

School Safety Assessment Technical Memorandum

TENNYSON HIGH SCHOOL

Hayward Unified School District

January 2019

TENNYSON HIGH SCHOOL


A school safety assessment was conducted at Tennyson High School in Hayward during the afternoon dismissal on Wednesday January 30th, 2019. The assessment was attended by representatives from the City of Hayward, Alameda County Safe Routes to Schools staff, and Tennyson High staff and students.

Participants included:

- Charmine Solla, Senior Transportation Engineer, Hayward Public Works
- Veronica Estrada, Principal Tennyson High School
- Leslie Lara-Enriquez, Alameda County SR2S Team
- Aleida Andrino-Chavez, Alameda County SR2S Team
- Carlos Valadao, Engineer, Alameda County SR2S Team
- Courtney Wood, Planner, Alameda County SR2S Team
- Ben Frazier, Planner, Alameda County SR2S Team
- Darrell Davis, Alameda SR2S County Team
- 6 Tennyson High School staff
- 6 Tennyson High School students

School Information

Location & Enrollment

	Address:	27035 Whitman Street, Hayward, CA 94544
	Morning Bell(s):	8:15 AM
	Afternoon Bell(s):	Regular Days: 3:30 PM Collaboration Days: 2:14 PM
	Grade Levels:	9-12
	Enrollment	1,446
	School Type (neighborhood/magnet/charter) :	Tennyson High has an enrollment boundary

Student Travel Data

Students' Proximity to School (school estimate):	<p>Less than ¼ mile (5-min. walk): 5%</p> <p>Between ¼ and ½ mile (5-10-min. walk): 20%</p> <p>Between ½ and 1 mile (10 to 20-min. walk): 35%</p> <p>Greater than 1 mile (more than 20-min. walk): 40%</p>
---	--

Student Travel Mode Info:	School Estimate:
	<p>Walking: 50%</p> <p>Biking: 2%</p> <p>School Bus: 2%</p> <p>Transit: 25%</p> <p>Carpool: 5%</p> <p>Family Vehicle: 15%</p> <p>Other: 0%</p>

Note: Recent Hand Tally data is not available for Tennyson High.

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>Tennyson High has 4 “school yard” style bike racks, with a total capacity of about 100 bikes.</p> <p>This bike parking area is located in a secure, fenced-off area.</p>
<p>How do school buses interact with the school?</p>	<p>There is very limited school bus activity at Tennyson High. Only a small percentage of students use the school buses.</p> <p>These buses load along the curb in the large parking lot.</p>
<p>Is the school served by local transit agencies? Are there stops within ¼ mile?</p>	<p>There is no transit service directly fronting the campus. AC Transit service is accessible from three nearby corridors: Whitman Street (north of Harder Road), Tennyson Road, and Mission Boulevard.</p>
<p>Does the school have special pick-up/drop-off policies/procedures?</p>	<div> </div> <p>Student and family vehicles primarily access the campus from the large parking area.</p> <p>A large number of students access Tennyson High from a path along its northern edge. This path crosses active railroad tracks.</p>

Frontage Streets

Street Name	Width	Lanes	Posted Speed Limit	Traffic Volumes	Existing Traffic Calming
Whitman Street	44 feet	2 lanes	25 mph		Class II bike lanes
Huntwood Avenue	48 feet	2 lanes	30 mph		Class II and IIB bike lanes

Existing Conditions

Tennyson High School is located on Whitman Street, between Harder Road and Tennyson Road in Hayward. Students arrive at Tennyson High through a variety of modes; the majority of students use active or shared modes of travel. To the west, the school is bordered by the Union Pacific Niles Subdivision Railroad (UPRR) tracks. This active track is used by both passenger (Capitol Corridor) and freight trains. There is a pedestrian crossing on these tracks that connects to a path providing campus access. Many students also utilize the pedestrian overpass of the BART tracks near the Whitman Street/Fruitwood Way intersection. The drop off lane and parking lot experiences congestion during peak periods.

The following existing conditions were observed or reported by participants during the school safety assessment (SSA).

1. UPRR Railroad Crossing and Northern Border Path

- ◆ A path runs along the northern edge of the campus between Whitman Street and Huntwood Avenue.
 - This path is mostly paved. It becomes unpaved between the football field and the railroad crossing.
 - The paved segment of this path is uneven due to minimal maintenance.
 - The path was also observed to be covered in leaves, dirt, and other debris and could use sweeping.
 - There are multiple entry/exit points for this path:
 - Sorensdale Park
 - Near the tennis courts (most popular exit point)
 - Whitman Street
 - Huntwood Avenue
 - The school has staff stationed near the tennis courts/main buildings to monitor the path.
 - Both pedestrians and bicyclists were observed using this path.
 - Many students use this path as their access point into/out of campus.
 - Any student who wants to cross travel west of the tracks uses this path.
 - Students primarily access the path via Whitman Street and the gate near the tennis courts.

- Some students exit into Sorensdale Park, but most continue across the railroad tracks.
- ◆ The path is served by an at-grade pedestrian crossing of the UPRR tracks.
 - The crossing is currently equipped with concrete crossing panels, red flashing lights, and bells. The lights and bells begin about 30 seconds prior to trains approaching the crossing, which was observed to be very little warning for pedestrians.
 - There are currently no crossing arms or gates.
 - Passing trains do not typically slow for this crossing and pass through at a high rate of speed.
 - There is a fence along the school property line, but there is no barrier separating the trackway from Huntwood Avenue.
 - There is not a sidewalk on the trackside of Huntwood Avenue. There is a sidewalk on the western side across the street.
 - A Capitol Corridor Train passed through the crossing during the assessment's observation period. Student compliance with the crossing lights and bells was observed to be good.
- ◆ As the trackway is not physically isolated by fencing or other barriers, many students were observed walking on or near the tracks (walking north-south along the tracks). This was noted to be a regular occurrence by assessment attendees.
 - Students from nearby Chavez Middle School were observed walking along the railroad tracks.
 - Some students were observed walking along or near the trackway with headphones in; limiting their ability to hear trains.
- ◆ Huntwood Avenue is used as a drop-off/pick-up area by parents. Drivers use the curbside parking areas along Huntwood Avenue where students cross the tracks and use the path to access campus.



Left: The path connecting Huntwood Avenue and Whitman Street along the northern edge of campus (looking towards Huntwood).



Right: This is where the path transitions from paved to unpaved (looking toward Whitman).



Top Left: The railroad crossing looking towards the school from Huntwood Avenue.

Top Right: The railroad crossing looking towards Huntwood Avenue from the Tennyson High gate.

Bottom Left: A group of students biking towards the Huntwood Avenue gate.

Bottom Right: Students walking towards Huntwood Avenue after the dismissal bell.

2. BART/Oakland Subdivision Pedestrian Overpass

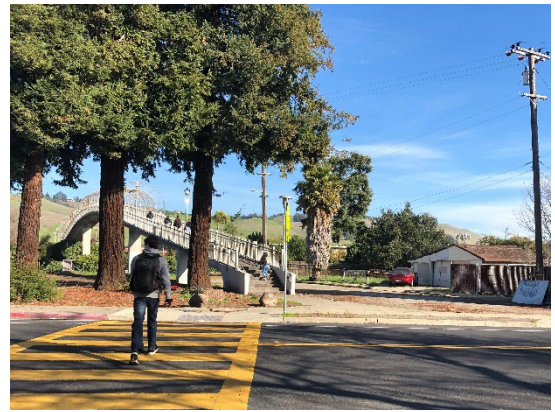
- ◆ Near the Fruitwood Way/Whitman Street intersection there is a pedestrian overpass of BART's tracks and Oakland Subdivision UPRR tracks.
- ◆ This overpass is not currently ADA accessible; there are stairs at both ends of the overcrossing and no ramp.
- ◆ Most students access the overcrossing via the southern crossing of Whitman Street at Fruitwood Way. The Whitman Street crossing is not stop controlled.
- ◆ During the assessment's observation period, some drivers correctly yielded and others did not stop for pedestrians.
 - School staff reported this crossing as one of their primary areas of concern, in part because of poor driver yield compliance.

Alameda County Safe Routes to Schools Program

- ◆ This is the most direct route to Mission Boulevard and other destinations east of the railroad tracks; none of the streets across from the Tennyson Campus cross the BART tracks.



Left: Students crossing Whitman Street walking towards the overpass.



Right: Looking across Whitman Street towards the overpass.



Above: The pedestrian overcrossing, just after the stairs, looking east.

3. Whitman Street Path Entrance/Staff Parking Lot Driveway

- ◆ This area has a high volume of pedestrian traffic, with many students accessing the path.
- ◆ There is a shortage of staff parking in the lot. Some staff drive over the curb and park in the dirt area by trees between the parking lot and the path.
- ◆ Many family vehicles were observed trying to enter the staff parking lot; however, the area is monitored by staff who turn these vehicles away.
 - This can cause congestion on Whitman Street as cars U-turn or back-out of the driveway.



Above: The overflow staff parking area, looking from the path.

4. Large Parking Lot Area

- ◆ The main student parking area is located at the southern side of the campus, accessed via driveways on Whitman Street.
- ◆ Along the northern edge of the parking area, there is a drop-off curb area. This area is primarily used by the small school buses that serve Tennyson High.
- ◆ The parking lot has two driveways; one for entries and one for exits.
 - Cars were observed exiting the parking lot in two lanes, one for left turns and one for right turns.

- ◆ During arrival and dismissal periods, the parking lot area gets very congested with both vehicles and pedestrians.
 - School staff expressed concerns about students walking in the parking lot (to get to their cars) mixing with cars in the parking lot.
- ◆ The queue for the exit driveway can wrap around the back edge of the parking lot as cars slowly filter out.
 - The majority of cars want to turn left out of the driveway.
 - Multiple cars were observed turning left out of the right turn lane, as cars were able to exit faster from that direction.
 - The area in front of the exit driveway is typically congested with cars, making it harder for cars to pull out of the driveway.
 - Car were also observed exiting via the entry area.

5. Whitman Street

- ◆ Northbound drivers on Whitman Street (north of Peyton Drive after parking is prohibited), were observed routinely crossing the lane line and cutting into the bike lane at the curve in the road.
- ◆ Along the frontage of Whitman Street, on both sides of the street, drivers were observed stopping in the bike lane and loading/unloading students.
 - School staff reported that this is a regular occurrence.
- ◆ Drivers were also observed blocking private residential driveways to load/unload students.
- ◆ Students were observed biking the wrong direction along Whitman Street.
- ◆ Student and parent vehicles are not permitted into the north and central parking areas; these are for staff parking only. These driveways are coned off during the pick-up and drop-off times.
 - Drivers will sometimes pull in front of and block these driveways when loading and unloading students.
- ◆ Multiple cars were observed performing U-turns on Whitman Street.
- ◆ Students were observed crossing mid-block across Whitman Street along the school's entire frontage. SSA participants reported that many students did not sufficiently look for traffic before crossing and that many students had two earbuds in, making it harder to hear their surroundings.
- ◆ SSA participants stated that cars turning onto Whitman Street from the minor streets in front of the school routinely cut off other vehicles.



Left: A northbound car traveling primarily in the bike lane along Whitman Street.

Right: Whitman Street, north of Raymond Drive, looking towards the school.

6. Whitman Street/Manson Drive

- ◆ This T-intersection is all-way stop-controlled.
 - This is the only location on Whitman Street where vehicles have to stop in the immediate vicinity of the school.
- ◆ Drivers routinely perform rolling stops at this intersection.
- ◆ SSA participants reported that cars regularly perform U-turns at this intersection.

Recommendations

Engineering Recommendations

Recommendations to improve infrastructure or operations surrounding Tennyson High School can be seen on the conceptual improvement plan found on the following page.

Policy & Program Recommendations

The Alameda Safe Routes to Schools Program, in addition to engineering improvements, has many encouragement and educational activities that can benefit students and campus community at Tennyson High.

The School Site Coordinator for Tennyson High is Darrell Davis. The site coordinator can help schedule, organize, and promote many of the program offerings of Alameda SR2S. The contact information for the Site Coordinator is below:

Darrell Davis, ddavis@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 Tennyson High School to increase safety and active commutes to school.

- ◆ Continue to Provide Rail Safety Education
 - Continue to provide rail safety education classes to students to raise awareness of and increase safety when crossing and walking near active railroad tracks.
- ◆ 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 (WSB), Bicycle Trains (BT), 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 and students 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.
 - The school can also provide carpools with parking or drop-off incentives.
- ◆ Schedule Drive Your Bike Program
 - This interactive workshop is a great educational opportunity to teach and refresh safe bicycling behavior. This workshop covers a wide range of relevant topics from understanding traffic signals and signs, to bicycle hand signals, to how to safely cross the street. The Drive Your Bike workshop has both a middle school and high school version.
- ◆ Participate in International Walk and Roll to School Day (IRW2SD), Cocoa for Carpools (C4P), 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. Cocoa for Carpools, held in the winter, is a fun event for high schools that rewards carpoolers with free hot chocolate when they arrive to school. 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.

Transit Recommendations

- ◆ Tennyson High School is served by transit with bus stops for AC Transit Line 99 available on Mission Boulevard, Lines 83, 86, and 41 on Tennyson Road, and Line 41 Whitman Street (north of Harder Road).
 - Line 37 used to run on Whitman Street and had stops in front of the school. AC Transit recently took that line out of service.
- ◆ The principal indicated that about 25% of students use transit to get to/from school.
- ◆ As none of the bus stops are immediately adjacent to the campus, ensuring that students have safe access to these stops is very important.
 - Whitman Street is very important for north-south travel.

Alameda County Safe Routes to Schools Program

- Enhancing the crossing of Whitman Street near the pedestrian overpass of BART will aid in improving access to Mission Boulevard.
- ◆ South Hayward BART is about half a mile away and is accessible via Tennyson Road.

Safe Routes to Schools Improvement Plan
Tennyson High School,
Hayward

Site Assessment held January 2019

- 1**Union Pacific Railroad Crossing**
 - Enhance the existing advance train alert system by installing pedestrian scale crossing arms/gates on both sides of the rail crossing
 - Install barrier fence/anti-trespass landscaping across the right-of-way on both sides of the track crossing
 - Update the sidewalk pattern (meeting ADA standards) approaching the crossing to a “Z” type crossing to increase pedestrian visibility of tracks
 - Refresh railroad crossing signs around this crossing
 - Upgrade the fencing along the western edge of the school to 10-feet tall with anti-climb mesh openings
 - Long Term: The City and School District should work with Union Pacific to build a sidewalk or shared-use path parallel to the tracks along Huntwood Avenue. [This trail could potentially run between Tennyson Rd and Harder Rd or Jackson St]. A 10-12 foot tall fence and/or anti-trespass landscaping should separate this path from the active trackway and designed with “rail-with-trail” best practices
 - Short Term: The City and School District should raise awareness of safety concerns with Amtrak/Union Pacific and to discuss additional short term improvements
 - Add “Railroad Crossing Ahead” signage for students using the path
- 2**Pathway along Tennyson’s Northern Border**
 - Pave the western-most segment of the trail near the football field
 - Perform regular maintenance/sweeping of the path
 - Resurface the trail to provide a better surface for students biking and walking along it
- 3**Pathway/Whitman Street & Northern Parking Lot Edge**
 - If staff parking continues to be necessary in the unpaved area, consider formalizing it as a parking zone to clearly indicate its intended use for all users and to make movements more predictable
 - At all staff-only driveways, install “Staff Parking Only” signs to re-enforce that parents and students should not be entering those areas
 - Continue to place cones in front of driveways during pick up and drop off to reinforce that the driveways cannot be used by parents or students
- 4**Large Parking Lot**
 - Install R61-19 Turning Instruction Sign to enforce the correct turning movement from each lane
 - Install turn arrow pavement markings near the driveway
- 5**Whitman Street/Fruitwood Way/BART Pedestrian Overpass**
 - Install advance yield markings around the existing high visibility crossing of Whitman Street
 - Install a RRFB at the Whitman Street crossing
 - Long Term: Retrofit the overcrossing with ADA compliant ramps, increasing accessibility of the facility. The lights at either end of the overcrossing will also have to be relocated to ensure necessary width
- 6**Whitman Street**
 - In front of the parking lot exit driveway, stripe “KEEP CLEAR” pavement markings
 - Install bicycle lane conflict markings across Tennyson High School driveways on the western side of Whitman Street
 - Install conflict markings in northbound bicycle lane where Whitman Street curves (Continues to the left)



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.