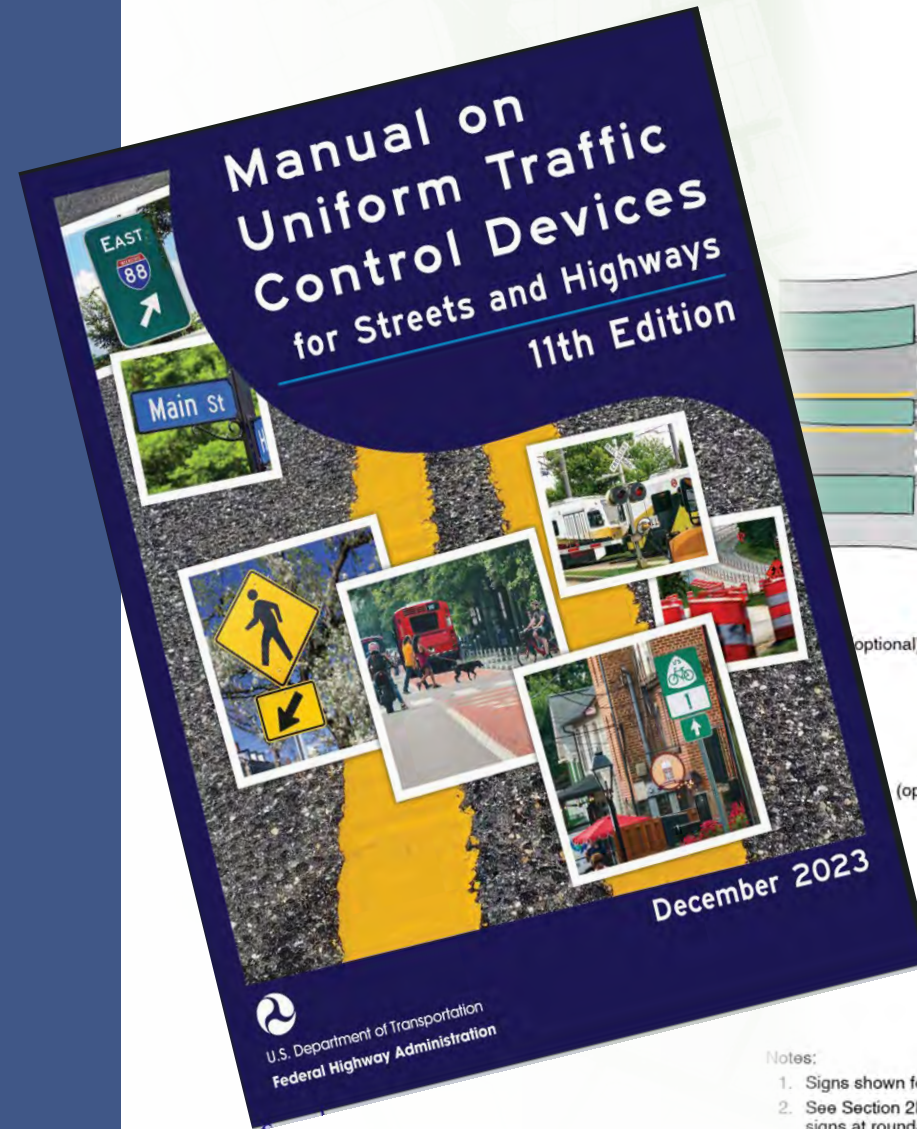


TRAFFIC SAFETY UPDATE

November 2025

Honolulu Department of
Transportation Services



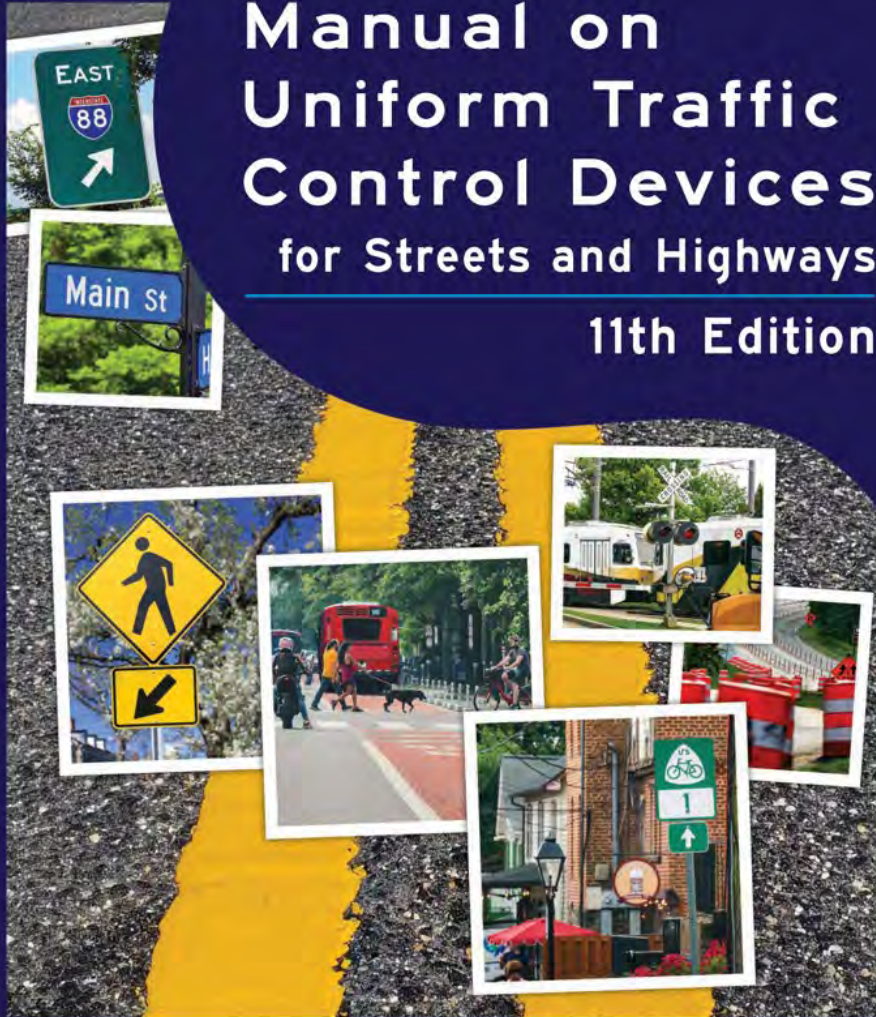
Notes:

1. Signs shown for only one leg
2. See Section 2D.39 for guide signs at roundabouts
3. See Chapter 3D for markings at roundabouts



MUTCD History

Manual on Uniform Traffic Control Devices for Streets and Highways 11th Edition



December 2023



U.S. Department of Transportation
Federal Highway Administration

The 11th edition of the Manual on Uniform Traffic Control Devices (MUTCD) was published by the Federal Highway Administration in December 2023.

The first MUTCD was published in 1935 by AASHTO to consolidate roadway standards. This established standardized traffic controls to enhance road safety across the United States.

City and County is required to follow the MUTCD per ROH 15-3.1

Honolulu
COMPLETESTREETS



MUTCD Chapters

Chapter 1: General and Definitions

Chapter 2: Signs (sizes, colors, shapes, applications, locations; includes regulatory, warning, guide)

Chapter 3: Markings (lane markings, symbols, colors, lengths, applications)

Chapter 4: Traffic Signals (warrants, design, signage, RRFBs)

Chapter 5: Traffic Controls for Automated Vehicles (New)

Chapter 6: Temporary Traffic Controls (work zones, night time work, flaggers, detours, etc.)

Chapter 7: Traffic Controls for School Zones

Chapter 8: Traffic Controls for Railroads and Light Rail

Chapter 9: Traffic Controls for Bicycle Facilities

MUTCD Principles

Planning and Engineering

- Design and installation must be guided by engineering studies (e.g., traffic engineering study, warrant analysis, context for bicyclist/pedestrian use) and should not simply be an “add sign/markings” reaction.
- Qualified persons must make the decision to install/modify devices
- The placement must follow the standards (height, lateral offset, retroreflectivity, visibility, approach speed, sight lines) as detailed.

Uniformity and Consistency

- Consistent device design, word/message, colors, symbol formats, legends. The MUTCD emphasizes that non-compliance can increase liability for the agency and may affect eligibility of federal aid
- For an urban transit context (like Honolulu’s rail/bus system), ensure integration of signs/markings across modes (bike lanes, transit lanes, pedestrian crossings) in a consistent manner.

Safe Systems Approach in the New Edition

- There is stronger attention to **vulnerable road users** (pedestrians, bicyclists) including updated device applicability to multimodal contexts.
- The update includes provisions for emerging mobility contexts and improved tools for accessibility and pedestrian crossing enhancements.
- Standardization reinforced: The MUTCD continues to emphasize **uniformity of device appearance, placement, visibility and recognition** across jurisdictions to promote safety and reduce driver confusion.



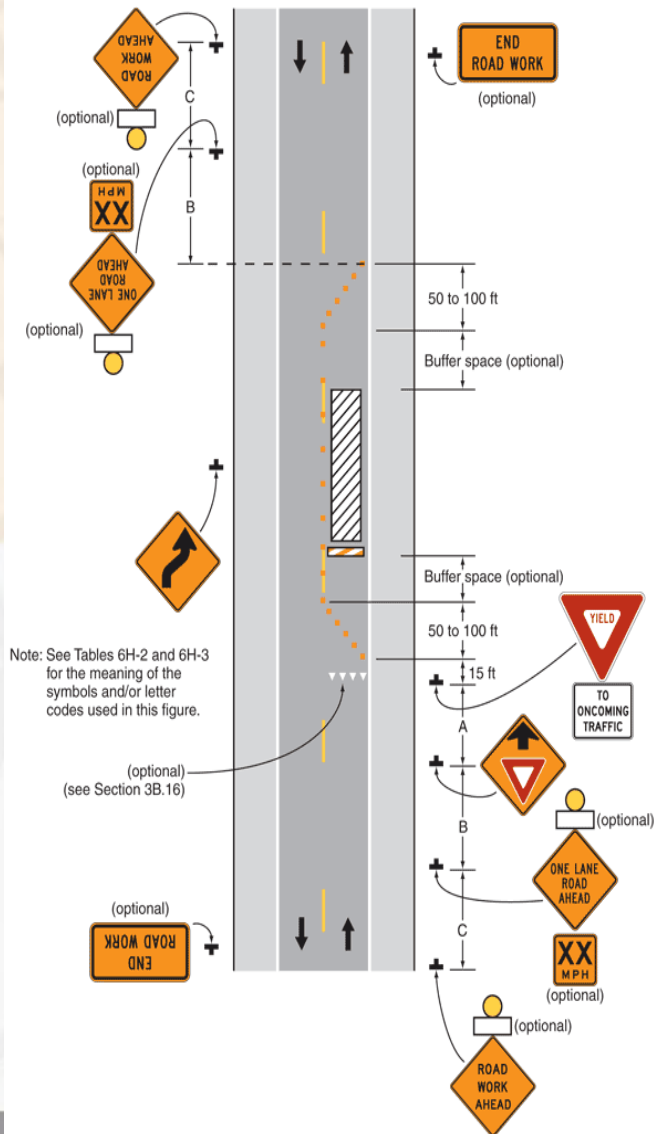
New Additions!

- Rectangular Rapid-Flashing Beacons (RRFB)
- Green bike lane markings
- Red bus lane markings
- Sign sizes



What It Means for Us

Figure 6H-11. Lane Closure on a Two-Lane Road with Low Traffic Volumes (TA-11)



Typical Application 11

- New projects that install traffic control devices should comply with the new standards.
- For existing installations, updates to be planned where possible and practical.
- Local agencies must track the state's adoption process. Until the state manual is updated, local agencies may operate under the existing version but should coordinate for future compliance.
- Procurement of signs, signals, pavement markings, and beacons should specify compliance with MUTCD.

TRAFFIC SAFETY UPDATE

Honolulu Department of
Transportation Services



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:

1. Improve **safety**
2. Apply **context-sensitive** solutions
3. Protect + promote **accessibility** and **mobility** for all
4. Balance the needs and comfort of **all modes** and users
5. Encourage consistent use of **national** industry **best practices**
6. Improve **energy efficiency** in travel and **mitigate emissions**
7. Encourage **opportunities** for **physical activity**
8. Recognize Complete Streets as a **long-term investment**
9. Build **partnerships** with stakeholders + organizations statewide
10. Incorporate **trees** and **landscaping**



Honolulu

COMPLETESTREETS

ROH 14-18



Department of Planning & Permitting

Transit-Oriented Development (TOD)

Special Districts

New Street Standards

Development and Project Review

Department of Transportation Services

Complete Streets, Bicycle, & Pedestrian Programs

Transit Operations & Access

Traffic Improvements at Various Locations

Traffic Signals & Street Usage Permits

Department of Design & Construction

Roadway Construction & Rehabilitation of Streets

Street Lighting

Curb Ramp Program

Bridges & Drainage

Department of Facility Maintenance

First-Aid Pavement Repair

Pavement Preservation Program

Maintenance & Installation of Roadway Striping & Signs

Storm Water Quality

Department of Parks & Recreation

Urban Forestry & Street Trees

Off-street Paths & Trails



Complete Streets Core Team

- Jurisdiction over City streets is shared between departments
 - Transportation Services: transit, planning, operations
 - Facility Maintenance: legal ownership, maintenance, stormwater
 - Design and Construction: capital and rehabilitation projects
 - Planning and Permitting: private development, permitting
 - *Parks and Recreation: street trees*
- Interdepartmental group meets twice a month to coordinate street activities and projects and tackle challenges collectively
- Major project scoping is done collectively using the Complete Streets Checklist

City & County of Honolulu: Complete Streets Scoping Checklist

(Instructions: This checklist is to be completed by the City and County of Honolulu Complete Streets Core Team for upcoming roadway maintenance and improvement projects by the Department of Design and Construction, Facility Maintenance, and Transportation Services. The checklist is intended to be completed, and is most useful, early in the scoping stage of project design. Signed checklists are to be stored in the interdepartmental Complete Streets shared drive: \\N\dcps\CompleteStreets\employees\first checklist)

Project Title: _____

Department / Division: _____

Project Manager: _____ **Division Chief:** _____

Print Name _____

Signature _____ Date _____

Complete Streets Administrator: _____ **Director / Exceptions:** _____

Print Name _____

Signature _____ Date _____

Section A: Project Information and Roadway Context

Project Description: _____

Neighborhood: _____

Project Area/Listing of Streets: _____

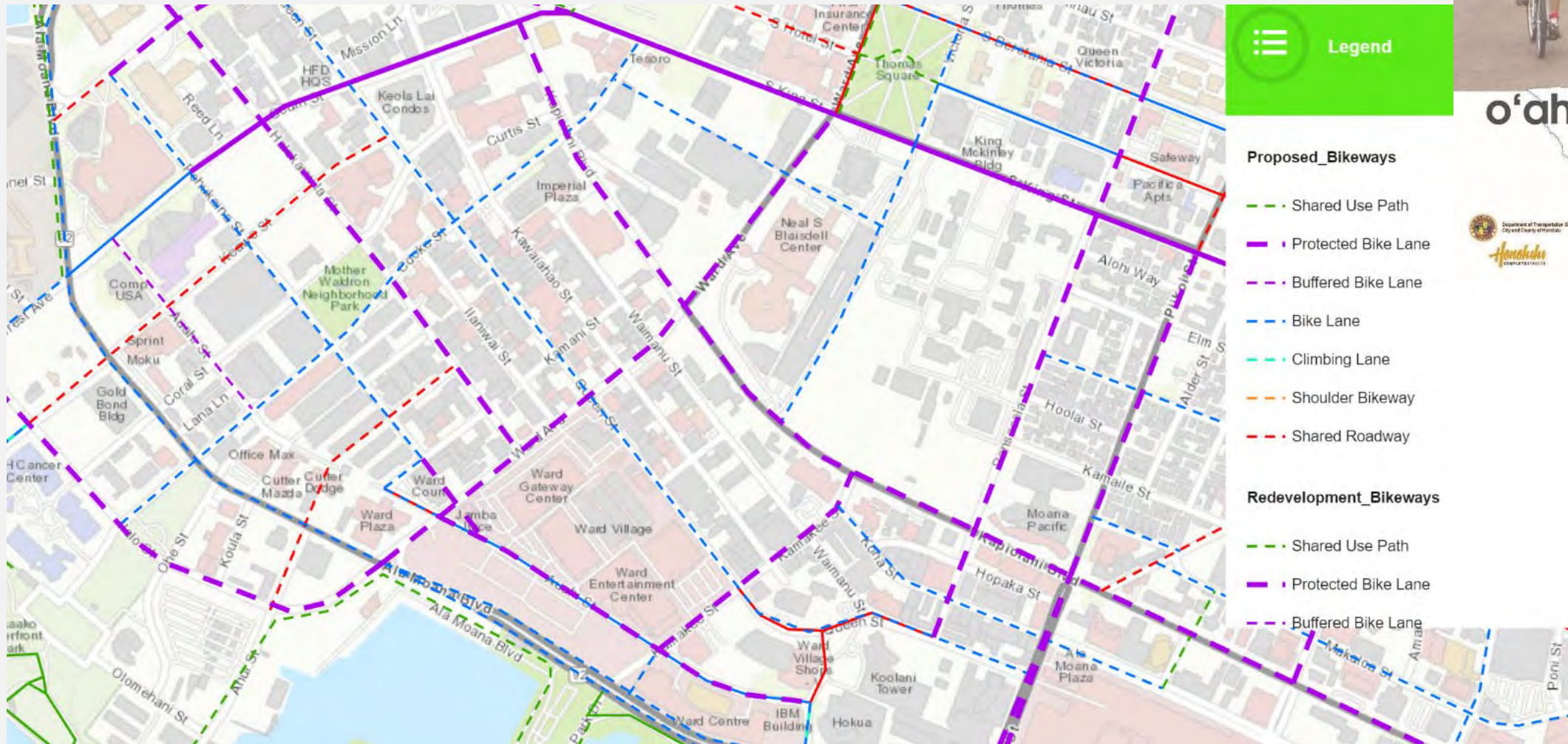
1) What is the Community Type? (Check all that apply.)

☐ Residential ☐ Commercial ☐ Industrial ☐ Mixed Use ☐ Other - Explain _____

Section B: Consistency with Existing Transportation Plans and Posted Speed Limit

Street Name	Posted Speed Limit	Does a Complete Streets plan exist?	City Pedestrian Plan	City Bike Plan	TOD Plan/Station Access/Transit Priority	Vision Zero Action Plan

Implementing the O'ahu Bike Plan



o'ahu bike plan

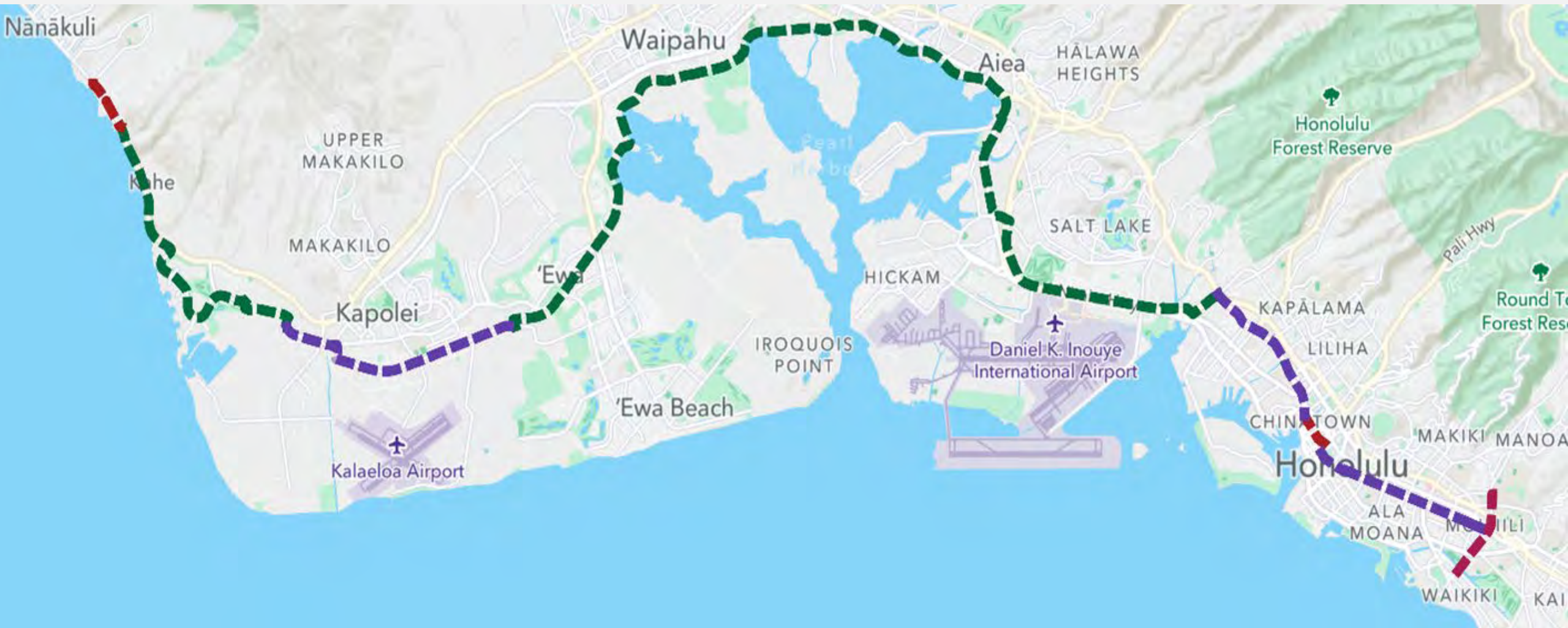
2019 Update



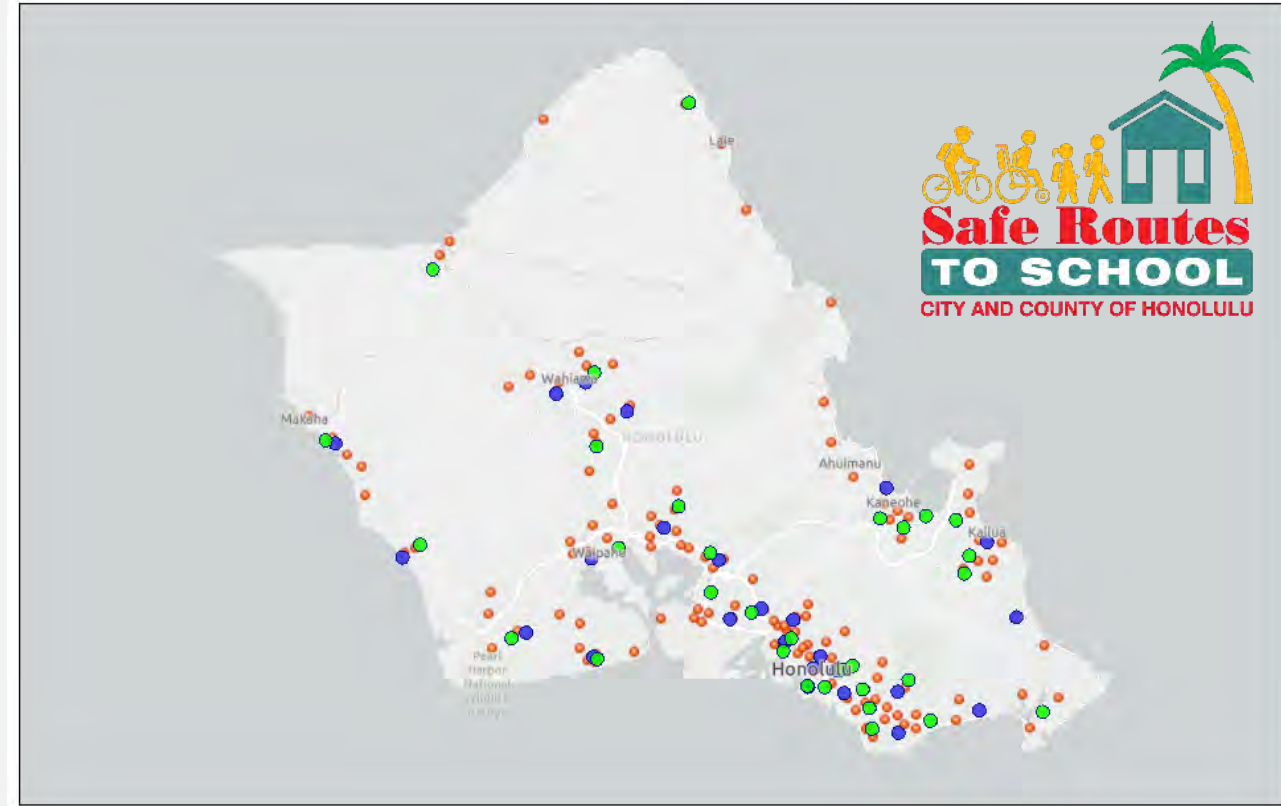
December 2019



O'ahu South Shore Multi-Use Path: Leeward Coast to UH Mānoa



Implementing Safe Routes to School

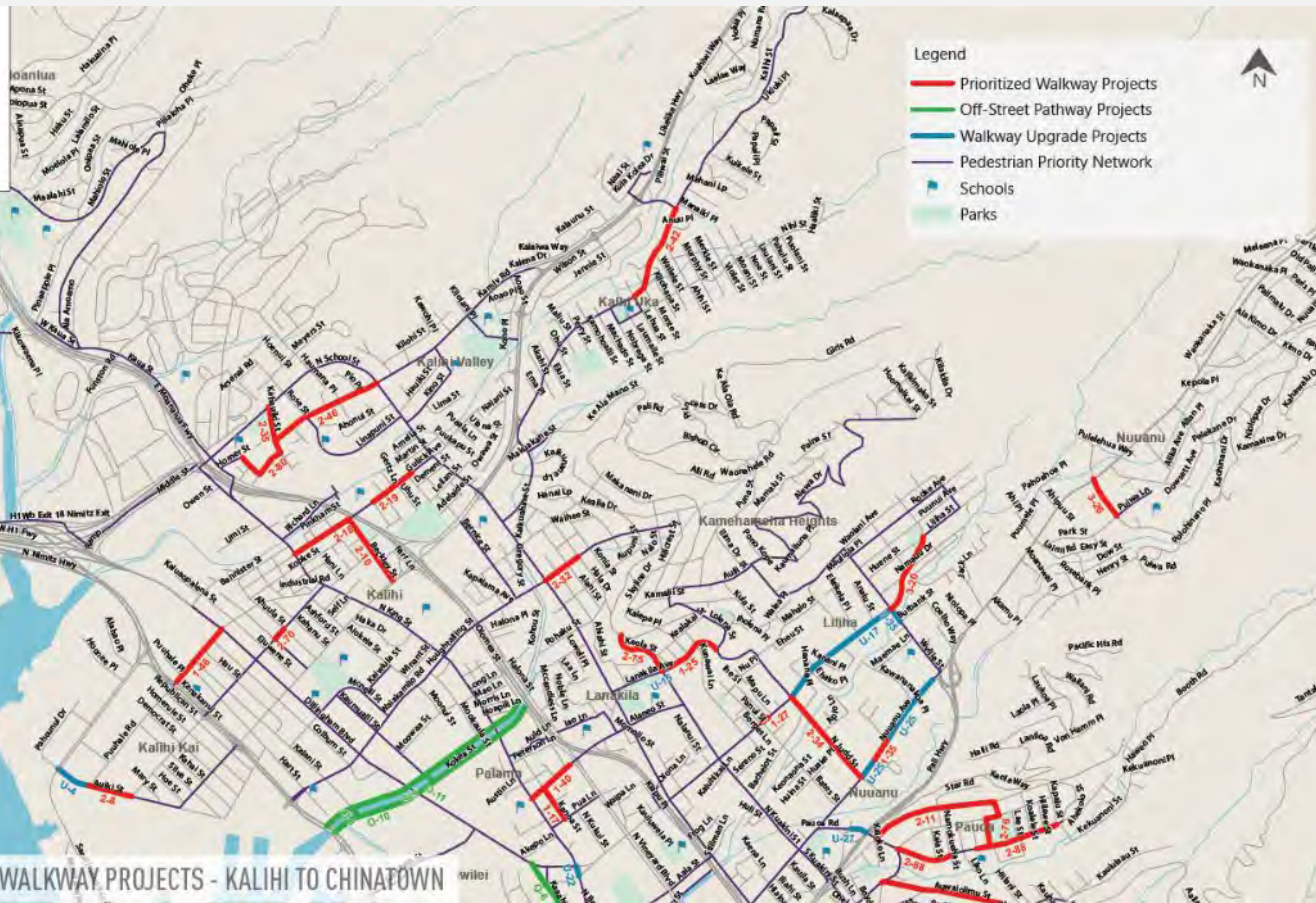


School Zone Traffic Calming & Complete Street Projects

- Federal-Aid Priority Walkway Projects (Waiʻanae, Waipahu, Wahiawā, Kalihi, McCully/Date, Kailua)
- SS4A Quick-Build Demonstration Grant (50 high-injury locations, ~20 school locations)
- Waipiʻo Point Access Road Shared-Use Path (Waipahu High School)
- North King Street Bikeway and Crosswalk Upgrades (Kaiʻulani Elementary School, Farrington High School, Kalākaua Middle School)
- Kāneʻohe Complete Streets (Heʻeia Elementary School, Parker Elementary School, Castle High School)
- Kamehameha IV Road School Crossing Upgrades (Dole Middle School, Kaʻewai Elementary School)
- Nuʻuanu Avenue/Bates Street Crosswalk Upgrades (Hawaii Baptist Academy Elementary School)
- Waimano Home Road/Leomele Street RRFB (Pearl City Highlands Elementary School)
- Waimano Home Road/Hoʻomalua Street (Pearl City Elementary School)
- Moanalua Road/Nalopaka Place RRFB (Alva Scott Elementary School)
- Meheʻula Parkway/Hikikaulia Street RRFB (Mililani High School)
- Māhoe Street Safe Routes to School (August Ahrens Elementary School)
- Keolu Drive Bikeway and Traffic Calming (Keolu, Enchanted Lake &, Kaʻelepulu Elementary Schools, Kailua Intermediate School)
- Ala ʻĀkau Street Curb Extensions (Kamaile Academy)
- Kīlauea Avenue Lane Reconfiguration & Harding Avenue Sidewalks (Kāhala & Waiʻalae Elementary Schools, Kaimukī Middle School)
- Mōkapu Road Lane Reconfiguration (Aikahi Elementary School)
- Hawaiʻi Kai Drive Lane Reconfiguration (Hahaʻione & Kamiloiki Elementary Schools)
- Lunalilo Home Road Crossing Upgrades (Kaiser High School)
- Haleʻiwa Road Shared-Use Path (Haleʻiwa Elementary School)
- and more...



Implementing the O'ahu Pedestrian Plan



Project Community	Project Corridor
Waianae	Plantation Road
	Mill Street
	McArthur Street
	Lualualei Homestead Road
Wahiawa	California Avenue
	Glen Avenue/Uuku Street
McCully-Moiliili	Kapiolani Boulevard
	Date Street
	Hauoli/Pumehana/Citron/ Fern Streets
	Lokahi/Algaroba Street
Makiki	Nehoa Street
	Pensacola Street
	Keeaumoku Street
	Piikoi Street
	Prospect Street/Iolani Avenue
Kalihi	Palama Street
	Gulick Avenue
	Beckley Street
	Puu hale Road
	Kanoa Street
Waipahu	Waipahu Street
	Honowai Street
Kailua	Kuulei Road
	Kailua Road
	Kalaheo Avenue

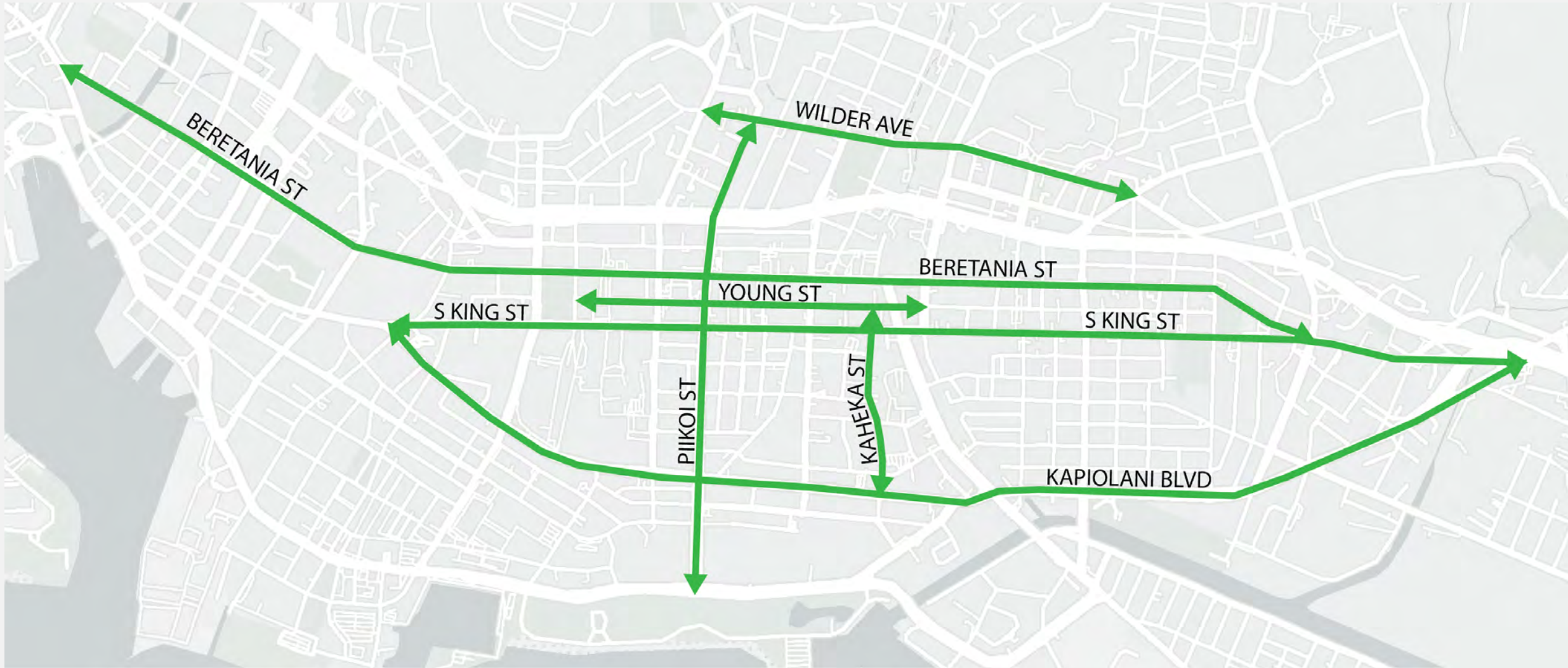
Our First Federal-Aid Walkway Projects



***2022 Florida study shows
the absence of sidewalks
increases pedestrian
crashes by 67%***

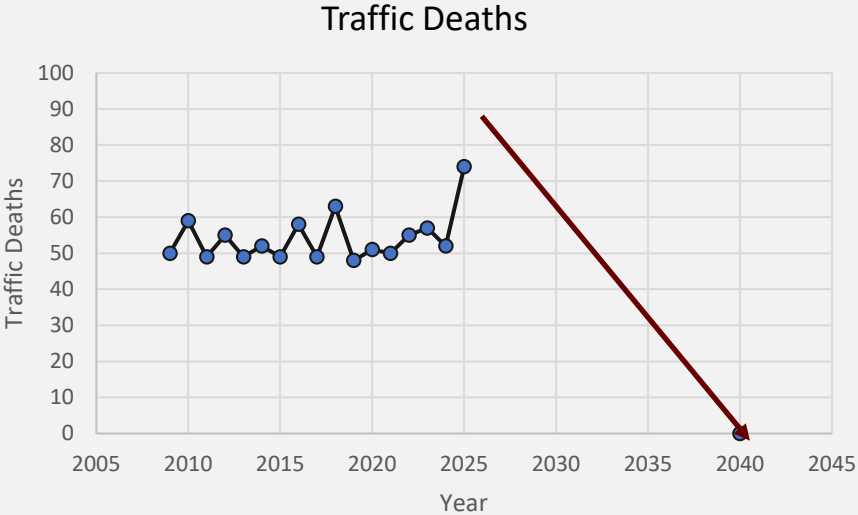


Safe Streets and Roads for All Grant (FFY23)



2025: Fatalities on O‘ahu

<u>Demographic</u>	<u>No.</u>	<u>Percentage</u>
Pedestrian	22	30%
Motorcyclist	19	26%
Moped	7	9%
Vehicle	18	24%
E-bike*	3	4%
E-scooter	1	1.35%
Bicyclist	1	1.35%
Skateboarder	1	1.35%
Utility vehicle	1	1.35%
<u>TOTAL</u>	<u>74</u>	



<u>Demographic</u>	<u>No.</u>	<u>Percentage</u>
Male	50	67%
Female	24	34%
<u>Total</u>	<u>74</u>	

<u>Age</u>	<u>No.</u>	<u>Percentage</u>
Kupuna 65+	17	34%

Reaching for Vision Zero

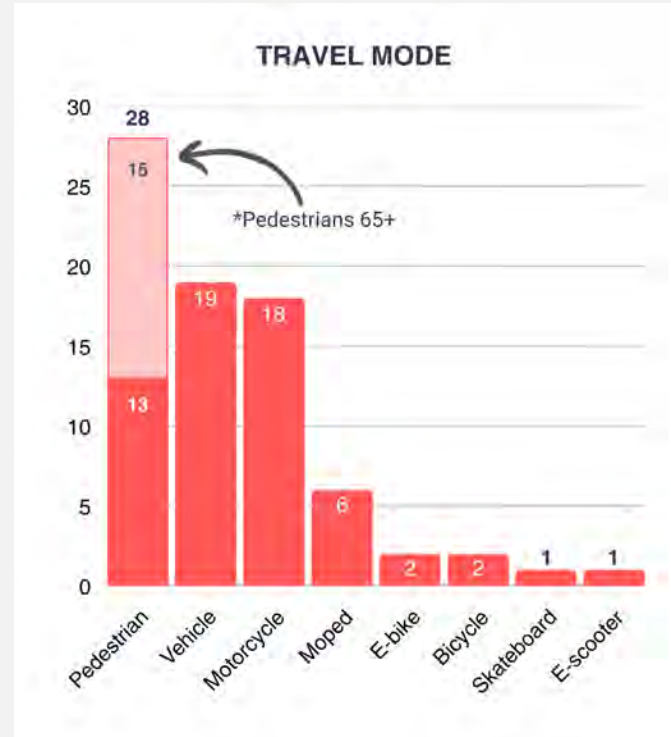


318 deaths between 2015-2020:

- 40% are people walking and bicycling
- Our kupuna 65+, and lower-income communities are disproportionately impacted

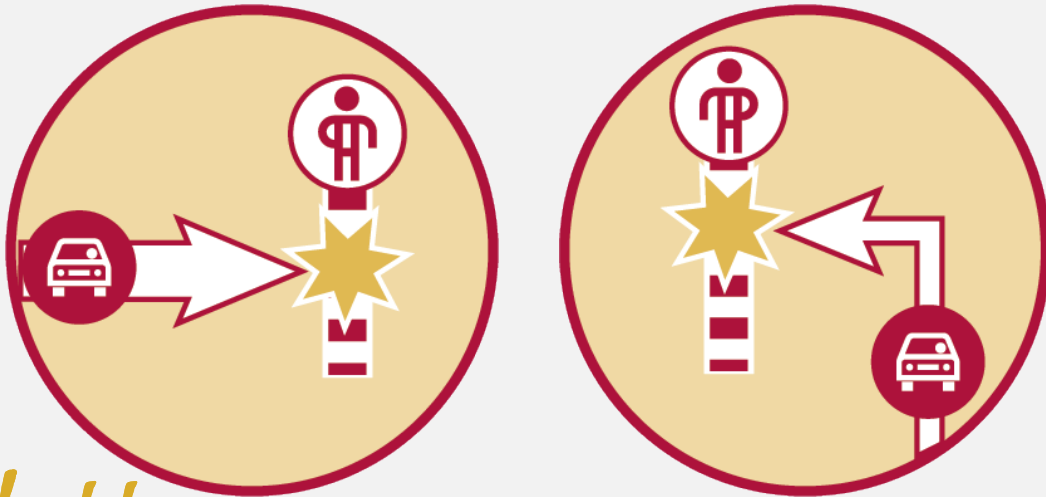
Timeline:

- 2018: City Council Resolution 18-219
- 2019: State Act 134
- Federal Law 23 USC Section 148 (g) (3)
- 2025: City Council Resolution 25-1
Adopting O'ahu Vision Zero Action Plan



The Major Safety Issues

- Pedestrians are 6% of commuters but are involved in 15% of all injury crashes, and they make up > 30% of fatalities on O'ahu
- Nearly 70% of crashes involving people walking and bicycling take place at intersections
- Left-turn collisions dominate at traffic signals
- Straight-ahead collisions typically occur at uncontrolled crossing locations



What causes fatal and serious injury crashes?



INATTENTION

**33% of
fatal crashes**



IMPAIRMENT

**33% of
fatal crashes**



SPEED

**32% of
fatal crashes**



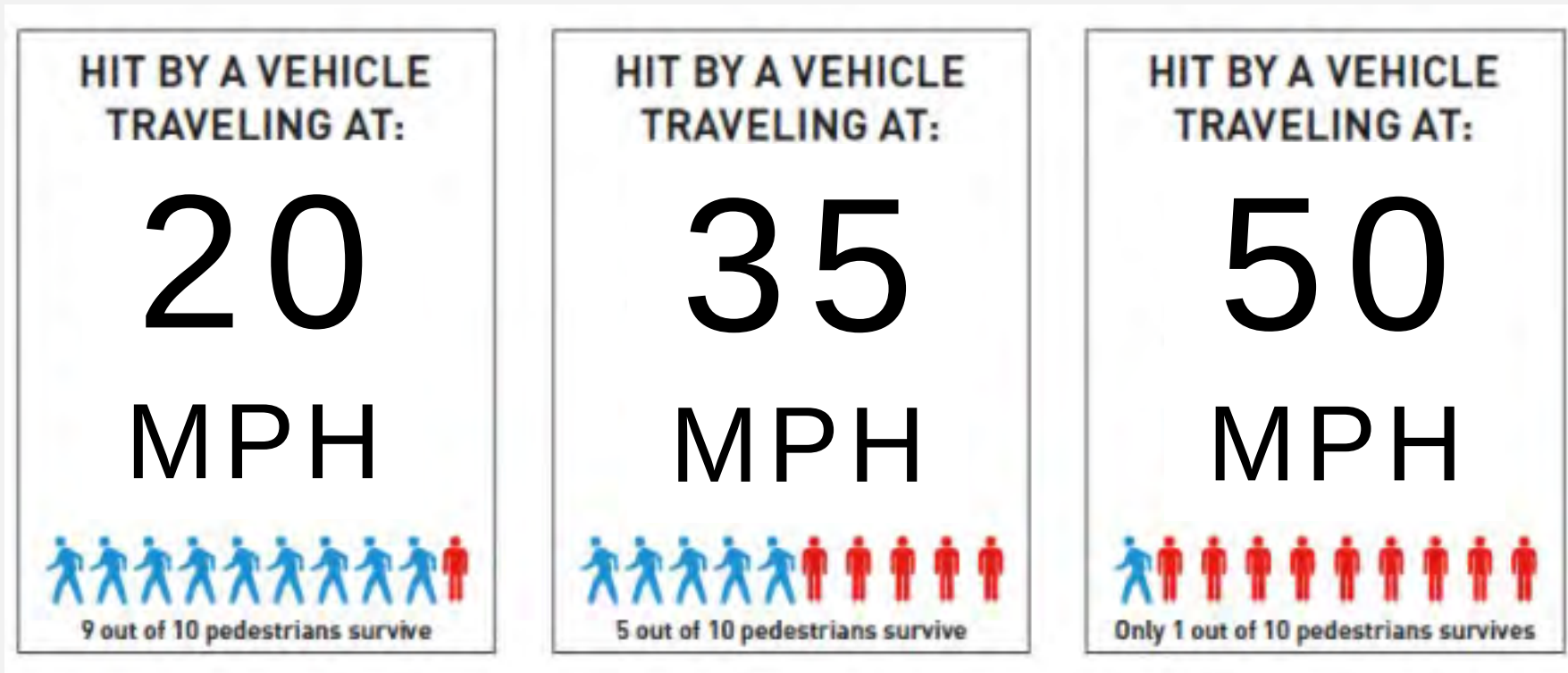
FAILURE TO YIELD

**10% of
fatal crashes**

* Data from VZAP 2015-2022



Speed Matters



Speed Matters

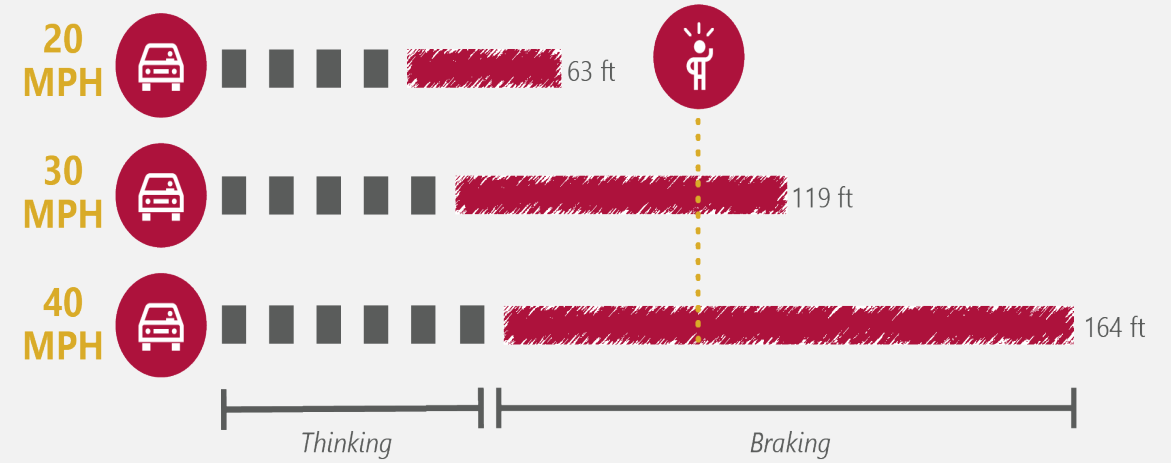


Image from Flickr user Aimin-feder



Safe System Elements

Safe Speeds

Street design

Enforcement

Laws & policies

Safe Streets

Data driven approach

Quick Build

Invest in walking, transit, bikes

Integrate safety

Revise law, policy, procedure

Safe People

Shared kuleana

SRTS

Diversity of users

Integrate safety into LU & permitting

Organizational capacity

Post-crash care

Crash data quality

Take care of people affected by crashes

Safe Vehicles

Prioritize safer vehicles

Collaborate to improve safety of vehicles



Actions: Safe Streets

Data Driven Approach

Vision Zero dash

Use proven safety treatment

Data before and after!

Focus on HIL

Innovative Design strategy

Fund Quick Build Projects

Crosswalk upgrades

Community based projects at HIL

Master agreement for QB

City QB Team

Pilot open streets and other QB

Walking, Biking, and Transit

Implement ped X improvements

Transit siting and ped access

Improved transit shelters

Analysis of transit stations

Implement Ped and Bike Plans

..... and more

Integrate Safety into projects

Crash data quality

Take care of people affected by crashes

Law, Policy, Process

City ordinance that Safety is the first priority

Update the CS Design Manual

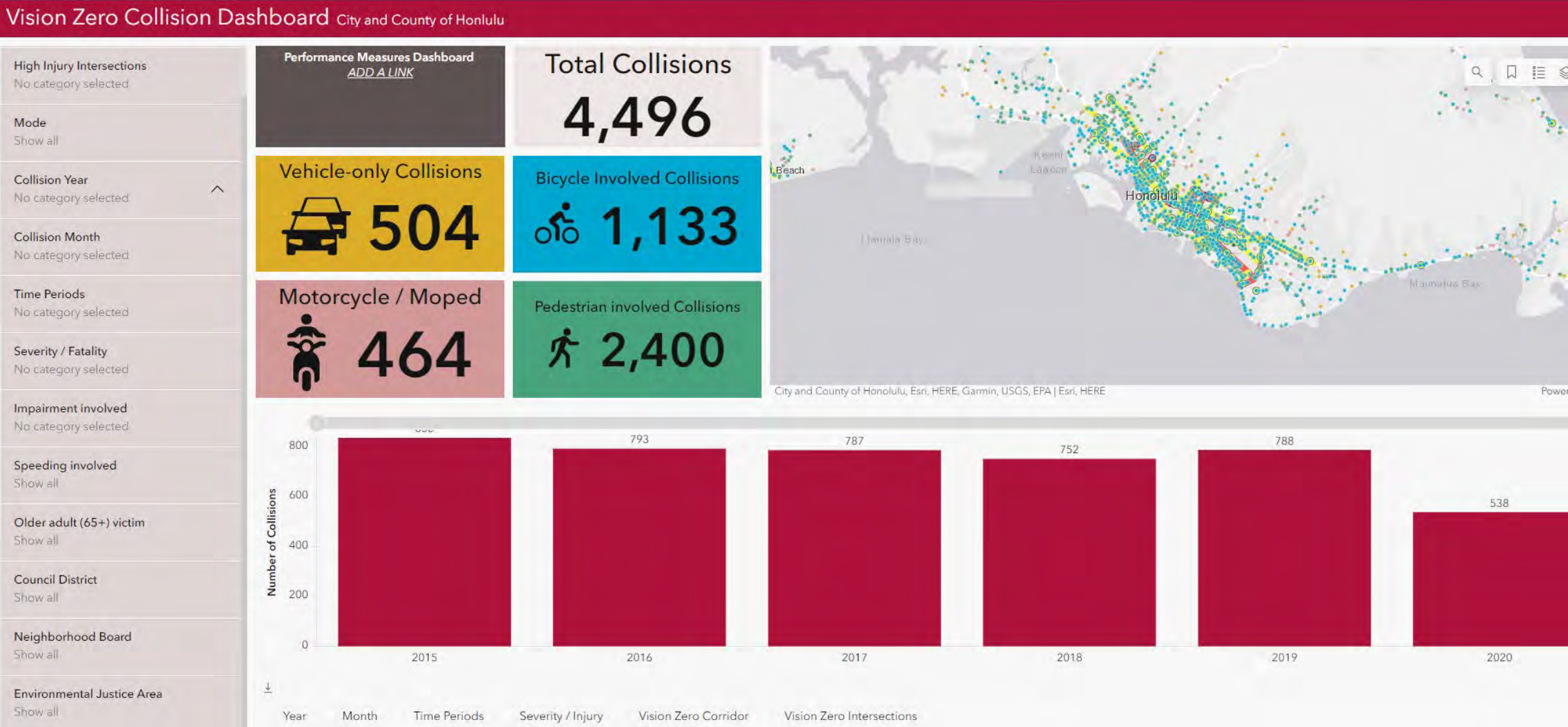
Amend city ordinance relating to bicycles

Consider safety and delay impacts of traffic signal upgrades

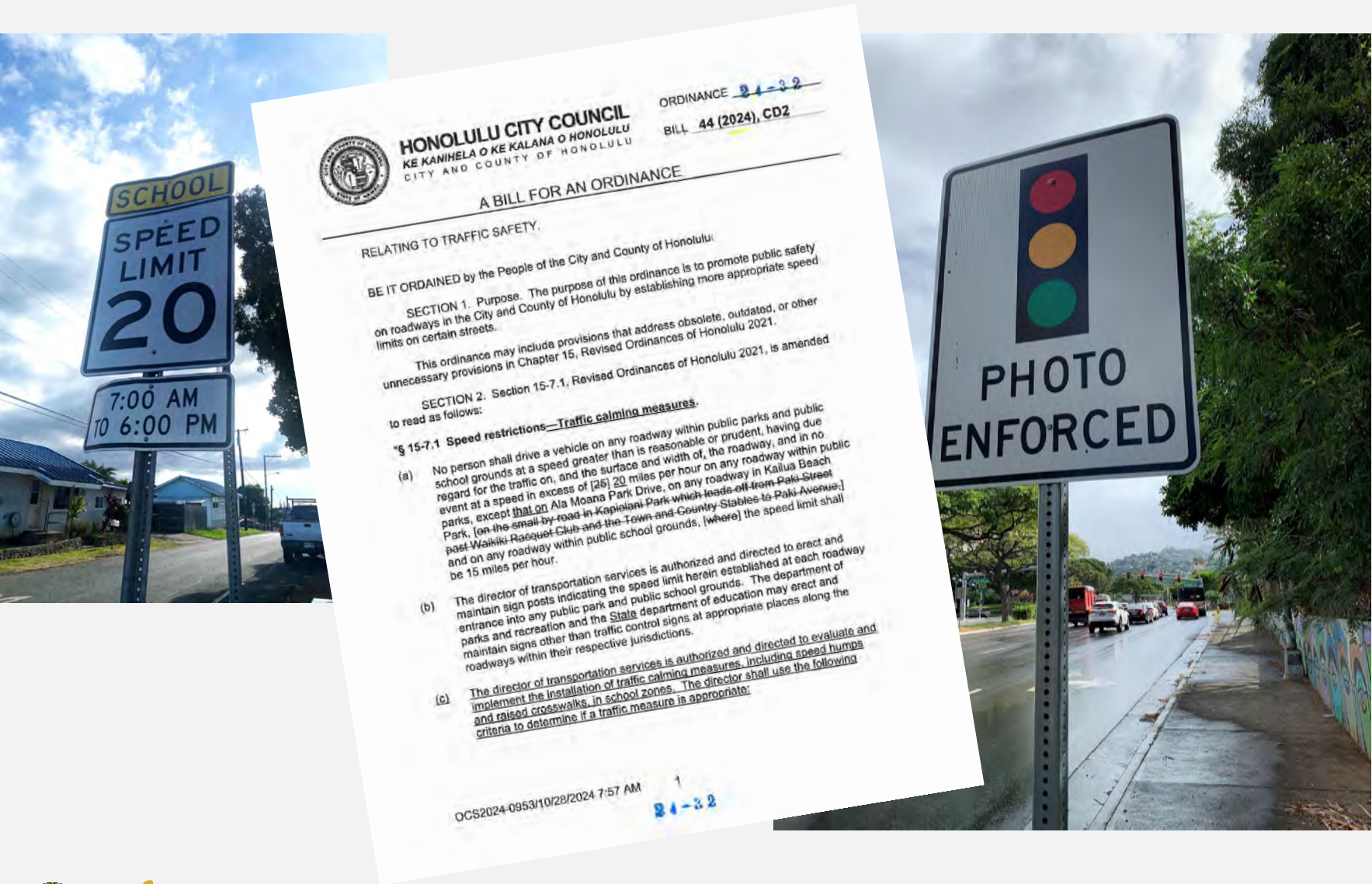
Consider safety and delay impacts of traffic signal upgrades



Data-Driven Decision Making



Policy & Legislative Updates



O'ahu Vision Zero Campaign Materials



IT IS MY KULEANA TO SLOW DOWN AND DRIVE SAFELY OUT OF RESPECT FOR OUR COMMUNITY.



- I will slow down to make the difference between life and death in a crash.
- When I see a person crossing the street, I will come to a stop for them.
- I will avoid parking too close to the street corner, so people can see each other better at intersections.
- I will drive and text, but never at the same time.
- I will never drive if I'm impaired, even slightly, by drugs or alcohol.
- I will remember that when I am behind the wheel, my vehicle can take someone's life or cause serious harm, regardless of which user violated the rules.
- I will tell others about this pledge and ask them to hold me accountable if I'm lapsing in my commitment.

I take this pledge because I never want to take someone's life or injure a person because I'm driving recklessly, impatiently, or selfishly.

EVERY PERSON USING OUR ISLAND STREETS IS LOVED, HAS BEEN LOVED, OR WILL BE LOVED BY THEIR 'OHANA.

I will remember that each time I turn on my engine, I take on a life-or-death responsibility. I never want a family to lose a loved one because I'm rushing, angry, or distracted behind the wheel.

Signature _____ Date _____



Project Development



- 1 Based on existing plans
- 2 Paving / resurfacing scheduled
- 3 Feasibility
- 4 Funding \$



Quick-Build & Interim Projects

- Lane reconfiguration
- Intersection/crossing upgrades
- Parking treatments
- Low-cost walkway, bicycle & transit facilities
- Crosswalk improvements

Traffic Calming



Pedestrian Zone



Rapid Flashing Beacons



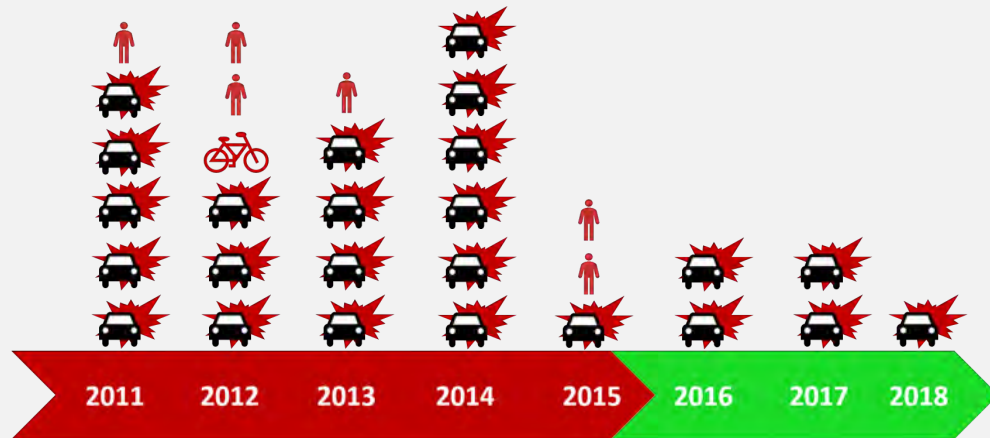
Curb Extensions



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)



Honolulu Urban Core Bikeway Network 2025

Upcoming

- Protected or buffered bike lane
- Bike lane
- Bike route (sharrows)

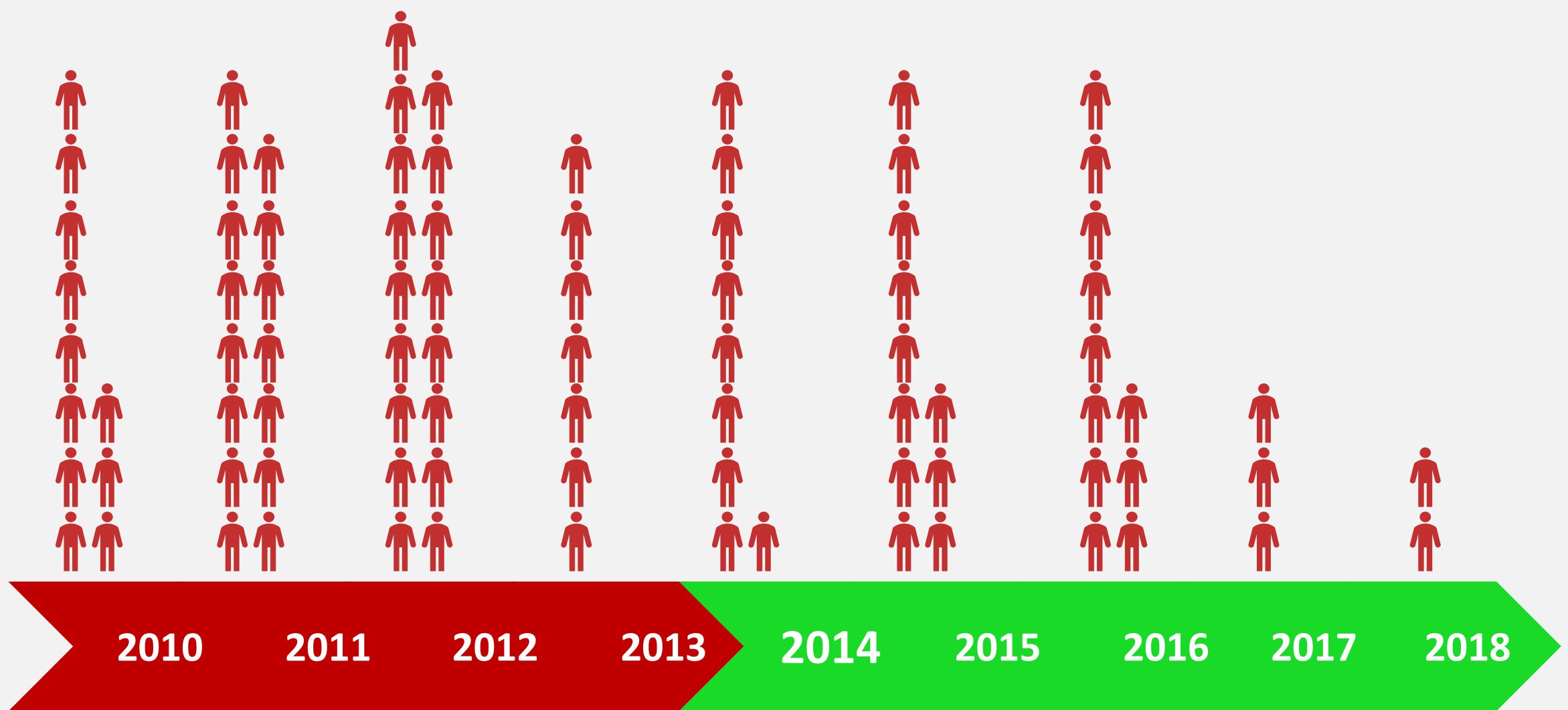
Existing Bikeways

- Bike path
- Protected or buffered bike lane
- Bike lane
- Bike route (sharrows)

Map labels include: Nuuanu Ave., Alakea St., Richards St., Queen St., Punchbowl St., S. King St., Cooke St., Ward Ave., Kamakee St., Waimanu St., Auahi St., Ilalo St., Beretania St., Young St., Pensacola St., Keeaumoku St., Lunalilo Fwy, Ala Moana Blvd, and various other local streets.

Scale: 0 to 1 mile. North arrow pointing up.

Source: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community.



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



School Zone Speed Humps/Raised Crosswalks

Completed:

- Campbell High School
- Hawaii Baptist Academy
- Holomua Elementary School
- 'Ilima Middle School
- Kahalu'u Elementary School
- Kahuku Elementary School
- Kapālama Elementary School
- Kawanānakoā Middle School
- Leihōkū Elementary School
- Mā'ili Elementary School
- Makakilo Elementary School
- McKinley High School
- Moanalua High School

Upcoming:

- 'Āina Haina Elementary School
- August Ahrens Elementary School
- Castle High School
- Enchanted Lake Elementary School
- 'Ewa Beach Elementary School
- Hale'iwa Elementary School
- Helemano Elementary School
- Highlands Intermediate School
- Iliahi Elementary School
- Ka'elepulu Elementary School
- Kailua Intermediate School
- Kalihi Waena Elementary School
- Kāne'ohe Elementary School
- Keolu Elementary School
- Leilehua High School
- Maemae Elementary School
- Makaha Elementary School
- Moanalua Elementary School
- Moanalua Middle School
- Niu Valley Middle School
- Punahou School
- Waialua Elementary School
- Waikele Elementary School
- Waimalu Elementary School



Raised Crosswalk Study

- The percent of **drivers stopping for pedestrians significantly increased from 66% to 89%.**
- Average speed of vehicles across study locations dropped by 4 mph.
- The percentage of **drivers exceeding the speed limit decreased** significantly with reductions in top speed and lower prevailing speed.
- A study of crashes four years before and three years after the State's installation of raised crosswalks at nine locations in Kalihi and Waianae and found that **pedestrian and serious injury crashes plummeted to zero** for all studied locations.



Quick-Build RRFB Pilot: School Street & Date Street



**Yield Rate
Before**

60%

**Yield Rate
After**

87%



Quick-Build Walkway Improvements

*The O'ahu Pedestrian Plan identifies over **900 miles** of missing walkways on City roadways.*



Safe Streets and Roads for All Grant (FFY24)

~50 High-Injury Locations

Uncontrolled Crosswalks

- Solar rectangular rapid-flashing beacons (RRFBs)
- Daylighting
- Curb extensions
- Raised crosswalks
- Pedestrian refuge islands
- Speed humps
- Gateway treatments
- Lane conversions



Signalized Intersections

- Center line hardening
- Leading pedestrian intervals (LPIs)
- Daylighting
- Turn wedges
- Curb extensions



Full Right-of-Way Reconstruction

- Higher-quality materials for intersection and crossing treatments
- New or upgraded sidewalks
- Shared-use paths
- Landscaping + green infrastructure
- Signal upgrades
- Curb ramps + ADA accommodations
- Lighting improvements

Bikeway Protection



Sidewalks, Medians & Raised Crossings



Roundabouts



Landscaping & Street Trees



Vision Zero Summary



1

Safety Culture Codified and Documented

2

Data Driven, Analyze Innovation

3

Community and Stakeholder, Multi Department Collaboration

4

Use of Grants and Federal Funds

