

Joseph Azevada Elementary School
Fremont School Traffic Safety Assessment
Technical Memo

October 2017

Prepared by Alta Planning + Design

Joseph Azevada Elementary School

A Traffic Safety Assessment was conducted at Joseph Azevada Elementary School during the afternoon pick-up on Tuesday, March 14, 2017. The assessment was attended by representatives from the City of Fremont, Fremont Police Department, Alta Planning + Design, and Joseph Azevada Elementary staff and parents.

School Information

| | |
|-------------------|------------------------|
| Address | 39450 Royal Palm Drive |
| Morning Bell(s) | 8:30am |
| Afternoon Bell(s) | 2:50pm |
| Grade Levels | Grades K-6 |
| Enrollment | 605 |

Joseph Azevada Elementary is located on Royal Palm Drive in a residential neighborhood. The school is directly adjacent to Azevada Park and there is a pathway and gate allowing students access to the back of the school. Shopping centers located west and south of the school and I-880 generate through traffic around the school. Parents access the drop-off loop and parking lot on Royal Palm Drive. There is a separate staff parking lot, also accessed from Royal Palm Drive.

Existing Conditions

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

1. Royal Palm Drive

- ♦ Cars are backed-up along Royal Palm Drive to enter the drop-off loop from Bamboo Lane to Flamingo Lane.
- ♦ Parents can access the drop-off loop from both directions, which creates turning conflicts between cars.
- ♦ Cars sometimes block the drop-off loop entrance and exit, which can cause sight distance issues, especially for buses.

2. Royal Palm Drive & Bamboo Lane

- ♦ The crosswalk across Royal Palm Drive is heavily used.
- ♦ The intersection is uncontrolled on both legs.

3. Blacow Road

- ♦ Traffic on Blacow Road is light, however, very few parents have their students walk to Azevada School to get picked up or dropped off on the Blacow Road frontage adjacent to the school.
- ♦ The path through Azevada Park to access the school gets muddy when it rains.

- ◆ Occasionally there are issues with parents blocking neighbors' driveways on Blacow Road

4. Royal Palm Drive & Coco Palm Drive

- ◆ The intersection is currently stop controlled on Royal Palm Drive and uncontrolled on Coco Palm Drive.
- ◆ Heavy traffic on Coco Palm Drive makes it dangerous for students to cross Royal Palm Drive.
- ◆ The City has previously conducted studies and plans to convert this intersection to a 4-way stop.

5. Coco Palm Drive & Blacow Road

- ◆ There is an existing Walking School Bus route that crosses through this intersection.
- ◆ More waiting space for pedestrians is needed in the medians across Coco Palm Drive.
- ◆ Pedestrians do not have enough time to cross Coco Palm Drive.

6. Additional Observations

- ◆ Attendees discussed the possibility of closing the drop-off loop to cars completely and encouraging parents to use the surrounding streets to park and walk to the school. This would eliminate the traffic and safety issues that are associated with entering and exiting the drop-off loop. Additionally, many families are already parking and walking to school, so this change would support existing behaviors and would not pose a significant inconvenience to families.
 - If closing the drop-off loop, the City should conduct a study to assess whether to keep or remove the existing the mid-block crosswalk on Royal Palm Drive. With the additional traffic, concentrating crossing at the existing crosswalks at Diamond Head Lane and Bamboo Lane could be better options.
- ◆ The curb ramps on streets surrounding the school should be upgraded with truncated domes to be ADA compliant.
- ◆ The City plans to upgrade the existing speed bumps on Royal Palm Drive as part of their re-striping plan.

7. Current Safe Routes to School Involvement

- ◆ Joseph Azeveda Elementary has been in the Alameda County SR2S program since 2012 and participates in two of the countywide events: International Walk & Roll to School Day and Bike to School Day.
- ◆ According to student travel tallies collected in spring 2016, approximately 9% of students walk to school and 0.4% bike. Approximately 7.8% of students participate in a carpool to school, and 80.3% arrive by family vehicle.

Recommendations

Recommendations to improve infrastructure or operations surrounding Joseph Azeveda 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 Joseph Azeveda 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 the maps to promote good behavior among bicyclists, pedestrians, and drivers.
- ◆ Promote use of the walking path in Azeveda Park.
- ◆ Consider using the section of Royal Palm Drive west of the school and other locations where parking is underutilized for Park & Walk sites.
- ◆ Participate in SR2S events, such as International Walk & Roll to School Day, the Golden Sneaker Contest, and Bike to School Day.
- ◆ Provide age-appropriate pedestrian and bicycle safety education to students, either during class or as an after school activity.
- ◆ Participate in SR2S evaluations each fall and spring to monitor progress on mode shift goals.
- ◆ Encourage and aid in the creation Walking School Bus groups.
- ◆ Pilot temporary circulation changes such as restricting turning movements or closing the drop-off loop in the spring to get parents ready for changes in the fall.

Joseph Azevada Elementary, Fremont
Safe Routes to School Improvement Plan
Site Assessment held March 2017



- 1 Pedestrian Path (Blacow Road to Azevada School)**
 - Pave path through Azevada Park to enable walking through park when ground is muddy
 - Install wayfinding signs to school
- 2 Coco Palm Drive / Blacow Road**
 - Install high visibility crosswalks across Coco Palm Drive and all east legs across Blacow Road
 - Install advance yield markings on Coco Palm Drive
 - Adjust signal timing to provide leading pedestrian interval signal and install curb extensions on east leg of Blacow Road to provide additional queuing space
- 3 Coco Palm Drive / Banyan Tree Road**
 - Install high visibility crosswalk across east side and transverse crosswalk on west side of Banyan Tree Road
- 4 Coco Palm Drive / Kahlua Court**
 - Install transverse crosswalk across Kahlua Court
- 5 Coco Palm Drive / Kona Court**
 - Install transverse crosswalk across Kona Court
- 6 Royal Palm Drive / Coco Palm Drive**
 - Upgrade to 4-way stop in accordance with City's planned improvements recommended by analysis and school safety assessment
 - Install high visibility crosswalks on all legs
- 7 Royal Palm Drive / Bamboo Lane**
 - Update to high visibility crosswalks and install advance yield markings on both legs
 - Install school crossing Assembly B signage on Bamboo Lane
 - Install, on two corners, upgraded accessible curb ramps at southwest and southeast corners; new ramp on the north side
 - Conduct stop sign warrant study on minor street
- 8 Drop-Off Loop**
 - [FUSD] Install 30' lengths of red curb adjacent to driveway entrance to increase visibility
 - [FUSD] Consider allowing only right turns to enter and right turns to exit the drop-off loop
 - [FUSD] Consider closing drop-off loop completely except to buses, and encouraging parents to park and walk from nearby streets
 - [COF] Upgrade striping on existing speed humps in accordance with planned City improvements
- 9 Royal Palm Drive / Diamond Head Lane**
 - Install high visibility crosswalks and yield teeth on both legs
 - Install school crossing Assembly B signage on Diamond Head Lane
 - Install upgraded accessible curb ramps on northeast, southeast and southwest corners
 - Upgrade striping on existing speed humps in accordance with planned City improvements
 - Conduct stop sign warrant study on minor street
- 10 Royal Palm Drive / Flamingo Lane**
 - Install high visibility crosswalks and advance stop markings on all legs, and upgraded accessible curb ramps at all corners

Fremont School Traffic Safety Assessment
Joseph Azeveda Elementary School
Preliminary Cost Estimate

Alta Planning + Design

11/30/2017

Traffic Safety Improvements

| ITEM NO. | DESCRIPTION | ESTIMATED QUANTITY | UNIT | UNIT COST | COST |
|--------------------------|---|--------------------|------|-----------|------------------|
| 1 | Mobilization | 1 | LS | \$34,200 | \$34,000 |
| 2 | Traffic Control | 1 | LS | \$34,200 | \$34,200 |
| 3 | High Visibility Crosswalk | 16 | EA | \$2,000 | \$32,000 |
| 4 | Traverse Crosswalk | 3 | EA | \$500 | \$1,500 |
| 4 | Curb Extension & Ramp | 6 | EA | \$20,000 | \$120,000 |
| 5 | Curb Ramp Improvement | 10 | EA | \$5,000 | \$50,000 |
| 6 | Yield Line | 5 | EA | \$500 | \$2,500 |
| 7 | Sign and Post Assembly | 8 | EA | \$500 | \$4,000 |
| 8 | STOP Bar and Pavement Marking | 5 | EA | \$400 | \$2,000 |
| 9 | Minor Street Stop Control Study & Implementation | 2 | EA | \$6,000 | \$12,000 |
| 10 | Concrete Pedestrian Path | 4800 | SF | \$20 | \$96,000 |
| 11 | Painted Curb Marking | 1 | LS | \$2,000 | \$2,000 |
| 12 | Signal Modification (Leading Pedestrian Interval) | 1 | LS | \$20,000 | \$20,000 |
| SubTotal Items | | | | | \$410,200 |
| CONSTRUCTION CONTINGENCY | | | | 20% | \$82,000 |
| Total | | | | | \$492,200 |



Sign In Sheet

PROJECT Fremont School Traffic Safety Assessments

SUBJECT Azevada Elementary

DATE March 14, 2017

[illegible]