

January 18, 2024

# KILAUEA AVENUE

## Neighborhood Board Update



*Honolulu*  
COMPLETESTREETS

# HONOLULU'S COMPLETE STREETS LAW ROH 14-18

Complete streets are safe, convenient, and accessible for all, regardless of transportation mode, age, or ability.

Every transportation facility or project, whether new construction, reconstruction, or maintenance, shall implement complete streets features with the following goals:

- Improve **safety**
- Apply **context-sensitive** solution
- Protect + promote **accessibility** and mobility for all
- Balance the needs and **comfort** of all modes and users
- Encourage consistent use of national **best practices**
- Improve energy **efficiency** in travel and mitigate emissions
- Encourage opportunities for physical **activity**
- Recognize Complete Streets as a long-term **investment**
- Build **partnerships** with stakeholders + organizations
- Incorporate **trees** and landscaping



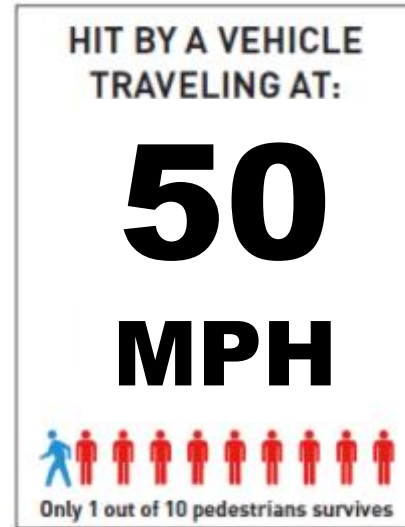
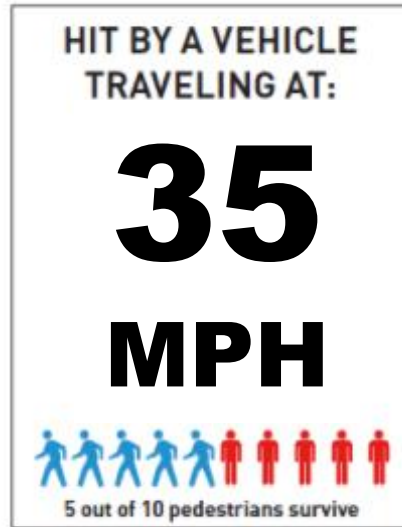
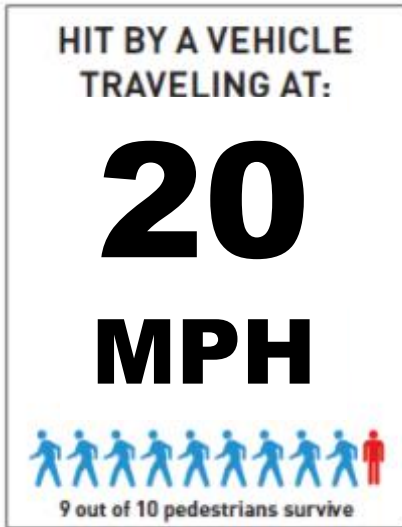
**On average, one person a week  
dies on O'ahu roads.**

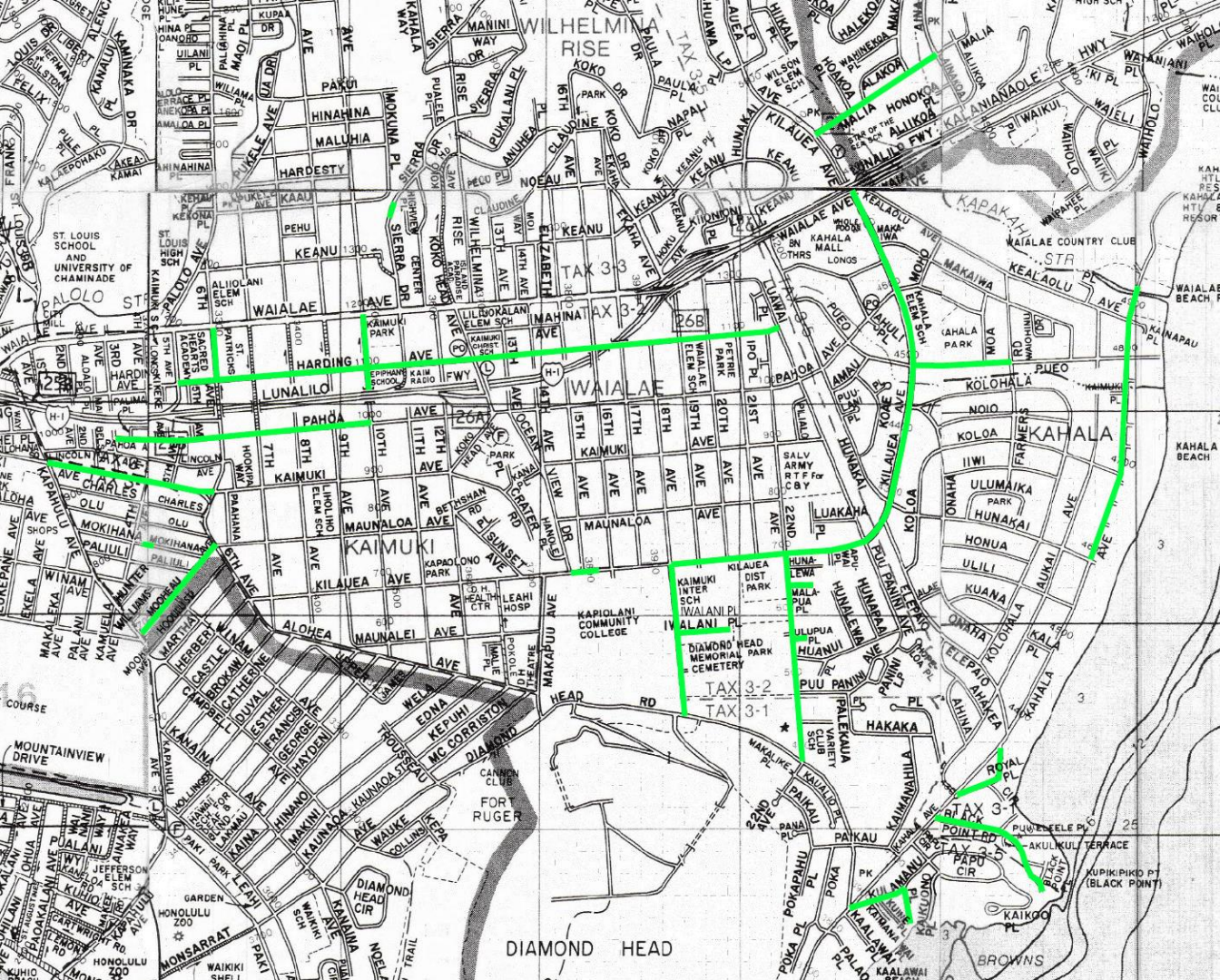
**PEDESTRIANS AND KŪPUNA ARE DISPROPORTIONATELY IMPACTED.**

# HOW DO WE CREATE SAFE STREETS FOR ALL USERS?

#1: DEDICATED AND PROTECTED FACILITIES FOR NON-VEHICULAR TRAVEL

#2: LIMIT OPPORTUNITIES FOR SPEEDING





# REHABILITATION OF STREETS PHASES 26A & 26B

- REPAVING
- RESTRIPING
- CURB RAMPS
- WALKWAY UPGRADES
- TRAFFIC SAFETY IMPROVEMENTS

# KILAUEA AVENUE



65-70 MPH

Max Speeds



10,000-20,000

Cars per Day



7,720

School  
Enrollment  
on Corridor



1

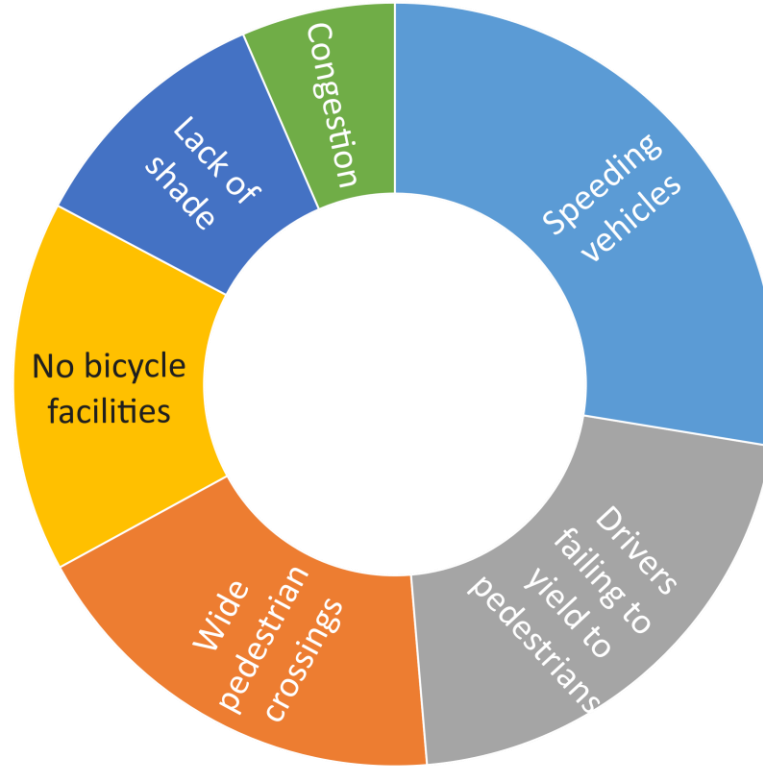
Traffic  
Fatalities in  
Last 5 Years



78'

Street Width

## Q5. What Do You Like Least About Kilauea Avenue?



# SAFETY ANALYSIS

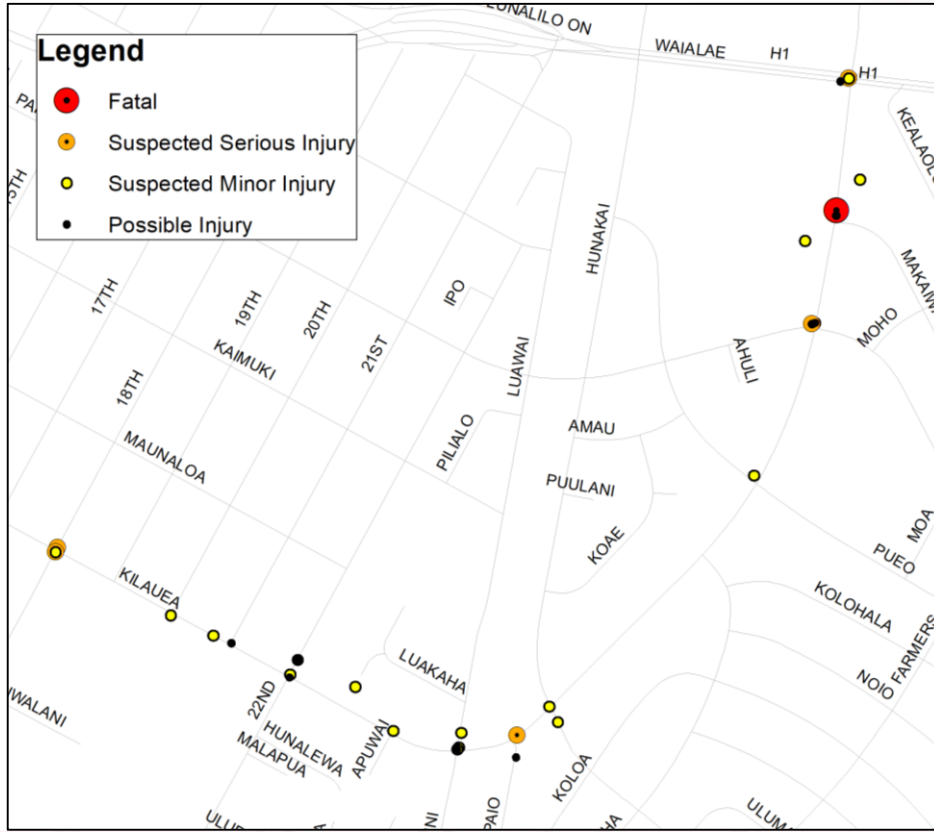
## Kilauea Avenue Project Vicinity Crashes 2015-2020

	<b>Total</b>	<b>Motor Vehicle</b>	<b>Motorcycle/ Moped</b>	<b>Pedestrian</b>	<b>Bicyclist</b>
<b>Injury</b>	51	29	12	7	3
<b>Serious injury</b>	5	0	2	2	1
<b>Fatality</b>	1	0	0	1	0



# SAFETY ANALYSIS

## Kilauea Avenue Project Vicinity Crashes 2015-2020



### Fatality

Kilauea Ave/Makaiwa St

### Serious Injuries

Kilauea Ave/18<sup>th</sup> Ave

Kilauea Ave/Elepaio St

Wai'alae Ave/Kilauea Ave

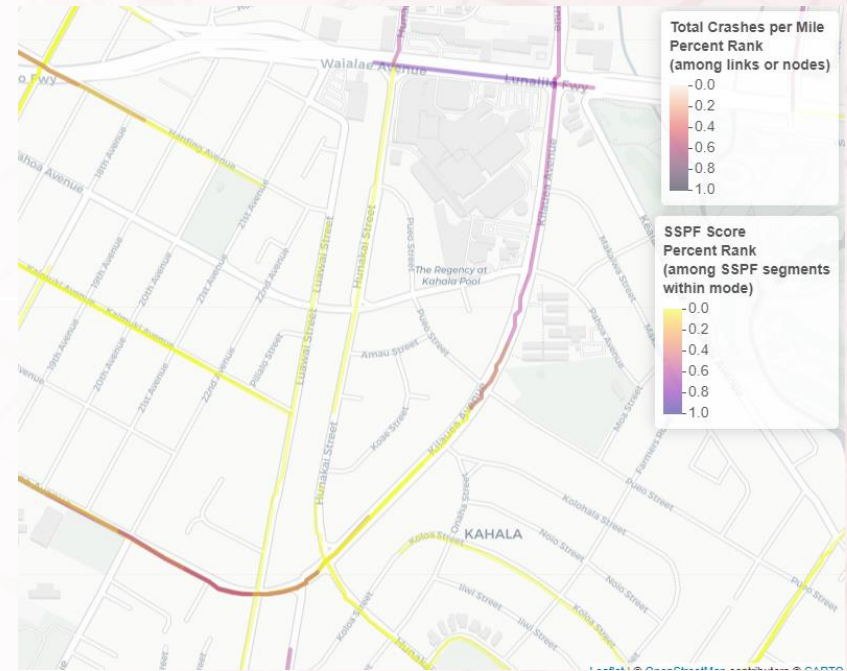
Pahoa Ave/Kilauea Ave

# SAFETY ANALYSIS

## Pedestrian Injuries



## Bicyclist Injuries



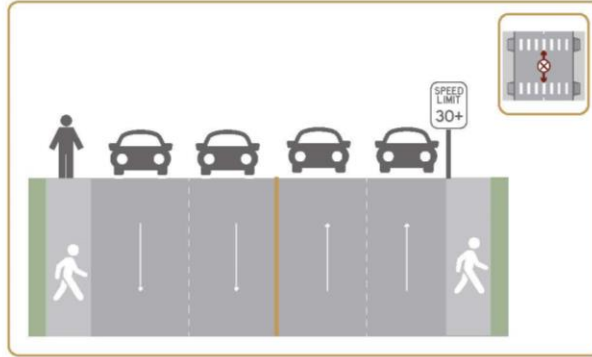
# COMMON CRASH FACTORS

**Common characteristics** at Oahu's High Pedestrian Injury Corridors and Intersections/Crossings are summarized below. It's important to recognize these common characteristics as they provide insights into needed changes to address safety at these locations and streets around Oahu.

## Corridor

Arterials with:

- 4 or more lanes
- Speed limits over 30 mph
- Lack of frequent well-designed crossings

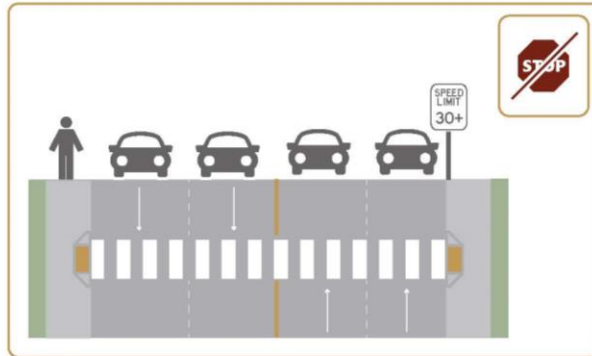


Corridor

## Signalized Intersection

Arterials with:

- Wide crossings (most 4 or more lanes and many 6 or more lanes)
- Speed limits over 30 mph
- Turning vehicle conflicts
- Missing pedestrian crossing leg or channelized right turns

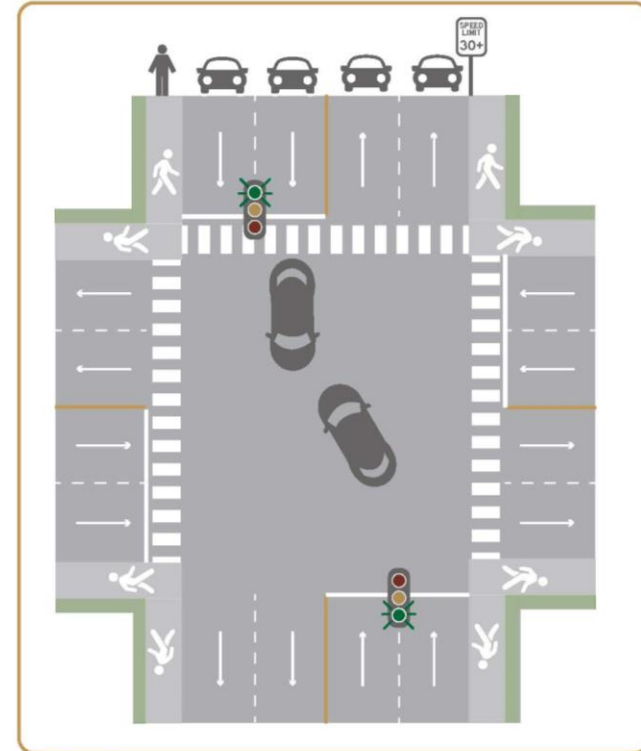


Uncontrolled Crossing

## Uncontrolled Crossings

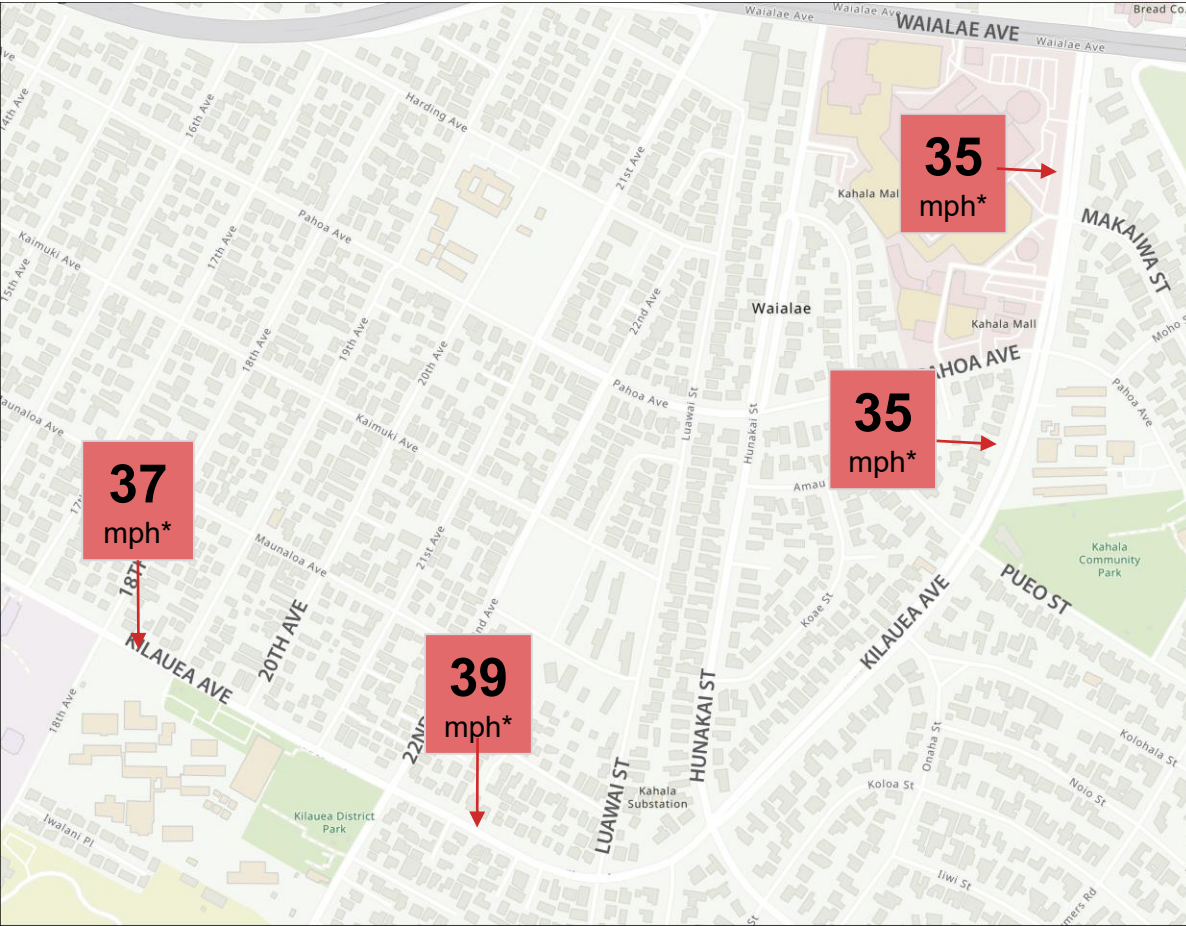
Wide crossings with:

- 4 or more lanes
- Marked crossings only
- Lack of medians, curb extensions, or other crossing enhancement



Signalized Intersection

# SPEED DATA



HIT BY A VEHICLE  
TRAVELING AT:

# 35 MPH

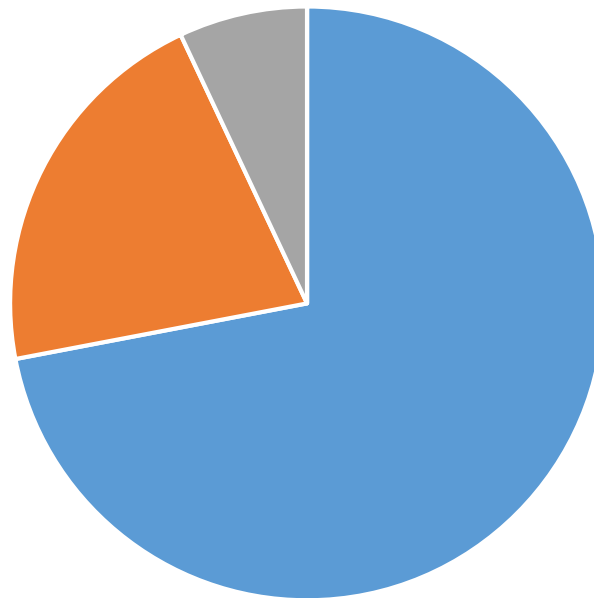
5 out of 10 pedestrians survive

The graphic shows a row of 10 stylized human figures. The first five figures are blue, representing survivors, and the last five are red, representing those who do not survive. This visualizes the statistic that only 5 out of 10 pedestrians survive a vehicle impact at 35 MPH.

\* 95<sup>th</sup> percentile speeds (5% of traffic going at or above)  
Collected by direction,  
highest direction shown



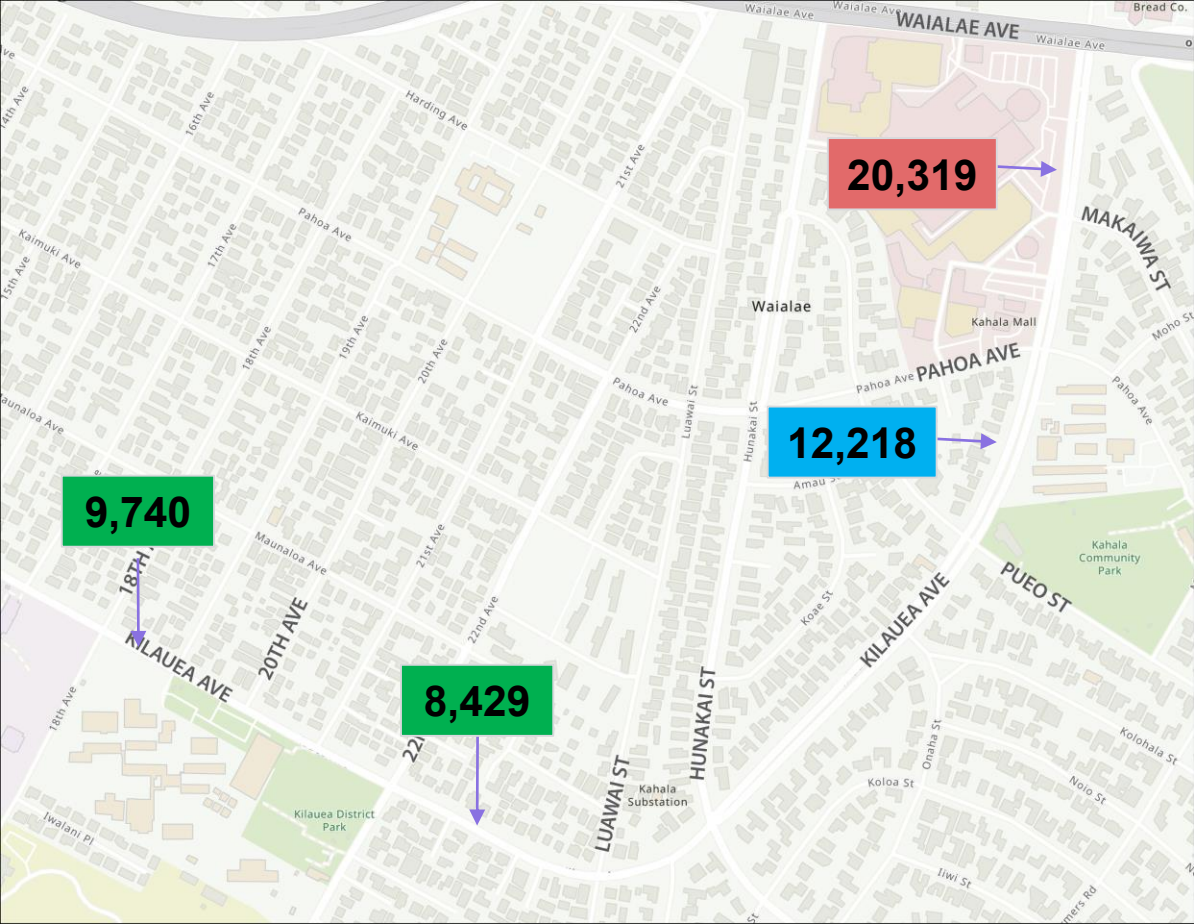
Q6. Do You Support Lowering the Speed Limit Along Kilauea Avenue to 25MPH?



■ Yes ■ No, keep as is ■ No, go even lower ■ Not sure



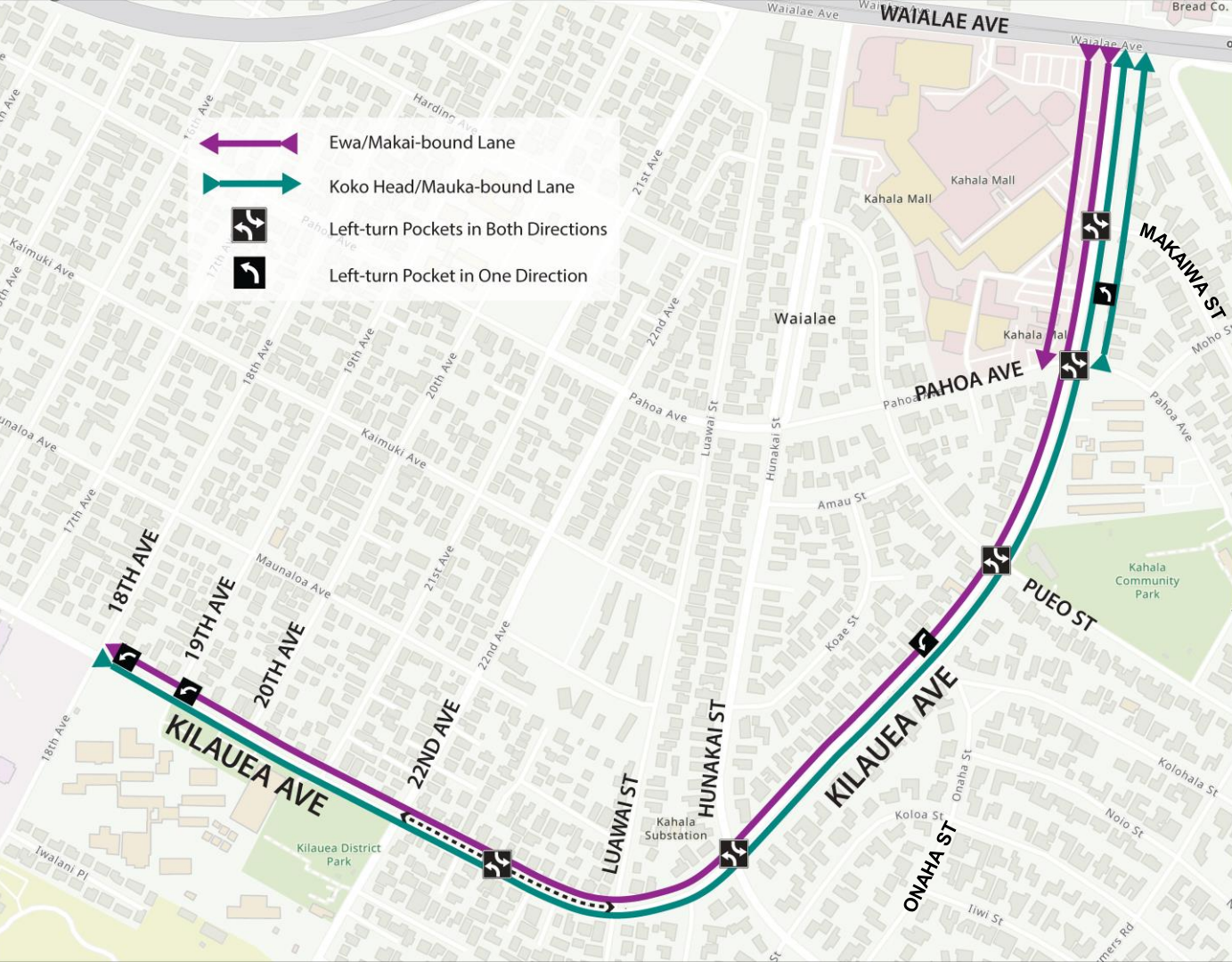
# TRAFFIC COUNT DATA



*Traffic volume reduces by roughly half makai of Pahoa Avenue.*

*Data collected in 2016, 2017, 2018, 2019, and 2023 show relatively consistent traffic volumes.*

# KILAUEA AVE LANE RECONFIGURATION






# FHWA GUIDANCE ON 4-TO-3 LANE RECONFIGURATIONS

Four-lane undivided roadways with AADT  $\leq 20,000$  are typically good candidates for a lane repurposing (e.g., converting to a two-lane, two-way road with a center-left-turn lane). However, projects are evaluated for lane repurposing feasibility on a case-by-case basis.

## General Guidelines for 4-Lane

LESS THAN 10,000 ADT	10,000 – 15,000 ADT	15,000 – 20,000 ADT	GREATER THAN 20,000 ADT
<b>Great candidate for Road Diet</b>	<b>Very good candidate for Road Diet</b>	<b>Good candidate for Road Diet</b>	<b>Potential candidate for Road Diet</b>
In most instances traffic will likely not be negatively affected.	Agencies should conduct intersection analysis to study potential traffic operational effects and consider signal retiming as needed.	Agencies should conduct a corridor analysis since traffic operations may be affected at this volume depending on the "before" condition.	Agencies should complete a feasibility study to determine whether this is a good location for a Road Diet. Operations may be affected at this volume.

 U.S. Department of Transportation  
Federal Highway Administration

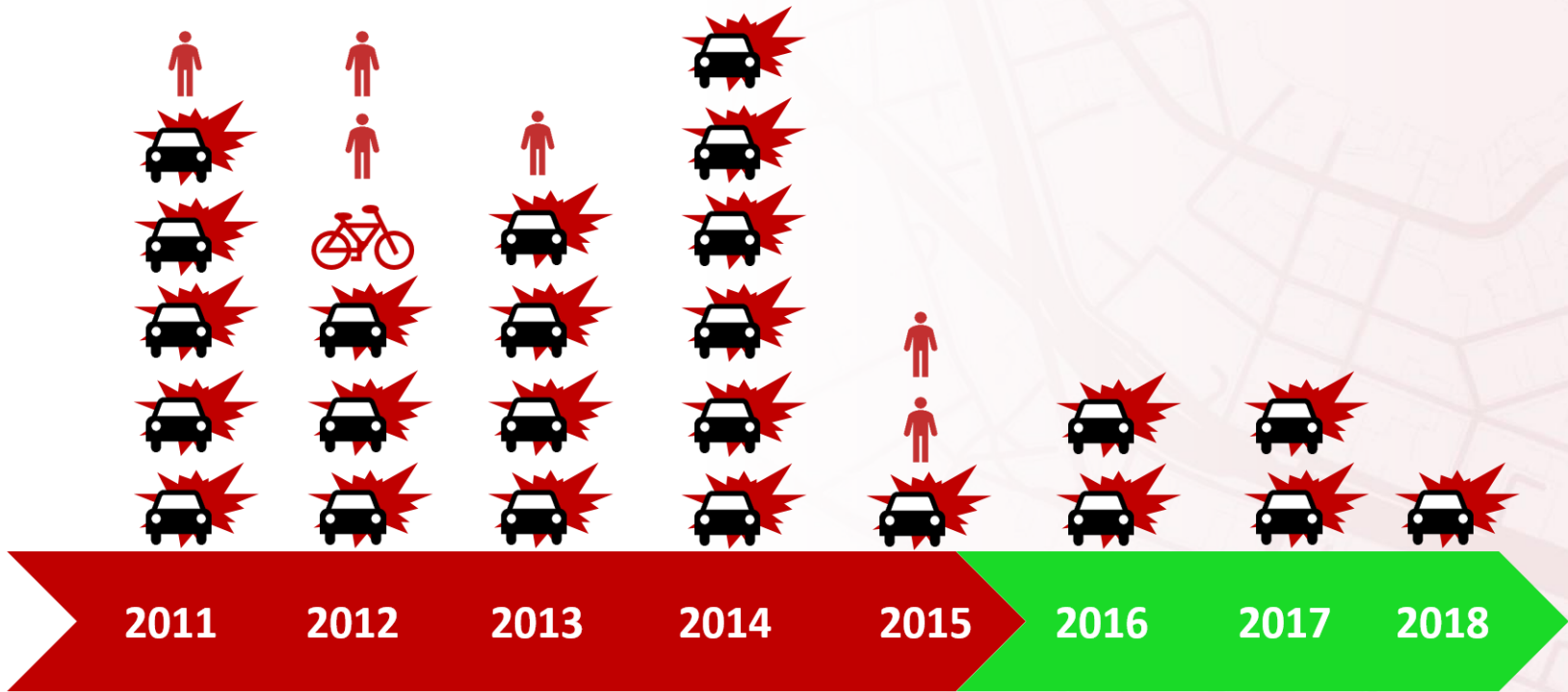
There are examples across the country where Road Diets have been successful with ADTs as high as 26,000.

# 4- TO 3-LANE CONVERSION (AKA “ROAD DIET”): KAMEHAMEHA IV ROAD



Benefits include:

- Dedicated left-turn lane
- Fewer opportunities for speeding
- Simpler side street maneuvers
- Fewer lanes for pedestrians to cross
- Opportunity to install pedestrian refuge islands, bicycle lanes, or transit stops

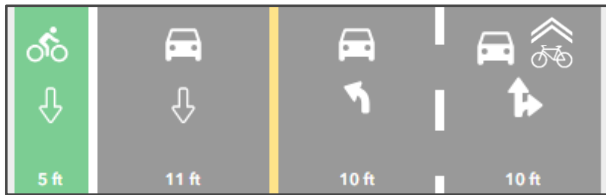
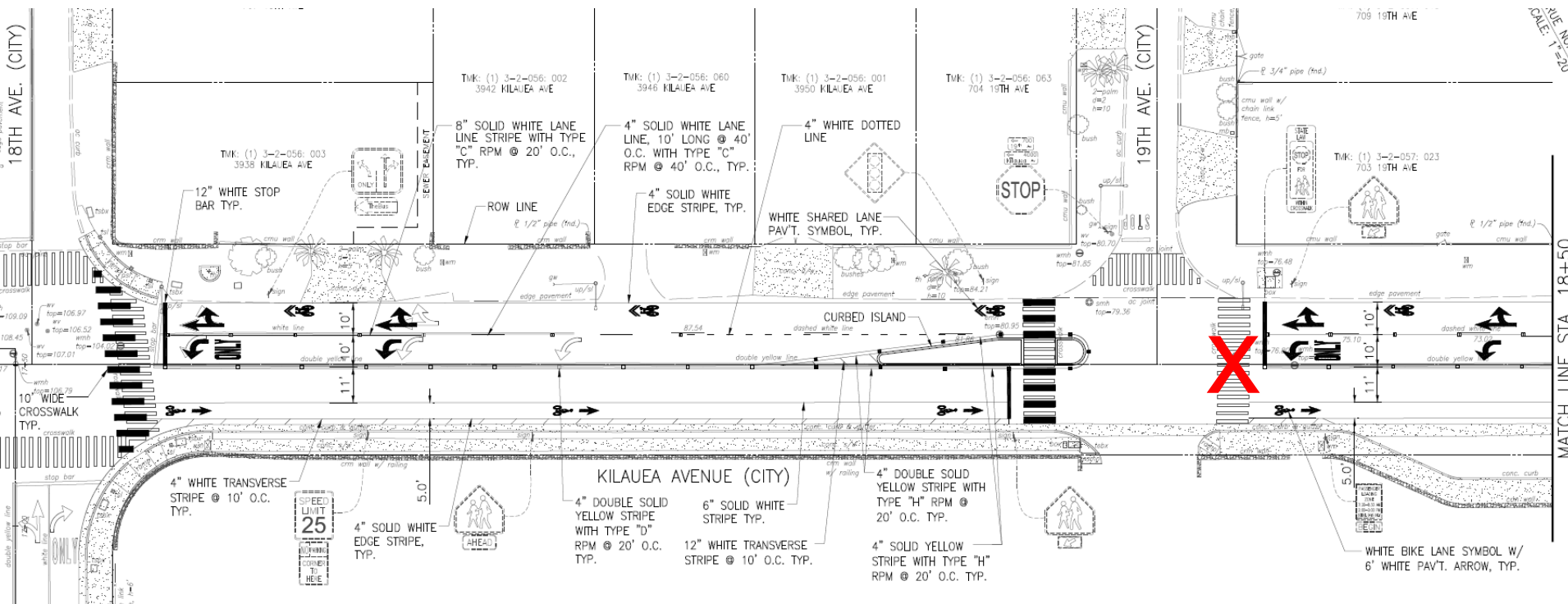


**Total Crashes on Kamehameha IV Road - EMS attended  
Before and After Road Diet (2016)**

18TH AVE. (CITY)

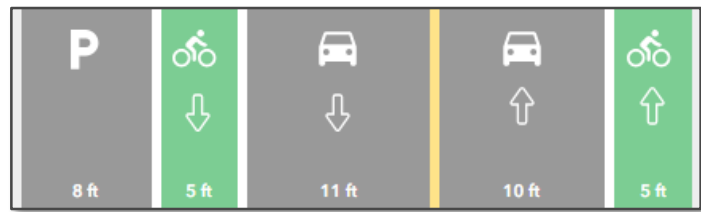
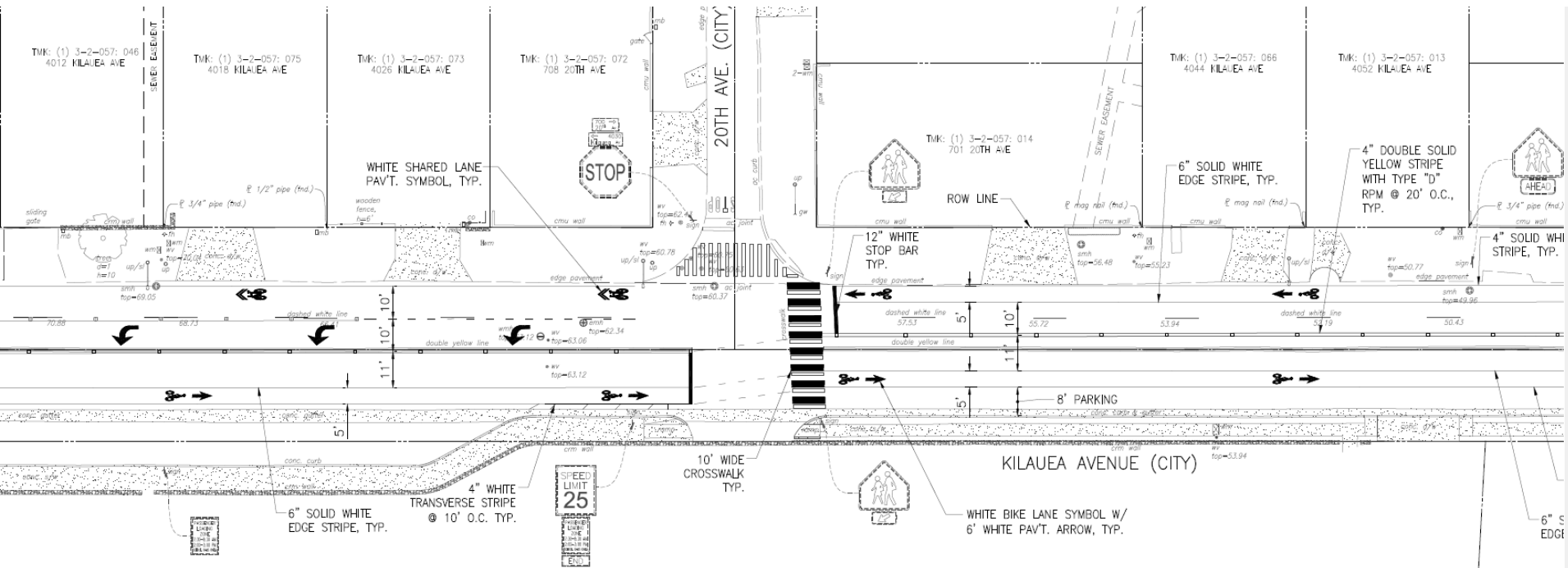
19TH AVE. (CITY)

SHEET NO. 18+50  
SCALE: 1"=20'



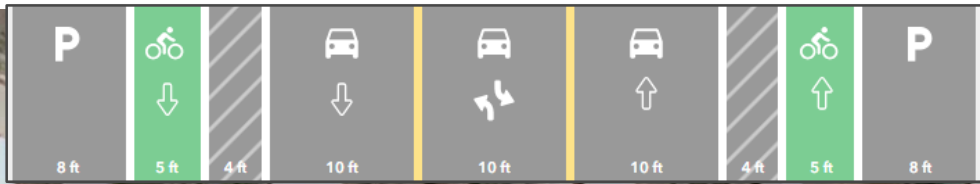
CITY AND COUNTY OF HONOLULU  
TMK: (1) 3-2-059: 003  
4109 KILAUEA AVE

MATCH LINE STA. 18+50

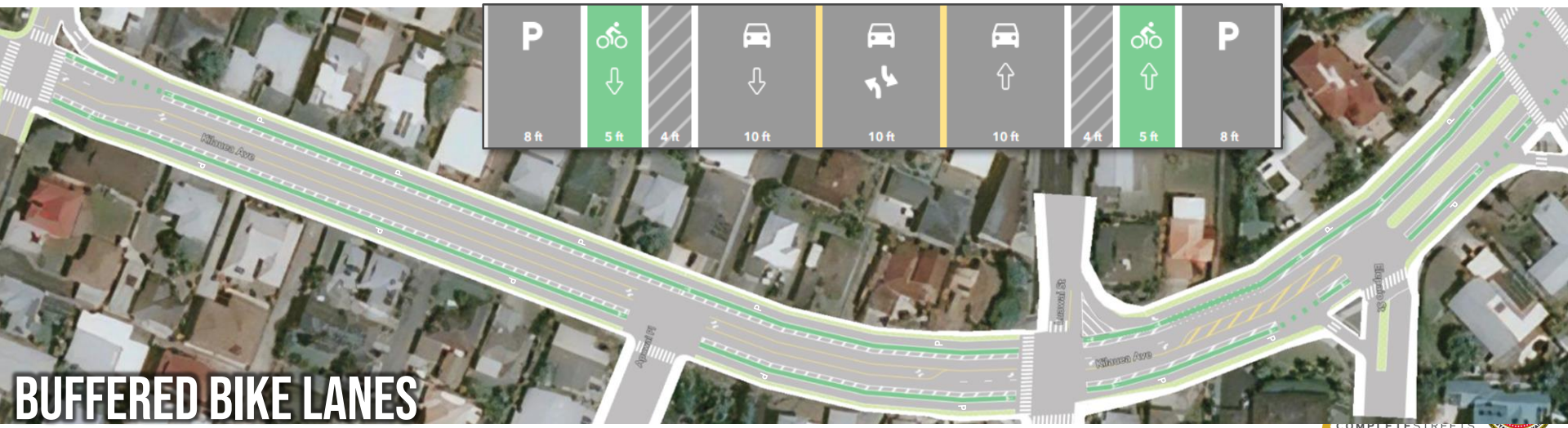




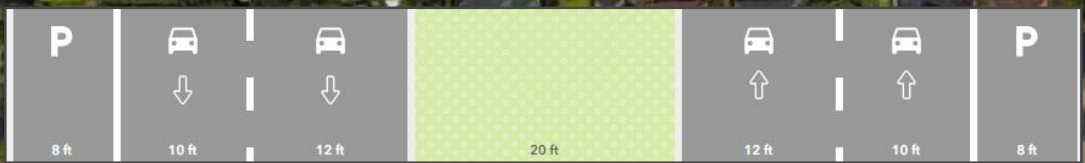
# EXISTING



# BUFFERED BIKE LANES



# EXISTING

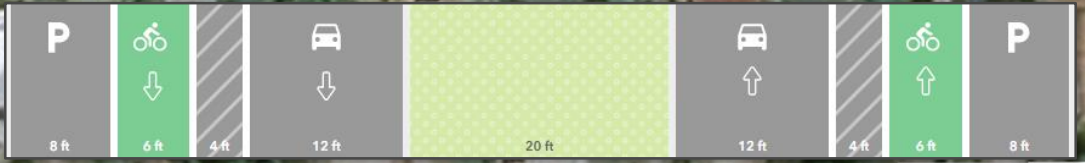


Hunakai St

Kilauea Ave

Onaha St

# BUFFERED BIKE LANES



Kilauea Ave

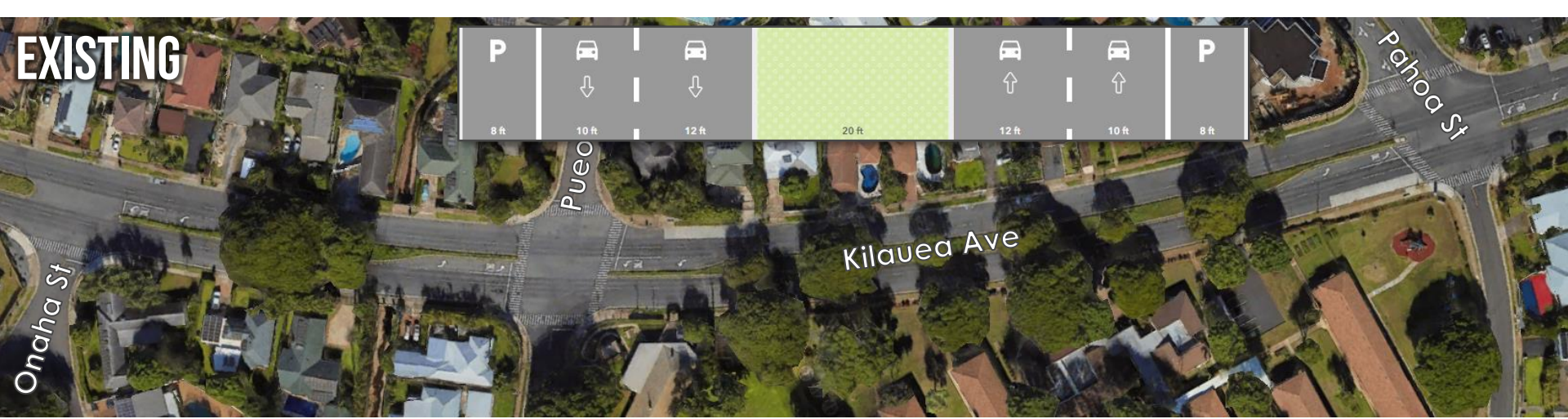
Kilauea Ave

Kilauea Ave

Onaha St



# EXISTING



# BUFFERED BIKE LANES



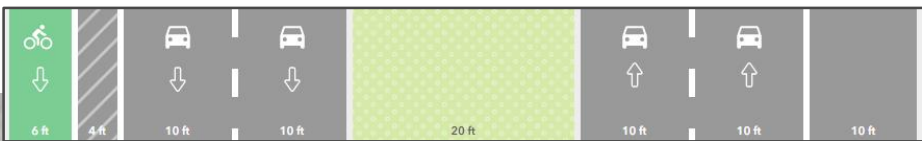


**EXISTING**



**BUFFERED BIKE LANE  
(RENDERING)**

# EXISTING



# BUFFERED BIKE LANES / LOADING ZONE

**NO PARKING**  
**LOADING AND UNLOADING ONLY**  
7:00 - 8:30 AM &  
2:00 - 3:00 PM M-F  
Excluding Holidays



# STREET PARKING

## PAHOA AVENUE – WAIALAE AVENUE

	Existing Street Parking Spaces (estimate)	Existing Utilization*
Mauka/Ewa	12	6
Makai/Koko Head	22	11
Total	34	17

*\*Parking utilization was recorded on a weekday morning and mid-day with the highest number shown*

# Kilauea Avenue Traffic & Queue Study



## Northbound @ Pāhoā Ave: PM Peak

95<sup>th</sup> percentile queue by lane



Average queue by lane



*\*PM peak is 2:30-3:30pm  
PM peak is highest of day*

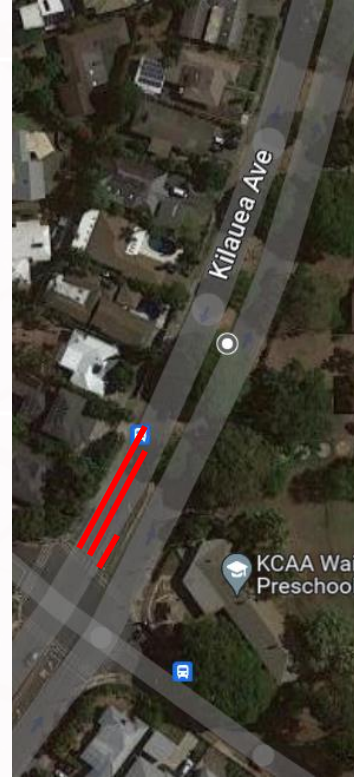
# Kilauea Avenue Traffic & Queue Study



## Southbound @ Pueo St AM Peak

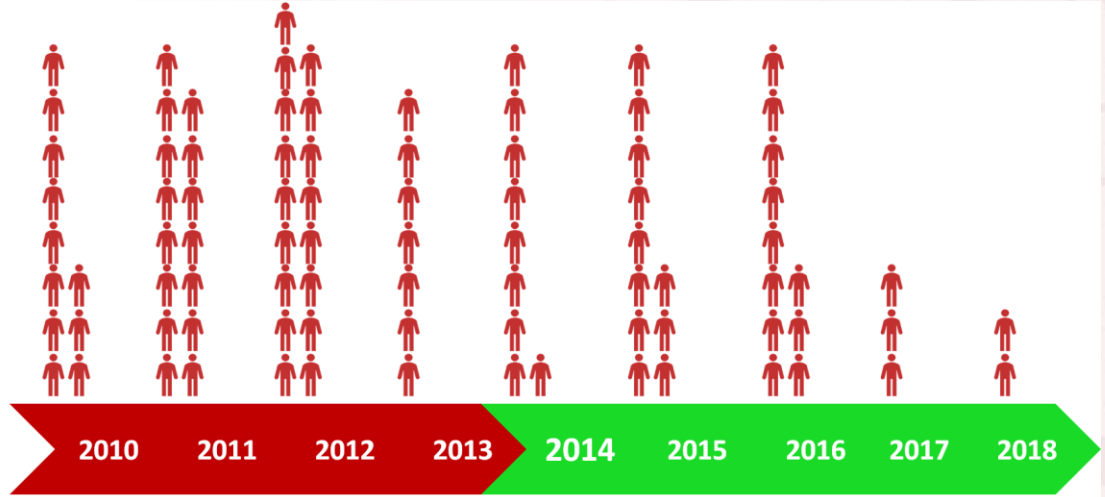
95<sup>th</sup> percentile queue by lane

Average queue by lane



*\*AM peak is 7:15-8:15am  
AM peak is highest of day*

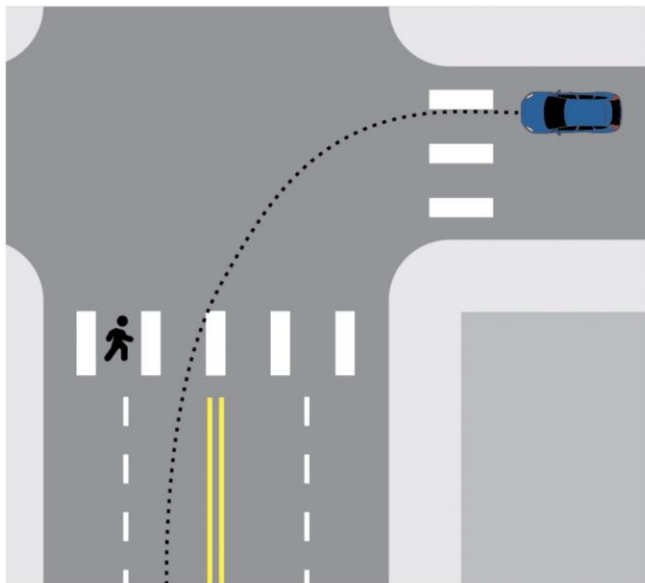
# BIKE FACILITY BENEFITS BEYOND BICYCLISTS



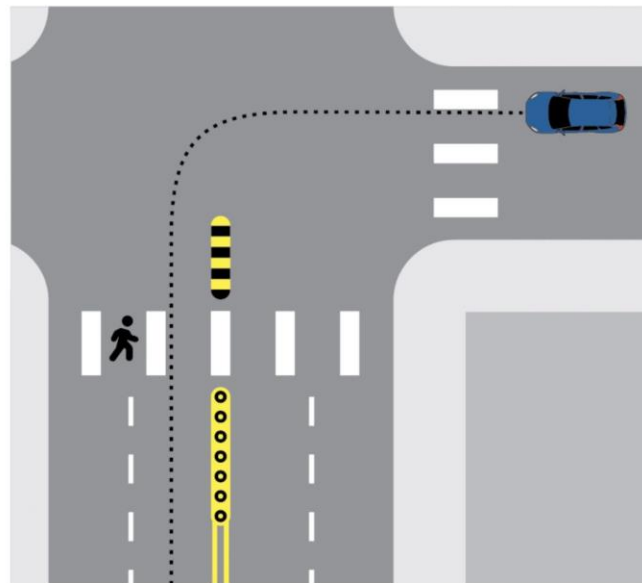
Pedestrian-Motor Vehicle Crashes on King Street - EMS attended Before and After Protected Bike Lane (2014)

# SLOW-TURN WEDGES

TO SLOW TURNING VEHICLES AND  
REDUCE PEDESTRIAN CRASHES



Before centerline hardening



After centerline hardening



# ENHANCED PEDESTRIAN CROSSINGS: CURB EXTENSIONS



Hardy Avenue, Kauai



Kukui Street, Chinatown

# PROJECT OUTREACH

## RESIDENTS

Door-to-Door along Kilauea Ave  
Kahala Towers  
Tropic Gardens  
Waialae Gardens

## BUSINESSES

Aloha Petroleum  
Kahala Mall  
Kahala Professional Center  
Bank of Hawai'i  
McDonald's

## SCHOOLS

**Kahala Elementary**  
**Kaimuki Middle**  
**Kapiolani Community College**  
**KCAA Preschool** (\*since closed)  
**Waiokeola Congregational Church & Preschool**  
Waialae Elementary  
**Wilson Elementary**

## COMMUNITY

Kahala/Waialae YMCA  
Waialae-Kahala Neighborhood Board  
Kaimuki Neighborhood Board  
Diamond Head-Kapahulu-St. Louis Heights NB

## BICYCLE ORGS

Hawaii Bicycling League  
Biki

## ELECTEDS

State Senators & Representatives  
City Councilmember Waters

## AGENCIES

Hawai'i Department of Education  
Hawai'i Department of Health  
Honolulu Police Department  
Honolulu Departments of Transportation Services,  
Design & Construction, Facility Maintenance,  
Environmental Services, Planning & Permitting

# NEXT STEPS

- Project design is ongoing
- CS mailing list and Neighborhood Board updates
- Mail notification to property owners with frontage sidewalk improvements (not Kilauea Avenue)
- Bid first phase of project by end of 2024



**ASK | LEARN | SHARE | CONNECT**

[www.honolulu.gov/completestreets](http://www.honolulu.gov/completestreets)

[www.instagram.com/hnl.completestreets](http://www.instagram.com/hnl.completestreets)

- View Community Resources
- Sign up for our mailing list
- Learn about Complete Streets projects
- Provide feedback and get involved!

