

Blacow Elementary School Fremont School Traffic Safety Assessment Technical Memo

December 2017

Prepared by Alta Planning + Design

Blacow Elementary School

A Traffic Safety Assessment was conducted at Blacow Elementary School during the afternoon departure on Wednesday, October 25, 2017. The assessment was attended by representatives from the City of Fremont, Alta Planning + Design, and Blacow Elementary staff.

School Information

Address	40404 Sundale Drive Fremont, CA 94538
Morning Bell(s)	8:15 AM/ 11:20 AM (K), 8:15 AM/ 9:15 AM (TK), 8:24 AM (1-6)
Afternoon Bell(s)	11:35 AM/ 2:40 PM (K), 11:35 AM/ 12:35 PM (TK), 2:40 PM (1-6) Wednesday: 1:20 PM (1-6)
Grade Levels	TK-6
Enrollment	435
School Type (neighborhood or magnet)	Magnet (dual immersion program)
Participating School in Alameda County Safe Routes to Schools?	No
Does the school have bike racks? What is the capacity? Is it secure bike parking? On a typical day, what percentage of racks are used?	Yes, Blacow Elementary School has bike racks. This bike parking is unsecured. Capacity: 36 bikes On a typical day, 20% of bike racks are being used.
How do school and transit buses interact with the school?	Buses use separate loop east of drop-off loop. Buses pick up students after traffic from school dismissal has cleared.

Blacow Elementary is located on Sundale Drive in a low density residential area, just one block from Blacow Road, and a number of blocks from Stevenson Boulevard. The school property is bounded by Sundale Drive and Hilo Street – both low traffic, slow speed roads. The school is adjacent to Blacow Park. There are currently two access areas to the school, including from the drop off loop located on Sundale Drive, and through a gate located on Hilo Street. There are two school-related driveways on Sundale Drive including the drop-off loop, and the bus pick-up/drop-off area.

Within a half mile, there were 10 pedestrian-involved collisions and 14 bicycle-involved collisions between 2011 and 2014. Closest to the school, there was one bicycle injury that occurred on Sundale Drive at Boone Drive.

Existing Conditions

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

1. Sundale Drive

- ◆ There were no vehicles observed speeding on Sundale Drive during the walk audit, aided by the two existing speed humps.
- ◆ Some students and parents crossed Sundale Drive outside of crosswalk locations.

2. Sundale Drive/Verne Street

- ◆ Students and parents walk along both sides of Sundale Drive, including across Verne Street.
- ◆ Verne Street does not currently have a stop sign or designated crosswalk.

3. Sundale Drive/Hilo Street

- ◆ Vehicles yielded to the high volume of pedestrian traffic crossing the intersection at all approaches. Vehicles got backed up at this intersection because of high pedestrian volumes.
- ◆ A participant observed that allowing left turns out of the school drop off loop alleviated further backup at this intersection as people driving could choose to turn left and avoid the Sundale Drive/Hilo Street intersection.

4. Hilo Street/Besco Drive

- ◆ There are currently three transverse crosswalks at the intersection of Hilo Street and Besco Drive. There were high levels of pedestrian traffic crossing Hilo Street along the designated crosswalks.
- ◆ The more westerly crosswalk across Hilo Street does not have a curb ramp connecting to the sidewalk.
- ◆ Audit participants observed vehicles speeding on Besco Drive, most likely because it is a connection to Stevenson Boulevard. Vehicles were observed doing U-turns in the Hilo Street/Besco Drive intersection.



Left: View from school courtyard at the intersection of Hilo Street and Besco Drive.

Right: Sidewalk on Hilo Street without curb ramp.

5. Drop-Off Loop

- ◆ Blacow Park has a number of pedestrian pathways that run adjacent to the school property. Assessment participants did not see any families use Blacow Park to enter school property.
- ◆ At dismissal time, students walking, biking and being picked up by car cleared out of the area within 15 minutes. There was minimal vehicle backup onto Sundale Drive and many parents parked on surrounding streets to pick up their students.
- ◆ The sidewalk in front of school was not overly crowded after dismissal bell, and this was aided by volunteers and staff that encouraged students being picked up to wait at benches on school property until they saw their parents.



Drop off loop after Wednesday dismissal.

- ◆ Cars sometimes parked in front of red curb by entrance of drop off loop. Cars parked in front of red curb made entering the drop off loop more difficult, especially for the small buses that use the drop-off loop.



Vehicle parked in front of red curb by drop-off loop entrance.

6. Drop-Off Loop Exit

- ◆ The crosswalk striped across the drop off loop exit has a CA MUTCD non-compliant width and striping, and currently the advanced stop pavement marking and turn arrows are painted underneath the crosswalk.

7. Bus Drop-Off Lot/Sundale Drive

- ◆ There were a couple of vehicles waiting in the bus drop off area, but Principal Jose Hernandez told the group that a volunteer was very efficient at clearing parent drivers in time for bus pickup.
- ◆ The crosswalk striped across the parking lot exit has a CA MUTCD non-compliant width and striping.

8. Hilo Street

- ◆ There is currently a loading zone for approximately 40' on Hilo Street along school property edge. During the walk audit it was observed that some of the cars at this section were parked and one car was blocking a driveway.
- ◆ Students and parents were observed crossing Hilo Street at mid-block locations, especially coming from the school access gate on Hilo Street.

Recommendations

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

The following improvements are recommendations for policy and program implementation at Blacow Elementary 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. This would include crossing roadways at crosswalks and not at midblock locations.
- ◆ Work with parents to connect them with others who live nearby to increase the number of students carpooling, especially for those that come from outside neighborhood attendance area. This 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.
- ◆ Join the Alameda County Safe Routes to School program and participate in educational events, including Bike Rodeos, Pedestrian Safety Rodeos, and the Rock the Block Assembly.
- ◆ After joining the program, participate in SR2S evaluations each fall and spring to monitor progress on mode shift goals.
- ◆ Send regular reminders to parents regarding the drop-off and pick-up location options. Consider opening the Hilo Street/Besco Drive gate for dismissal times. If this recommendation is implemented, encourage parents to use the relatively underutilized curb on Hilo Street east of the Hilo Street/Besco Drive intersection.



DATE October 25, 2017

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**Fremont School Traffic Safety Assessment
Blacow Elementary School
Preliminary Cost Estimate**

Alta Planning + Design

6/4/2018

Traffic Safety Improvements - City of Fremont Recommendations

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	COST
1	Mobilization	1	LS	\$3,000	\$3,000
2	Traffic Control	1	LS	\$3,000	\$3,000
3	High Visibility Crosswalk	8	EA	\$2,000	\$16,000
4	Curb Ramp Improvement	1	EA	\$5,000	\$5,000
5	STOP Bar and Pavement Marking	7	EA	\$400	\$2,800
6	Stop Control Warrant Study	1	LS	\$6,000	\$6,000
SubTotal Items					\$35,800
CONSTRUCTION CONTINGENCY				20%	\$7,200
Total					\$43,000

Traffic Safety Improvements - Fremont Unified School District Recommendations

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	COST
1	Mobilization	1	LS	\$3,900	\$4,000
2	Traffic Control	1	LS	\$3,900	\$3,900
3	High Visibility Crosswalk	2	EA	\$2,000	\$4,000
4	Sign and Post Assembly	1	EA	\$500	\$500
5	Drop-off Loop Striping	1	LS	\$1,500	\$1,500
6	STOP Bar and Pavement Marking	2	EA	\$400	\$800
7	Remove STOP Bar and Pavement Marking	2	EA	\$50	\$100
8	Concrete Pedestrian Path (School to Park Connection) [Optional]	1,200	SF	\$20	\$24,000
9	School Access Gate [Optional]	1	EA	\$500	\$500
10	Bike SPA (Secured Parking Area) [Optional]	1	LS	\$7,500	\$7,500
SubTotal Items (Optional Items Not Included)					\$14,800
CONSTRUCTION CONTINGENCY				20%	\$3,000
Total					\$17,800
SubTotal Items (Optional Items Included)					\$46,800
CONSTRUCTION CONTINGENCY				20%	\$9,400
Total					\$56,200

Traffic Safety Improvements - All Recommendations

<i>City of Fremont Recommendations</i>	<i>Total</i>	\$43,000
<i>Fremont Unified School District Recommendations (without Optional Items)</i>	<i>Total</i>	\$17,800
All Recommendations	Total	\$60,800
<i>City of Fremont Recommendations</i>	<i>Total</i>	\$43,000
<i>Fremont Unified School District Recommendations (with Optional Items)</i>	<i>Total</i>	\$56,200
All Recommendations	Total	\$99,200

Blacow Elementary Fremont

Safe Routes to Schools Improvement Plan

Site Assessment held October 2017

- 1 Verne Street/Sundale Drive**
- Install high visibility crosswalks across both Verne Street approaches to Sundale Drive
- 2 Sundale Drive/Hilo Street**
- Install high visibility crosswalks and advance stop pavement markings at all approaches
- 3 Hilo Street/Besco Drive**
- Install high visibility crosswalks and advance stop pavement markings at all approaches
- Install curb ramp on Hilo Street curb
- 4 Blacow Park**
- Explore connection between Blacow Park and rear entrance to Blacow Elementary to open new walking routes to school for families
- 5 Bus Drop-Off Lot/Sundale Drive**
- Upgrade crosswalk to high visibility crosswalk across parking lot exit and move back placement of advanced stop pavement marking
- 6 Drop-Off Loop**
- Install R26S "No Stopping" Sign and stripe diagonal hatching along existing red curb to discourage parking
- 7 Drop Off Loop Exit**
- Upgrade crosswalk to high visibility crosswalk and move back placement of advanced stop pavement marking
- 8 Bicycle Parking**
- Consider installing cage around existing bicycle parking for additional security
- 9 Hilo Street/Besco Drive**
- Consider adding school gate near intersection to be used at school dismissal to promote parents picking up students on Hilo Street east of intersection



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.

Improvements not to scale