

**Kennedy High School  
Fremont School Traffic Safety Assessment  
Technical Memo**

October 2017


Prepared by Alta Planning + Design



# Kennedy High School

A Traffic Safety Assessment was conducted at Kennedy High School during the morning arrival on Thursday, October 26, 2017. The assessment was attended by representatives from the City of Fremont, Fremont Police Department, Alta Planning + Design, and Kennedy High staff.

## School Information

Address	39999 Blacow Road Fremont, CA 94538	
Morning Bell(s)	8:00 AM Wednesday: 8:35 AM	
Afternoon Bell(s)	3:00 PM Wednesday: 2:40 PM	
Grade Levels	9-12	
Enrollment	1,385	
School Type (neighborhood or magnet)	Most students come from enrollment area.	
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, JFK High has bicycle parking. It is in a fenced area, but the gate is not locked.  The existing racks are at or near capacity on most days.	
How do school and transit buses interact with the school?	No buses	
Does the school have special pick-up/drop-off policies/procedures?	There is the main drop-off loop and a secondary loop in the student parking lot that is less utilized. Students can also be dropped-off along Farwell Drive and walk through the field. Some drop-off also occurs in the ROP parking lot; students are not to park in that lot.	

John F. Kennedy High School is located off of Blacow Road, near the Stevenson Boulevard intersection. The school has direct frontage along Blacow Road and Farwell Drive. Students accessing the school via bicycle come from both directions on Blacow Road and from the east via Stevenson Boulevard. Most pedestrian access occurs through the Blacow Road/Boone Drive intersection, but others come via the shopping center parking lot at Blacow and Stevenson. Some students are also dropped-off along Farwell Drive and access the school via the fields.

Between 2011 and 2015 there were 7 pedestrian-involved collisions and 10 bicycle-involved collisions within a  $\frac{1}{4}$  mile of the school and 4 pedestrian-involved collisions and 5 bicycle-involved collisions between a  $\frac{1}{4}$  and  $\frac{1}{2}$  a mile of Kennedy High School. Most of these collisions occurred along Stevenson Boulevard, Blacow Road, or Sundale Drive.

## Existing Conditions

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

### 1. Blacow Road

- ◆ Most students access the high school via Blacow Road. The school has three driveways along Blacow Road (from north to south) including the staff parking lot, drop-off loop, and student parking lot.
  - During the audit, students were observed walking onto campus using the staff and student parking lot driveways.
- ◆ There are currently three pedestrian entrances along Blacow Road: one at the western end of the drop-off loop, the Boone Drive intersection, and one at the eastern end of the loop.
- ◆ Once the loop reaches capacity, cars back-up onto Blacow Road, blocking the right lane; this makes it difficult for bicyclists to travel along Blacow Road. Bicyclists commonly ride on the sidewalk or dismount and walk because they can no longer ride along the curb.
- ◆ Walk audit participants reported that cars are regularly observed dropping students off in no stopping areas, at intersections, mid-block, near the median, and other prohibited areas.
- ◆ Participants also noted that students biking along Blacow Road often bike on the sidewalk because the curb area is usually blocked by cars wrongly loading/unloading and/or waiting to enter a driveway.



*Looking northwest along Blacow Road from the student parking lot driveway.*

## 2. Blacow Road/Boone Drive Intersection

- ◆ This intersection is where most pedestrians access campus. The majority of students come from Boone Drive; there is a very large volume of pedestrians and can cause vehicle delays for cars leaving the drop-off loop.
- ◆ Cars waiting to enter and leave the loop can also block the intersection, making it difficult for pedestrians to cross.
- ◆ Currently there is only one marked crossing on the east intersection approach and no marked crossing across Boone Drive.



*The Blacow Road/Boone Drive Intersection, looking towards the existing marked crossing at the east approach.*



*The Blacow Road/Boone Drive existing crossing.*

### 3. Blacow Road/Student Parking Lot

- ◆ This is the school's southern-most driveway and serves as one of the access points for the student parking lot.
- ◆ Both pedestrians and bicycles coming from Stevenson Boulevard were observed entering campus through the driveway and not using the paved path further along Blacow Road. The driveway is the first point of access coming from that direction.
- ◆ Walk audit participants reported that during afternoon dismissal, a long queue can build trying to leave the parking lot, as cars struggle to see and find a gap where they can safely exit.
- ◆ During the morning arrival period, participants observed some conflicts between bikes and cars as they entered the driveway. JFK's bicycle parking is on this side of the school, and most students access the parking area via the student parking lot.
- ◆ There is a drop-off area within the student parking lot. This area was observed to be underutilized on the day of the assessment.
- ◆ To take pressure off of the Boone Drive exit of the main drop-off loop, cars are permitted to take a right turn out of the loop and exit via the student lot. This created conflicts between cars, bikes, and pedestrians entering the student lot driveway.



*The student parking lot driveway off of Blacow Road.*

#### 4. Stevenson Boulevard (east of Blacow Road)

- ◆ Walk audit participants reported that all of the bicyclists observed on Stevenson Boulevard were riding on the sidewalk and not with traffic.

#### 5. Sundale Drive

- ◆ Walk audit participants reported that cars speed along Sundale Drive. Sundale Drive was used by some students as an alternative to Blacow Road.
- ◆ Additionally, Sundale Drive is currently designated as a bicycle route. Calming traffic will make Sundale a more comfortable street for students and other bicyclists to ride.

#### 6. Staff Parking Lot Driveway

- ◆ Despite existing signage indicating that there should be no drop-off in the staff lot, parents were regularly observed entering the parking lot to drop-off their children.

#### 7. Internal Circulation

- ◆ Once on campus, students are asked to walk their bicycles. While compliance is sometimes limited, the on-campus infrastructure can be improved to facilitate better pedestrian connections.
- ◆ Students bicycling to school from the north or west tend to enter campus as soon as they can to avoid conflicts on Blacow Road. However, once they are on campus, there are no pedestrian facilities that can provide access to the bike parking area on the eastern side of campus. Students either walk in the roadway or on grass (which can be problematic in inclement weather).



- ◆ As mentioned in above section, pedestrians also enter campus via the student parking lot driveway. Providing better pedestrian facilities in this part of campus could improve pedestrian safety and behavior.



*Looking towards the student parking lot/bike parking area from Blacow Road; left is west of the drive, right is east of the driveway.*

## Recommendations

Recommendations to improve infrastructure or operations surrounding Kennedy High School 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 Kennedy High School 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.
- ◆ 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.
- ◆ Send regular reminders to parents regarding the drop-off and pick-up location options and encourage parents to use the relatively underutilized drop-off space along Farwell Drive.
- ◆ Join the Alameda County Safe Routes to Schools Program. This program can provide bicycle and pedestrian education for students, encouragement activities, and advice and support to encourage more students to walk and bike.
- ◆ Provide additional bicycle, skateboard, and longboard parking for students. The parking area should be locked during the middle of the day to minimize theft.



**PROJECT** Fremont School Traffic Safety Assessments

**SUBJECT** Kennedy High School

**DATE** October 26, 2017

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**Fremont School Traffic Safety Assessment  
John F. Kennedy High 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	\$34,400	\$34,400	
2	Traffic Control	1	LS	\$34,400	\$34,400	
3	High Visibility Crosswalk	6	EA	\$2,000	\$12,000	
4	Curb Extension & Ramp	1	EA	\$50,000	\$50,000	
5	Curb Ramp Improvement	3	EA	\$5,000	\$15,000	
6	Shared Lane Markings	2	EA	\$350	\$700	
7	Buffered Bike Lanes*	1	LS	\$100,000	\$100,000	
8	Class IV Bike Facility*	1	LS	\$150,000	\$150,000	
9	Widen Concrete Sidewalks	800	SF	\$20	\$16,000	
10	Signal Modification (Pedestrian Scramble)	1	EA	\$20,000	\$20,000	
11	Corridor Wide Traffic Calming Allowance (Sundale Drive)	1	LS	\$250,000	\$250,000	
<b>SubTotal Items</b>					<b>\$682,500</b>	
				CONSTRUCTION CONTINGENCY	20%	\$136,500
<b>Total</b>					<b>\$819,000</b>	

\*Cost may vary depended upon extents of facility

**Traffic Safety Improvements - Fremont Unified School District Recommendations**

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	COST	
1	Mobilization	1	LS	\$6,600	\$6,600	
2	Traffic Control	1	LS	\$6,600	\$6,600	
3	High Visibility Crosswalk	2	EA	\$2,000	\$4,000	
4	Traffic Cones & Delineators	1	LS	\$1,000	\$1,000	
5	Drop-off Signage and Markings	1	LS	\$5,000	\$5,000	
6	Concrete Pedestrian Path or Sidewalk	2,800	SF	\$20	\$56,000	
7	Painted Curb Marking	1	LS	\$5,000	\$5,000	
8	Bike SPA (Secured Parking Area) [Optional]	1	LS	\$15,000	\$15,000	
<b>SubTotal Items (Optional Items Not Included)</b>					<b>\$84,200</b>	
				CONSTRUCTION CONTINGENCY	20%	\$16,800
<b>Total</b>					<b>\$101,000</b>	
<b>SubTotal Items (Optional Items Included)</b>					<b>\$99,200</b>	
				CONSTRUCTION CONTINGENCY	20%	\$19,800
<b>Total</b>					<b>\$119,000</b>	

**Traffic Safety Improvements - All Recommendations**

<i>City of Fremont Recommendations</i>	<i>Total</i>	\$819,000
<i>Fremont Unified School District Recommendations (Without Optional Items)</i>	<i>Total</i>	\$101,000
<b>All Recommendations</b>	<b>Total</b>	<b>\$920,000</b>
<i>City of Fremont Recommendations</i>	<i>Total</i>	\$819,000
<i>Fremont Unified School District Recommendations (With Optional Items)</i>	<i>Total</i>	\$119,000
<b>All Recommendations</b>	<b>Total</b>	<b>\$938,000</b>



# John F. Kennedy High School DRAFT Fremont

## Safe Routes to Schools Improvement Plan

Site Assessment held October 2017

- 1 Blacow Road**
  - Install Class IV separated bikeways on Blacow Road in front of the school. Create connection to Silver Reef Drive at the north end. If feasible, continue bikeways along additional segments of Blacow Road
- 2 Blacow Road/Boone Drive**
  - Convert existing transverse crosswalk to high visibility crosswalk
  - Stripe new high visibility crosswalks on the northern and eastern approaches
  - Build out northeast corner (sidewalks and curb ramps) and extend sidewalk at the southeast corner to accommodate pedestrians
  - Install high visibility crosswalks across Blacow Road frontage road crossings at Boone Drive
  - Reconfigure intersection signals to create an all-pedestrian phase (pedestrian scramble) during school arrival and dismissal times
- 3 Stevenson Boulevard (east of Blacow)**
  - In the long term, install planned Class IV bike facilities or Stevenson Boulevard side path
- 4 Sundale Drive**
  - Install traffic calming measures on Sundale Drive to slow traffic and make it a safer bicycle route. Consider conversion to bicycle boulevard
- 5 Farwell Drive**
  - Install a high visibility crosswalk at the school entrance. Install curb ramps
  - North of the entrance install sharrows. South of the entrance install buffered bike lanes
- 6 Blacow Road**
  - In the short term, paint red curb along school frontage
- 7 Blacow Road/Staff Parking Lot Driveway**
  - Install additional signs/pavement markings to indicate there is no student drop-off via this driveway. Consider using cones to narrow driveway.
  - Cone off area between staff parking lot and drop-off loop
- 8 Internal Circulation Improvements**
  - Create a continuous pedestrian path from Blacow Road to existing sidewalk on the east side of school. This involves creating a sidewalk using existing lawn space in the Blacow Road frontage area (a sign will need to be relocated), striping a marked crossing across the parking lot, and continuing the sidewalk from the crossing to the existing sidewalk on the southeastern side of the school
  - Create a sidewalk from the drop-off loop to the proposed sidewalk on the east side of the school, improving connectivity
  - Mark a crosswalk between existing sidewalks near handicap parking spaces
  - Encourage bicyclists to dismount and use the proposed new sidewalk paths to minimize parking lot conflicts
  - Consider adding an additional bicycle parking facility on the west side of campus



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.