





### **Safe Routes to School - Basics**

Safe Routes to School is a multi-faceted approach to make walking and bicycling to school safer and more accessible for children through addressing the 5Es – engineering (infrastructure), education, encouragement, enforcement, and evaluation/planning.

# **SRTS - Funding Opportunities**

The Hawaii Department of Transportation administers a federal Safe Routes to School program that provides funding for bicycle and pedestrian infrastructure improvements and programs to get more students to walk and bicycle (for more details see - http://hidot.hawaii.gov/highways/srts/). The Honolulu Department of Transportation Services has a Safe Routes to School Program that provides mini-grants for education and encouragement activities and implements infrastructure improvements (for more details see -

https://www.honolulu.gov/dts/aboutus/trafficengineering/912-site-dts-cat/site-dts-te-cat/21839srts.html).

### SRTS - Plan

This Safe Routes to School Plan considers the Kalihi Kai Elementary School's resources and needs for all the 5Es and identifies solutions. Some the solutions are within the school's reach and some require outside help.

## **SRTS - Plan Process**

The Kalihi Kai Elementary School Safe Routes to School Plan was developed by Kalihi Kai Elementary School (KKES) and Hawaii Bicycling League. The plan development process involved collection and analysis of the standardized Travel Tallies and Parent Surveys.

# **SRTS - Planning Meetings**

Student Community Council meetings in August and December 2017 were used as Safe Routes to School planning meetings. The approximately 20 staff and parents present at the August meeting provided input on the issues they thought were impacting the safety of students walking and biking to school and what they felt was needed to make it safer and more welcoming for more students to walk and bike to and from school. The December meeting was used to present the draft SRTS plan with findings, issues, and solutions; the approximately 15 staff and parents present commenting of the draft and this document was revised accordingly.

### **SRTS - Travel Tally Findings**

Travel Tallies were taken for the days of October 17-19 (2017) in 29 classrooms with students tallied as high as 484 students.

Walking – Over half of students walk to (55%) and from (61%) school

Bicycling – Around 1% of students bike to and from school

Bus - Around 2% of students take The Bus to and from school

Family - Slightly over one-third (39%) of students are dropped off and picked up (34%) at school by family

## **SRTS - Parent Survey Findings**

A Parent Survey was distributed to parents the week of October 16 (2017) by being sent home with students. Of approximately 540 parent surveys distributed 213 parents responded (a response rate

of 39%). Results of the survey show a large portion of students live within a relatively close distance of the school:

- Within 0.25 miles 71%
- 0.25-0.5 miles 13%
- 0.5-1 mile 9%
- more than 1 mile from school 7%

Parent Survey responses were similar to the Travel Tallies in how students get to and from school, but with slightly higher numbers walking to (62%) and from (64%) school.

Issues reported to affect parents' decision to allow a child to walk or bike to/from school:

- 1. Safety of Intersections and Crossing 79%
- 2. Violence or Crime 63%
- 3. Speed of Traffic Along Route 45%
- 4. Distance 43%
- 5. Weather or Climate 43%
- 6. Amount of Traffic Along Route 40%
- 7. Sidewalks or Pathways 39%
- 8. Crossing Guards 34%
- 9. Time 27%
- 10. Convenience of Driving 25%

The open-ended additional comments section of the Parent Surveys responses was useful in providing some concerns about specifics streets. The most noted street of concern was Kalihi Street and other noted streets included McNeill Street, Kaumualii Street, and Dillingham Blvd.

# **SRTS - Safety Data**

The Department of Health data on traffic injuries requiring Emergency Medical Service response shows the history of bicycle and pedestrian injuries in the area surrounding the school. Kalihi Street, Dillingham Blvd, and McNeill Street, all immediately bordering KKES, show a record of pedestrian and bicycle safety issues. See the Supporting Documents attached to the SRTS plan for maps of the pedestrian and bicycle injuries for the 10-year period 2007-2016. The full map is available at <a href="http://health.hawaii.gov/injuryprevention/home/traffic-safety/pedestrian-and-bicycle-safety/">http://health.hawaii.gov/injuryprevention/home/traffic-safety/pedestrian-and-bicycle-safety/</a>.

# **SRTS - Traffic Safety Observations**

Hawaii Bicycling League Advocacy Director Daniel Alexander conducted traffic safety observations of the area around KKES in two forms; arrival/departure observations, and an audit of area streets. The arrival/departure observations showed heavy flows of students walking accessing/departing KKES on both the Kalihi St and McNeill St ends. Many students were observed crossing at the unsignalized crosswalks on Kalihi St (see Supporting Documents for a picture of students crossing at one of these crosswalks) and the unsignalized crossing at McNeill St/Kaumualii St. Many students were also observed walking on the unimproved streets that extend west from Kalihi Street where they had to share the streets with occasional passing vehicles (see Supporting Documents for a picture of students walking of one of these streets). The nearby Kalakaua Middle School adds to the high levels of pedestrian activity in the area. Motorized traffic on Kalihi St and Dillingham Blvd is very heavy, particularly during the morning arrival time. The walk audit of the area was undertaken specifically to identify treatments at pedestrian crossings and presence of sidewalks and bikeways; while no comprehensive map of findings was compiled, notes were taken to better understand the safety issues and barriers to walking and biking to and from KKES.

# **SRTS - Issues**

Through the SRTS Parent Surveys, planning meetings, DOH injury map, and traffic safety observations, a number of barriers or issues for walking and bicycling to and from KKES were identified.

- Unsignalized crossings on Kalihi St between North King St and Dillingham Blvd there are 5
  unsignalized crosswalks and many students cross at these. Safety concerns from drivers failing
  to yield to pedestrians at these crossings and speeding was the most prominent noted concern
  by parents and staff. National studies of unsignalized crosswalks on 4-lane streets has shown
  these to have safety issues. See Supporting Documents for a picture of students crossing at one of
  these crosswalks
- Lack of bikeways or wide sidewalks on Kalihi St Kalihi St provides immediate access to the school and with no dedicated space for bicycling was identified as a major deterrent to students biking to and from the school.
- Eluwene St, Kaumualii St, Ahuula St, Kahanu St, Ashford St, and Akina St extend west into the residential neighborhood from Kalihi St. Many students walk on the residential streets to west of KKES, the lack of sidewalks, requiring those walking or biking to do so in the roadway mixing with cars, was noted as a concern. See Supporting Documents for a picture of students walking of one of these streets
- All way stop crossing at McNeill St/Kaumualii St Due to the high levels students cross at the McNeill St/Kaumualii St intersection and concern over drivers yielding to students, historically the school has had a JPO at this crossing.
- Unsignalized crossings on Mokauea St there are no signalized crossings between North King St and Dillingham Blvd. Many of the students live in the area west of Mokauea St and need to cross Mokauea St to get to/from the school. The crossings on the street were noted as a safety concern due to concern over motorists failing to yield and speeding.
- Heavy traffic and fast speeds on Dillingham Blvd and North King St Due to KKES service area students shouldn't generally have to cross Dillingham Blvd or North King St, but some have to travel along these heavily trafficked streets, where intersections and driveways provide hazards.
- The only bike lanes in the vicinity of the school Waiakamilo Rd bike lanes don't directly connect to the school and there is no bikeway linking them to school reducing their potential utility to serve students biking to school. Also, the Waiakamilo bike lanes are unprotected and next to street parking, a design which puts cyclists in the door zone and can be especially dangerous for elementary school age children who are smaller in stature and have less dexterity handling a bicycle than adults.
- High speed limits around school The streets immediately around the school, have a speed limit of 25mph during school arrival and departure times consistent with Honolulu Ordinance. Giving the need for students to cross at unsignalized crossings and that concern about speeding vehicles was one of the most noted concerns by parents and staff, a reduction in the speed limit would help address real and perceived safety of students walking and biking. Many jurisdiction in the United States use 15mph school zone speed limits.
- Failure of motorists to yield to pedestrians at unsignalized crosswalks and when turning right across a crosswalk were noted as a major concern. In additional to specific engineering solutions, this could be addressed through additional enforcement and education.
- Speeding motorists were noted as general and frequent point of concern. In additional to specific engineering solutions, this could be addressed through additional enforcement and education.

# **SRTS - Engineering Solutions**

There are a number of engineering or infrastructure needs to make walking and bicycling to and from KKES safer and more attractive.

# Support HDOT Kalihi St pedestrian safety improvements

The Hawaii Department of Transportation has been engaged in planning for pedestrian and bicycle safety improvements to Kalihi Street. As of February 2017, had selected three possible alternatives to address pedestrian safety on Kalihi St in the vicinity of the school and were going to conduct further analysis to select the preferred alternative. The three alternatives are:

- Traffic signal a new traffic signal at the KKES entrance (between Ashford St and Kahanu St)
- Lane sizing eliminating one lane in the makai bound direction to provide a safety crossing median and reduce the lanes to cross from four to three

• Lane sizing with traffic signal – the combination of the two above alternatives. The plans can be seen here - <a href="https://hidot.hawaii.gov/wp-content/uploads/2015/04/20170217-Kalihi-Street-Resurfacing.pdf">https://hidot.hawaii.gov/wp-content/uploads/2015/04/20170217-Kalihi-Street-Resurfacing.pdf</a>

# Support DTS North King Street and Waiakamilo Road pedestrian and bicycle safety improvements

The Honolulu Department of Transportation Services has begun a planning process for "Complete Streets" improvements on North King St and Waiakamilo Rd to improve pedestrian, bicycle, and traffic safety. While these streets both represent the outer edge of the KKES's service area, students walk and bike along these streets in cases and students accessing the school should be considered as important users.

# Neighborhood Greenway Treatment on Unimproved Streets

Eluwene St, Kaumualii St, Ahuula St, Kahanu St, Ashford St, Akina St, the 6 neighborhood streets between Dillingham Blvd and North King St that extend west from Kalihi Street, serve many students, yet they lack sidewalks requiring students to walk in the street. See Supporting Documents for a picture of students walking of one of these streets. While the Department of Health traffic injury data only shows one bicycle and no pedestrian injuries (2007-2016), the absence of sidewalks was noted as a concern and barrier to walking during the SCC planning meetings. A "Neighborhood Greenway" treatment that ensures slow speeds and alerts drivers to the need to share the roadway with pedestrians and bicyclists should be considered for these streets. The treatment should include speed humps, raised crossings at the start of each block, 15mph speed limits (speed limit signage is largely absent on these streets), and other possible traffic calming.

# McNeill St/Kaumualii St Safe Crossing Improvements

The McNeill St/Kaumualii St intersection is one of the major accessing points to KKES and given that large number of students cross here this is a major point of concern for the school. To address safety at the crossing, KKES historically had a JPO crossing guard placed at this intersection and is in the process of getting a new JPO crossing guard approved to be positioned here. Engineering safety improvements, including curb extensions and a raised intersection, should be considered to provide added safety to this crossing.

### Mokauea Street Safe Crossing Improvements

In addition to Kalihi Street, many students cross Mokauea Street at intersections without traffic signals. Measures, including curb extensions, should be considered to improve safety at these uncontrolled crossings.

# SRTS - Education, Encouragement, and Enforcement Solutions

There are a number of non-infrastructure measures that can be taken to improve the safety of students walking and biking to school. The items discussed include the below.

### Increased Enforcement

Motorists speeding and failure to yield to pedestrians were noted as major concerns. Additional enforcement of this illegal and dangerous driving behavior in the area around the school by the Honolulu Police Department would be a tremendous help in addressing pedestrian and bike safety.

## Traffic Safety Measures Oriented Towards Drivers

In additional to enforcement, there are opportunities to address dangerous driving through education and awareness. Discussed actions included: 1. collaborate with HPD to do traffic safety sign wavings on a routine basis; 2. create banners and signs with traffic safety messages for parents.

# Traffic Safety Signage Oriented at Students

Students' behavior is very important in keeping them safe while walking and biking to and from school. Posters and signs with safety messages would be placed around the school to educate and

remind students of the importance of being safe and cautious on the streets and particularly when crossing the street.

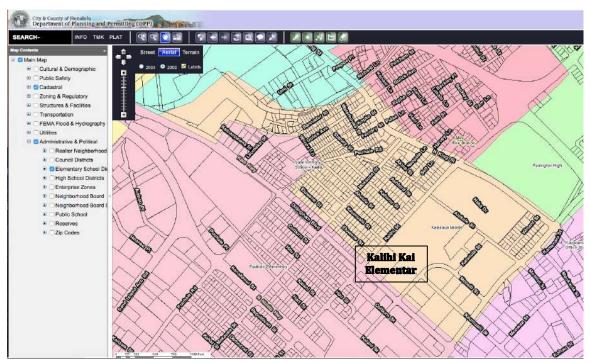
#### **Student Education**

Hawaii Bicycling League currently works with KKES to offer HBL's BikeEd program to 4th grader students that educates them on safe bicycling. KKES would like to have pedestrian safety education, possibly occurring in an assembly setting. Discussed partners for the pedestrian education included Walk Wise Hawaii, Honolulu Police Department, and Hawaii Bicycling League.

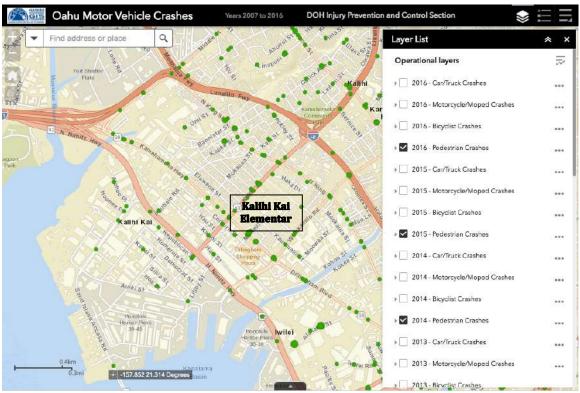
# Public Services Announcements

Two concepts were discussed to develop a public service announcement on traffic safety: 1. KKES's media program could create one or more PSA; 2. KKES could work with one or the local news and media outlets to create and broadcast a PSA.

# **SRTS Supporting Documents**



Kalihi Kai Elementary service area (as provided by the City DPP)



Pedestrian Injuries with EMS response 2007-2016 (as provided by the Hawaii DOH)



Bicycle Injuries with EMS response 2007-2016 (as provided by the Hawaii DOH)



Students crossing Kalihi Street at the unsignalized marked crosswalk near Kahanu Street



Students walking in the street on Kaumualii Street between Kalihi Street and Mokauea Street