To: Matthew Reeves, Safe Routes to School Coordinator and General Program Associate, Redwood City 2020
From: Dara O’Byrne, Planning Associate
Joe Paull EIT, Engineer II
Date: January 5, 2018

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

Overview of Process

In order to assess the walking and biking safety conditions, needs, and opportunities of the Hoover Community School campus and community, a walk audit was performed during the morning drop off time of 8 AM to 8:30 AM (with a morning bell of 8:25). The group performing the walk audit included the participants listed below. The purpose of the walk audit was to identify behaviors during drop-off, interactions between pedestrians, bicyclists, and motor vehicles, and identify infrastructure needs.

Participants:

- Dara O’Byrne – Planning Associate, Alta Planning + Design
- Joseph Paull, EIT – Engineer II, Alta Planning + Design
- Matthew Reeves – SRTS Coordinator & General Program Associate, Redwood City 2020
- David Linhares – Community School Coordinator, Hoover Community School, Redwood City School District
- Amanda Rothengast, Principal, Hoover Community School
- John Crowell, Redwood City 2020
- Kimberly Overton – Assistant Engineer, Community Development, City of Redwood City

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.
Hoover Community School Background and Existing Conditions

Background Information

Hoover Community School is located on Charter St between Spring Street and Stambaugh Street. Hoover Community was built in 1946 and was modernized in 1998; the school will undergo a major renovation in 2018. The current student population is about 850 students between Kindergarten and 8th grade.

Existing Conditions

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

Front Drop-Off Loop on Charter St

- The drop off loop is one-way, allowing vehicles to travel south, with two drive aisles. The entrance and exit of the loop are both on Charter Street between Stambaugh Street and Spring Street.
- The front drop off loop has a center buffer area between the drive aisles that are striped with the words ‘PED ZONE’ and diagonal white stripes. This continues the entire length of the loop and is intended for students that enter and exit vehicles that are lined up in the loop. The pedestrian zone crosses the outer drive aisle at the end of the loop, creating a conflict between vehicles and pedestrians.
- Vehicles lined up and became congested within the drop off loop before the morning bell.
- Pedestrians crossing the northern driveway of the loop have low visibility to drivers turning left into the loop due to the presence of a street tree and adjacent parked cars.
- There is no buffer or curb separating the drop off area from the sidewalk, leaving pedestrians exposed.

Rear Parking Lot & Secondary Drop-Off Loop

- The rear parking lot has a drop off zone abutting the school campus and a drive aisle between this drop off zone and the parking stalls on the other side of the lot. The parking lot allows for one-way traffic with an entrance on Stambaugh Street and an exit on Laurel Street.
- Cars parked in the drop off area and drop offs were observed in the drive aisle, forcing pedestrians to navigate between parked and moving cars. It was observed that double parking in the drive aisle was a common occurrence during drop off times, turning both lanes into drop off lanes.
- This lot will be removed with the implementation of the Hoover Community School Facilities Masterplan (discussed on the following pages).

Charter Street

- There is a raised mid-block crosswalk with curb extensions between Stambaugh Street and Spring Street, at the exit of the drop off loop.
- There is a loading zone on the west side of Charter Street just north of Stambaugh Street that is used for drop off and pick up of students. Vehicles were observed parking in this loading zone, with one car parking...
perpendicular, causing other vehicles to reverse out of the loading area and make dangerous maneuvers to re-enter the travel lanes.

- Curb extensions are installed at the intersection of Charter Street and Stambaugh Street. Parents and school staff noted that the curb extensions have effectively reduced speeds on Charter Street. Multiple skid marks indicate that the curb extension on the northwest corner of the intersection is often struck by turning vehicles.
- Charter Street is a Class III Bikeway with share lane markings.

Stambaugh Street

- There is a crossing guard stationed at Stambaugh Street and Willow Street. It was reported that the crossing guard is rotated from this intersection to the intersection of Stambaugh Street and Laurel Street.
- Stambaugh Street is a Class III Bikeway with shared lane markings.
- The majority of students that walk to school were observed walking along Stambaugh Street, mostly coming from the pedestrian bridge at the western end of Woodside Road.
- High speeds were observed on Stambaugh Street.
- The northeast corner of Stambaugh Street and Manzanita Street has overgrown vegetation that blocks visibility of pedestrians to drivers.
- Parking occurs in the designated bus drop-off location.
- The street trees on Stambaugh Street block the visibility of many of the signs.

Middlefield Road

- Middlefield Road was observed to be congested near the school campus during the morning drop off times.
- The traffic signal at the intersection of Middlefield and Charter Street has actuated pedestrian signals that do not have pedestrian recall. The crosswalks crossing Middlefield Road have pedestrian refuge islands in the center of the roadway.
- Middlefield Road was noted to have Class II bike lanes north of Woodside Road.
- At the time of the site assessment, pedestrian crossings were not present at the intersection of Middlefield Road and Woodside Road. A crossing at this location is currently under construction.
Woodside Road Pedestrian Bridge @ Stambaugh Street

- A pedestrian bridge spans Woodside Road, connecting the two halves of Stambaugh Street. The bridge has a switchback at both entrances.
- The bridge was observed to be heavily tagged with graffiti and was noted to have an “uninviting” appeal by the walk audit group.
- Large waves of students and parents were observed crossing the bridge from the communities to the west of Woodbridge Road during the morning drop off.
- Bikers were observed utilizing the bridge

Other Observations

- Hoover Park was noted as a popular location for students to spend time after school, but was noted to not have proper lighting.
- Sidewalk parking was observed on Spring Street where rolled curbs are present, which blocked the path for pedestrians.

Summary of Recommended Improvements

Recommendations to improve infrastructure or operations within and surrounding the Hoover Community School campus can be seen on the conceptual improvement plan on the following page. 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 Hoover Community 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 are also included on these maps to promote good behavior among bicyclists, pedestrians, and drivers.
- Emphasize and grow support volunteer led walking school buses and bike trains, especially for families north of Woodside Road.
- Organize community support and volunteer groups for painting a mural on the pedestrian bridge crossing Woodside Road and regular clean up events.
- Provide support for staff and/or volunteers to manage the drop-off zone in the front of the school
- Join the countywide SR2S program and participant 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.
Livable Neighborhood Streets Recommendations

The Livable Neighborhood Streets (LNS) project is a street enhancement project in the neighborhoods surrounding the new “Stanford in Redwood City” campus. The project is developing friendly, community oriented streets that are accessible for people riding bicycles, walking, and driving cars. The project has had several public workshops in Redwood Village, Friendly Acres, and North Fair Oaks and has proposed improvements in these neighborhoods. Several recommendations are within the vicinity of Hoover Community School. The following are recommendations for consideration or additions to these plans:

- In general, prioritize projects that are within five hundred feet of the school and work to improve safety and comfort of non-motorized travel.
- Douglas Avenue and Middlefield Road curb extensions. Install high visibility crosswalks, including across the driveway, in addition to the recommended curb extensions.
- Spring Street and Second Avenue and Spring Street and Douglas Avenue curb extensions. Install high visibility crosswalks in addition to the recommended curb extensions.
- Spring Avenue and Flynn Avenue high visibility crosswalks. Install ADA-compliant curb ramps along with the recommended high visibility crosswalks. Curb extensions should also be installed at this intersection.
- Stambaugh Street from the pedestrian bridge to Mansanita Street streetscape enhancements. It was discussed during the walk audit that this may include curb extensions and green infrastructure. One possible location for the green infrastructure installation is at the end of Stambaugh Street before the pedestrian bridge. If this is to be installed, special consideration should be given to ensure the green infrastructure does not reduce access to and from the bridge for bicyclists. It should also include a bicycle ramp and ADA-compliant curb ramp leading from the roadway to the pedestrian bridge.

For more information on the Livable Neighborhood Streets, visit: [http://www.redwoodcity.org/livable](http://www.redwoodcity.org/livable)
Redwood City School District Facilities Master Plan Recommendations

A facilities master plan was created for the Hoover 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](http://www.rcsdk8.net/Page/6104)

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

- With the redesign of the front drop off loop, consider removing parking spaces within the loop and creating a pedestrian space in their place. This improvement is not currently budgeted for in the District’s Master Plan.
- Consider a grade separation or planted buffer between the driveway loop and the adjacent sidewalk. This improvement is not currently budgeted for in the District’s Master Plan.
- The Facilities Master Plan will relocate the gym to intersection of Willow Street and Stambaugh Street. The gym will have an access point at the intersection, which will likely direct additional pedestrians to cross at this intersection. The intersection should be enhanced to improve pedestrian safety. Placemaking elements such as pavement markings can also be incorporated into this design. More specific recommendations can be found on the improvements map.
- Keep the existing buffer between the drive aisles in the drop off loop but restrict the ‘PED ZONE’ striping to the final 20 feet in order to encourage parents to let their children out at the end of the loop. This will allow traffic movements to be conducted more efficiently and will reduce the number of conflicts between students walking from the cars and the vehicles moving through the loop. This area should be staffed during drop off and pick up times in order to further encourage parents to wait until they reach the front of the loop to drop off or pick up students. Follow the model established by Selby Lane. This improvement is not currently budgeted for in the District’s Master Plan.
The above items are recommendations only and based on Safe Routes to Schools site assessment best practices. Feasibility, prioritization for funding, and implementation of any recommended improvements is the responsibility of the appropriate governing agency.

- All recommendations that are a part of this Safe Routes to School plan either align with or expand upon the recommendations for the neighborhood that are part of the Livable Neighborhood Streets Project.
- In general, consider placing a higher priority for funding and implementation of any recommended improvements in the neighborhood that are part of the Safe Routes to Schools Improvement Plan.

**Note:** For additional information on Livable Streets Recommendations in relation to Hoover Elementary School, see the Hoover Community School Technical Memo.
## Traffic Safety Improvements

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**SubTotal Items** $619,500  
**CONSTRUCTION CONTINGENCY** 20% $123,900  
**Total** $743,400