# Forest Park Elementary School Fremont School Traffic Safety Assessment Technical Memo

October 2017

Prepared by Alta Planning + Design

# **Forest Park Elementary School**

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

## **School Information**

Address	34400 Maybird Circle Fremont, CA 94555		
Morning Bell(s)	8:25 AM/ 11:35 AM (K),	3:30 AM (1-6)	
Afternoon Bell(s)	11:45 AM/ 2:55 PM (K), 2:55 PM (1-6)		
	Wednesday: 11:45 AM (K), 1:30 PM (1-6)		
Grade Levels	K-6		
Enrollment	1,011		
School Type (neighborhood or magnet)	Attendance area boundary		
Students' Proximity to School	Less than ¼ mile (5-minute walk): 20%		
(Percentage of students)	Between ¼ and ½ mile	(5- to 10-minute walk): 60%	
	Between ½ and 1 mile (10- to 20-minute walk): 15%		
	Greater than 1 mile (more than 20-minute walk): 5%		
Participating School in Alameda County Safe Routes to Schools?	Yes		
Student Travel Mode Info (Percentage of students)	School Estimate:	Recent SR2S Hand Tally Data (if available): Fall 2014	
( or ormage or cradement)	Walking: 60%	Walking: 53%	
	Biking: 5%	Biking: 2%	
	School bus: 0%	School bus: 0%	
	Transit: 0%	Transit: 0%	
	Carpool: 10%	Carpool: 8%	
	Family Vehicle: 25%	Family Vehicle: 36%	
	Other: 0%	Other: 0%	
Does the school have bike racks? What is the capacity?	Yes, Forest Park Eleme has secure bike parking		
Is it secure bike parking?	Capacity: 3 long multi-l racks	pike	
On a typical day, what percentage of racks are used?	On a typical day, about bikes & scooters are pa		

How do school and transit buses interact with the school?	No school buses
Does the school have special pick-up/drop-off policies/ procedures?	The school has valet drop-off and pick-up. Safety patrol assists with vehicle loading in the valet area.

Forest Park Elementary School is located in the Ardenwood neighborhood of Fremont in the northern part of the city. The school is located in the middle of loop road, with the only other use inside the loop being a public park; low density residential uses surround the school. On the eastern side of Maybird Circle is a higher-speed collector street, Deep Creek Road.

Between 2011 and 2015 there were 0 pedestrian-involved collisions and 0 bicycle-involved collisions within a ¼ mile of the school and 3 pedestrian-involved collisions and 3 bicycle-involved collisions between a ¼ and ½ a mile of Forest Park Elementary School. These collisions occurred along Deep Creek Road, Paseo Padre Parkway, and Dunsmuir Common.

# **Existing Conditions**

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

- 1. Deep Creek Road/Maybird Circle (South Intersection)
  - This intersection is currently one-way stop-controlled (Maybird leg) and has one marked yellow transverse crosswalk across Maybird.
  - Walk audit participants reported that cars take turns onto Maybird at the intersection very fast, sometimes not yielding to pedestrians.
  - The unmarked crossing across Maybird Circle is well used as it provides near direct access for students and families accessing Forest Park from the townhouse development across the street. This crossing can be difficult as vehicles do not always yield to pedestrians.
  - City of Fremont staff reported that they are currently considering plans to install a stop sign at this intersection.



The southern Maybird Circle/Deep Creek Road intersection looking north.



The southern Maybird Circle/Deep Creek Road intersection looking east across Deep Creek Road.

- 2. Deep Creek Road/Maybird Circle (north intersection) & Deep Creek Road/Crandallwood Drive
  - These two intersections are very close to each other. There is a marked crossing across Maybird Circle and one across Deep Creek Road at Crandallwood Drive. However, navigating the two intersections can be very challenging for both vehicles and pedestrians.
    - o A crossing guard is stationed at Deep Creek Crossing.
    - o This crossing is well utilized as it provides a connection to the housing developments on the east side of Deep Creek Road.
  - Walk audit participants reported that cars regularly speed through the area.
  - In the days immediately following the walk audit, there was a pedestrian-involved collision at this intersection (per the police report, the pedestrian was deemed to be at fault).



Students and families crossing the Deep Creek Road/Crandallwood Drive intersection with assistance from a crossing guard.

#### 3. Maybird Circle/Platinum Terrace

- There is an existing yellow, high visibility crosswalk across Maybird Circle.
  - o This crossing currently lacks advance pavement markings.
  - o There are a relatively high number of pedestrians that cross this intersection as many students live nearby.
- Walk audit participants also reported that U-turns happen somewhat frequently in this segment of Maybird Circle.



Students crossing Maybird Circle at Platinum Terrace with assistance from the student safety patrol.

#### 4. Maybird Circle/Diamond Common

- There are trees and other vegetation near this intersection that can obscure pedestrians from people driving.
  - Walk audit participants reported that this vegetation it makes it more difficult to see pedestrians approaching the crossing.

#### 5. Maybird Circle/Shattuck Avenue

- This intersection is very heavily used by pedestrians.
  - o Parents park/pullover along both Maybird Circle and Shattuck Avenue and unload their kids. The vast majority of kids walked along the sidewalk and used the intersection; it is monitored by the school's student safety patrol.
  - o Both crossings across Maybird Circle were well utilized.
- Shattuck Avenue was heavily utilized by parents as a drop-off location; some did perform mid-block U-turns, however.
- Some pedestrian crossings were observed further north, towards Diamond Common, using unmarked crossings.
- Walk audit participants reported that the crossings at the Shattuck intersection could be better signed in advance.



The student safety patrol stopping traffic to allow students and families to cross at the Maybird Circle/Shattuck Avenue intersection.

#### 6. Maybird Circle

- Maybird Circle has all of Forest Park's frontage along the western side of the circle road.
- Along the school's frontage, red curb paint for "No Stopping" zones were faded and in need of repainting by the school district.
- Select "No Stopping" and "School Zone/Assembly" signs are faded and in need of replacement.





Left: A faded "No Stopping Any Time" sign on Maybird Circle. Right: A segment of curb with very faded red paint along Maybird Circle.

- Walk audit participants noted that further away from the school (near the Deep Creek intersections) cars were regularly observed making U-turns.
- Participants also noted that students and families regularly jaywalk.
  - o This was most frequently observed near the Fairbanks Common driveway.

- There is a curb ramp across the street from this driveway, and city staff noted that there had been prior discussions about marking a crosswalk there.
- Sidewalks along Maybird Circle are more narrow where they front Fisher Park than when fronting the school. The narrower sidewalks can get overcrowded during drop-off and dismissal times.

#### 7. Maybird Circle - Drop-off Loop

- The school has a drop-off loop with one entry driveway and one exit driveway; both are on Maybird Circle.
- The school uses cones and signs to attempt to prohibit left turns into and out of the drop-off loop.
  - o Audit participants reported that cars have moved/runover/drove around the cones to make the prohibited movements.



The drop-off loop entrance with cones to discourage left turns in on Maybird Circle.

#### **Recommendations**

Recommendations to improve infrastructure or operations surrounding Forest Park Elementary 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 Forest Park Elementary 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.
- Participate in more SR2S events, including Bike Rodeos, Pedestrian Safety Rodeos, and the Rock the Block Assembly. These can teach pedestrian and bicycle safety lessons and best practices to kids (and in turn their parents) to improve behavior.
- Participate in SR2S evaluations (hand tallies) 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 and remind parents to follow instructions given by school staff and roadway signs.





**PROJECT** 

Fremont School Traffic Safety Assessments

**SUBJECT** 

Forest Park Elementary

DATE

October 25, 2017

Name	Organization/Affiliation	Email Address
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#### Fremont School Traffic Safety Assessment Forest Park Elementary School Preliminary Cost Estimate

Alta Planning + Design 6/4/2018

Traffic Safety	Improvements - Cit	v of Fremont Recommendations

	ontrol	QUANTITY 1 1	LS	<b>UNIT COST</b> \$30,700	<b>COST</b> \$30,700
<ul><li>2 Traffic C</li><li>3 High Vis</li></ul>	ontrol	1		\$30,700	\$30,700
3 High Vis		1	1.0		
	ikilin. Cuanaall.		LS	\$30,700	\$30,700
4 Sign and	sibility Crosswalk	9	EA	\$2,000	\$18,000
. Sigirari	d Post Assembly	18	EA	\$500	\$9,000
5 Curb Ex	tension & Ramp	4	EA	\$45,000	\$180,000
6 Yield Lir	ne	4	EA	\$500	\$2,000
7 STOP Ba	ar and Pavement Marking	7	EA	\$400	\$2,800
8 Trim Ve	getation	1	LS	\$500	\$500
9 Rectang	gular Rapid Flashing Beacons (RRFB) [Optional]	1	EA	\$15,000	\$15,000
10 Expand	Existing Sidewalks [Long-term Improvement]	4,000	SF	\$20	\$80,000

ALTERNATIVE 1	SubTotal Items (Optional and Long Term Items Not Included)		\$273,700
	CONSTRUCTION CONTINGENCY	20%	\$54,700
	Total		\$328,400
ALTERNATIVE 2	SubTotal Items (Optional & Long Term Items Included)		\$368,700
	CONSTRUCTION CONTINGENCY	20%	\$73,700
	Total		\$442,400

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

ITEM		ESTIMATED			
NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
1	Mobilization	1	LS	\$100	\$100
2	Traffic Control	1	LS	\$100	\$100
3	Painted Curb Marking	1	LS	\$1,000	\$1,000
		SubTo	tal Items		\$1,200
		CONSTRUCTION CON	TINGENCY	20%	\$200
			Total		\$1,400

All Recommendations	Total	\$443,80
Fremont Unified School District Recommendations	Total	\$1,40
City of Fremont Recommendations (With Optional Items)	Total	\$442,40
All Recommendations	Total	\$329,80
Fremont Unified School District Recommendations	Total	\$1,40
City of Fremont Recommendations (Without Optional Items)	Total	\$328,40



# **Forest Park Elementary School DRAFT Fremont**

### Safe Routes to Schools Improvement Plan

Site Assessment held October 2017

- Deep Creek Road/Maybird Circle (south) intersection)
  - Install three curb extensions at all corners except the northeast corner
  - Upgrade the existing transverse crosswalk across Maybird Circle to high visibility and stripe high visibility crosswalk across north leg of intersection - Install rectangular rapid flashing beacon (RRFB) for
  - the northern crossing of Deep Creek Road Install appropriate advanced yield markings
  - dependent on installation of aforementioned
  - Install School Assembly D signs in advance of Deep Creek and Maybird crossings
- Deep Creek Road/Maybird Circle (north intersection)/ Crandallwood Drive
   Remove the existing crosswalk across Deep Creek
  - Road at Crandallwood Drive
  - Upgrade transverse crossing across Crandallwood to high visibility crosswalk
  - The City is currently in the process of converting the intersection to all-way stop controlled
- Maybird Circle/Platinum Terrace
   Install School Assembly D sign in advance of Maybird
  - Refresh advance stop pavement markings on Platinum Terrace
  - Install advance yield markings on Maybird Circle.
    Install a curb extension at southwest corner

  - Refresh faded School Assembly B sign
- Maybird Circle/Diamond Common
   Trim trees/vegetation in parkway to increase visibility of pedestrians and signs
- Maybird Circle/Shattuck Avenue
   Install School Assembly D signs in advance of

  - Refresh "No Stopping Signs" along school frontage Convert transverse crosswalks to high visibility
  - Install advance stop pavement markings on all approaches
- Maybird Circle/Fairbanks Common Driveway
   Utilizing the existing curb ramps, install a high
  - visibility crosswalk

  - Install advance yield markingsInstall School Assembly B sign at the crosswalk
- Maybird Circle
  - Long Term: Consider widening sidewalks along park frontage of Maybird Circle to match the rest of street
- **Maybird Circle School Frontage** 
  - Refresh red paint along curb in no stopping/parking

District Recommendation







Recommendation