue: Consider installing Class II bike lanes from Middlefield Road to Edison Way or, alternatively, convert the corridor into a Class III bikeway.
   - Sixth Avenue: Consider installing Class III bike route from Semicircular Road to Middlefield Road
   - Glendale Avenue: Consider installing a Class III bike route from Fifth Avenue to Berksire Avenue
   - Columbia Avenue: Consider installing a Class III bike route from Glendale Avenue to El Camino Real
   - Middlefield Road: Conduct a feasibility study for a 4 lane to 3 lane road diet with the installation of buffered bike lanes

Improvements not to scale
## Traffic Safety Improvements

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**SubTotal Items** $458,600

CONSTRUCTION CONTINGENCY 20% $91,700

**Total** $550,300