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: Taft Community School Walk/Bike Audit and Field Review**  

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**Overview of Process**  

On May 23, 2017, a walk/bike audit and field review was performed during the morning drop-off time to assess the walking and biking safety conditions, needs, and opportunities at Taft Community School. Participants observed behaviors during drop-off, interactions between pedestrians, bicyclists, and motor vehicles, and infrastructure needs. At the end of the field review, 17 participants gathered in the Police Activities League Building community room to discuss the observations during the morning arrival period and parents shared their regular observations and concerns. All of these items were recorded on a large plotted map (see below).

Participants included:

- 10 parents of Taft students
- Taft Community School Crossing Guard
- Theresa Vallez-Kelly, San Mateo County Office of Education Safe Routes to School Coordinator
- Elsa Aispuro, Taft Community School Coordinator
- Officer Ken Faljean, Redwood City Police Department
- Kimberly Overton, City of Redwood City Engineer
- Matthew Reeves, Redwood City 2020 Safe Routes to School Coordinator and General Program Associate
- Dara O'Byrne, Alta Planning + Design Planning Associate
- Ben Frazier, Alta Planning + Design Planner

After the audit and field review, Alta compiled all of the concerns and observations and developed recommended improvements to address concerns and issues. These recommendations are discussed in the following section.
Taft Community School Background and Existing Conditions

Background information

Taft Elementary School is located on 10th Avenue between Page Street and Bay Road. Taft was originally built in 1947 and was modernized in 1993; the elementary school will undergo a major renovation in 2018. The current student population is about 520 students between Kindergarten and 5th grade. After the renovation, the school will also serve 6th, 7th, and 8th graders.

Existing Conditions

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

Bay Road/Eleventh Avenue & Bay Road/Twelfth Avenue

- Many families were observed walking along the south side of Bay Road
- To reach the school, most families crossed Bay Road at Tenth Avenue
- Both Eleventh Avenue and Twelfth Avenue intersections with Bay Road have wide curb radii and unmarked crosswalks

Bay Road/Tenth Avenue (northern leg)

- Tenth Avenue is disjointed at Bay Road
- There is a crossing guard stationed at this intersection
- This is the most popular crossing to cross Bay Road (north-south). It is currently striped with a yellow ladder crosswalk
- The crossing guard, who has been stationed at this intersection for an extended period of time, reports feeling very unsafe attempting to stop vehicles speeding along Bay Road
- Sometimes cars do not stop when the crossing guard attempts to stop traffic to allow pedestrians to cross
- While the school crossing signs do have actuated flashing lights, they are not effective at slowing or stopping vehicles as they approach
- Cars travel along Bay Road well above both the posted speed limit (30 MPH) and the school zone (25 MPH) limit
- Approaching Bay Road, left turns onto Bay are prohibited during certain hours. Walk audit participants reported some cars still make left turns, despite both near-side and far-side signage
- The Tenth Avenue crossing is currently striped as a yellow transverse crosswalk (east-west)
• Both sides of the Tenth Avenue approach to Bay Road have sufficient red curb striped, but enforcement was reported as an issue by walk audit participants

Bay Road/Tenth Avenue (southern leg)
• Similar to Bay Road and Eleventh Avenue and Twelfth Avenue the Bay and Tenth (south) intersection crosswalk is not marked
• This intersection has wide curb radii
• Walk audit participants reported that sometimes pedestrians will cross here, instead of at the northern segment of Tenth Ave

Bay Road/9th Avenue
• The crossing across Ninth Avenue is not striped
• This intersection has wide curb radii
• Walk audit participants reported that sometimes pedestrians will cross here, and not at the northern segment of Tenth Ave
• On the north side of Bay Road there is a fire access driveway and gate. Walk audit participants reported that during drop-off and pick-up times, cars will stop and sometimes park there for loading and unloading

Bay Road/ Eighth Avenue
• Bay Road/Eighth Avenue is the second primary crossing for students and families traveling along Bay Road to access Taft
• The intersection is uncontrolled and has no striped crossings
• Similar to other Bay Road intersections, the curb radii here are very wide
• On both sides of Bay Road, east of Eighth Avenue, there are SamTrans bus stops. Walk audit participants reported that these stops were used by both Taft students and students of nearby schools.
  o Neither bus zone has sufficient red curb

Bay Road/Seventh Avenue & Bay Road/Sixth Avenue
• Many families were observed walking along both sides of Bay Road
Both Seventh Avenue and Sixth Avenue intersections with Bay Road have wide curb radii on both sides of Bay Road
Both Seventh Avenue and Sixth Avenue intersections with Bay Road have unmarked crosswalks

Tenth Avenue (between Page Street and Bay Road)
- Tenth Avenue is a popular drop-off area for students being driven to school
- Some of the curb along the school frontage is painted white for loading/unloading. Walk audit participants reported that cars will sometimes park in this area
- The sidewalk along Tenth Avenue is narrow, but has room to be widened to provide pedestrians (some with strollers) additional walking space

Tenth Avenue/Michael Drive
- The crossing across Michael Drive in not striped
- Walk audit participants reported that multiple cars a day will use this intersection (and other points along Michael Drive) to make U-turns

Eighth Avenue (between Page Street and Bay Road)
- Eighth Avenue is another popular location for students being dropped-off by car
- There is school access at the northern end of the baseball fields
- Pick-up and drop-off in the area can get very crowded as this is also the primary pick-up/drop-off loading area for KIPP Excelencia school located on the same campus
- There is currently very limited painted white curb space along Eighth Avenue

Page Street/Tenth Avenue
- This intersection is all-way stop controlled
- All four crossings are currently striped as yellow transverse crosswalks with advance stop markings

Page Street/Eighth Avenue
- This intersection is currently two-way stop controlled; traffic traveling on Eighth Avenue has to stop
- All four crossings are striped: the two Eighth Avenue crossings are transverse crosswalks and the two Page Street crossings are ladder crosswalks
- The two approaches from Eighth Avenue have advance stop markings; the two Page Street approaches do not have advance yield markings

Page Street/Seventh Avenue & Page Street/Sixth Avenue
- Both Seventh Avenue and Sixth Avenue intersections with Page Street have really wide curb radii on both sides of Bay Road
- Both Seventh Avenue and Sixth Avenue intersections with Page Street have unmarked crosswalks
- There is a speed hump on Page Street between Sixth and Seventh Avenues
Summary of Recommended Improvements

Recommendations to improve infrastructure and operations within the Taft 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 Taft 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. Encourage families to cross Bay Road at controlled intersections or Tenth Avenue with the crossing guard.
- 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.

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.
- At the intersection of Bay Road and Tenth Avenue, install a refreshed high visibility crosswalk, curb extensions, advance yield markings (shark’s teeth), and additional red curb around the crosswalks/curb extensions in addition to the recommended Rectangular Rapid Flashing Beacon (RRFB). High visibility crosswalks and bulbs are included on the low priority list.
- At the intersection of Bay Road and Eighth Avenue, incorporate advance stop markings on the Eighth Avenue approaches and advance yield markings on the Bay Road approaches, curb extensions at all four corners, and additional red curb at the corners for both pedestrian visibility and for the SamTrans bus zone in addition to the RRFB and high visibility crosswalks recommended.
- At the intersection of Page Street and Eighth Avenue, in addition to installing high visibility crosswalks and curb extensions, nearby vegetation should be trimmed to increase pedestrian and sign visibility, additional
red curb should be installed, the intersection should be studied to see if it can be converted to all-way stop control, and the appropriate advance stop or yield markings should be installed.

- The Livable Neighborhood Streets plan calls for Class II bike facilities along Florence Street/Bay Road from 17th Avenue to Fourth Avenue. It is recommended that this lane be extended to Second Avenue.

For more information on the Livable Neighborhood Streets, visit:
http://www.redwoodcity.org/livable

**Redwood City School District Facilities Master Plan Recommendations**

A facilities master plan was created for the Taft 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:

- While specific improvements to the parking area for pick-up/drop-off flow are not planned or budgeted for in the current Master plan, the school and the district should continue to monitor the drop-off/pick-up circulation, and make necessary improvements to improve pedestrian safety. These improvements can include additional signage and markings or a redesign or where pick-ups and drop-offs are allowed.
The above items are recommendations only and based on 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 prioritization for all improvements near the Taft Community School Campus.

**Fair Oaks Avenue**
- Consider placing a higher prioritization for all recommendations that are a part of this Safe Routes to School plan.

**Livable Neighborhood Streets Project (LNS)**
- Redwood City Campus
- Taft Community School
- Specifics on Livable Streets Recommendations. For additional comments on Livable Streets Recommendations in relation to Taft Community School, see the Taft Community School Technical Memo.

**Other Recommendations**
- Install transverse crosswalks on the southern approach of Sixth Avenue and Page Street
- Southern approach of Sixth Avenue and Page Street
- Install curb extensions on the southern approaches of Seventh Avenue and Bay Road
- Install red curb around each corner of the intersection
- Install high visibility crosswalks across north and south approaches
- Install curb extensions on all corners of the intersection
- Install advance "STOP" markings and stop bars on the approaches of Eighth Avenue and Avenue yield lines on the approaches of Bay Road
- Install red curb around each corner of the intersection
- Install high visibility crosswalks on the north, east, and west approaches of the intersection (consistent with LNS)
- Install RRFB on the recommended Bay Road crossing (consistent with LNS)
- Install RRFB on the recommended Bay Road crossing (consistent with LNS)
- Install red curb on the northeast corner of the intersection, along Bay Road to allow for more buses
- Install "BUS LOADING" signs at the two bus stops on Bay Road

**Bay Road / Ninth Avenue**
- Install transverse crosswalk across Ninth Avenue
- Install curb extensions or reduce curb radii on both corners of Ninth Avenue
- Install R93bp "USE CROSSWALK" signs on both corners of Ninth Avenue

**Bay Road / Tenth Avenue**
- Install R93bp "USE CROSSWALK" signs on both southern corners of Tenth Avenue
- Install high visibility crosswalks across north and south approaches
- Install curb extensions at the landings of proposed and existing high visibility crosswalks
- Install RRFB on Bay Road crossing (consistent with LNS)
- Consider installing R5-2 "LEFT TURN" blank out sign

**Improvements not to scale**
0 300 ft

**Taft Community School**
Redwood City
Livable Neighborhood Streets Project (LNS)
- 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.

**Page Street / Eighth Avenue**
- Conduct traffic study for an all-way stop control
- Install red curb around each corner of the intersection
- Install advance "STOP" markings and stop bars on the approaches of Eighth Avenue and Avenue yield lines on the approaches of Bay Road
- Install red curb around each corner of the intersection
- Install high visibility crosswalks across north and south approaches
- Install curb extensions at the landings of proposed and existing high visibility crosswalks
- Install RRFB on Bay Road crossing (consistent with LNS)
- Consider installing R5-2 "LEFT TURN" blank out sign

**Page Street / Tenth Avenue**
- Install high visibility crosswalks across each approach
- Install curb extensions on all corners of the intersection
- Install high visibility crosswalks across Michael Drive
- Install curb extensions on both corners of Michael Drive

**Tenth Avenue / Michael Drive**
- Install high visibility crosswalks across Michael Drive
- Install curb extensions on both corners of Michael Drive

**Taft Community School Campus**
- Utilize the planting strip to expand the sidewalk on the east side of the school campus
- Paint the curb green and install R32D "30 MINUTE PARKING" signs as shown on the east side of the school campus
- Refresh the red and white painted curbs on the east side of the school campus and install R26S "NO STOPPING ANYTIME" signage and R25D "SCHOOL LOADING" signage as shown on the east side of the school campus
- Paint curb white as shown on the west side of the school campus

**Spring Street**
- Install transverse crosswalks on the: Fifth Avenue: Consider installing Class II Bike Lanes from rail crossing to Florence Street (consistent with LNS) This may require reduction in lane widths and/or removal of the turn lane in some areas
- Fifth Avenue: Consider installing Class II Bike Lanes from rail crossing to Rolson Road (consistent with LNS)

**Corridor Recommendations**
- Page Street: Consider converting to bicycle boulevard from Second Avenue to Haven Avenue
- Bay Road: Consider installing Class II Bike Lanes from Douglas Avenue to Florence Street (consistent with LNS). This may require reduction in lane widths and/or removal of the turn lane in some areas
- Fifth Avenue: Consider installing Class II Bike Lanes from rail crossing to Rolson Road (consistent with LNS)

**Other Recommendations**
- Install advance "STOP" pavement markings and yield line
- Install advance "STOP" markings and stop bars on the approaches of Eighth Avenue and Avenue yield lines on the approaches of Bay Road
- Install red curb around each corner of the intersection
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- Install RRFB on Bay Road crossing (consistent with LNS)
- Consider installing R5-2 "LEFT TURN" blank out sign

**Bay Road / Fifth Avenue**
- Long Term: Conduct traffic analysis for converting to signalized intersection

The above items are recommendations only and based on Safe Routes to School site assessment best practices. Feasibility determination, final design, accessibility, funding, and implementation of any recommended improvements is the responsibility of the appropriate governing agency.
## Traffic Safety Improvements

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SubTotal Items $764,000

CONSTRUCTION CONTINGENCY 20% $152,800

Total $916,800