Hirsch Elementary School & Horner Junior High School Fremont School Traffic Safety Assessment Technical Memo

October 2017

Prepared by Alta Planning + Design

Hirsch Elementary School & Horner Junior High School

A joint Traffic Safety Assessment was conducted at Hirsch Elementary School and Horner Junior High School during the afternoon dismissal on Tuesday, March 21, 2017. The assessment was attended by representatives from the City of Fremont, Fremont Police Department, Alta Planning + Design, and both Hirsch Elementary and Horner Junior High staff.

Hirsch Elementary School Information

Address	41399 Chapel Way Fremont, CA 94538	
Morning Bell(s)	Kindergarten: 8:20am	
	First-Sixth Grades 8:15am	
Afternoon Bell(s)	Kindergarten, First, Second, and Third Grades: 2:31pm	
	Fourth, Fifth, & Sixth Grades: 2:46pm	
Grade Levels	Grades K-6	
Enrollment	573	

Horner Junior High School Information

Address	41365 Chapel Way Fremont, CA 94538
Morning Bell(s)	8:15am
Afternoon Bell(s)	2:26pm* Next academic year, Horner is cutting 20 minutes from their daily instructional time which can help offset the dismissals
Grade Levels	Grades 7-8
Enrollment	1,000

Hirsch Elementary School and Horner Junior High School share a campus located along Chapel Way. The schools' longest street frontage is along Chapel Way on its eastern border. The west and south sides of the schools are bordered by single family houses. Irvington Avenue borders the school to the north. Both schools share curb drop-off space along Chapel Way.

Hirsch Elementary has two driveways along Chapel Way, one for a staff parking lot and the other for their small drop-off loop. Horner Jr High has two lots accessible from Chapel Way and one from Irvington Avenue. The two lots on Chapel Way are for FUSD buses and staff parking only. The lot accessible from Irvington Avenue has parking and a drop-off loop available for parents to use. The curb along Irvington is also commonly used for loading and unloading.

Existing Conditions

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

1. Hirsch Elementary Drop-off Loop

- Accessible from the southern-most driveway on Chapel, Hirsch has a small drop-off loop that is heavily used by parents. The loop does get very congested, and many parents opt to park along Chapel Way or Carol Avenue and walk to pick-up their child as an alternative.
- Given the size/space restraints, not much can be done to change Hirsch's drop-off loop. One item that would help cars flow would be improving their ability to exit the loop on Chapel, discussed in more detail in number 3 and 4.



• Cars attempting to turn left into the drop-off area can cause additional congestion along Chapel Way.

2. Horner Jr High Drop-off Loop

- The drop-off loop for Horner Junior High is larger than Hirsch's, but still suffers vehicle flow and efficiency problems.
- Once a vehicle enters to loop and finds an available spot, the car will usually park until the child is ready to return to the car. This practice limits the amount of cars that can enter the loop, as cars do not typically pull forward OR enter one of the available parking spaces in the same lot.
- Additionally, cars attempting to make a left turn into the lot from Irvington were observed blocking eastbound traffic and the sidewalk/driveway as they attempted to enter the lot.
- Horner has limited staffing availability to have a person monitor the lot to improve efficiency and behavior.
- Additionally, some pedestrians were observed jaywalking across Irvington (from the driveway). Some were attempting to access a vehicle idling on the opposite curb and a few sought to use the cemetery as a shortcut.





3. Chapel Way

- Chapel Way is the primary hub of activity for pick-up and drop-off for both schools.
- The sidewalk on the school side of the street is very narrow, and the parkway is not maintained (creating a muddy mess). As a long-term improvement project, it should be widened to better accommodate the high volume of pedestrian traffic.
- In the afternoons, the northern stretch of this block of Chapel Way is reserved for three AC Transit buses (on the day of the assessment, there was one articulated bus and two standard length buses). This represents over 140 feet of required space for the buses to layover before the dismissal bell.
 - The southernmost end of the bus zone is right up against a crosswalk. The bus parks so close, it limits the ability of through traffic on Chapel and pedestrians wishing to cross to see each other.
- Also on the school side of Chapel, the southern extent of this block (near Carol Avenue) has another AC
 Transit bus stop. A discharge-only stop is located across the street.
- The remainder of the Chapel on the school side and entire other side of the street is used as parking and/or loading space for private vehicles.
- All school-related driveways on Chapel (five driveways) except for the Hirsch drop-off loop are not intended to be used by parents. Staff and FUSD buses do use them, however. This creates a lot of potential conflict zones.
- There are two speed bumps currently on Chapel Way, one near Hirsch's staff parking lot and one near the middle of Horner's primary staff parking lot.
 - o The speed bump closer to Hirsch is commonly used by both parents and students as a crosswalk; a de facto raised crossing.





The only striped crosswalk across this stretch of Chapel Way is at Laurel Street, on the Horner side of Chapel (near the AC Transit buses); inconvenient for most Hirsch-related activity. This generates an increased amount of jaywalking throughout the corridor, particularly on the speed bump.



4. Chapel Way and Carol Avenue

- Chapel Way and Carol Avenue has a very high volume of pedestrian crossings during afternoon dismissal. Both crossings are very heavily used.
- This is also one of the two ways that vehicles can access either school.
- A crossing guard is VERY necessary at this crossing. The primary concern observed at this intersection was that the semi-constant, but inconsistent, flow of pedestrians. For example, pedestrians would enter the crosswalk and they would get about two-thirds of the way across (as vehicles are preparing to move), and then seeing people still in the crosswalk, another group of pedestrians would then enter the intersection. This process repeated itself constantly throughout the pick-up period.
 - o While this does lead to greater vehicle congestion, more importantly it was observed that patience of drivers grew shorter as they continued to wait and they then began to make risker decisions.
 - A crossing guard could control the flow of the pedestrians, allowing both the children and parents to cross safely, and create opportunities for the cars to safely travel through the intersection.



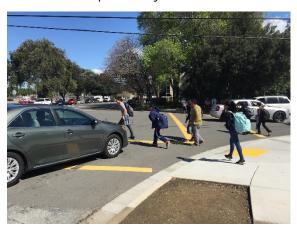


- A notable number of vehicles traveling westbound on Carol Avenue were overserved making "California Roll" stops as they made right turns onto Chapel Way. This is very dangerous given the high volume of pedestrian traffic.
- Despite there being the road width for cars to form two lanes on southbound Chapel near the intersection, cars would commonly use the middle of the southbound roadway (lanes are not striped). Cars commonly have to wait to turn right due to pedestrians crossing. Because cars commonly used the middle of the lane, those cars were in the same line as cars who wanted to turn left who generally had less

pedestrian conflicts to yield to; this increases the back-up on Chapel and also hinders cars' ability to leave the Hirsch drop-off loop.

5. Chapel Way and Irvington Avenue

- Chapel Way and Irvington Avenue behaves very similarly to Chapel Way and Carol Avenue. The following three observations hold true at this intersection as well.
- Chapel Way and Irvington Avenue has a very high volume of pedestrian crossings during afternoon dismissal. The two crossings originating from the corner of the school are the two most heavily used.
- This is also one of the two ways that vehicles can access either school.
- A crossing guard is VERY necessary at this crossing. The primary concern observed at this intersection was that the semi-constant, but inconsistent, flow of pedestrians. For example, pedestrians would enter the crosswalk and they would get about two-thirds of the way through crossing (as vehicles are preparing the move) and then seeing people still in the crosswalk, another group of pedestrians would then enter the intersection. This process repeated itself constantly throughout the pick-up period.
 - While this does lead to greater vehicle congestion, more importantly it was observed that patience of drivers grew shorter as they continued to wait and they then began to make risker decisions.
 - A crossing guard could control the flow of the pedestrians, allowing both the children and parents to cross safely, and create opportunities for the cars to safely travel through the intersection.
- The ability of this intersection to flow with some regularity has a direct impact on the ability of cars to be able to exit Horner's drop-off loop. Cars will line the curb on the school side of Irvington (and the cemetery side to a much lesser extent). The constant flow of pedestrians limits cars' ability to clear the intersection, which slows the ability of cars to pull away from the curb and exit the loop, respectively.





6. Additional Observations

 Horner Jr High currently has limited bike and skateboard parking on campus. The occupancy of this parking area should be monitored and expanded if necessary.

7. Current Safe Routes to School Involvement

- Hirsch Elementary joined the Countywide SR2S program in Fall 2016; making this their first year in the program. Hirsch Elementary should be sure to take advantage of both the educational and encouragement activities. Specifically, the Rock the Block Assembly and Pedestrian Safety Rodeos would be very beneficial to these students.
- Joining the SR2S program would provide Horner Junior High with both educational and encouragement resources to educate students about the rules of the road and safety issues as well as encouraging increased travel by Green Modes (walking, biking, carpool, school bus, and transit).

Recommendations

Recommendations to improve infrastructure or operations surrounding Hirsch Elementary and Horner Junior High can be seen on the conceptual improvement plan found on the following page. Engineering cost estimates for the infrastructure recommendations are also provided.

The following improvements are recommendations for policy and program implementation at Hirsch Elementary School and Horner Junior High to increase safety and active commutes to school.

Policy & Program Recommendations

- 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.
- Participate in more SR2S events, including International Walk and Roll to School Day,
 Pedestrian Safety Rodeos, and the Rock the Block Assembly.
- 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.
- 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. Similarly, Walking School Buses and Bike Trains can be established with the same type of coordination.
- Educate students that speed bumps should not be used as crosswalks.
- Horner Jr. High Specific Recommendations
 - o In the drop-off area, install signage and instruct parents (through ongoing communication methods) to pull into a parking space if their child is not ready to keep the loop moving.

Hirsch Elementary Specific Recommendations

 Through suggested route maps, ask students and parents to walk along the far side of the Chapel Way to minimize the conflicts with the five driveways on the school side of the street.



John M. Horner Jr. High School and O.N. Hirsch Elementary School, **Fremont**

Safe Routes to School Improvement Plan Site Assessment held March 2017

- Irvington Avenue
 - Paint curb and install R25D or R26(S) signs to designate loading and no parking zones.
- Irvington Avenue / Chapel Way
 Install high visibility crosswalks on all four legs and curb extensions on all four corners
 - Consider providing a crossing guard at this intersection
- Chapel Way / Laurel Street
 Install high visibility crosswalks on south and east legs
 Install curb extension with detectable warning surface
 - on school side of Chapel Way
 Install high visibility crosswalk across Mahoney Street
 Install advanced yield markings on approaches
 Install School Assembly B Signage at both crossings
 Consider installing curb extensions at both eastern

 - corners
- **Chapel Way**
 - Paint curb yellow, white, or red (30' prior to crosswalk at Laurel) to designate bus, loading, or no parking zones with accompanying R25D, R26(S), or R28C
 - Long Term: widen sidewalk on the school side of Chapel Way
- Chapel Way / Carol Avenue
 Install high visibility crosswalks on north, east, and
 - Install curb extensions at northeast corner (existing ramps at both north corners)
 - Install curb ramp with detectable warning surface at southwest corner
 - Consider providing a crossing guard at this intersection
 - Stripe right and left turning lanes
- Irvington Avenue / Thurston Street
 - · Install high visibility crosswalks on south and west

Improvements not to scale





Fremont School Traffic Safety Assessment John M. Horner Jr. High School and O.N. Hirsch Elementary School Preliminary Cost Estimate

Alta Planning + Design 11/30/2017

Traffic Safety Improvements

ITEM		ESTIMATED			
NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
1	Mobilization	1	LS	\$37,200	\$37,000
2	Traffic Control	1	LS	\$37,200	\$37,200
3	High Visibility Crosswalk	14	EA	\$2,000	\$28,000
4	Curb Extension & Ramp	10	EA	\$20,000	\$200,000
5	Curb Ramp Improvement	6	EA	\$5,000	\$30,000
6	Yield Line	1	EA	\$500	\$500
7	Sign and Post Assembly	11	EA	\$500	\$5,500
8	Right and Left Turn Pavement Markings	2	EA	\$400	\$800
9	Sidewalk Widening (Long Term)	5000	SF	\$20	\$100,000
10	Painted Curb Marking	1	LS	\$7,100	\$7,100
		SubTo	SubTotal Items		\$446,100
		CONSTRUCTION CON	TINGENCY	20%	\$89,200
			Total		\$535,300





PROJECT

Fremont School Traffic Safety Assessments

SUBJECT

Hirsch Elementary

DATE

March 21, 2016

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