HONOLULU CITY COUNCIL

KE KANIHELA O KE KALANA O HONOLULU

CITY AND COUNTY OF HONOLULU

No. 25-1

RESOLUTION

ADOPTING THE FINAL O'AHU VISION ZERO ACTION PLAN DATED AUGUST 2024.

WHEREAS, in the 2006 general election, Honolulu voters approved an amendment to the Revised Charter of Honolulu establishing a priority of the Department of Transportation Services ("DTS") to make Honolulu a pedestrian- and bicycle-friendly city; and

WHEREAS, Ordinance 12-15, approved on May 25, 2012, established a complete streets policy to guide and direct more comprehensive and balanced planning, design, and construction of City and County of Honolulu ("City") transportation systems; and

WHEREAS, Resolution 18-219, adopted on November 14, 2018, urged the City Administration to adopt the goals, strategies, and policies of Vision Zero, which Resolution 18-219 describes as "a comprehensive strategy to eliminate all traffic deaths and severe injuries while promoting safe, healthy, and equitable mobility for all"; and

WHEREAS, crash report data indicates that a total of 1,697 fatal and serious injury crashes and an average of one traffic-related death per week occurred on O'ahu during the years 2015 through 2020; and

WHEREAS, severe injury crashes disproportionately impact vulnerable road users, such as people walking and biking, and road users in vulnerable populations, such as kūpuna and persons in high-poverty areas; and

WHEREAS, in June 2024, the DTS published a public draft of the O'ahu Vision Zero Action Plan to solicit public input on a new roadmap for eliminating traffic-related deaths and serious injuries on O'ahu, and in August 2024, the O'ahu Vision Zero Action Plan was finalized; and

WHEREAS, the O'ahu Vision Zero Action Plan identifies 39 miles of high-injury street segments and 93 high-injury street intersections that account for a disproportionate share of serious injuries and fatalities on City-owned streets; and

WHEREAS, the City Council ("Council") finds that the O'ahu Vision Zero Action Plan is a multi-pronged strategy to achieve transportation safety on O'ahu's roadways; and

RESOLUTION

WHEREAS, the Council further finds that it is important to support of the DTS' O'ahu Vision Zero Action Plan and thatit is in the best interest of the City and its residents for the Council to formally adopt the final O'ahu Vision Zero Action Plan, dated August 2024, attached hereto as Exhibit A; now, therefore,

BE IT RESOLVED by the Council of the City and County of Honolulu that it hereby adopts the final O'ahu Vision Zero Action Plan, dated August 2024, attached hereto as Exhibit A, to protect and promote the safety of all those who use City streets; and

HONOLULU CITY COUNCIL

KE KANIHELA O KE KALANA O HONOLULU

CITY AND COUNTY OF HONOLULU

No. 25-1

RESOLUTION

BE IT FINALLY RESOLVED that copies of this resolution be transmitted to the Mayor, the Managing Director, the Chief of Police, the Fire Chief, the Director of Emergency Services, the Director of Design and Construction, the Chief Engineer of Facility Maintenance, the Director of Planning and Permitting, and the Director of Transportation Services.

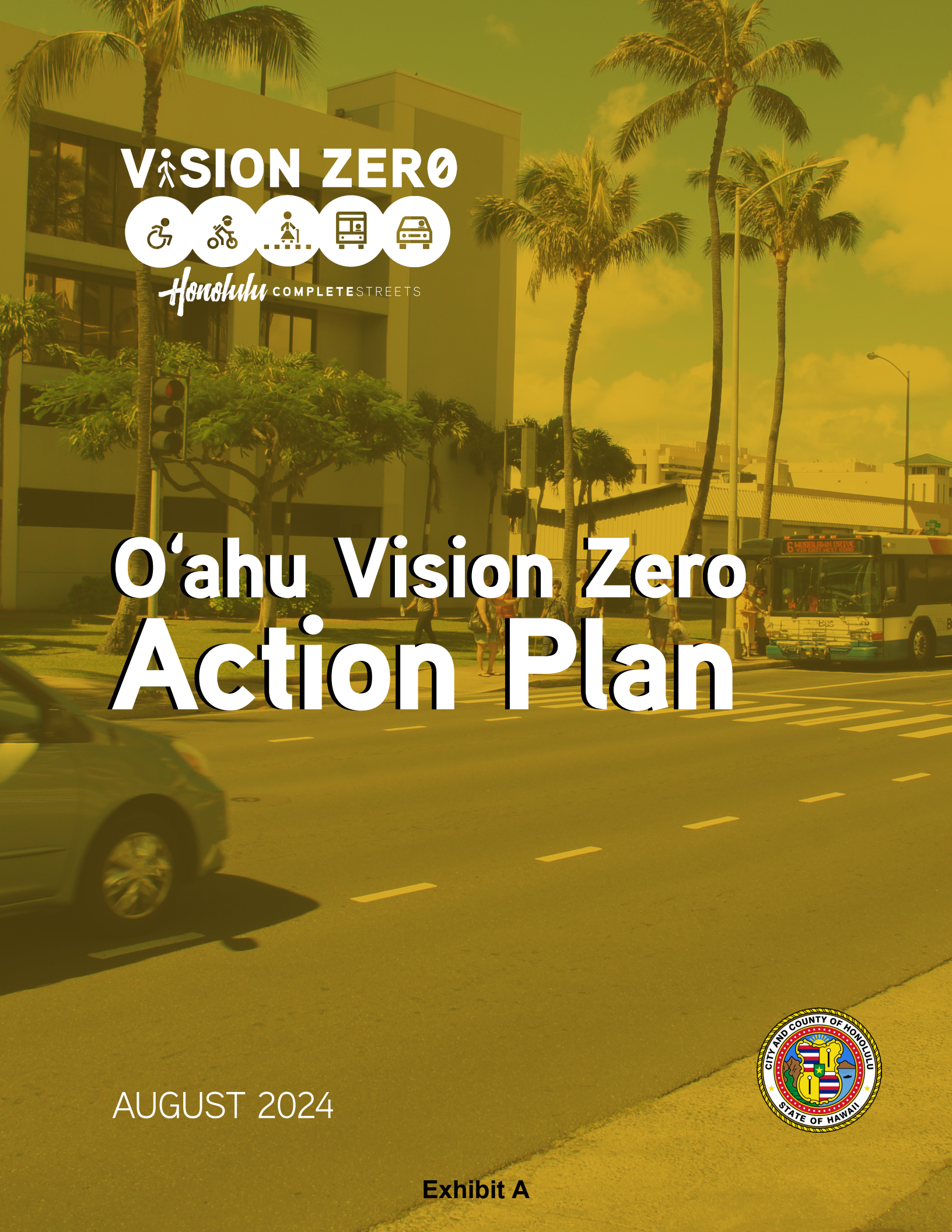
INTRODUCED BY:

DATE OF INTRODUCTION:

JAN 2 2025

Honolulu, Hawai'i

Councilmembers



O‘ahu Vision Zero Action Plan

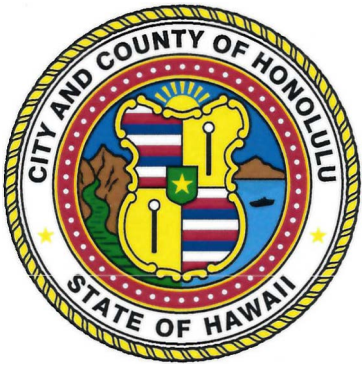
AUGUST 2024

CITY AND COUNTY OF HONOLULU
STATE OF HAWAII

Exhibit A

O'AHU VISION ZERO ACTION PLAN

FINAL
August 2024



J. Roger Morton, Director
Department of Transportation Services

CITY AND COUNTY OF HONOLULU

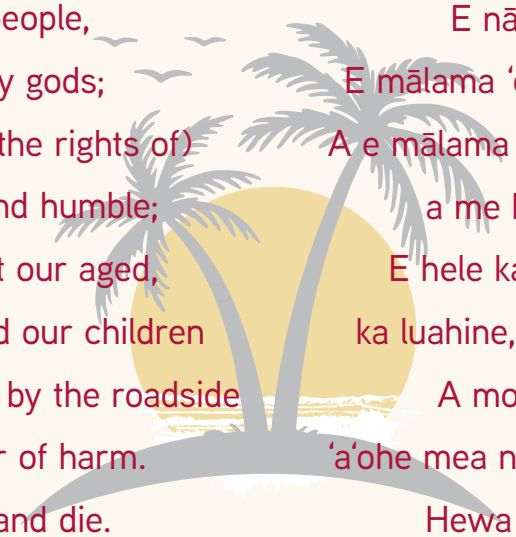
Acknowledgements

The O'ahu Vision Zero Action Plan (Plan) was prepared by the City and County of Honolulu in cooperation with the O'ahu Metropolitan Planning Organization and the United States Department of Transportation (USDOT). The Plan was prepared with support of a consultant team composed of Nelson\Nygaard Consulting Associates, PBR HAWAI'I & Associates, Inc., and Austin Tsutsumi & Associates.

Thank you to the individuals and organizations that made this plan possible, including the residents whose input is reflected in this document.

The Plan was funded in part through grants from the USDOT Federal Highway Administration. The views and opinions of the agency expressed herin do not necessarily state or reflect those of the USDOT.

We acknowledge the 104 people who have died from traffic related injuries on O'ahu since this planning effort started. This Plan, and the allocation of resources to implement it, is dedicated to shielding people from harm as they move along and across our streets.



The Law of the Splintered Paddle	**Kānāwai Māmalahoe**
"O my people,	E nā kānaka,
Honor thy gods;	E mālama 'oukou i ke akua
Respect alike (the rights of)	A e mālama ho'i i kānaka nui
men great and humble;	a me kānaka iki;
See to it that our aged,	E hele ka 'elemakule,
our women, and our children	ka luahine, a me ke kama
Lie down to sleep by the roadside	A moe i ke ala
Without fear of harm.	'a'ohe mea nāna e ho'opilikia.
Disobey, and die.	Hewa nō, make.

Exhibit A

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Exhibit A

Acronyms and Abbreviation

The following are acronyms and abbreviations used throughout this Plan.

ACRONYM	DEFINITION
AADT	Average Annual Daily Traffic
AARP	American Association of Retired Persons
ADA	Americans with Disabilities Act
City	City and County of Honolulu
DOH	Hawai'i Department of Health
DTS	City and County of Honolulu Department of Transportation Services
EJ	Environmental Justice
FARS	Fatality Analysis Reporting System
FHWA	Federal Highway Administration
FSI	Fatal or Serious Injury crash
FY	Fiscal Year
HB	House Bill
HBL	Hawai'i Bicycling League
HDOT	Hawai'i Department of Transportation
HIL	High Injury Location
HPD	City and County of Honolulu Police Department
HRS	Hawa'i Revised Statutes
LGBTQ+	Lesbian, Gay, Bisexual, Transgender, Queer
MADD	Mothers Against Drunk Driving
MPH	Miles per Hour
Plan	Honolulu Vision Zero Action Plan
PSP	Pedestrian Safety Program
ROW	Right-of-Way
RRFB	Rectangular Rapid Flashing Beacons
SHACA	State of Hawai'i Advanced Crash Analysis
SHSC	State Highway Safety Council
SRTS	Safe Routes to School
SS4A	Safe Streets and Roads for All
T6/EJ	Title VI/Environmental Justice
Title VI	Title VI of the Civil Rights Act of 1964 (anti-discrimination laws)
US	United States
USC	United States Code
USDOT	United States Department of Transportation
WAO	We Are Oceania

Exhibit A

Hawaiian Terms

WORD	MEANING
Kama'āina	Residents
Keiki	Youth
Kuleana	Responsibility and privilege
Kūpuna	Elders
Makai	Toward the sea
Mauka	Toward the mountains

Exhibit A

1

Introduction

On average, we experience one traffic death a week on O'ahu streets. Every traffic death and serious injury changes the lives of loved ones and people involved in the crash forever. People walking and kūpuna (elders) are among those most impacted by serious injury and fatal crashes.

Our vision is to save lives by eliminating serious injury and fatal crashes.

Truly safe streets are possible. The actions we must undertake to achieve this vision of zero traffic fatalities and injuries on O'ahu are numerous, and we need everyone that travels our streets to make safer choices. The City and County of Honolulu (City) is committed to ending traffic deaths on our streets and has prepared this O'ahu Vision Zero Action Plan (Plan) to get us there. The Plan identifies a host of actions to create a truly safe transportation system for kama'āina (residents) and visitors who travel in many different ways, using our island's various mobility options.



Eliminating future deaths requires all of us to accept our kuleana (responsibility and privilege) to make our streets safer for everyone, including our most vulnerable. The City will continue its partnerships with government agencies, community-based organizations, and the public to make our streets more forgiving to the inevitable mistakes that define being human. We must work together to create a transportation system safety net that prevents these mistakes from having serious and irreversible outcomes by reducing the severity of crashes when they do occur.

Vision Zero is a global initiative committed to developing holistic programs, practices, and projects that prioritize traffic safety to bring us closer to a target of zero serious injury or fatal traffic crashes.

Exhibit A



The O‘ahu Vision Zero Action Plan is a roadmap for eliminating traffic-related deaths and serious injuries on O‘ahu.

Existing Conditions

Chapter 2 examines existing conditions, including an overview of relevant previous planning efforts, past and ongoing safety programs, and recent crash patterns including High-Injury Locations.

Safe Streets: Kuleana to Community

Chapter 3 describes the community engagement process that supported development of the Plan.

Acting in Accordance with Our Vision

Chapter 4 outlines goals and actions to get to zero traffic deaths and serious injuries on O‘ahu using five interrelated “Safe System” elements: (1) Safe Speeds, (2) Safe Streets, (3) Safe People, (4) Post-Crash Care, and (5) Safe Vehicles.

Our Work Has Started

Chapter 5 highlights important Vision Zero, Complete Streets, and transportation safety projects already underway.

Our Commitment

Chapter 6 provides an organizational framework and prioritized project list for implementing Vision Zero actions and staying on track to reaching our goal. This chapter includes the City’s commitment to achieving zero deaths and serious injuries, including partnerships, updated policies, and immediate changes in the way we do our work.

Exhibit A

How will this vision guide the City and County of Honolulu?

The City is committed to making decisions on a daily basis that will:

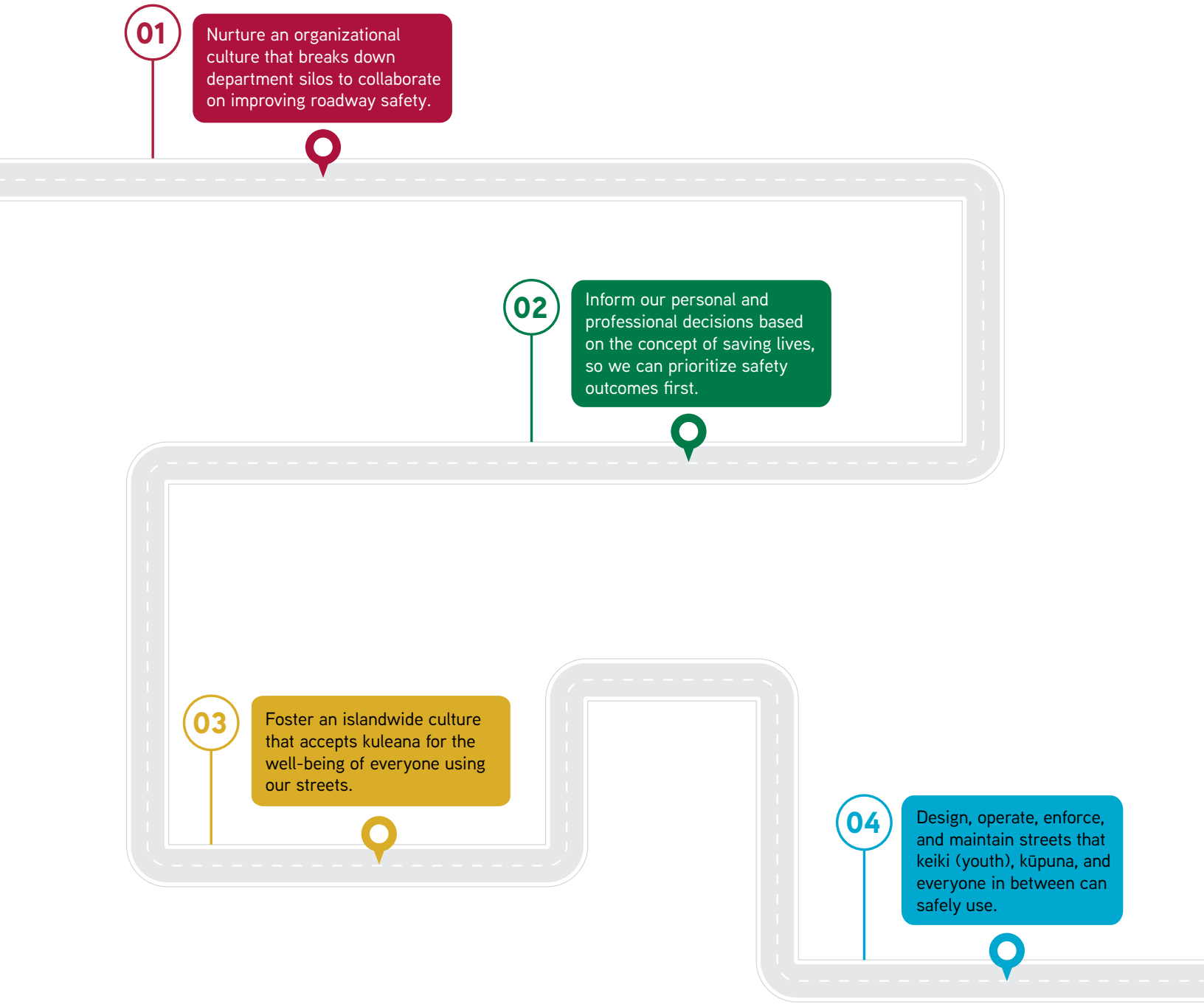


Exhibit A

Safe System Principles

The Vision Zero approach is based on these Safe System principles:



Traffic deaths are unacceptable. Death and serious injury are unacceptable outcomes of using the roadway system. Vision Zero advocates for a system-wide approach to reduce the frequency and severity of collisions.



People make mistakes. Humans make mistakes, so we need to design roads and modify how people operate so our mistakes don't lead to serious injury or death.



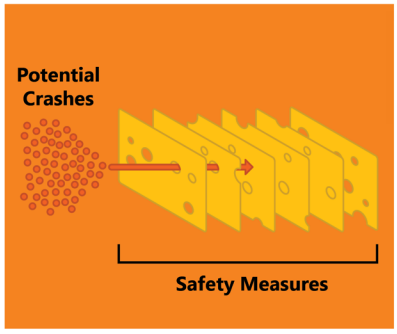
Bodies are vulnerable. Humans are vulnerable, so Vision Zero actions need to reduce the transfer of energy from cars onto people in crashes by using lighter vehicles and slower speeds.



We're in this together. Safety is a societal responsibility that involves many different participants including the people planning, designing, building, operating our roads; vehicle manufacturers; law enforcement, emergency responders; post-crash personnel; and people using the roads.



Safety is about being proactive. We can take action in places where crashes are not yet documented by systematically applying countermeasures to vulnerable locations.



Redundancy is essential. Safety measures must be designed so that if one part of the system fails, people will still be safe.

Exhibit A

Why Vision Zero Now?

City, state, and federal officials are responding to the public's demand for actions that protect our island's people.



In 2018, the Honolulu City Council adopted a resolution (18-219) urging the Department of Transportation Services to adopt a Vision Zero policy. In 2019, Hawai'i State Law Act 134 adopted Vision Zero as the policy of the State of Hawai'i and requires the counties to adopt Vision Zero policies. At the federal level too, there is a laser focus on safety. For instance, federal law (23 U.S.C. Section 148(g)(3)) requires the State of Hawai'i to obligate no less than 15% of its Highway Safety Improvement Program funds to address our most vulnerable populations – people walking, people biking, and our keiki and kūpuna - because they make up more than 15% of the State's total fatalities in roadways.

Finally, this Plan makes the City eligible and well positioned to apply for and accept a variety of new funding sources from the USDOT, including the Safe Streets and Roads for All (SS4A) Grant Program.



Exhibit A

Vision Zero Action Plan Process

The O'ahu Vision Zero Action Plan is data-driven at its core, responding to the actual safety experience and priorities of O'ahu with proven safety interventions. The Plan development process was guided by input from the public, stakeholders, and a project steering committee. The diagram below provides a high-level overview of this process, which began in late 2021.

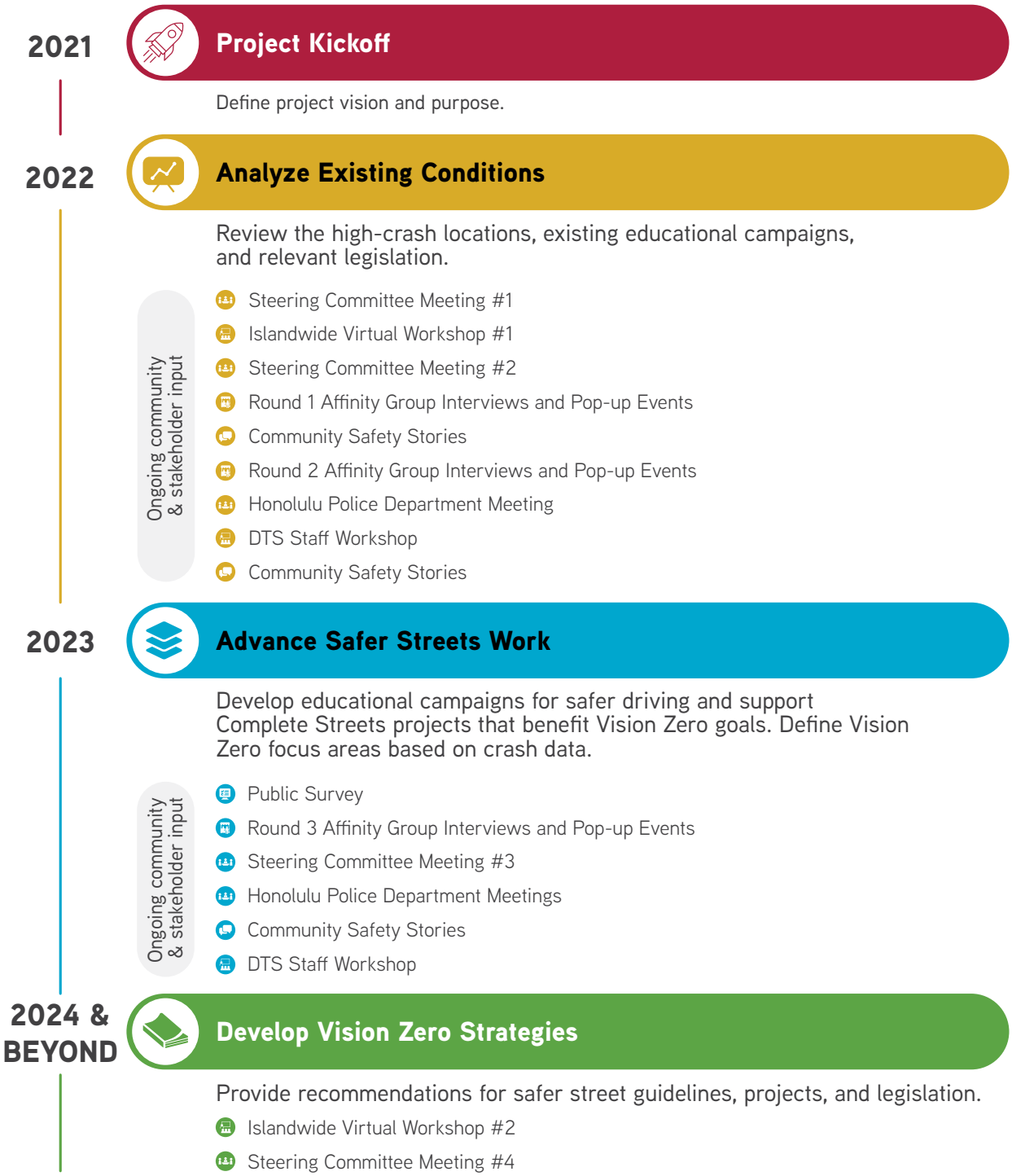


Exhibit A

2

Existing Conditions

This Vision Zero Action Plan builds on existing policies, plans, and programs. It responds to the past six years of reported crash data reviewed in detail during the planning process.

Plan and Policy Review

This section provides brief descriptions of related plans. A policy review revealed opportunities to build on or strengthen existing plans and policies by incorporating actions that prioritize safety in decision-making and foster kuleana for safe streets. These opportunities are documented as actions in Chapter 4.

Complete Streets Design Manual, 2016

City and County of Honolulu

The Honolulu Complete Streets Design Manual (Manual) sets forth design standards specific to Honolulu and provides guidance to planners, designers, and engineers to incorporate Complete Streets principles and features into projects within the City and County of Honolulu (City) right-of-way. The Manual recommends multi-modal design solutions to enhance mobility, improve road safety, and create sustainable communities.

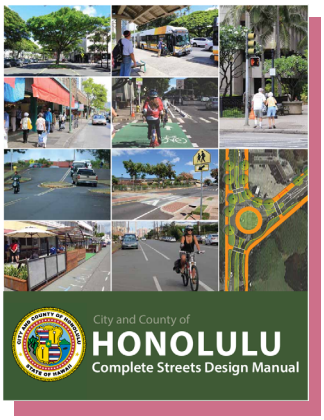


Exhibit A

O‘ahu Pedestrian Plan, 2022

City and County of Honolulu



The O‘ahu Pedestrian Plan includes ten objectives to help achieve O‘ahu’s goal of creating sustainable, safe, and context sensitive streets that inspire pedestrian activity. The O‘ahu Pedestrian Plan mapped the 393-mile Pedestrian Priority Network as the crucial network to make walking safe and convenient and included a prioritized list of projects to implement walkways in key areas with total project cost estimated at $547 million. The O‘ahu Pedestrian Plan recommends a Vision Zero approach with proposed actions to improve pedestrian safety, the inclusion of best practice guidelines to better address pedestrian needs, and the identification of High Pedestrian Injury corridors and intersections. The High-Injury corridors and intersections methodology and specific locations were considered as part of the O‘ahu Vision Zero Action Plan (Plan) development.

Final Report to Legislature on Act 134, 2020

Hawai’i Department of Transportation

Act 134 requires the Hawai‘i Department of Transportation (HDOT) and county transportation departments to adopt a Vision Zero policy. Act 134 also requires the State Highway Safety Council (SHSC) to consult with the counties and review policies and recommendations to report to the State Legislature and develop an action plan to reduce traffic fatalities to zero. The SHSC action plan was completed in December 2020 and included policies on how to reduce speeds on state and county roads, engineering recommendations on how to increase vehicular, pedestrian and bicycle safety, data-driven enforcement recommendations to reduce speeding and driving under the influence, additional steps to eliminate fatalities, an implementation plan, and tracking measures. The SHSC action plan makes 48 recommendations in the areas of enforcement, engineering, education, equity, policy, partnerships, and evaluation.

Act 180, 2024

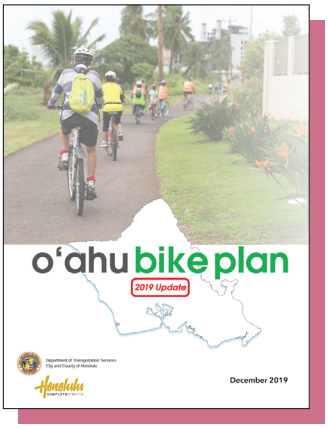
Act 180 requires the HDOT and county transportation agencies to identify high-risk and dangerous corridors and intersections, to develop implementation plans for safety improvements at these locations, and to give safety the highest priority when considering any changes at these locations. The Act also eliminates the need for an engineering study for speed limit reductions within one-mile of a school. Act 180 was adopted in July 2024 as this Plan was being finalized.

Exhibit A

O‘ahu Bike Plan, 2019

City and County of Honolulu

The O‘ahu Bike Plan guides the continued growth of bicycling as a safe, convenient, accessible, affordable, healthy, and fun transportation option. The focus of the 2019 O‘ahu Bike Plan update was to identify specific projects, policies, and programs that will expand bicycle ridership and provide a network of safe, low-stress bikeways attractive to users of all ages and abilities. The O‘ahu Bike Plan proposes a prioritized list of bikeway projects totaling 567 new miles of bikeways, including 88 miles of priority 1 protected bikeways on City right-of-way.





Hawai‘i Vulnerable Road User Safety Assessment, 2023

Hawai‘i Department of Transportation

HDOT’s assessment reviewed fatal and serious injury crashes for people bicycling or walking and defined short corridor segments as High Crash Corridors. The corridors defined in this process will be a resource for the City moving forward. Other differentiated findings from the report include a 2022 observation that houseless people make up 43% of the 28 pedestrian fatalities, and 71% of the seven bicycle fatalities across the state.

Honolulu Transportation Demand Management Plan, 2023

City and County of Honolulu

The Honolulu Transportation Demand Management (TDM) Plan includes a list of strategies and actions to inform and encourage travelers to maximize the efficiency of O‘ahu’s transportation systems. The TDM Plan included the development of the HNL Connect program with key elements including an annual travel challenge and targeted marketing to encourage use of sustainable transportation modes, a vanpool subsidy program, a developer TDM reporting program, and a restricted parking zone program. The TDM program is to be implemented by the City Department of Transportation Services and will increase walking, bicycling, transit, and carpooling use and reduce driving.



Exhibit A

Safety Programs and Campaigns

This section describes current local and statewide programmatic efforts to address traffic safety through education and information.

Walk Wise Hawai'i

Hawai'i Department of Transportation

Walk Wise Hawai'i is a program managed by the Hawai'i Department of Transportation (HDOT) as part of a larger set of Safe Communities Programs and encourages safe road practices for pedestrians and drivers. The program includes outreach at local events and a Pedestrian Safety Month in August with daily outreach activities. The Walk Wise Hawai'i program also partners with the Honolulu Police Department (HPD) and schools to promote safety and provide workshops to students. The program has an active online presence and has partnered with local music artists, The Angry Locals, to produce music videos advocating for safe road use. The program also produces pamphlets that outline pedestrian and driving actions to increase safety, which are available across languages including ʻŌlelo Hawai'i, Tagalog, Spanish, and more.

"No Excuses" Campaign

Hawai'i Department of Transportation

In 2021, HDOT partnered with the Hawai'i Department of Health, the four county law enforcement agencies, Mothers Against Drunk Driving (MADD) Hawai'i, and other community members to remind drivers to drive safely. The campaign was guided by state data, which indicated that nearly half of the fatalities were related to speeding and nearly half of drivers in fatal crashes in the state tested positive for drugs and alcohol. Messaging largely focused on safe speeds, impaired driving, and proper safety protocol such as seatbelts.

The campaign consisted of enforcement of traffic safety laws and education through public engagement and sign waving. Family members and friends of victims were present at select sign waving sites to share their stories. Police departments also coordinated sobriety checkpoints to reinforce the consequences and impacts of impaired driving. Other campaign activities included a public service announcement that aired on television and social media and a "Red Ribbon Challenge" where community members submitted photos of themselves with the MADD Red Ribbon to show their commitment to road safety.

Exhibit A

Organizational Safety Champions

Several organizations already integrate safety communication into their daily activities.

Traffic Division

Honolulu Police Department (HPD)

The HPD Traffic Division oversees enforcement of traffic safety. Their webpage also provides access to resources regarding traffic safety laws for pedestrians, cyclists, and drivers. HPD uses National Highway Transportation Safety Agency grant funding from the Office of Traffic Safety to help carry-out its traffic safety programing, including Click It or Ticket, stops to educate drivers and cyclists in violation of bicycle-related laws, and participate in community talks and safety activities.

Pedestrian Safety Program

Honolulu Department of Transportation Services (DTS)

DTS' Transportation Engineering Division runs the City's Pedestrian Safety Program, which encourages road safety on the island of O'ahu. The program largely consists of outreach efforts to youth and adults and operates in partnership with HDOT and Walk Wise Hawai'i. The program distributes safety educational materials, including a Halloween activity book and Walk Wise Hawai'i pamphlets, as well as free safety gear for community members. The goal of this program is to educate drivers and pedestrians on road safety and reduce the overall number of crashes involving people walking. Community engagement and education take place in various venues: schools, senior centers, community meetings, and fairs. The program is a mix of in-person and virtual activities. Program staff are currently developing animated characters that represent archetypal road users, a concept that will be tested through surveys and focus groups.

Safe Routes to School

Honolulu Department of Transportation Services

The Safe Routes to School (SRTS) program is aimed at increasing the number of children who walk and bike to school and is housed in the City's DTS. SRTS uses the 5Es Framework of Education, Encouragement, Evaluation, Enforcement, and Engineering. The SRTS program has active, ongoing engagement with youth that includes a poster contest, workshops, walking school buses, and much more. SRTS also has a mini-grant program to fund non-infrastructure projects and is actively involved in incorporating school-based infrastructure improvements to City projects.



Exhibit A

Complete Streets

City and County of Honolulu

The City's Complete Streets departments: DDC, DFM, DPP, DTS and DPR's Division of Urban Forestry are committed to planning, designing, and operating City streets that work for all of us. Many of our streets were planned and designed to move vehicles quickly and efficiently but lack adequate sidewalks, comfortable crossings, low-stress bike facilities, or accessible bus stops. The 2012 Complete Streets Ordinance (Revised Ordinances of Honolulu 14-18) charted a path toward design changes that are proven to improve safety in all roadway and transportation projects, including routine maintenance, repaving, and roadway rehabilitation. Complete Streets safety features installed by the City include quick-build design solutions, pedestrian safety improvements, transit enhancements, traffic calming, and new bicycle facilities that enhance the safety of all roadway users, including people driving cars and riding the bus.

Hawai'i Bicycling League

The Hawai'i Bicycling League (HBL) is an island-wide nonprofit promoting bicycle use, providing education, and advocating for safety. HBL has received City grants to deliver programs to educate youth and adults of all ages on how to cycle safely. The BikeEd program teaches fourth graders around O'ahu how to ride a bicycle, basic cycling safety, and laws of the road. The BikeEd program reached over 7,000 students during the 2023-2024 school year. The Adult BikeEd program educates adults and seniors on safe cycling through a variety of methods including workshops and with education materials. The Adult BikeEd program directly reached over 2,000 participants in 2023.



Exhibit A

Bicycle Program

Honolulu Department of Transportation Services

DTS is also home to the City's Bicycle Program, which is dedicated to creating a more bike-friendly O'ahu. The program connects people to information regarding bicycle resources, infrastructure, and projects. The Bicycle Program webpage contains a number of resources to encourage bicycling and bicycle safety including: the 2022 Official O'ahu Bike Guide, information on bicycle-related traffic laws, an educational pamphlet for drivers, and bicycle education workshops. The Bicycle Program works with and administers grants that fund the Hawai'i Bicycling League to run youth, adult, and senior bicycle education programs.

Learning from Other Vision Zero Cities

In comparing our work with other cities, we learned that safety programs are most effective when they are part of a multipronged approach that includes design, educational campaigns, and evaluation.

Our future infrastructure investments will build on our awareness of the common safety violations and crash factors. When new safety features are installed, communication will tie back to those issues. New infrastructure near schools must be sustained investments that communicate with road users that students and their families have roadway priority.

In the future, our safety programs will be developed in alignment with safety goals and will be guided by crash analysis data. Primary crash factors will be used to determine campaign messaging. Programs will be developed in partnerships with community-based organizations and those most vulnerable to traffic violence with the knowledge that traffic safety education starts young. Another avenue for amplifying the impact of programs is to increase capacity for engagement through formalized volunteer programs that allow youth and other residents to give back to their community while exploring transportation safety. Finally, in considering empathy campaigns, City staff will conduct outreach that acknowledges the trauma of losing loved ones due to this challenging yet preventable public health issue.

Because it is difficult to tie the direct impact of safety programs to change in fatal and serious injury crashes, there are opportunities to build new metrics for evaluation. Such metrics include audience reach, media impressions, campaign awareness, number of participants in a program, and driver stop for pedestrian or speed compliance rates.

Exhibit A

Crash Patterns

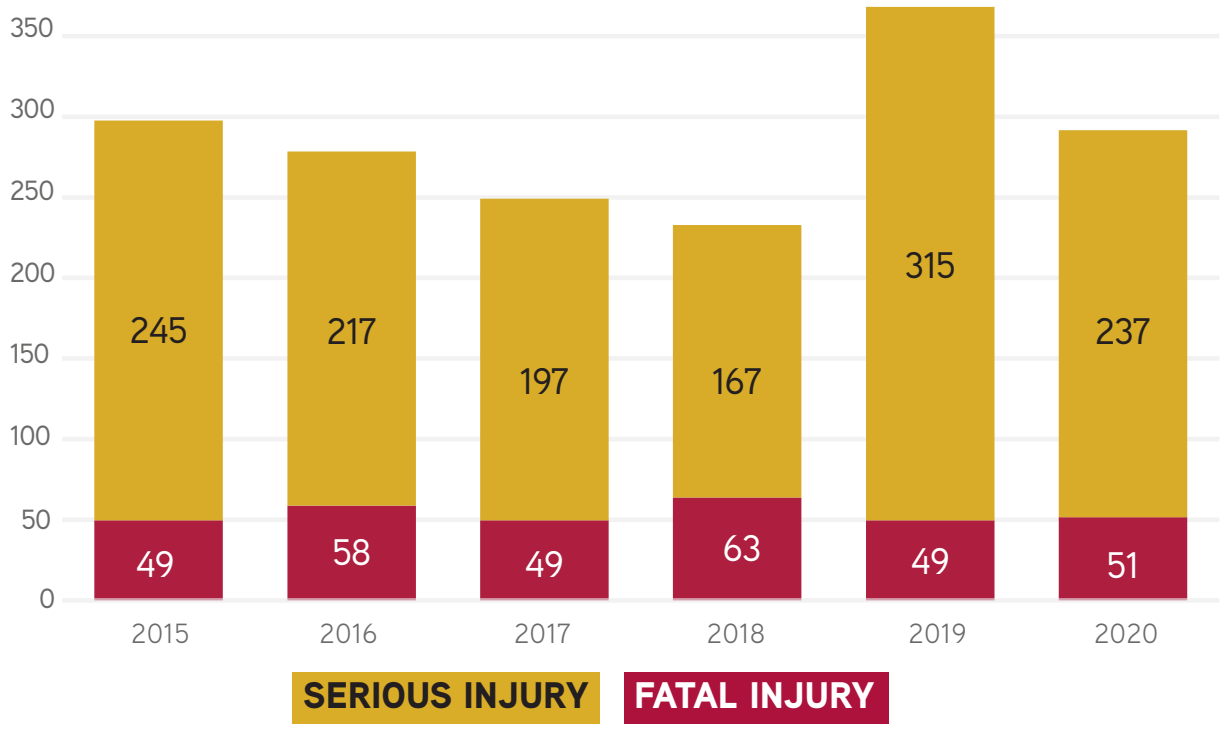
This Vision Zero Action Plan (Plan) is informed by crash report data covering the years of 2015 through 2020. During this time, O'ahu witnessed an alarming number of fatal and serious injury (FSI) crashes - 1,697. Vision Zero crashes are defined as any injury crash involving a person walking or bicycling and any severe injury or fatal crash involving a motorcycle, a motorist, or a passenger.

1,697
Fatal and serious injury crashes



It is crucial to recognize that each loss of life, or significant injury, not only impacts the individuals involved, but also reverberates through the lives of their families and others connected to the incident. As more data becomes available, existing conditions will be measured and monitored to understand whether we are moving towards our Vision Zero target. As shown in the figure below, the number of fatalities across O'ahu has remained relatively constant over the 6-year period. Serious injury crashes decreased steadily between 2015 and 2018 but spiked in 2019 and decreased again in 2020.

Fatal and Serious Injury Crashes on O'ahu 2015-2020



Data Source: Hawai'i Department of Transportation SHACA. The State of Hawai'i, Department of Transportation, has provided this crash information under the protection of 23 USC 407. This information may not be used in any Federal or State court proceeding in any action for damages arising from any occurrence at a location mentioned or addressed in the information provided.

Exhibit A

This Plan focuses on surface roads (excludes interstate highways). There was a total of 1,504 FSI crashes, including 277 fatalities, on surface roads during the six-year period.

The analysis presented in this section delves into various aspects of these crashes, including the modes of transportation involved, demographics of individuals involved, types of crashes, locations, and infrastructure characteristics.

About the Data

Fatal and Serious Injury Crashes

A fatal injury is any injury that results in a person's death within 30 days of a motor vehicle crash. A serious injury is any injury other than fatal that results in one or more of the following: severe laceration resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood; broken or distorted extremity (arm or leg); crush injuries, suspected skull, chest, or abdominal injury other than bruises or minor lacerations; significant burns (second and third degree burns over 10% or more of the body); unconsciousness when taken from the crash scene; and/or paralysis.

Vision Zero Crashes

Vision Zero Crashes are defined as any injury crash involving a person walking or bicycling and any severe injury or fatal crash involving a motorcycle, a motorist, or a passenger. This is a combination of crash data and the City's multimodal data that incorporates information about the street and land use context.

Data Sources

To understand crash patterns (e.g., crash location, conditions, people involved, street characteristics) and given that no single source provides all this information in one place, our crash pattern analysis draws upon several datasets, which are outlined below.

HDOT's State of Hawai'i Advanced Crash Analysis (SHACA) includes details reported by the law enforcement officer who responds to the crash incident, such as the location of the crash, the travel modes involved, the type of vehicle, etc. Details and accuracy about street and other infrastructure characteristics are limited and depend on what is reported at the scene of the crash.

The Fatality Analysis Reporting (FARS) System reports on details associated with serious suspected injury crashes that have a fatal outcome.

Hawai'i Department of Health (DOH) Emergency Medical Services & Injury Prevention System Branch data provides insights to assess people killed and hospitalized as a result of being involved in a crash incident.

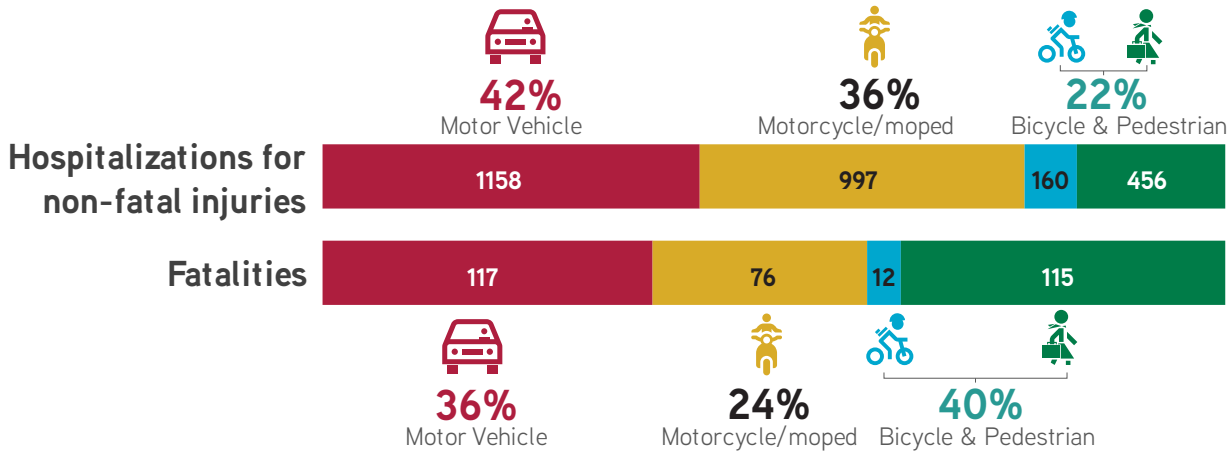
Exhibit A

Impact of Crashes

Crash Severity by Mode

Most traffic crashes involve only vehicles, but the protective features of motor vehicles afforded to drivers tend to mitigate the severity of these incidents and most result in no injury to the drivers involved. On the other hand, people walking, using mobility devices such as wheelchairs, or riding bicycles are far more likely to be killed or seriously injured in crashes. From 2015-2020, people walking and bicycling accounted for 22% of hospitalizations for non-fatal injuries and 41% of fatal crashes. This translates to 118 pedestrian deaths and 13 cyclist deaths during this period. Pedestrian fatalities are the largest portion at 37%. In relation to walking rates (5% of commuters), pedestrian fatalities are heavily disproportionate. Similarly, people bicycling are disproportionately represented at 4% of all fatalities while only accounting for 1% of commuters. Motor vehicle occupants make up 34% of the fatal crashes. It's important to recognize that this Plan is primarily focused on surface roads and as such will largely not address the 15% of motor vehicle occupant and 19% of motorcycle/moped fatal crashes that occurred on interstate highway facilities under state and federal jurisdiction.

People Killed Compared to People Hospitalized for Non-Fatal Injuries, by Mode, 2015-2020



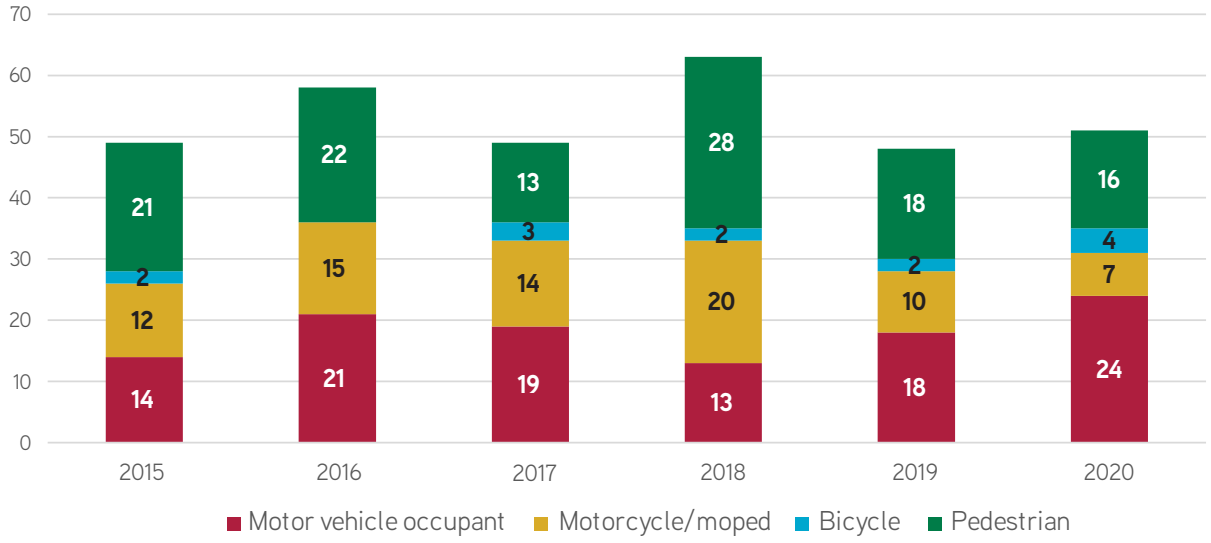
Data Source: Hospitalizations figures from Hawai'i DOH. Fatalities figures from HDOT SHACA.

Exhibit A

Crash Details by Mode by Year

The data on fatal crashes by year during 2015-2020 show that fatalities reached a peak in 2018 with 63 deaths. Notably, despite a significant decrease in traffic volumes in 2020 there was no corresponding reduction in the traffic fatalities. Fatalities by mode varied significantly from year-to-year with the most pedestrian and motorcycle/moped fatalities in 2018 and the most bicycle and motor vehicle fatalities in 2020. When looking at fatal crashes combined with serious injury crashes, 2019 had the most with over 360 FSI crashes. During this year, FSI crashes for pedestrians, motor vehicle occupants, and motorcycle/mopeds peaked. FSI crashes for bicycles were highest in 2020.

People Killed by Mode on O'ahu, 2015-2020



Data Source: HDOT SHACA

Fatal and Serious Injury Crashes by Mode on O'ahu, 2015-2020

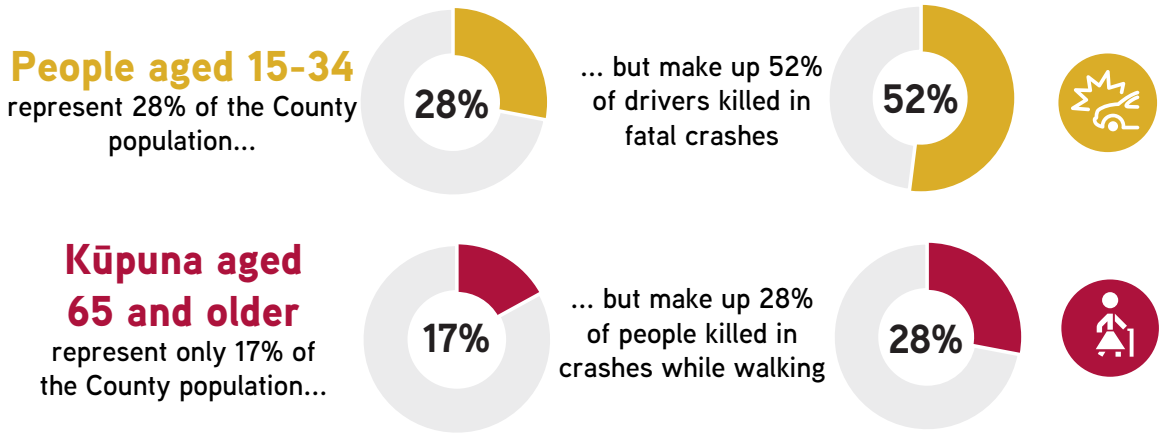
	Bicycle	Pedestrian	Motor vehicle occupant	Motorcycle/ moped	Total FSI
2015	14	75	116	89	294
2016	15	74	100	86	275
2017	13	64	86	83	246
2018	7	68	76	79	230
2019	19	95	132	118	364
2020	21	65	113	89	288

Data Source: HDOT SHACA

Demographics

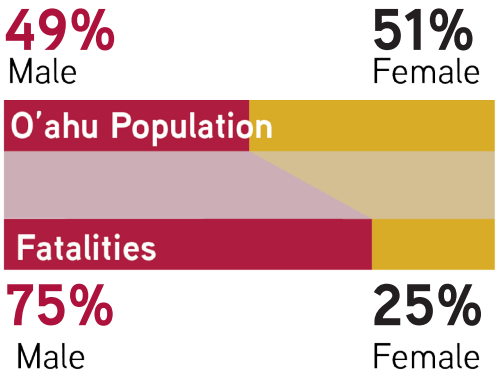
Age and Gender

Older adults and young people are some of the most vulnerable road users. Kūpuna aged 65 and older make up 28% of people killed in crashes while walking but represent only 17% of the population. Overall, drivers aged 15-34 are overrepresented in crashes compared to older age groups. The highest proportion of drivers involved in fatal crashes are 25-34 years old, accounting for 23% of all driver-involved incidents. This is followed by those aged 45-54.



Data Source: National Highway Traffic Safety Administration's FARS

Gender plays a role in road safety, as males are far more likely to be killed in crashes than females. Men make up roughly half of O'ahu's population but account for 75% of people killed in crashes.



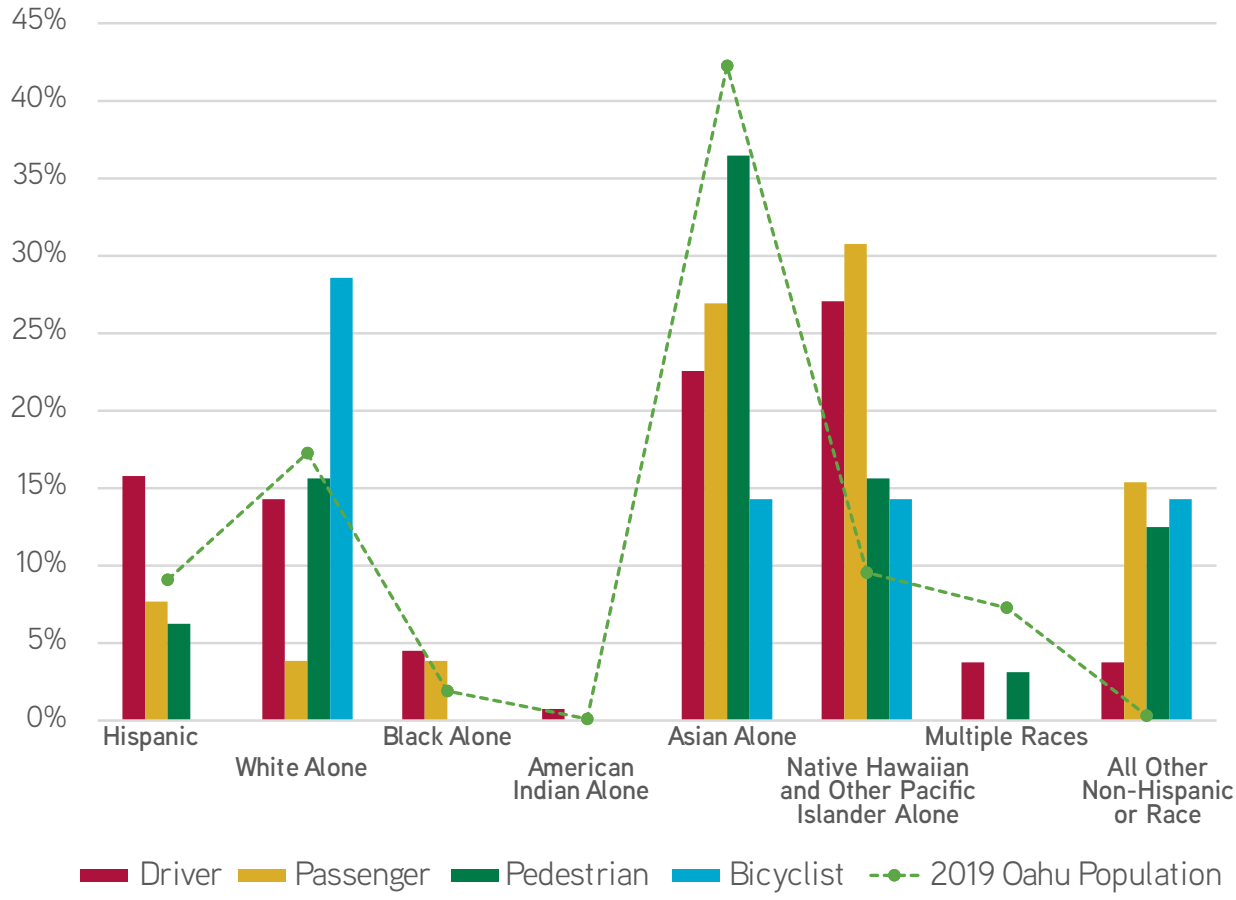
Data Source: FARS, 2019 City and County of Honolulu

Exhibit A

Race of Affected Persons

To understand the multifaceted landscape of traffic safety, it is imperative to explore the intersection of race and crash data when compared to overall population demographics. Comparing United States (U.S.) Census and FARS race data is imperfect, as the categories don't match perfectly; most notably for O'ahu is that FARS does not include a category for more than one race, whereas the U.S. Census finds nearly 20% of O'ahu's population is more than one race. With acknowledgement to these limitations, the data suggests that Native Hawaiian and Other Pacific Islanders are disproportionately impacted by traffic deaths.

People Killed by Race/Ethnicity and Mode, 2015-2020



Data Source: FARS; 25 fatal crash victims with unknown race and ethnicity are not shown in this chart.

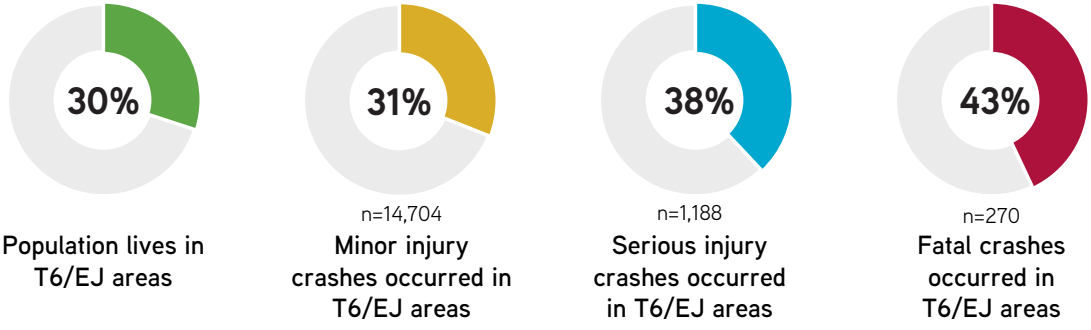
Exhibit A

Title VI/Environmental Justice Communities

Title VI of the Civil Rights Act of 1964 prohibits discrimination against anyone in the US based on race, color, or national origin by any agency receiving Federal funds. Moreover, HDOT Title VI programs require environmental justice strategies that ensure fair treatment and meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. These laws are in place so that all people can participate in and benefit from transportation projects, programs, and policies. The O'ahu Metropolitan Planning Organization uses an analysis of Title VI/Environmental Justice (T6/EJ) areas which include both minority (defined as Black, Hispanic or Latino, Asian American, American Indian and Alaskan Native, and Native Hawaiian or Other Pacific Islander) and low-income populations (median household income is at or below the US Department of Health and Human Services poverty guidelines).

People living in T6/EJ areas are overrepresented in Vision Zero crash data. About 30% of O'ahu's population lives in T6/EJ areas, but 43% of fatalities and 38% of serious injury crashes occurred in T6/EJ areas.

Crashes on State and City Surface Roads within Title VI/Environmental Justice Areas by Injury Level

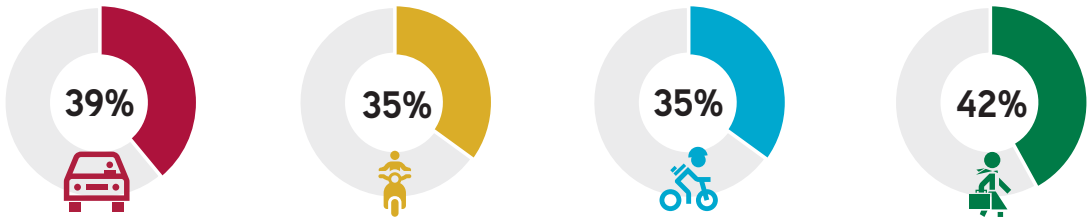


T6/EJ areas are particularly overrepresented in pedestrian FSI crashes modes with crashes where they account for 42% of such crashes. Three out of the top five U.S. Census block groups with the highest rates of FSI crashes per street centerline mile are T6/EJ areas and are the following:

- Kalākaua and King Street (Ala Moana-Kaka'ako)
- Mayor Wright Housing (Kalihi-Pālama)
- Linapuni Elementary School area (Kalihi-Pālama)

Exhibit A

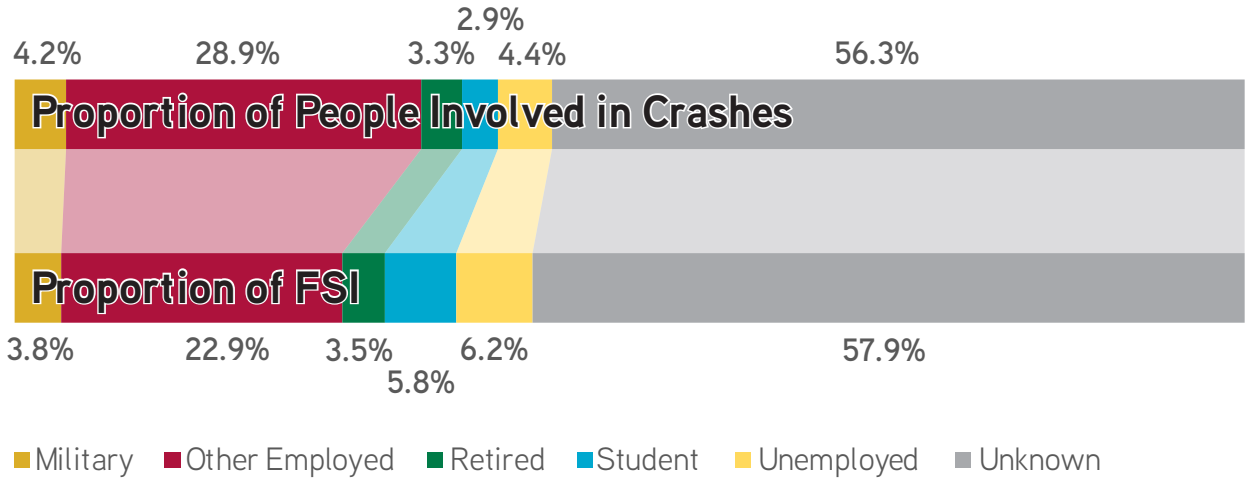
Fatal and Serious Injury Crashes on State and City Surface Roads within Title VI/Environmental Justice Areas by Mode



Employment Status of Affected Persons

Employment status was available for 42% of individuals involved in crashes during the study period. Most individuals involved in crashes have an unknown employment status. Among the known categories, employed individuals (classified as "Other Employed") represent the largest proportion of FSI crashes (23%). Unemployed people and students are overrepresented in FSI crashes compared to crashes overall. As noted in a summary of Hawai'i Vulnerable Roadway Users Assessment, HDOT has begun collecting data on houseless status for fatalities; this data is not typically available in crash reports.

Employment Status of People with Fatal and Serious Injuries



Data Source: HPD

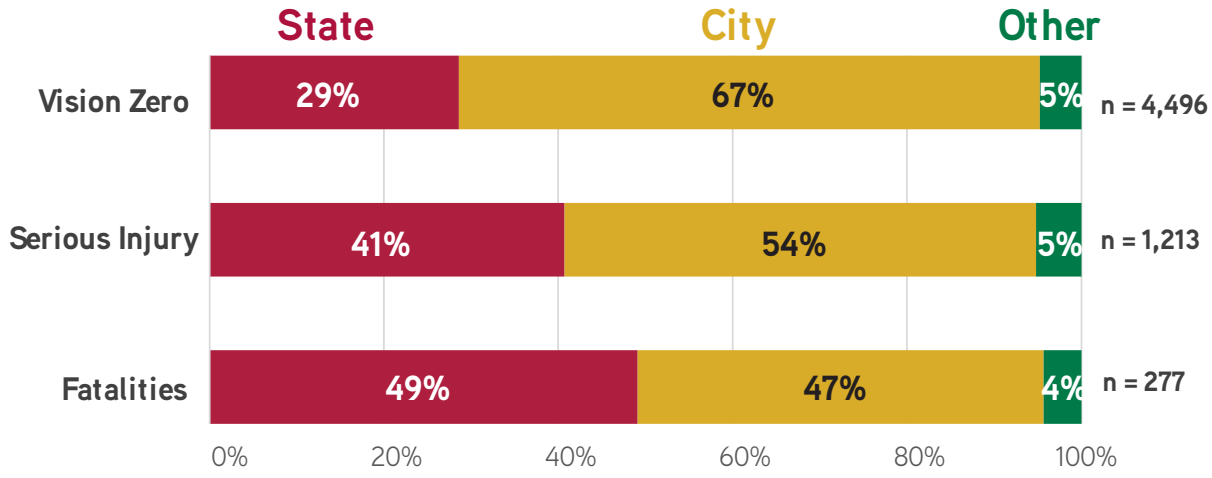
Exhibit A

Crash details by Jurisdiction

This Plan is focused primarily on the streets where the City plays a role in design and maintenance, but the analysis also includes State-owned surface roads. On Interstate highways, engineering design is wholly the responsibility of HDOT.

Of the nearly 5,000 Vision Zero crashes analyzed, two-thirds take place on City roads. More than half of the serious injury crashes took place on City roads, but slightly more fatalities occurred on State roads.

Crashes on State and City Surface Roads by Injury Level, 2015-2020



Data Source: HDOT SHACA.

Street jurisdiction in this chart uses a more accurate street multimodal network developed by the City. "Other" includes crashes on private streets and the less than 20 crashes on Department of Defense Federal roads. It does not include grade separated highways.

Exhibit A

Common High-Risk Roadway Characteristics

The analysis provides an opportunity to understand the characteristics of the streets with a history of reported crashes, so that safety features can be considered for other streets that are at risk due to having attributes in common with the High-Injury Locations. Corridors with these characteristics should be monitored and maintained to prevent future crashes. Common attributes for streets with a high incidence of crashes include:

- "Main Streets" and other major streets
- Three or more vehicular lanes
- Average daily traffic volumes above 20,000 vehicles
- Speed limits over 30 miles per hour (MPH)
- Unsignalized intersections and those without all-way stop signs or other traffic control

Complete Streets Types and Functional Classification

There are two types of road categories: the City's Complete Streets typology and the functional classification. Complete Streets typologies are defined per the Complete Streets Design Manual, and include main streets, avenues, boulevards, malls, streets, residential streets, lane/alley, rural road, and scenic byways. The functional classification is defined by the Federal Highway Administration, and includes principal arterials, minor arterials, major collectors, minor collectors, and local streets.

- **Complete Streets Types:** Main streets, avenues, and boulevards make up 17.3% of total centerline miles and 63.2% of FSI crashes. Main streets had the greatest rate of FSI crashes per mile at 3.9, followed by avenues which saw 2.6 FSI crashes per mile, and boulevards with 2.3 FSI crashes per mile.
- **Functional classification:** 63% of FSI crashes occurred on principal and minor arterials, which make up nearly 17% of our island roadway miles -- a rate of 2.8 (principal arterials) and 2.6 (minor arterials) FSI crashes per centerline mile. Major collectors also saw a disproportionate rate of crashes. While local streets made up almost three-quarters of centerline miles, but less than one quarter of FSI crashes, local streets saw by far the lowest FSI crashes per centerline mile, at 0.2.

Number of Lanes

Streets with a higher travel lane count have a higher risk of severe crashes, whereas streets with fewer lanes have a lower likelihood of serious or fatal crashes. Roads with one or two lanes comprise the majority of roads (87.4%), but have a relatively lower proportion of FSI crashes (0.4) per centerline mile. Notably, roads with five or more lanes, comprise only 3.6% of centerline miles, but have a significantly higher proportion of FSI crashes per mile at 19.1. The data clearly shows that as the number of lanes increases, so does the FSI crash rate.

Traffic Volumes

The data show a trend between higher crash rates and higher Annual Average Daily Traffic (AADT). Streets with traffic volumes above 5,000 vehicles per day account for approximately 20% of centerline miles but were the site of 73% of FSI crashes. There were over 3 FSI crashes per mile on streets with an ADT volume greater than 15,000. The highest category ("20,001 and above") has the highest crash rate at 3.2 crashes per centerline mile.

Exhibit A

Average Annual Daily Traffic (AADT) and Crashes

AADT	Centerline Miles	Percent of All Centerline Miles	Number of FSI Crashes	Percent of All FSI Crashes	FSI Crashes per Centerline Mile
No data*	1,513	73.8%	304	21.2%	0.2
5,000 and below	119	5.8%	79	5.5%	0.7
5,001 – 10,000	113	5.5%	203	14.2%	1.8
10,001 – 15,000	110	5.4%	233	16.3%	2.1
15,001 – 20,000	51	2.5%	155	10.8%	3.0
20,001 and above	143	7.0%	459	32.0%	3.2

* Assumed to be local streets with low traffic volumes

Excludes 48 crashes that took place on U.S. interstate ramps within 100 feet of a local street intersection.

Data Source: City and County of Honolulu and HDOT SHACA. HDOT has provided this crash information under the protection of 23 USC 407. This information may not be used in any Federal or State court proceeding in any action for damages arising from any occurrence at a location mentioned or addressed in the information provided.

Posted Speed

Streets with posted speed of 30 MPH or higher experienced a higher rate of FSI crashes than streets with lower speed limits. Streets with posted speeds of 35 MPH account for 27% of FSI crashes but only 8% of centerline miles. The relatively small number of 30 MPH streets (1.6% of centerline miles) had the highest FSI rate per mile at 3.3. At the opposite end, streets with speed limits of 20 MPH or lower had the lowest FSI rate per mile at 0.2.

Posted Speed and Crashes

Posted Speed	Centerline Miles	Percent of All Centerline Miles	Number of FSI Crashes	Percent of All FSI Crashes	FSI Crashes per Centerline Mile
Less than 20 MPH	355	17.3%	65	4.5%	0.2
25 MPH	1,436	70.0%	765	53.4%	0.5
30 MPH	33	1.6%	110	7.7%	3.3
35 MPH	160	7.8%	387	27.0%	2.4
40 MPH and above	67	3.3%	106	7.4%	1.6

Excludes 48 crashes that took place on U.S. interstate ramps within 100 feet of a local street intersection and one crash that took place on a street that was missing speed limit data.

Data Source: City and County of Honolulu and HDOT SHACA. HDOT has provided this crash information under the protection of 23 USC 407. This information may not be used in any Federal or State court proceeding in any action for damages arising from any occurrence at a location mentioned or addressed in the information provided.

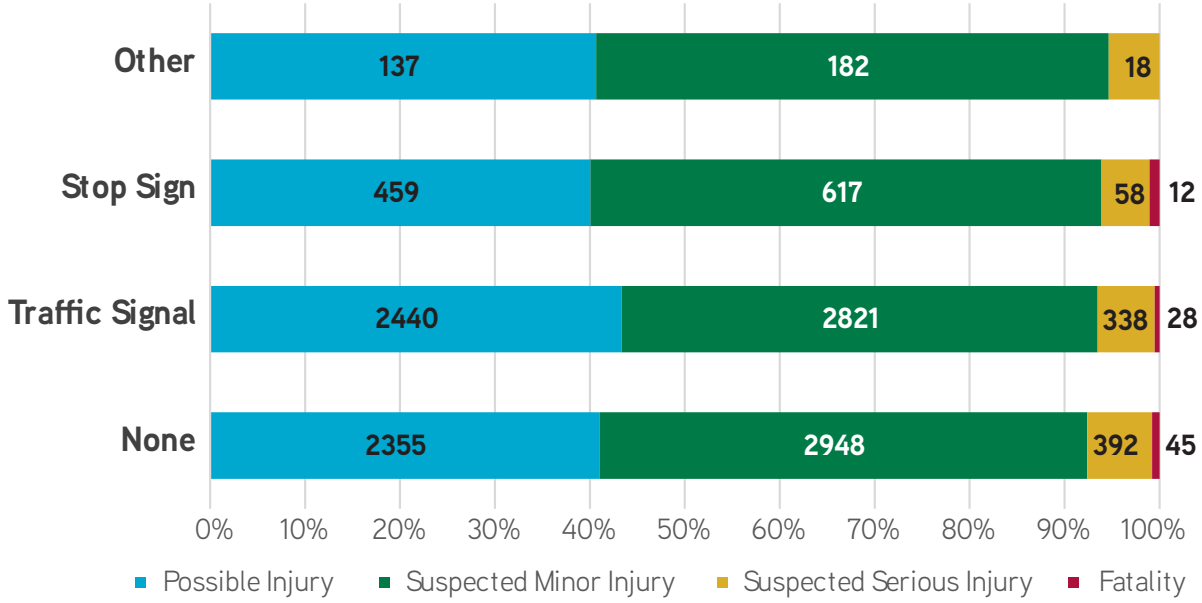
Exhibit A

Intersections

Most crashes resulting in injury on O'ahu occur at intersections, and crashes that occur between intersections are more likely to result in a fatality or serious injury. **Nearly 70% of crashes involving people walking and bicycling take place at intersections compared to 57% of crashes involving motor vehicles only.**

The risk of fatal crashes increases at unsignalized intersections and those without all-way stop signs or other traffic controls. Signals and stop signs are the most common traffic control types on O'ahu. A high number of crashes occurred at signalized intersections but were less likely to result in a fatality or serious injury. The chart below shows crash types at intersections by traffic control type. The "Other" category includes yield signs, flashing red lights, flashing amber lights, and people providing temporary traffic control.

Traffic Control and Injury Severity at Intersections



Data is missing for 898 involved parties (units)

Data Source: HDOT SHACA. HDOT provided this crash information under the protection of 23 USC 407. This information may not be used in any Federal or State court proceeding in any action for damages arising from any occurrence at a location mentioned or addressed in the information provided.

Exhibit A

Multimodal Elements

- 80% of FSI crashes involving bicyclists occurred on streets without dedicated bikeway infrastructure. Over 94% of street centerline miles lack dedicated bikeways. This category includes shared roadway bike routes, which include Share the Road signage or sharrows, but still require bicyclists to share a travel lane with motorists. Shared roadway bike routes make up just 3% of centerline miles but account for 18% of FSI crashes involving bicyclists.
- 21% of FSI crashes involving bicyclists occurred on streets or facilities with dedicated bikeways. Thirteen percent of those crashes occurred in facilities with regular bike lanes or buffered bike lanes and 8% occurred in protected bike lanes and shared use paths. These dedicated bikeways cover less than 6% of the street network and the bicycle FSI crash rate per mile on these facilities is 0.1. Note that this analysis doesn't consider exposure (bicycle volumes) and streets with bikeway infrastructure facilities typically have much higher rates of bicycle use than those without bikeways. The crash reports also show that the presence of a bikeway facility adjacent to a crash location does not necessarily imply its usage during the crash, as highlighted by instances where cyclists may have been outside designated lanes or crossing the street.
- Nearly one-fifth (19%) of FSI pedestrian crashes occur on roads without sidewalks or other pedestrian facilities, indicating infrastructural deficiencies.
- Though this analysis doesn't consider exposure, higher rates of crashes involving pedestrians and cyclists occurred near high-ridership bus stops (with 200 or more daily ons and offs) as compared to islandwide statistics. These crashes, however, were less likely to result in fatal or serious injury when compared to crashes islandwide.

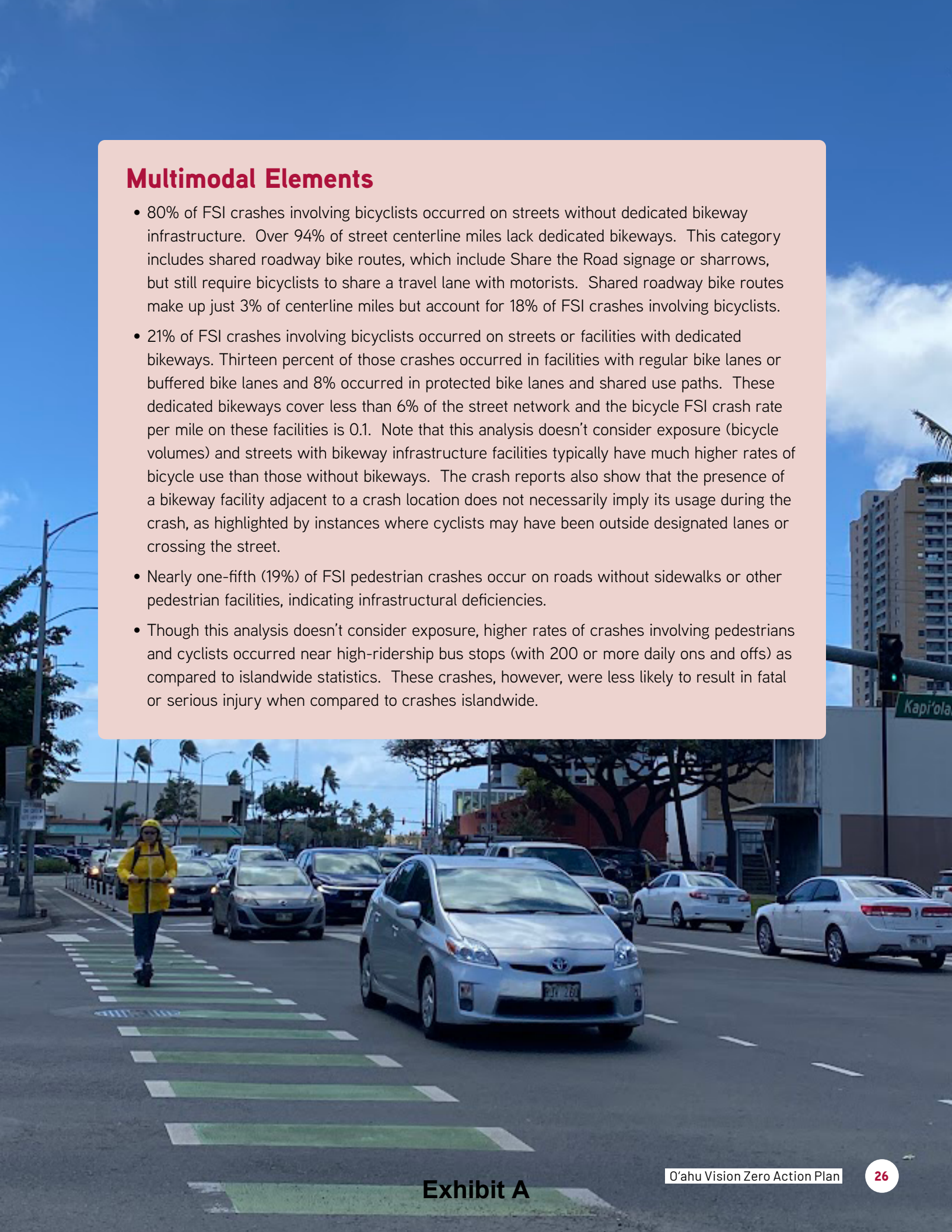


Exhibit A

Common Contributing Factors

This section describes the demographic, land use, and infrastructure characteristics associated with higher crash severity.

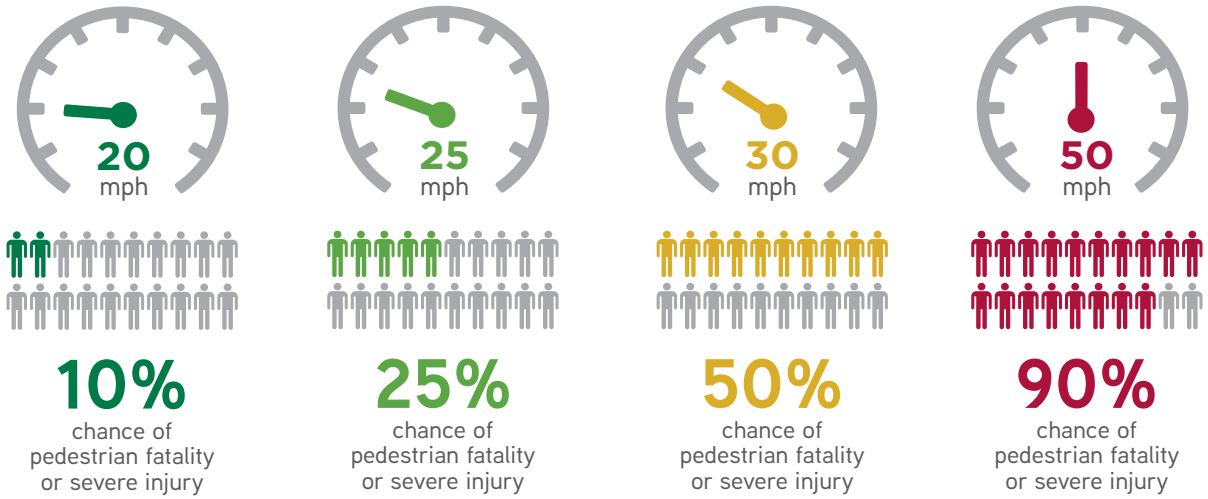
Human Factors

Human factors, such as inattention, impairment, driving too fast for the conditions, and failure to yield, were contributing factors for 85% of all crashes, and **95% of crashes on a State or City surface road**.

Speed

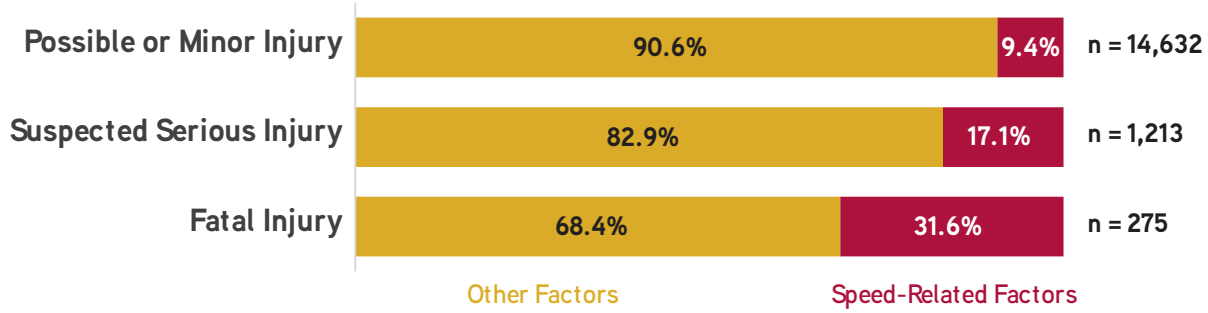
Speed is a determining factor in the severity of injury and fatality when a crash does occur. The crash report data indicates that speed is a primary contributing factor in a significant portion of crashes and the severity of crashes increases with higher speeds.

Vehicle Speed and Pedestrian Injury



Speed was a contributing factor in 32% of fatal crashes, 17% of serious injury crashes, and 9% of minor injury crashes. While this finding comports with the upward relationship between speed and severity of injury, it should also be acknowledged that speed is likely underreported in less severe crashes.

Speed-Related Crashes by Injury Level on State and City Surface Roads, 2015-2020



Speed-related crashes include Drove Too Fast for Condition or Exceeded Speed Limit as contributing factors.

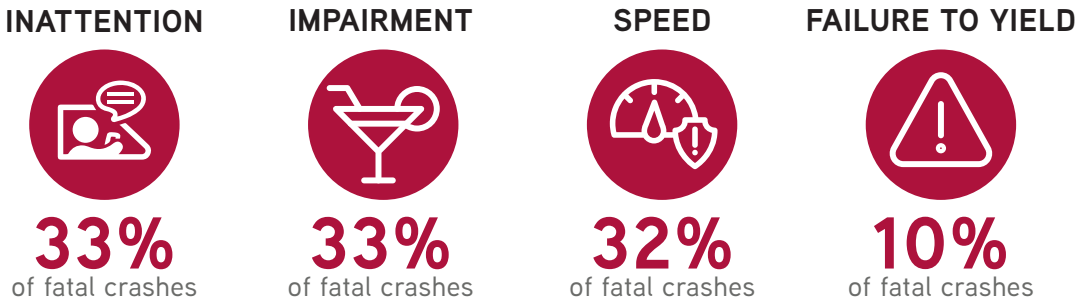
Data Source: HDOT SHACA. HDOT has provided this crash information under the protection of 23 USC 407. This information may not be used in any Federal or State court proceeding in any action for damages arising from any occurrence at a location mentioned or addressed in the information provided.

Exhibit A

Impairment and Inattention

Inattention was the most common human factor recorded for crashes. These factors were involved in almost 40% of crashes that resulted in a death or serious injury and a similar number of crashes that resulted in minor injuries.

Impairment, usually from alcohol or other substances, was reported in 8.8% of fatal and 10.4% of serious crashes compared to 3.8% for other injury crashes. However, impairment is relatively underreported in the SHACA data as the data relies on police data from the time of the crash. Police reports document impairment in two ways: impairment or suspected impairment. After the crash, a toxicology report confirms if impairment was present in those involved in the crash, but the crash report is not updated with results from toxicology report. Data from FARS does include toxicology data and indicates that alcohol impairment is a factor in 33% of fatal crashes.



Lighting

Lack of visibility due to time of day and presence of roadway lighting are contributing factors in crashes on O'ahu. Half of fatal and serious injury crashes take place in daylight. However, crashes that take place in dark conditions, such as at night on unlit streets, are more likely to result in a fatality or serious injury than crashes that take place during the day. In dark conditions with no lighting, 14% of injury crashes result in an FSI. In dark conditions with continuous or spot illumination, the FSI rate is 11%. At dawn or dusk, the FSI rate is 10%. In daylight the rate is 6%.

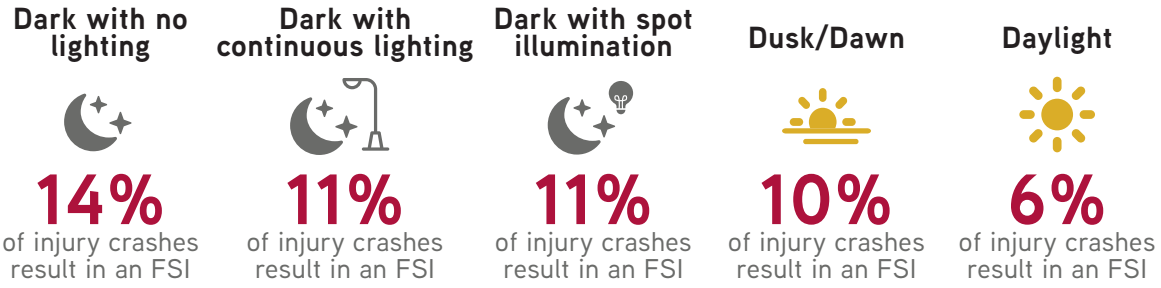


Exhibit A

Common Crash Types



Crashes involving motor vehicles

- Of FSI motor vehicle crashes on O'ahu streets, 43% involve a motor vehicle hitting an object. These objects include utility or light poles, parked cars, bridge railings or supports, fences, traffic signals, traffic barriers, trees, culverts or ditches, and other objects near roadway edges.
- Broadside crashes, when the front of one vehicle collides with the side of another vehicle, account for the second most common type of vehicle crash.



Crashes involving pedestrians

- The most frequent FSI crash scenarios involve pedestrians crossing in a crosswalk and a motor vehicle proceeding straight ahead or making a left turn. Left-turn collisions predominantly occur at traffic signals, while crashes involving vehicles proceeding straight ahead are more prevalent at uncontrolled locations.
- 44% of crashes where a pedestrian is fatally or seriously injured occur when the pedestrian is crossing in a crosswalk.
- 66% of pedestrian crashes in crosswalks took place on roads with four or more lanes.



Crashes involving people on bicycles

- The majority (80%) of FSI crashes involving cyclists occurred on a road with no dedicated space for bicyclists.
- The most common types of bicycle-involved crashes include a motor vehicle proceeding straight and colliding with a cyclist riding on a road without a bikeway, or a cyclist crossing a road. Notably, a vehicle proceeding straight ahead, regardless of the bicycle's action, is more likely to result in fatal or serious injuries to the cyclist compared to a turning vehicle.
- Differences exist in the predominant bicycle crashes on State surface roads and City streets. Riding outside a designated bikeway is more frequent on State roads, while incidents involving cyclists falling in or on the roadway are more common on City streets.
- While right turn on red maneuvers were not among the top motor vehicle actions, they were implicated in three fatal or serious bicycle crashes and 31 bicycle crashes of all injury levels.

Exhibit A

High-Injury Locations

While traffic safety is a community-wide issue, safety issues are not evenly distributed. Identifying High-Injury Locations (HIL), or street segments and intersections that experience the highest number of Vision Zero crashes, is one of the pillars of a Vision Zero program. High-Injury Locations will be developed into projects to improve safety. They also help inform proposed changes to policy, investments, and non-infrastructure changes.

Our approach for identifying these High-Injury Locations was informed by a review of cities across the US that have successfully reduced FSI crashes through their Vision Zero programs. The analysis is based on major crash reports from the HPD for the period 2015 to 2020, and covers both State and City roadways on the island, but excludes interstate facilities.

High-Injury Locations are composed of High-Injury Corridors and High-Injury Intersections.

High-Injury Location: Street segments and intersections that experience the highest number of Vision Zero crashes.

High-Injury Corridor: A street segment that experiences three or more Vision Zero crashes per mile per year.

High-Injury Intersection: An intersection of two streets where one or more Vision Zero crashes occur per year.

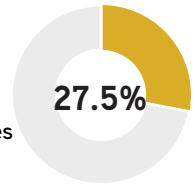
The largest concentration of High-Injury Locations is in urban Honolulu. Ninety percent of the High-Injury Corridors are in the Primary Urban Center development plan area (Kāhala to Pearl City). High-Injury Intersections are slightly more geographically distributed across the island.

High Injury Corridors

39 miles of streets, representing

27.5% of the Vision Zero crashes

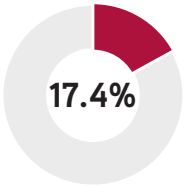
2% of the total street network*



High Injury Intersections

93 intersections, representing

17.4% of the Vision Zero crashes



*The road network does not include interstate highways

Note: The crash information in this section is under the protection of 23 USC 407. This information may not be used in any Federal or State court proceeding in any action for damages arising from any occurrence at a location mentioned or addressed in the information provided.

Title VI/Environmental Justice Communities

Of the High-Injury Locations, 34 High-Injury Corridors and 36 High-Injury Intersections are in Title VI/ Environmental Justice communities. These communities host a disproportionate number of High-Injury streets and intersections, with 30% of O'ahu's population but 46% of the High-Injury Locations.

Exhibit A

High-Injury Locations in Wai'anae & Mā'ili, Wahiawā, Waipahu & Pearl City, and Kapolei & 'Ewa



High-Injury Corridors

Area	Tier	Location	From	To	Total Vision Zero (VZ) Crashes	Total Crashes/ mile/year	Total FSI Crashes	Total FSI Crashes/ mile/year
Wai'anae & Mā'ili	Tier 2	Farrington Hwy	Ala 'Ākau St	Glenmonger St	26	3.1	12	1.5
Wahiawā	Tier 1	California Ave	Kamehameha Hwy	N Cane St	8	6.2	1	0.8
Waipahu & Pearl City	Tier 1	Leokū St	Farrington Hwy	Waipahu St	10	6.4	1	0.6
Waipahu & Pearl City	Tier 2	Waipahu Depot St	Farrington Hwy	Waipahu St	5	5.2	1	1.0
Kapolei & 'Ewa	Tier 2	Fort Weaver Rd	North Rd	Keone'ula Blvd	18	3.2	7	1.2

Exhibit A

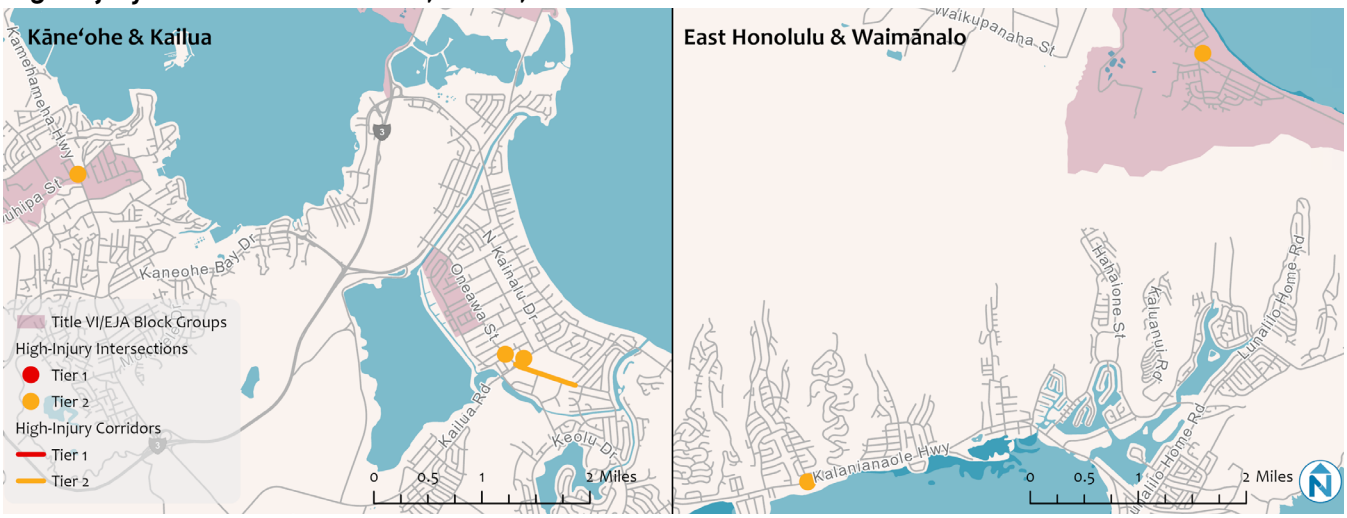
High-Injury Intersections

Area	Tier	Location	Total VZ Crashes	Total Crashes/ mile/year	Total FSI Crashes	Total FSI Crashes / mile/year
Waiʻanae & Māʻili	Tier 1	Farrington Hwy & Old Government Rd	10	1.7	6	1.0
Waiʻanae & Māʻili	Tier 1	Farrington Hwy & Saint Johns Rd	9	1.5	8	1.3
Waiʻanae & Māʻili	Tier 2	Farrington Hwy & Maliona St	7	1.2	4	0.7
Wahiawā	Tier 2	California Ave & Westervelt St	6	1.0	2	0.3
Wahiawā	Tier 2	Kilani Ave & N Cane St	9	1.5	1	0.2
Waipahu & Pearl City	Tier 2	Farrington Hwy & Leokāne St	11	1.8	2	0.3
Waipahu & Pearl City	Tier 2	Farrington Hwy & Mokuola St	9	1.5	1	0.2
Waipahu & Pearl City	Tier 2	Kuala St & Noelani St	6	1.0	3	0.5
Waipahu & Pearl City	Tier 2	Leokū St & Leolua St	7	1.2	1	0.2
Kapolei & ʻEwa	Tier 2	Farrington Hwy & Makakilo Dr	7	1.2	3	0.5
Kapolei & ʻEwa	Tier 2	Fort Weaver Rd & Pāpipi Rd	6	1.0	1	0.2
Kapolei & ʻEwa	Tier 2	Kapolei Pkwy & Kahiʻukā St	7	1.2	2	0.3
Kapolei & ʻEwa	Tier 2	Kapolei Pkwy & Keaunui Dr	6	1.0	4	0.7

Table is ordered by Area, Tier, then alphabetized by Location.

Exhibit A

High-Injury Locations in Kāneʻohe, Kailua, East Honolulu & Waimānalo



High-Injury Corridors

Area	Tier	Location	From	To	Total VZ Crashes	Total Crashes/ mile/year	Total FSI Crashes	Total FSI Crashes/ mile/year
Kāneʻohe & Kailua	Tier 2	Kailua Rd	Kuʻulei Rd	Wanaʻao Rd	13	4.3	1	0.3

High-Injury Intersections

Area	Tier	Location	Total VZ Crashes	Total Crashes/ mile/year	Total FSI Crashes	Total FSI Crashes / mile/year
Kāneʻohe & Kailua	Tier 2	Kamehameha Hwy & Kahuhipa St	6	1.0	2	0.3
Kāneʻohe & Kailua	Tier 2	Kuʻulei St & Aulike St	8	1.3	0	0.0
Kāneʻohe & Kailua	Tier 2	Oneawa St & Kīhāpai St	6	1.0	0	0.0
East Honolulu & Waimānalo	Tier 2	Kalanianaʻole Hwy & East Hind Dr	7	1.2	4	0.7
East Honolulu & Waimānalo	Tier 2	Kalanianaʻole Hwy & Nākini St	9	1.5	3	0.5

Table is ordered by Area, Tier, then alphabetized by Location.

High-Injury Locations in Urban Honolulu

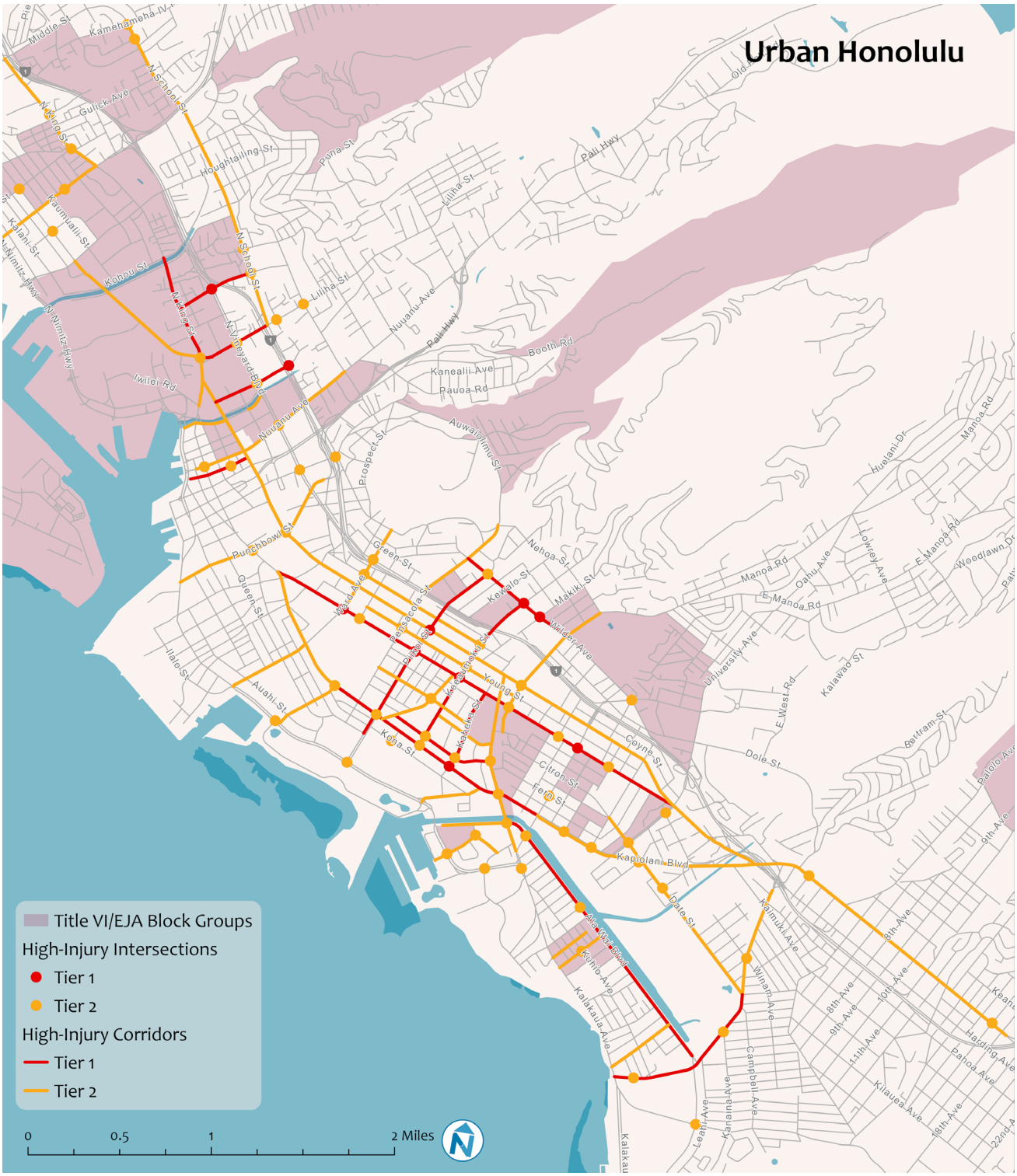


Exhibit A

High-Injury Corridors

Area	Tier	Location	From	To	Total VZ Crashes	Total Crashes/ mile/year	Total FSI Crashes	Total FSI Crashes/ mile/year
Urban Honolulu	Tier 1	ʻAʻala St	N Beretania St	N School St	18	7.1	1	0.4
Urban Honolulu	Tier 1	Ala Wai Blvd	Kalākaua Ave	Kapahulu Ave	67	6.5	11	1.1
Urban Honolulu	Tier 1	Bethel St	Nimitz Hwy	S Beretania St	17	8.7	2	1.0
Urban Honolulu	Tier 1	Liliha St	N King St	N School St	13	5.7	6	2.6
Urban Honolulu	Tier 1	Makaloa St	Sheridan St	Kalākaua Ave	25	7.4	5	1.5
Urban Honolulu	Tier 1	Kāheka St	Kapiʻolani Blvd	S King St	21	8.3	2	0.8
Urban Honolulu	Tier 1	Kapahulu Ave	Kalākaua Ave	Date St	33	6.1	9	1.7
Urban Honolulu	Tier 1	Kapiʻolani Blvd	Kamakeʻe St	McCully St	63	8.5	11	1.5
Urban Honolulu	Tier 1	Keʻeaumoku St	Kapiʻolani Blvd	Wilder Ave	34	6.3	7	1.3
Urban Honolulu	Tier 1	N King St	Kōhou St	Dillingham Blvd / Liliha St	20	6.1	3	0.9
Urban Honolulu	Tier 1	S King St	Alapaʻi St	Punahou St	92	11.3	10	1.2
Urban Honolulu	Tier 1	S King St	Punahou St	University Ave	56	9.5	10	1.7
Urban Honolulu	Tier 1	Pālama St	N King St	N School St	14	5.7	5	2.0
Urban Honolulu	Tier 1	Piʻikoi St	Waimanu St	Wilder Ave	39	6.5	5	0.8
Urban Honolulu	Tier 1	Wilder Ave	Pensacola St	Punahou St	26	6.8	3	0.8
Urban Honolulu	Tier 2	Beretania St	Alapaʻi St	Punahou St	39	5.4	7	1.0
Urban Honolulu	Tier 2	Beretania St	N King St	Alapaʻi St	35	5.6	4	0.6
Urban Honolulu	Tier 2	Beretania St	Punahou St	University Ave	20	3.2	2	0.3

Exhibit A

Area	Tier	Location	From	To	Total VZ Crashes	Total Crashes/ mile/year	Total FSI Crashes	Total FSI Crashes/ mile/year
Urban Honolulu	Tier 2	Date St	Isenberg St	Kapahulu Ave	28	4.1	7	1.0
Urban Honolulu	Tier 2	Dillingham Blvd	Waiakamilo Rd	N King St	22	4.1	2	0.4
Urban Honolulu	Tier 2	Hobron Ln	Holomoana St	ʻEna Rd	9	3.9	1	0.4
Urban Honolulu	Tier 2	Kalākaua Ave	Beretania St	McCully St	32	4.0	7	0.9
Urban Honolulu	Tier 2	Kalihi St	Nimitz Hwy	N King St	14	3.8	2	0.5
Urban Honolulu	Tier 2	Kamakeʻe St	Ala Moana Blvd	Kapiʻolani Blvd	9	4.3	3	1.4
Urban Honolulu	Tier 2	Kanunu St	Keʻeaumoku St	Kalākaua Ave	6	3.1	1	0.5
Urban Honolulu	Tier 2	Kapahulu Ave	Moʻoheau Ave / Date St	Harding Ave	17	5.0	1	0.3
Urban Honolulu	Tier 2	Kapiʻolani Blvd	McCully St	Waiʻalae Ave	30	3.7	8	1.0
Urban Honolulu	Tier 2	Kapiʻolani Blvd	South St	Kamakeʻe St	15	3.8	5	1.3
Urban Honolulu	Tier 2	Kīnaʻu St	Ward Ave	Keʻeaumoku St	19	4.6	8	1.9
Urban Honolulu	Tier 2	N King St	Dillingham Blvd / Liliha St	Iwilei Rd	6	4.1	0	0.0
Urban Honolulu	Tier 2	N King St	Middle St	Kalihi St	21	4.5	7	1.5
Urban Honolulu	Tier 2	S King St	University Ave	Kapiʻolani Blvd	13	3.3	7	1.8
Urban Honolulu	Tier 2	Nuʻuanu Ave	Merchant St	N Kuakini St/S Kuakini St	18	3.1	2	0.3
Urban Honolulu	Tier 2	Paoakalani Ave	Kalākaua Ave	Ala Wai Blvd	8	3.8	1	0.5
Urban Honolulu	Tier 2	Pensacola St	Lunalilo St	Nehoa St	10	3.2	0	0.0
Urban Honolulu	Tier 2	Punahou St	Nehoa St	Phillip St	16	3.3	2	0.4

Exhibit A

Area	Tier	Location	From	To	Total VZ Crashes	Total Crashes/ mile/year	Total FSI Crashes	Total FSI Crashes/ mile/year
Urban Honolulu	Tier 2	Punchbowl St	Ala Moana Blvd	S Beretania St	13	3.6	3	0.8
Urban Honolulu	Tier 2	Punchbowl St	S Beretania St	Lusitana St	7	3.3	0	0.0
Urban Honolulu	Tier 2	River St	Nimitz Hwy	S Vineyard Blvd*	6	5	0	0.0
Urban Honolulu	Tier 2	Royal Hawaiian Ave	Kalākaua Ave	Aloha Dr	7	5.4	1	0.8
Urban Honolulu	Tier 2	Rycroft St	Pensacola St	Kāheka St	17	5.2	1	0.3
Urban Honolulu	Tier 2	School St	Houghtailing St	Liliha St	19	3.8	5	1.0
Urban Honolulu	Tier 2	School St	Kamehameha Iv Rd	Houghtailing St	19	3.3	4	0.7
Urban Honolulu	Tier 2	Seaside Ave	Kalākaua Ave	Ala Wai Blvd	9	5.6	0	0.0
Urban Honolulu	Tier 2	Sheridan St	Kapiʻolani Blvd	Kalākaua Ave	8	3.0	1	0.4
Urban Honolulu	Tier 2	Waiʻalae Ave	Koko Head Ave	17th Ave	8	3.3	1	0.4
Urban Honolulu	Tier 2	Waiʻalae Ave	St Louis	Koko Head Ave	26	4.5	9	1.6
Urban Honolulu	Tier 2	Ward Ave	Ala Moana Blvd	Kapiʻolani Blvd	10	3.9	1	0.4
Urban Honolulu	Tier 2	Ward Ave	S King St	Prospect St	16	5.7	3	1.1
Urban Honolulu	Tier 2	Young St	Victoria St	Punahou St	34	6.0	7	1.2

*Excludes the pedestrian segment between N Beretania St and N Kukui St.

High-Injury Intersections

Area	Tier	Location	Total VZ Crashes	Total Crashes/ mile/year	Total FSI Crashes	Total FSI Crashes / mile/year
Urban Honolulu	Tier 1	S Beretania St & Piʻikoi St	12	2.0	2	0.3
Urban Honolulu	Tier 1	Kapiʻolani Blvd & Māhukona St	13	2.2	2	0.3

Exhibit A

Area	Tier	Location	Total VZ Crashes	Total Crashes/ mile/year	Total FSI Crashes	Total FSI Crashes / mile/year
Urban Honolulu	Tier 1	Ke'eaumoku St & Wilder Ave	13	2.2	5	0.8
Urban Honolulu	Tier 1	King St & McCully St	14	2.3	3	0.5
Urban Honolulu	Tier 1	King St & Ward Ave	16	2.7	2	0.3
Urban Honolulu	Tier 1	S King St & Ke'eaumoku St	18	3.0	4	0.7
Urban Honolulu	Tier 1	S King St & Pi'ikoi St	23	3.8	0	0.0
Urban Honolulu	Tier 1	Pālama St & Hālona St	10	1.7	6	1.0
Urban Honolulu	Tier 1	N School St & Stillman Lane	12	2.0	1	0.2
Urban Honolulu	Tier 1	Wilder Ave & Makiki St	13	2.2	1	0.2
Urban Honolulu	Tier 2	Ala Moana Blvd & 'Ena Rd	6	1.0	0	0.0
Urban Honolulu	Tier 2	Ala Moana Blvd & Pi'ikoi St	7	1.2	2	0.3
Urban Honolulu	Tier 2	Ala Wai Blvd & Kai'olu St	7	1.2	0	0.0
Urban Honolulu	Tier 2	Ala Wai Blvd & McCully St	11	1.8	3	0.5
Urban Honolulu	Tier 2	S Beretania St & Punahou St	8	1.3	0	0.0
Urban Honolulu	Tier 2	S Beretania St & Punchbowl St	10	1.7	1	0.2
Urban Honolulu	Tier 2	Bethel St & S Pauahi St	8	1.3	1	0.2
Urban Honolulu	Tier 2	Date St & Mahi'ai St	7	1.2	2	0.3
Urban Honolulu	Tier 2	Dillingham Blvd & McNeill St	9	1.5	0	0.0
Urban Honolulu	Tier 2	Dillingham Blvd & Mokauea St	6	1.0	1	0.2
Urban Honolulu	Tier 2	Fern St & McCully St	7	1.2	3	0.5
Urban Honolulu	Tier 2	Hobron Ln & Ala Moana Blvd	10	1.7	0	0.0
Urban Honolulu	Tier 2	Hobron Ln & Lipe'epe'e St	6	1.0	1	0.2
Urban Honolulu	Tier 2	Kalākaua Ave & Ala Wai Blvd	10	1.7	0	0.0
Urban Honolulu	Tier 2	Kalākaua Ave & Makaloa St	6	1.0	1	0.2
Urban Honolulu	Tier 2	Kalākaua Ave & Pa'ū St	6	1.0	0	0.0
Urban Honolulu	Tier 2	Kalihi St & Kahanu St	7	1.2	1	0.2

Exhibit A

Area	Tier	Location	Total VZ Crashes	Total Crashes/ mile/year	Total FSI Crashes	Total FSI Crashes / mile/year
Urban Honolulu	Tier 2	Kamakeʻe St & Ala Moana Blvd	7	1.2	3	0.5
Urban Honolulu	Tier 2	Kamoku St & Date St	7	1.2	0	0.0
Urban Honolulu	Tier 2	Kapahulu Ave & Castle St	7	1.2	0	0.0
Urban Honolulu	Tier 2	Kapahulu Ave & Lemon Rd	6	1.0	3	0.5
Urban Honolulu	Tier 2	Kapahulu Ave & Winam Ave	6	1.0	0	0.0
Urban Honolulu	Tier 2	Kapiʻolani Blvd & Isenberg St	7	1.2	1	0.2
Urban Honolulu	Tier 2	Kapiʻolani Blvd & Kalākaua Ave	11	1.8	3	0.5
Urban Honolulu	Tier 2	Kapiʻolani Blvd & Kamakeʻe St	10	1.7	1	0.2
Urban Honolulu	Tier 2	Kapiʻolani Blvd & Paʻani St	6	1.0	2	0.3
Urban Honolulu	Tier 2	Kapiʻolani Blvd & Piʻikoi St	9	1.5	0	0.0
Urban Honolulu	Tier 2	Keʻeaumoku St & Kapiʻolani Blvd	8	1.3	2	0.3
Urban Honolulu	Tier 2	Keʻeaumoku St & Kīnaʻu St	7	1.2	0	0.0
Urban Honolulu	Tier 2	Keʻeaumoku St & Makaloa St	8	1.3	2	0.3
Urban Honolulu	Tier 2	N King St & Liliha St	10	1.7	2	0.3
Urban Honolulu	Tier 2	N King St & Mokauea St	8	1.3	3	0.5
Urban Honolulu	Tier 2	N King St & Richards Ln	7	1.2	3	0.5
Urban Honolulu	Tier 2	N School St & Ahonui St	7	1.2	2	0.3
Urban Honolulu	Tier 2	N School St & ʻAlaneo St	9	1.5	1	0.2
Urban Honolulu	Tier 2	N School St & Kamehameha IV Rd	6	1.0	1	0.2
Urban Honolulu	Tier 2	N School St & Lanakila St	6	1.0	0	0.0
Urban Honolulu	Tier 2	S King St & Artesian St	7	1.2	0	0.0
Urban Honolulu	Tier 2	S King St & Makahiki Way	8	1.3	2	0.3
Urban Honolulu	Tier 2	S King St & Nuʻuanu Ave	6	1.0	1	0.2
Urban Honolulu	Tier 2	S King St & Punahou St	10	1.7	2	0.3

Exhibit A

Area	Tier	Location	Total VZ Crashes	Total Crashes/ mile/year	Total FSI Crashes	Total FSI Crashes / mile/year
Urban Honolulu	Tier 2	S King St & Punchbowl St	10	1.7	3	0.5
Urban Honolulu	Tier 2	S King St & Victoria St	11	1.8	1	0.2
Urban Honolulu	Tier 2	Kona Iki St & Kona St	6	1.0	0	0.0
Urban Honolulu	Tier 2	Kūhiō Ave & Seaside Ave	7	1.2	0	0.0
Urban Honolulu	Tier 2	Liliha St & Holokahana Ln	6	1.0	0	0.0
Urban Honolulu	Tier 2	Liliha St & N Kuakini St	9	1.5	2	0.3
Urban Honolulu	Tier 2	Makaloa St & Kāheka St	9	1.5	2	0.3
Urban Honolulu	Tier 2	Monsarrat Ave & Pākī Ave	6	1.0	1	0.2
Urban Honolulu	Tier 2	Pensacola St & Young St	6	1.0	0	0.0
Urban Honolulu	Tier 2	Queen Emma St & ʻIolani Ave	7	1.2	2	0.3
Urban Honolulu	Tier 2	Rycroft St & Sheridan St	7	1.2	1	0.2
Urban Honolulu	Tier 2	University Ave & Date St	8	1.3	2	0.3
Urban Honolulu	Tier 2	University Ave & Kuilei St	7	1.2	1	0.2
Urban Honolulu	Tier 2	S Vineyard Blvd & ʻAʻala St	10	1.7	0	0.0
Urban Honolulu	Tier 2	S Vineyard Blvd & Liliha St	8	1.3	3	0.5
Urban Honolulu	Tier 2	S Vineyard Blvd & Nuʻuanu Ave	6	1.0	1	0.2
Urban Honolulu	Tier 2	S Vineyard Blvd & Queen Emma St	7	1.2	1	0.2
Urban Honolulu	Tier 2	Waiʻalae Ave & 16th Ave	8	1.3	1	0.2
Urban Honolulu	Tier 2	Waiʻalae Ave & 2nd Ave	11	1.8	2	0.3
Urban Honolulu	Tier 2	Ward Ave & Kīnaʻu St	6	1.0	1	0.2
Urban Honolulu	Tier 2	Ward Ave & Lunalilo St	6	1.0	1	0.2
Urban Honolulu	Tier 2	Wilder Ave & Metcalf St	7	1.2	0	0.0
Urban Honolulu	Tier 2	Wilder Ave & Piʻikoi St	9	1.5	0	0.0
Urban Honolulu	Tier 2	Young St & Keʻeaumoku St	10	1.7	2	0.3

Table is ordered by Area, Tier, then alphabetized by Location.

Exhibit A

Project Prioritization – Safety and Equity

The High-Injury Locations will help the City prioritize its focus and resources. Addressing safety at places with the most extensive history of crashes is critical to reverse the trend of stagnant FSI crashes.

Within this list of focused locations are two categories based on crash frequency:

- **Tier 1** locations are very high-injury areas and the highest priority for capital and quick-build projects. These locations experience six or more Vision Zero crashes per year per mile, or two or more fatal injury crashes per year.
- **Tier 2** locations are high-injury areas but at half the rate of Tier 1 locations.

Safety treatments will be integrated into the City's repaving, land use, and operations decisions. Safety features in the Safety Features Toolkit recommended by this plan will be considered for any work at High-Injury Locations.



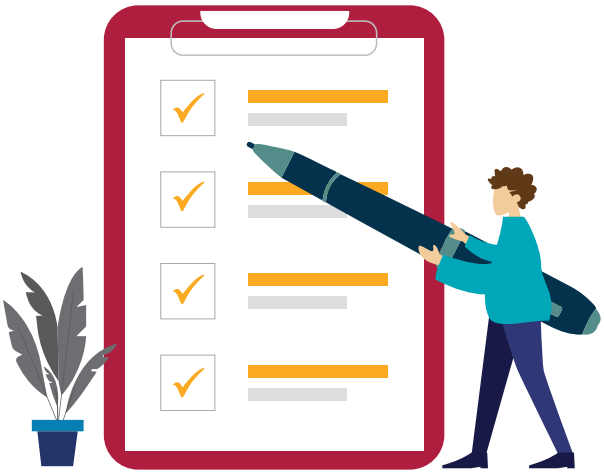
Exhibit A

3

Safe Streets: Kuleana to Community

O'ahu Vision Zero Action Plan (Plan) public engagement activities gathered input from the public, community-based organizations, representatives from vulnerable communities, and government agencies to ensure that a broad cross section of our community contributed to the Plan. This effort included outreach and engagement events that centered vulnerable populations such as keiki (youth), kūpuna (elders), immigrants, Environmental Justice/Title VI populations, and houseless individuals.

Through a suite of online and in-person forums, stakeholders shared their concerns on traffic safety. These engagement opportunities included two virtual islandwide workshops, a project steering committee, interviews with leaders from community-based organizations, and stakeholder meetings about priority topics and communities most impacted by crashes. The engagement team also distributed educational materials and collected comments at pop-up events. Digital engagement tools, including an online survey, were also used to gather input and personal stories related to traffic safety from the public.



Engagement Activities

Vision Zero Survey Respondents: **412**



Islandwide Workshop Participants: **100**



Pop Up Community Engagement Events: **4**



Traffic Safety Personal Stories Shared: **47**



Project Steering Committee Members: **34**



Stakeholder Meetings with Representatives for Vulnerable Groups: **7**



Exhibit A

Islandwide Workshops

Two Islandwide Workshops, held in December 2022 and June 2024, gathered over 100 O'ahu residents to discuss and collect feedback on the Plan. At the first workshop, the Vision Zero team presented the Plan's goals, data on serious injury and fatal traffic crashes, the Safe Systems approach, and actions that have proven effective at improving safety outcomes. The second meeting was an opportunity for the team to gather public input on the draft Plan and encourage participants to take the Safe Streets Pledge that encourages individual action to make streets safer. Participants were given opportunities to respond to the presentations through polling and open-ended discussions. Breakout rooms encouraged attendees to speak in smaller groups about safety actions including tools to support people using crosswalks, to protect kūpuna, to reduce speeds, to make biking safer, and curb impaired/distracted driving.

The Islandwide Workshops revealed the following themes:

- Nearly all participants (95%) support the goal of zero traffic deaths, and 82% support 2030 as the target date to achieve this goal.
- When asked about what they perceive as the leading cause of traffic fatalities and serious injuries, 61% said speed and 32% said inattention.
- People wanted more information about the relationship between fatal crashes and infrastructure change, and safety features that protect pedestrians and cyclists.
- Of the Safe System Elements (described in Chapter 4), participants thought Safe Streets was most important, followed by Safe Speeds and Safe People.

The Islandwide Workshops were promoted through various City and County of Honolulu (City) communication channels, by local media, and with the support of project nonprofit partners.



Exhibit A

Public Survey

In June 2023, an online survey gathered 412 responses from residents of all regions of O'ahu. The top five safety concerns among respondents (with the percentage of the respondents that said it was a major concern noted) were people driving too fast (83%), people driving while impaired (81%), people texting while driving (80%), drivers not yielding to pedestrians (77%), and the lack of sidewalks/walkways (65%). These top safety concerns are shown below with the percentage of fatal crashes where the concern was a contributing factor. Only 30% of respondents agreed with the statement that they feel safe traveling on O'ahu streets, and just over 10% agreed with the statement that they feel it is safe for school-age children to walk and bike. The top five major safety concerns were consistent with residents from different areas of the island.

Top Five Major Safety Concerns



1. People Driving Too Fast

83%

Contributes to 32% of fatal crashes



2. People Driving While Impaired

81%

Contributes to 33% of fatal crashes



3. People Driving While Texting or Looking at Phone

80%

Contributes to 33% of fatal crashes



4. Drivers Not Yielding to People to People Using Crosswalk

77%

Contributes to 10% of fatal crashes



5. Lack of Sidewalks/Walkways

65%



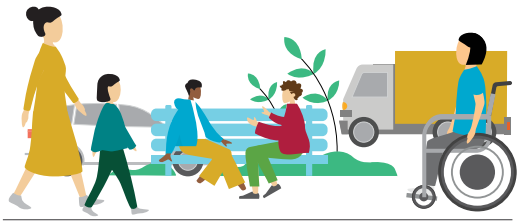
"Kalihi needs better sidewalks for seniors and people using walkers and wheelchairs. When cars double park and encroach on sidewalks, they force people walk on the roads which causes a safety issue for both pedestrians and drivers." -Traffic Safety Story

Exhibit A

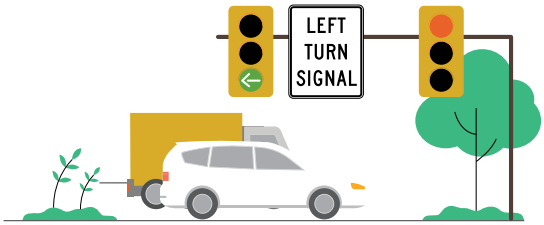
The survey also solicited input on 17 different safety tools, such as roundabouts and red-light cameras. All safety tools were supported by most respondents, with the least popular tool still receiving support from 68% of respondents. Some respondents expressed a need for more education on new roadway safety features and their safety benefits, such as protected bike lanes or roundabouts, so people have a better understanding of why we use them and how to use them.

Top 5 Most Supported Safety Tools

Sidewalks: **99%**



Protected Left Turns: **95%**



Pedestrian Refuge Islands: **95%**



20 MPH School and Neighborhood Zones: **94%**



Rectangular Rapid-Flashing Beacon: **95%**

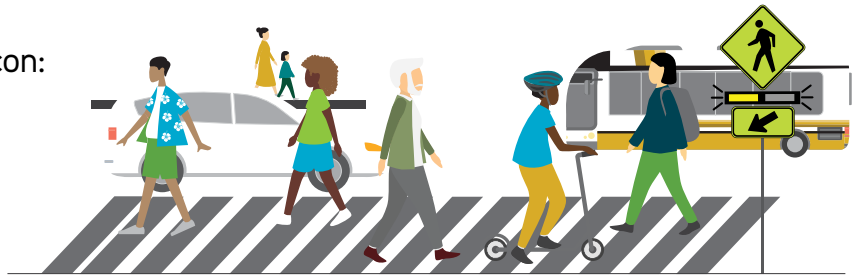


Exhibit A

Outreach at Community Events

AARP Caregiver Event (November 2022)

As part of the City's continued engagement with kūpuna and to promote awareness of the Vision Zero Action Plan campaign, the project team attended an AARP resource fair and event to celebrate family caregivers. The Vision Zero project team hosted an informational table at the event to understand the specific transportation needs and mobility issues that kūpuna and their families face on O'ahu and to promote the first islandwide workshop. The event was attended by 264 caregivers, kūpuna, and family members. Key takeaways from participants were concerns around speeding, the need for traffic calming improvements on neighborhood streets, limited visibility from parked vehicles, and the need for pedestrian walkway improvements.





"My wife bikes to work every day on city streets and is **always on high alert** due to drivers that don't look, don't signal for turns, and speed on streets." -Traffic Safety Story

Exhibit A

Hawai'i Bicycling League Annual Event (May 2023)

Hawai'i Bicycling League (HBL) invited the Vision Zero project team to host a booth at their annual membership event with the intention of promoting awareness of the Plan and garnering participation in the public survey. HBL members were interested in strategies for safer roadway conditions for people on bikes, engineering solutions for better protecting cyclists from drivers, and active transportation policy.



"**I personally feel it is not safe to ride a bike** because [I'm] afraid of being hit by a car...When I ride my bike, cars zip past and it feels like there's little to nothing stopping them from crashing into me." -Traffic Safety Story

Better Tomorrow Speaker Series – Reclaim Our Streets (July 2023)

The Better Tomorrow Speaker series hosted a traffic safety movie screening and talk story with local traffic safety leaders, including a Department of Transportation Services representative, and community members. This event featured the Hawai'i premiere of "Reclaim our Streets" which offers perspectives on how to make Hawai'i's roads safer and more sustainable. Attendees shared their concerns about the safety of our island's transportation system with project staff. Topics raised by concerned members of the public included the dangers pedestrians encounter at intersections with uncontrolled left turns, at uncontrolled crosswalks, along multi-lane roads without medians, and at busy intersections.



"[Safer crosswalks] should be a priority and not an afterthought. **Let's not allow another person to lose their life** in a vehicle or on foot in order to cross a roadway." -Traffic Safety Story

Exhibit A

Hawai'i LGBT Legacy Foundation Kūpuna Rainbow Town Hall (September 2023)

The Rainbow Town Hall is a periodic event to provide a space for older people identifying as lesbian, gay, bisexual, transgender, queer/questioning, intersex, asexual/aromantic, or some other diverse gender identity or sexuality to gather, talk story, and speak on specific issues that impact the lives of this community. The Vision Zero project team promoted the project at this event, solicited feedback, and supported a discussion about policy and engineering approaches for safer streets. Rainbow Town Hall participants mentioned their desires to see more transportation-based educational programs for kūpuna that focus on best practices when using the bus and crossing roads. There were also suggestions to have transportation studies better consider kūpuna and their needs. Requested infrastructure improvements included longer crossing times at large signalized intersections, rectangular rapid-flashing beacons, speed humps, better street lighting, and more visible street signs.





Exhibit A

Project Steering Committee

The Steering Committee met during key project milestones to offer important feedback and suggestions on how to address various aspects of the project. The Steering Committee consisted of representatives from federal, state, and local government agencies, nonprofit and community-based organizations, and family members of people killed or injured by traffic violence. The unique and collective contributions of each committee member helped shape the Plan. The Steering Committee was focused on three main goals:

1. Create a culture of creativity and problem solving to create O'ahu-focused solutions.
2. Support educational and public campaigns through collective networks.
3. Provide insights and perspectives on community needs, vulnerabilities and challenges, project, program and policy development, and resources for implementation.

The Steering Committee was organized by the Vision Zero project team and composed of representatives from the following entities:

- AARP Hawai'i
- Aloha Care
- City and County of Honolulu Department of Facility Maintenance
- City and County of Honolulu Department of Design and Construction
- City and County of Honolulu Department of Parks & Recreation
- City and County of Honolulu Department of Transportation Services
- Citizens for a Fair ADA Ride
- USDOT Federal Highway Administration
- Hawai'i Department of Health
- Hawai'i Department of Transportation
- Hawai'i Bicycling League
- Honolulu Community Action Program
- Honolulu Police Department
- Kōkua Kalihi Valley
- Mothers Against Drunk Driving
- O'ahu Metropolitan Planning Organization
- Ulupono Initiative
- Walk Wise Hawai'i
- We Are Oceania

Exhibit A

Complete Streets Core Team

The City's Complete Streets ordinance assigned implementation responsibility to the City Departments of Design and Construction, Facility Maintenance, Planning and Permitting, and Transportation Services. The Complete Streets Core Team is an internal, interdepartmental group that has been convening twice a month since 2016 to provide a collaborative structure for coordination among the multiple City departments with shared responsibility for various aspects of the street right-of-way, from planning and design to construction and maintenance. Given the connection between Complete Streets and Vision Zero, the Complete Streets Core Team played a prominent role in the development of the Plan through regular review of analysis, recommendations, and project documents. These City stakeholders will ultimately implement many elements of the Plan.



The Honolulu Complete Streets Program requires close collaboration between five City departments on a wide range of projects and programs.

Exhibit A

Nonprofit Leader Conversations

Conversations with community leaders and nonprofit organizations revealed specific needs for groups that are more vulnerable to traffic safety issues, including immigrants, unhoused people, youth, and kūpuna.

Micronesian Communities (November 2022)

A conversation with staff from We Are Oceania (WAO) highlighted how Kalihi residents, and particularly the Micronesian community, are impacted by O'ahu's current transportation system:

- Kalihi, an area with higher concentration of immigrants from Micronesia, is disproportionately impacted by traffic violence. Residents in the area have a high dependence on public transportation and are more likely to work intergenerationally and as a community to meet their transportation needs (e.g., ridesharing coordinated through church groups).
- Cultural differences impact how people understand norms and rules of the road. For example, streetlights and crosswalk signals are not always intuitive to people from other countries. To be inclusive of all community members, we must continue to engage these newer residents.

Houseless Advocacy Organizations (February 2023)

Representatives of agencies that serve unhoused people offered insights into the impacts of our transportation system on houseless individuals and families:

- Transportation can be a major barrier for houseless individuals trying to access medical and social services. TheBus is a heavily utilized public service for houseless individuals, however, the frequency of service in areas with supportive facilities and the cost of fares can be a barrier for some. In rural areas where bus service is less available, and where walking is infeasible, the cost of transit fare to access essential appointments can become burdensome.
- Because of public perception toward unhoused people, pedestrians may jaywalk or walk in the road to avoid encampments or people living on sidewalks.
- Some houseless individuals, who disproportionately experience mental and behavioral health challenges, may be at risk of walking into traffic.
- Some houseless individuals are vulnerable to traffic safety due to walking and bicycling to atypical areas without established sidewalks, pedestrian crossings, or bike facilities.

Exhibit A

Safe Routes to School and Youth Groups (April and May 2023)

Representatives from Kōkua Kalihi Valley, Kalihi Valley Instructional Bike Exchange, the City's Safe Routes to School (SRTS) Program, and the O'ahu Coalition partners revealed unique issues that youth face and ways to support active transportation for O'ahu youth:

- Many young people use bicycles to get to school, for after school mobility, and to run errands for their families. Safer bike infrastructure that separates bike lanes from vehicle traffic would better protect young people on bicycles.
- Roads shared with vehicles or narrow streets with parked cars put people on bikes at great risk. Drivers may feel more comfortable with separated bicycle lanes as well.
- Speed humps and protected or signalized pedestrian crossings, especially near schools, can better protect children walking and using bikes, especially important in Kalihi where driving rates are lower than the island as a whole.
- Though Hawai'i State Law requires drivers to stop for people crossing the street at a crosswalk, many drivers falsely believe that pedestrians should yield to cars and are unaware of their responsibility to stop at unmarked crosswalks.
- Parents, community groups, and nonprofits can share responsibility in building support for SRTS programs. Due to limited resources, SRTS programs are often only implemented if parents are vocal and advocate for safer roads around schools.

Kūpuna Advocacy Groups (August 2023)

Participants from kūpuna advocacy groups, including Honolulu Parks Senior Citizen Program and the Hawai'i LGBT Legacy Foundation, shared some unique transportation safety challenges for older adults:

- Many kūpuna are vulnerable road users because they take longer to cross streets or have mobility challenges.
- The most common safety concerns included speeding vehicles, drivers running red lights, and sharing sidewalks with people on bikes or skateboards.
- Many participants offered ideas to make streets safer for kūpuna, including additional four-way stop-controlled intersections, curb extensions, rectangular rapid-flashing beacons, or red flags for kūpuna to wave while crossing the street.

Exhibit A

Key Takeaways from Public Engagement

Based on the collective engagement efforts for the O'ahu Vision Zero Action Plan, the following themes have emerged:

- **The City's goal of zero traffic deaths on O'ahu is the appropriate target for traffic safety.**
- **Implement safety measures for the most vulnerable community members:** those with disabilities, keiki, and kūpuna. Participants clearly expressed that our transportation system should be improved to better accommodate those who are most vulnerable. Participants shared about the challenges that vulnerable users face and the need to design improvements to accommodate them, through measures such protected pedestrian crossings and sufficiently wide sidewalks. Respondents recognized that transportation system that served the most vulnerable would consequentially serve all roadway users.
- **Improve transportation facilities for pedestrians and bicyclists.** More and better pedestrian improvements such as sidewalks, pedestrian crossing refuge islands, and rapid flashing beacons are safety countermeasures highly supported by the public. Protected bike lanes were recognized as an effective safety measure for bicyclists. A more connected system of bike lanes and pedestrian facilities, particularly connected to transit, is also desired. Increasing the connectivity of bike lanes, sidewalks, and bus routes were brought up by multiple participants.
- **Take proactive measures to reduce speeding.** Most participants identified speeding as the main contributor to traffic fatalities and injuries. Slowing the speed of vehicles would improve the safety and comfort of people walking, riding on bikes, and everyone using our roadways.





Exhibit A

Internal City Agency Meetings

Police Department Meetings

The Department of Transportation Services (DTS) and the Honolulu Police Department committed to working together toward Vision Zero by kicking off a series of three meetings to better understand each other's work and brainstorm solutions. Officers highlighted key findings from their experience in enforcement:

- Police officers found that older adults and unhoused people are disproportionately involved in severe crashes.
- Crashes involving impairment and inattention (e.g., distracted by a cell phone) are often under-reported.
- Interpretation of speed laws varies; although traveling at any speed above the speed limit is technically illegal, criminal prosecution of legal cases need to show a driver was traveling grossly over the speed limit.
- A key challenge for motorcycle safety is that people riding at high speeds need much longer to slow down, which is especially tricky at freeway on- and off-ramps. People in the military and young men are the target audience for safer motorcycle behavior.



"I had an incident while riding a bike when a van came to a screeching halt behind me while in a left turn lane. I decided that bike commuting wasn't a risk I was comfortable taking anymore, especially because I was pregnant. My daughter is now 9 months old, and I haven't been on my bike since this incident." -Traffic Safety Story

Exhibit A

Transportation Staff Workshops

During three collaborative working sessions, team members from DTS identified what they consider to be the varied root causes of traffic deaths. Participants included staff from across the agency responsible for transportation planning, engineering, and operations. They expressed the profound sadness they experience in learning about the lives lost, brainstormed barriers to creating safer streets, and prioritized concrete actions to improve safety. Some key takeaways of the working sessions include:

- The agency needs more data to support the use of unproven or innovative roadway safety treatments.
- Traffic signals that manage the movement of vehicles, pedestrians, and cyclists are difficult to change because of the age of our infrastructure and the complexities and costs associated with new construction.
- Long and complex project delivery processes are staff-resource intensive and limit the number of projects that can be delivered.
- A tremendous amount of staff time is focused on responding to public and elected official complaints, which often do not align with documented safety issues. This model limits the staff and funding resources available to implement projects where they are needed most.

These sessions concluded with development of the Vision Zero actions within DTS's control, which have been included in the Plan. The agency will be redoubling its efforts in collecting and analyzing safety data, building community relationships, adjusting the complaint process, integrating safety into the project delivery process, and building staff capacity – both in terms of training and total staff dedicated to Vision Zero.



"Residents using wheelchairs **have to move out of our community** due to the lack of basic public infrastructure; potholes and puddles are what our residents and visitors must avoid by walking on the busy Kamehameha Hwy in Hale'iwa." -Traffic Safety Story

Exhibit A



Exhibit A

4

Acting in Accordance with Our Vision

Achieving a future without fatal or serious injury outcomes from crashes requires a systemic approach. The Vision Zero approach uses five Safe System elements: Safe Streets, Safe Speeds, Safe Vehicles, Safe People, and Post-Crash Care. These elements are layers of a safety net to prevent crashes and reduce the probability of a fatal or serious injury outcome when they do happen.

Exhibit A

Safe System Elements and Goals

The City and County of Honolulu (City) is taking a multi-pronged approach to achieve transportation safety, by including comprehensive goals within each Safe System element. These goals are general statements of desired outcomes as they relate to Vision Zero.

Safe System Elements				
Safe Speeds	**Safe Streets**	**Safe People**	**Post-Crash Care**	**Safe Vehicles**
Safe System Goals				
Foster safe speeds through proactive street design	Use a data driven approach	Foster a culture of shared kuleana for traffic safety through education and outreach activities	Improve the quality of crash data	Prioritize safer vehicles
Support changes in the enforcement and adjudication process to reduce dangerous driving behaviors	Fund and use quick-build strategies to install roadway safety features	Support funding and development of Safe Routes to School plans, programs, and infrastructure	Take care of people who have been affected by crashes	Collaborate with other agencies to require safety improvements in vehicles
Revise laws, policies, and procedures to support safe speeds	Invest in walking, bicycling, and transit to grow their mode share	Integrate safety into land use and private development permitting		
	Integrate safety into capital and repaving projects from planning, and scoping through preliminary design and delivery	Strengthen organizational capacity		
	Revise laws, policies, and procedures to support safe streets	Support our diversity of roadway users		

Exhibit A

This section documents the actions needed to realize each Safe System goal.

A high-level estimate of timeframe, level of effort, and cost has been indicated for each. The following table shows a key for how to read the action tables:

Action	Timeframe	Effort	Cost
Description of the action	**ST** – Short-Term (within 5 years) **MT** – Mid-Term (5-15 years)	● Lowest effort ●● Medium effort ●●● Highest effort	$ Lowest cost $$ Medium cost $$$ Highest cost

Funding and resources will be made available to implement change by phasing in the effective actions recommended in this plan:

- Short-Term (ST) actions can be implemented within five years. Examples include targeted enforcement programs, pavement markings, and sign installations.
- Mid-Term (MT) actions can be implemented in five to fifteen years and may require legislative approval or multi-year funding. Examples include constructing all O'ahu Pedestrian Plan Tier 1 proposed walkway projects and expanding Vision Zero program staff.



Exhibit A

Actions to Create a Safety Net

The actions included within this Plan will work together to create a safety net composed of the Safe System elements that will prevent crashes from happening and keeps those that do from having serious or fatal outcomes.

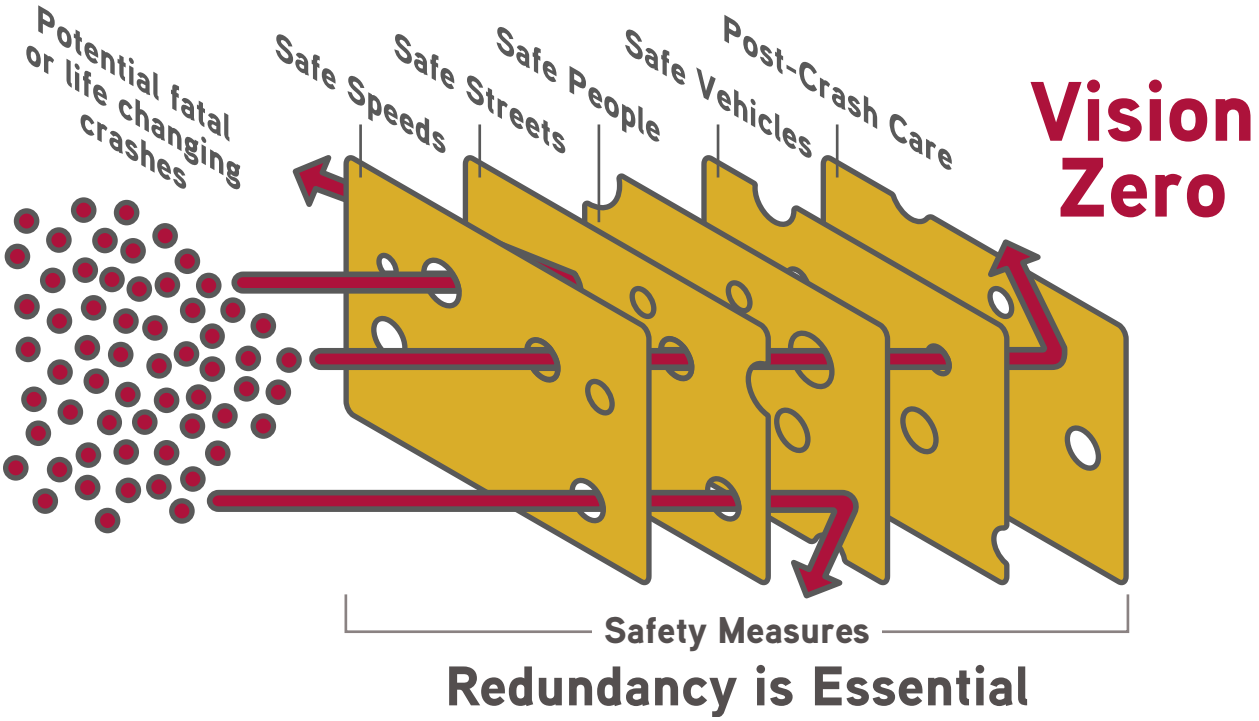


Exhibit A

Safe Speed Actions



Slower vehicle speeds reduce the force of crashes, provide additional time for drivers to stop, and improve the ability to see what is around us. Vehicles can be slowed through roadway design, speed limit designations, education, and focused enforcement. Safe speeds are crucial to achieving Vision Zero and there is a host of actions that must be taken, ranging from physical street improvements, to enforcement, to legislation.

Goal 1: Foster safe speeds through proactive street design

	Action	Time-frame	Effort	Cost
1.1.1	Establish safe target operating speeds as the basis for roadway design decisions.	**ST**	●	**$**
1.1.2	Study safety impacts of peak-hour contraflow operations on City streets and prioritize safety in decision making of possible changes.	**ST**	●	**$**
1.1.3	Update City traffic calming guideline to current best practices, including updating guidance on raised crossings on major streets.	**ST**	●●	**$**
1.1.4	Restructure the City's traffic calming program to better address documented speeding and safety issues and manage public requests.	**ST**	●●	**$**
1.1.5	Proactively collect speed data at High-Injury Locations, major streets, and other streets where crash data indicates speeding is a significant contributing factor.	**ST**	●	**$**
1.1.6	Partner with Hawai'i Department of Transportation (HDOT) to utilize aggregate movement data (e.g., Google data) to better understand speeds across the street network and prioritize areas for additional data collection.	**ST**	●	**$**
1.1.7	Implement speed reduction measures as part of roadway maintenance activities at: • High-Injury Locations. • School zones and streets without sidewalks.	**ST/MT**	●●	**$$**
1.1.8	Fund and implement speed reduction measures at the following locations: • High-Injury Locations that will not be addressed by 2040 by maintenance projects. • Priority streets identified through the traffic calming program	**ST/MT**	●●	**$$**

Exhibit A

	Action	Time-frame	Effort	Cost
1.1.9	Implement 25 miles per hour (MPH) speed limits on major streets in urbanized areas and on High-Injury Corridors.	ST	●	$
1.1.10	Use signal progression timing to address speeding at High-Injury Locations and on arterials.	ST/MT	●●●	$$

Goal 2: Support changes in the enforcement and adjudication process to reduce dangerous driving behaviors

	Action	Time-frame	Effort	Cost
1.2.1	Expand the Red-Light Safety Camera Enforcement program as provided by Act 30 (2020) and following the successful completion of the 2-year pilot program with the purpose of creating safety improvements at High-Injury Locations and system-wide.	ST	●●	$$
1.2.2	Establish a Speed Safety Camera Enforcement program as permitted by Act 112 (2024) - see 1.3.3 for more details on Act 112. Expand the Speed Safety Camera Enforcement when legislation allows, with the purpose of reducing speeding and improving safety at High-Injury Locations and system-wide.	ST	●●	$$
1.2.3	Support Honolulu Police Department's (HPD's) enforcement and investigation of and the Prosecutor's work in prosecuting more excessive speeding, reckless driving, and other high-risk traffic crime cases.	ST	●	$
1.2.4	Use education campaigns and enforcement to establish a cultural norm of strict adherence to the speed limit.	ST	●	$
1.2.5	Develop collaborative traffic safety grant applications focused on root causes of crashes.	ST	●	$
1.2.6	Work with the Judiciary to expand access to cell phone and vehicle computer data that can be used to investigate crashes.	MT	●●●	$
1.2.7	Work with the Judiciary to establish a lower threshold for excessive speed (or use bodily injury) in order to prosecute negligent injury and homicide cases and increase fines.	MT	●●●	$

Goal 3: Revise laws, policies, and procedures to support for safer speeds

	Action	Time-frame	Effort	Cost
1.3.1	Adopt a City ordinance to change the speed limit to 20 MPH on all local streets and in school zones.	ST	●	$$
1.3.2	Support State of Hawai'i (State) legislation that increase fines for speeding.	ST	●	$
1.3.3	Support State legislative changes to support the use of speed camera enforcement and prepare for implementation on High-Injury Locations and emerging areas where speed is a significant contributing factor. Act 112 (2024) allows for the installation of a Speed Safety Camera program in conjunction with Red-Light Safety Cameras.	ST	●	$

Sara's Law

In 2023, Sara Yara was struck and killed by a motorist as she and her sister walked in a marked crosswalk across Kapi'olani Boulevard on their way to McKinley High School. The driver was reported to have had over 200 traffic-related citations and violations at the time. Stricter penalties on irresponsible drivers may deter future similar tragedies.

One way the affected school and community members came together to safeguard their community was to work with the State Representative Scott Saiki, the Honolulu Prosecutor's Office, and others to find ways to better address the problem of habitual offenders of traffic laws by restricting their driving privileges, limiting their access to a vehicle, and providing for higher criminal penalties.

The State adopted Act 173 in 2024 to increase penalties for habitual driving without a license. "Sara's Law" will authorize the courts to confiscate and impound a vehicle as the maximum penalty for a third conviction of operating a vehicle without a license and increase the penalty to a Class C felony.



Exhibit A

Safe Streets Actions



The condition and geometric design of streets and intersections has a documented effect on safety. The number and width of travel lanes, pedestrian crossing treatments, traffic calming features, degree of separation between different travel modes, intersection controls, signal phasing, and level of visibility between users, among other factors, can all influence safety performance outcomes on our streets. Research shows that communities with more transit use, walking, bicycling, and less car-driving are safer for all road users. Streets can and should be designed and operated to prevent crashes and reduce injuries and fatalities when crashes do occur.

Goal 1: Use a data driven approach

	Action	Time-frame	Effort	Cost
2.1.1	Maintain the Vision Zero dashboard for critical traffic safety metrics, including geographic and social disparities, by routinely integrating new crash report data.	**ST**	●	**$**
2.1.2	Select proven and promising safety improvements based on specific crash types at High-Injury Locations and other problem areas, such as road diets and intersection treatments that reduce turning vehicle speeds.	**ST / MT**	●●●	**$$$**
2.1.3	Conduct before and after studies on projects to understand the impact of the change on crash factors and crash frequency.	**ST**	●●	**$**
2.1.4	Integrate High-Injury Locations into the workflow for data collection, funding, planning, design, and construction of rehabilitation of streets projects.	**ST**	●●	**$**
2.1.5	Pilot and evaluate innovative design strategies, including: • Low-cost solar-powered rectangular rapid flashing beacons (RRFBs) mounted on conventional sign posts. • Raised crossings on major streets, to build on the promising evaluation conducted as part of this Plan and described in Chapter 5.	**MT**	●●	**$$**

Exhibit A

Goal 2: Fund and use quick-build strategies to install roadway safety features

	Action	Time-frame	Effort	Cost
2.2.1	Fund and implement a crosswalk upgrade program that implements quick-build improvements, including the following: • RRFBs. • Raised crosswalks. • Speed humps near crosswalks. • Pedestrian crossing islands. • Curb extensions and no parking zones on approach to crosswalks. • Leading Pedestrian Intervals. • No Right Turn on Red. • Centerline hardening/medians. • Turn wedges.	ST	●●	$
2.2.2	Support community-based projects at High-Injury Locations.	ST	●	$
2.2.3	Procure a master agreement to install quick-build improvements through a private contractor.	ST	●	$$
2.2.4	Establish a City quick-build focused construction team within Department of Transportation Services (DTS) to increase the volume and pace of quick-build project delivery.	MT	●●●	$$
2.2.5	Identify appropriate streets for limiting vehicle access and explore temporary and pilot applications, including Open Streets events and use of quick-build materials for more permanent changes.	MT	●●	$

Goal 3: Invest in walking, bicycling, and transit to grow their mode share

	Action	Time-frame	Effort	Cost
2.3.1	Implement pedestrian crossing improvements that ensure slower pedestrians can safely cross.	ST	●●	$
2.3.2	Implement pedestrian safety improvements and transit stop siting adjustments to ensure safe and convenient access to transit.	ST	●●	$$

Exhibit A

	Action	Time-frame	Effort	Cost
2.3.3	Provide improved transit stop infrastructure such as lighting, shelters, and benches at high-use stop locations.	**ST**	●●	**$$**
2.3.4	Conduct analyses of high transfer transit stop locations and implement changes such as increased dwell time, schedule modifications, increased bus frequencies, signal modifications, and new pedestrian crossings. The aim is to reduce the risk of people rushing or behaving dangerously to access stops.	**ST**	●●	**$**
2.3.5	Identify lighting deficiencies at High-Injury Locations and develop a plan to implement priority improvements by 2040.	**ST**	●●	**$$**
2.3.6	Dedicate additional funding and staff to walkway and bikeway projects to leverage historic levels of available federal transportation funding.	**ST/MT**	●●	**$$**
2.3.7	Implement O'ahu Pedestrian Plan Tier 1 proposed walkway facilities by 2040 to create a comprehensive walkway network to connect people to transit, schools, and major destinations. Building out the proposed Tier 1 walkway projects would require approximately $12 million in total annual funding.	**MT**	●●●	**$$$**
2.3.8	Implement O'ahu Bike Plan Priority 1 proposed bikeway facilities by 2040 to create a low-stress bikeway network. Building out the proposed Priority 1 bikeway projects would require approximately $5 million in total annual funding.	**MT**	●●●	**$$$**
2.3.9	Implement transit priority improvements, including dedicated lanes, signal priority, and intermodal connections, to make transit a more competitive and attractive transportation mode. The DTS's forthcoming Honolulu Transit Comprehensive Operations Analysis plan will provide prioritized actions.	**MT**	●●●	**$$$**
2.3.10	Explore the feasibility of roadway use and parking pricing policies that would support the shift to sustainable transportation modes.	**MT**	●●	**$**

Exhibit A

Goal 4: Integrate safety into capital and repaving projects

	Action	Time-frame	Effort	Cost
2.4.1	Provide safe and conveniently placed crosswalks, including through installation of new crosswalks, consistent with the Complete Streets Design Manual. Marked crosswalks should be spaced so that people can cross at preferred locations and avoid risks associated with crossing outside of marked crosswalks.	**ST/MT**	●●	**$$**
2.4.2	Prioritize safety projects in the capital improvement program.	**ST**	●●	**$$**
2.4.3	Prioritize safety over vehicular delay considerations in the project planning and design process.	**ST**	●●	**$**
2.4.4	Utilize multi-disciplinary teams throughout the project processes to ensure all safety improvements are considered.	**ST**	●	**$**
2.4.5	Increase funding levels for rehabilitation of streets program to ensure that safety elements are implemented with all projects.	**ST/MT**	●●	**$$**
2.4.6	Update the Complete Streets Checklist to include High-Injury Locations and include safety considerations and an in-house process for integrating lane reconfiguration as part of multi-lane projects.	**ST**	●	**$**

Exhibit A

Goal 5: Revise laws, policies, and procedures to support safe streets

	Action	Time-frame	Effort	Cost
2.5.1	Adopt a City ordinance, consistent with the State's Vision Zero law, specifying that safety is the first priority for the City, and will take precedence when determining trade-offs related to parking and travel delay.	**ST**	●●	**$**
2.5.2	Update the Complete Streets Design Manual and internal DTS guidance documents to add and provide for expanded use of safety tools, including the following: • Centerline hardening. • Curb extensions. • In-street Pedestrian Crossing signs. • Leading Pedestrian Intervals. • Leading Bicycle Intervals. • No Right Turn on Red. • Protected intersections. • Protected turn phasing. • Raised crosswalks. • Turn wedges. • Speed humps.	**ST**	●	**$**
2.5.3	Amend City ordinance to provide more clarity on where people are permitted to ride bicycles on sidewalks and expand where bicyclists can legally ride on sidewalks to include streets where bikeway infrastructure is absent.	**ST**	●●	**$**
2.5.4	Consider the safety and delay impacts of traffic signal upgrades and operations changes on all modes.	**ST**	●	**$**
2.5.5	Support revision to the traffic code (Revised Ordinances of Honolulu and Hawaii Revised Statutes) to provide for expanded pedestrian rights and responsibilities that provide for safety, transportation equity, and accessibility.	**ST**	●	**$**

Exhibit A

Safe People Actions



People must practice safe behaviors and share responsibility for the impacts of their choices. The transportation system must safely serve all people using the street including people who walk, roll, bike, take transit, drive, or use other modes of travel. Safe People actions will play a key role in achieving Vision Zero. Actions range from fostering safe user behavior to building organizational capacity to implement safe streets and speeds.

Goal 1: Foster a culture of shared kuleana for traffic safety through education and outreach activities

	Action	Time-frame	Effort	Cost
3.1.1	Create and widely deploy information campaigns, using strategies such as bumper stickers, yard signs, and large vehicle wraps, that raise awareness about high-risk behaviors and every user's role in keeping each other safe, including the following: • Drivers stopping for pedestrians in crosswalks, including unmarked crosswalks. • Driving the speed limit and slowing down around pedestrians and bicyclists.	**ST**	●	**$**
3.1.2	Create and widely deploy education campaigns to raise awareness about 20 MPH local streets and school zones, if legislation is adopted establishing such.	**ST**	●	**$**
3.1.3	Create and deploy an information campaign that explains the safety benefits of infrastructure changes, for the public, government officials, and other decision-makers to develop better understanding and support for potentially controversial safety projects.	**ST**	●	**$**
3.1.4	DTS and HPD partner to integrate enforcement in education campaigns and pursue grant funding to expand the work.	**ST**	●	**$**
3.1.5	Create and deploy education campaigns targeted at specific groups and demographics related to key safety concerns (e.g., young male drivers, youth e-bike riders).	**ST**	●	**$**

	Action	Time-frame	Effort	Cost
3.1.6	Partner with HDOT to update drivers' education curriculum to incorporate new roadway design features and how to safely operate a vehicle around all roadway users.	MT	●●	$
3.1.7	Expand the City's pedestrian and bicycle education programs to more systemically address mobility education through different levels of schooling, in partnership with the State and HPD.	MT	●●	$

Goal 2: Support funding and development of Safe Routes to School plans, programs and infrastructure

	Action	Time-frame	Effort	Cost
3.2.1	Fund and develop a Safe Routes to School (SRTS) Master Plan for elementary, middle, and high schools that creates O'ahu-wide and school specific strategies for improving school transportation safety.	ST	●	$
3.2.2	Fund and develop school-specific SRTS Plans, starting with schools with disproportionate crash burden and serving the largest concentrated Title VI/ Environmental Justice populations.	ST	●	$$
3.2.3	Use quick-build crosswalk and traffic calming projects on school routes to improve safety and to engage students, parents, school staff, and the broader community on the importance of transportation safety around schools.	ST	●●	$$

Goal 3: Integrate safety into land use and private development permitting

	Action	Time-frame	Effort	Cost
3.3.1	Update the Honolulu Transportation Impact Assessment Guide to include a Vision Zero checklist.	ST	●	$
3.3.2	Require major private development to utilize the updated Transportation Impact Assessment Guide and to implement recommended safety improvements.	ST	●	$
3.3.3	Site City-funded affordable housing investments and temporary shelters in areas with high-quality transit service and multimodal infrastructure.	MT	●●	$$

Exhibit A

Goal 4: Strengthen organizational capacity

	Action	Time-frame	Effort	Cost
3.4.1	Establish a Vision Zero Task Force composed of DTS, HDOT, and HPD.	ST	●	$
3.4.2	Add Vision Zero implementation to the Complete Streets Core Team responsibilities.	ST	●	$
3.4.3	Provide routine City and consultant training on current and best practices for Vision Zero and traffic safety improvements.	ST	●	$
3.4.4	Build capacity for staff to pursue federal funding opportunities.	ST	●	$
3.4.5	Expand the Complete Streets/Vision Zero planning branch of DTS to grow the City's dedicated staff.	MT	●●●	$$

Goal 5: Support our diversity of roadway users

	Action	Time-frame	Effort	Cost
3.5.1	Partner with community and advocacy organizations to engage with kūpuna (elders) to understand their safety concerns and needs.	ST	●	$
3.5.2	Work with local organizations to develop strategies to support the safety of unhoused people on our streets.	ST	●●	$
3.5.3	Include immigrant populations during outreach to gain understanding of social norms and community support structures.	ST	●	$
3.5.4	Provide safety information to military installations to support responsible driving on and off base.	ST	●	$
3.5.5	Design and operate streets where people with visual and mobility disabilities are considered the typical user.	ST/MT	●●	$$

Exhibit A

Post-Crash Care



When crashes do occur, people involved in crashes must be supported and immediately receive high quality care. Looking ahead, police and road managers must learn from the crash and implement changes to prevent similar crashes from happening again. In addition to sustaining responsive urgent medical care and transport, a comprehensive documentation system that confirms the factors that contributed to the crash creates a better safety landscape and can inform a response by design, program, policy, and justice experts.

Goal 1: Improve the quality of crash data

	Action	Time-frame	Effort	Cost
4.1.1	Establish a multi-disciplinary Crash Response Team to analyze fatal crashes and recommend safety interventions.	ST	●	$
4.1.2	Improve the crash reporting system to ensure consistent and reliable crash data.	ST	●●	$
4.1.3	Create a shared understanding of how difficult it is to understand crash patterns when data are missing (e.g., motor vehicle action preceding crash) and develop a strategy for reducing missing data in crash reports.	ST	●	$
4.1.4	Support State legislation to revise the criteria for Major crash reports to be based on injury, instead of property damage. The use of Minor crash reports for non-injury crashes would reserve Major crash reports and the extensive staff time required to complete them for more serious crashes.	ST	●	$

Goal 2: Take care of people who have been affected by crashes

	Action	Time-frame	Effort	Cost
4.2.1	Explore ways to better acknowledge or remember those whose lives have been lost on our roadways.	ST	●●	$

Safe Vehicle Actions



Safety measures built into vehicles can protect people both inside and outside of a vehicle, with active safety technologies to prevent crashes, and passive equipment or designs that minimize the harm from crashes. Although the regulatory lever of vehicle design lies with federal rule-making and corresponding manufacturing choices, procurement strategies and increased awareness of how vehicles size is related to crash outcomes can be acted upon locally.

Goal 1: Prioritize Safer Vehicles

	Action	Time-frame	Effort	Cost
5.1.1	Explore opportunities for utilizing cameras on board transit vehicles for safety studies.	**ST**	●	**$**
5.1.2	Support legislation changes to create a progressive fee structure based on vehicle weight taxes to incentivize lighter vehicles.	**ST**	●●●	**$**
5.1.3	Review and revise City policies and practices in procurement of City vehicles, including buses, to incorporate crash prevention technologies such as: autonomous emergency braking, lane change alerts, unobstructed sight lines from vehicle interior, out-of-vehicle cameras, speed limiters, and side guards.	**ST/MT**	●●	**$$**
5.1.4	Support City staff and HPD use of smaller vehicles and alternatives to driving for daily operations and staff transportation, limiting assignments of heavy vehicles based on job classification.	**ST/MT**	●●	**$$**

Goal 2: Collaborate with other agencies to require safety improvements in vehicles

	Action	Time-frame	Effort	Cost
5.2.1	Support legislation to integrate ignition locks in fleet manufacturing that lock engine or limit speeds of impaired drivers.	**ST**	●●	**$**
5.2.2	Conduct an assessment of O'ahu needs in preparation for autonomous and connected vehicles and infrastructure.	**MT**	●●	**$**



Exhibit A

5

Our Work Has Started

Through this planning process, we have already started incorporating Safe Systems decision-making into City and County of Honolulu projects and processes, learning along the way from our data and from other cities doing similar work.

Safety Projects

As we have uncovered the underlying causes of O'ahu's traffic safety crisis through detailed analysis and multi-faceted engagement, we have started advancing new safety strategies. This work has advanced thanks to the City and County of Honolulu's (City's) Complete Streets Core Team's commitment to safety and multimodal transportation. Complete Streets is a combined effort of the Departments of Design and Construction, Facility Maintenance, Planning and Permitting, and Transportation Services.

This section describes work that has been underway during the development of this plan. It has been informed by the Fiscal Year 2023 (FY23) Complete Streets Annual Progress Report, required by the City's Complete Streets ordinance (ROH 14-18).

Exhibit A

Stop for Pedestrians Awareness Signs and Information Campaign

Hawai'i State Law requires drivers to stop for people crossing the street at a crosswalk, regardless of whether it is marked. Driver failure to stop is a main factor in crashes involving pedestrians, so eliminating that behavior is essential to improving safety. In 2023, the Department of Transportation Services (DTS) collected data at nine uncontrolled crosswalk locations across the island and found that, on average, only 53% of drivers stop for people who have signaled their intent to cross the street by stepping off the curb and into the crosswalk.

DTS installed signs that document the percentage of drivers stopping for pedestrians at these unsignalized crosswalks. In coordination with sign installation, DTS deployed an informational campaign through local news media, social media, and bumper stickers to raise driver awareness of the legal responsibility and safety importance of stopping for pedestrians. DTS conducted two rounds of additional data collection at the nine locations, and the overall rate of drivers stopping for pedestrians increased to 62% and 60%, respectively. The modest increase in the percentage of drivers stopping for pedestrians suggests a positive impact from the awareness campaign, but also makes clear the need for additional improvements.



Vehicles Stopping for Pedestrians Pre- and Post-Installation

Location	Pre-Installation (% Stopping)	Round 1 Post-Installation (% Stopping)	Round 2 Post-Installation (% Stopping)
California Ave at Makani Ave	68%	78%	81%
Kailua Rd at Ho'olai St	64%	50%	60%
Kapolei Pkwy at Kūnehi St	44%	69%	61%
Moanalua Rd at Ualo St	60%	48%	46%
N King St at Harvey Lane	55%	76%	70%
Punchbowl St at Miller St	64%	70%	78%
Renton Rd at Pahikā St	55%	72%	60%
University Ave at Kuilei St	36%	57%	50%
Lunalilo Home Rd at Kaumakani St	29%	60%	47%
Overall Average	**53%**	**62%**	**60%**

Exhibit A



Stop for Pedestrians Awareness sign

Rectangular Rapid-Flashing Beacon Pilot Installation

The City has several Complete Streets projects in design that will include rectangular rapid-flashing beacons (RRFBs), a safety feature that increases the visibility and driver awareness of crossing pedestrians. The O'ahu Vision Zero Action Plan (Plan) also identifies the need for RRFBs at a number of High-Injury Location crossings. The RRFB beacons remain "dark" until a pedestrian pushes the "call" button to activate the amber colored flashing lights. The lights flash rapidly in an irregular flash pattern that is similar to emergency flashers on police vehicles. The flashing lights are intended to catch the driver's attention that a pedestrian is crossing or attempting to cross the street and reinforce the driver's duty to stop for pedestrians. These can result in higher compliance with the law and a reduction in crashes up to 50%.

The City recently updated its uncontrolled crosswalk guidelines to include RRFBs as the appropriate safety tool for street crossings with multiple lanes and higher traffic volumes. Based on the updated guidelines, RRFBs will be needed at a significant number of pedestrian crossings on City streets. In the past, it has taken the City five to seven years to deliver standard RRFB projects at a cost of approximately $500,000 per location. The duration and cost are due to the complexity of design, project approval processes, and material and construction costs.

To reduce the time and cost of RRFB implementation, the City has initiated a pilot program to install solar-powered RRFBs on standard sign posts. The pilot will enable the City to trial the new equipment type and installation method and collect data for proof of concept and wider application. In FY23, the City received a grant of $30,000 from AARP for the upgrade of uncontrolled crosswalks at North School Street at Ahonui Street in Kalihi and Date Street at La'au Street in Mō'ili'ili. Planning and design began in FY23, and construction is expected to be completed by the end of 2024.

Stop Compliance Study at Raised Crosswalks

Starting in 2019, the Hawai'i Department of Transportation (HDOT) took action to reduce speeds and improve pedestrian safety at many locations across the O'ahu by installing raised crosswalks at existing unsignalized crosswalks. Raised crosswalks provide a gradual hump to slow vehicles. The raised crosswalks can reduce pedestrian crashes by 45%* by improving the visibility of pedestrians in crosswalks and providing drivers a physical reminder to reduce vehicle speed. HDOT has installed more than 50 raised crosswalks on O'ahu's state roadways, including on Kalihi Street in Kalihi, Fort Weaver Road in 'Ewa Beach, and Farrington Highway in Wai'anae.

HDOT partnered with the City to install raised crosswalks on Pensacola Street at four crossing locations fronting McKinley High School. HDOT also partnered with DTS to install speed humps near crosswalks on Pāpipi Road near 'Ewa Beach Elementary School on Kapi'olani Boulevard in Kaka'ako, and other locations.

The Vision Zero team conducted a study of drivers' compliance stopping for pedestrians before and after raised crosswalk installations at several locations to assess whether this safety feature is suitable to include as a standard safety treatment in the City's uncontrolled crosswalk guidelines.

The raised crossings resulted in multiple benefits:

- The percent of drivers stopping for pedestrians significantly increased from 66% to 89%.
- The average speed of vehicles across study locations dropped by 4 miles per hour (MPH).
- The percentage of drivers exceeding the speed limit decreased significantly with reductions in top speed and lower prevailing speeds.

How We Measure Stop for Pedestrians Compliance

With the support of the Plan consultant team, DTS developed a standard methodology to collect information about driver stop for pedestrians compliance. During the study, observers watch vehicles to see how they respond to a staged pedestrian stepping into the crosswalk when cars are far enough away to stop for them.

The observer at the location collects the following information for each crossing:

1. Number of cars failing to stop (by lane where the crossing included multiple lanes).
2. Number of cars stopping (by lane where the crossing included multiple lanes).



* Federal Highway Administration. (2013). "Raised Pedestrian Crossings" in PEDSAFE: Pedestrian Safety Guide and Countermeasure Selection System.

Exhibit A

Pedestrian and Bicycle Counters

The City has been installing active transportation monitors on sidewalks, bikeways, and multi-use paths at locations around O'ahu. The monitors count people biking and walking which is important data for project prioritization and planning. Furthermore, as the City continues to invest in Complete Streets and multimodal transportation facilities, the data will help understand how the facilities are used and their contribution to our transportation system. The count monitoring data has the potential to allow for future exposure-based safety analysis (that considers the number of street users in relation to crashes). The installation of pedestrian and bicycle monitoring devices was funded in part by the O'ahu Metropolitan Planning Organization and the United States Federal Highway Administration.

Campaign Materials

Speed is a contributing factor in one-third of traffic fatalities on O'ahu. Speeding is the main concern that the DTS receives from community members. The City's data indicates the speeding problems are most common on major streets. While speeding issues are not as common on residential streets, this is where the majority of the complaints DTS receives are focused on. To increase awareness of the impact of speeding, and to provide a resource that responds to these safety risks and community demands for slow speeds, DTS developed and intends to widely deploy campaign materials and a safe driver pledge. The campaign materials include bumper stickers and lawn signs.





Exhibit A

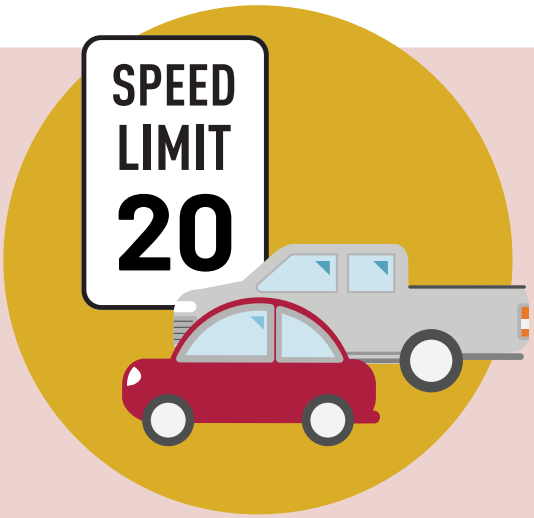
Honolulu City Council Resolution

In January 2024, City Council adopted Resolution 23-271, stating an official call for lower speed limits on residential streets. This resolution urged the State Legislature to amend HRS 291c-107 to remove the requirement for an Engineering Study when setting a maximum speed that lowers the existing speed limits and urged DTS to consider 15 MPH speed limits "throughout the City's residential areas."

Advancing a 20 MPH Default Speed Limit on City and County Streets

There has been growing community consensus that the prevalent 25 MPH speed limit is too high on many streets. The Vision Zero survey (described further in Chapter 3) of O'ahu residents found that "people driving too fast" was the top safety concern, and the vast majority of complaints DTS receives are for speeding, with most of these concerning local streets. Several existing plans, policies, and codes recognize the importance of proactively encouraging safe speeds. In particular, the December 2020 Report on ACT 134 explicitly calls for speed enforcement and speed management programs, and the 2022 O'ahu Pedestrian Plan and 2016 Complete Streets Design Manual both emphasize the importance of lower speed limits based on street designs that match lower target speeds. This Plan recommends legislation to amend the City ordinances to change the default speed limit to 20 MPH and require justification for a higher maximum speed.

Why Twenty is Plenty



Vehicular speed is a critical factor for survival in crashes – the higher a driver's speed, the lower the probability of a victim's survival. Injuries for vulnerable road users increase in severity as vehicle speeds increase. When a person is struck, the vehicle's kinetic energy is transferred to the human body, and the impact is a function of the square of the vehicle's speed. The human tolerance for being struck by a well-designed car will be exceeded if the vehicle is traveling over approximately 20 mph. In fact, evidence is mounting that pedestrians may survive the impact of a motor vehicle crash only at speeds of 20 mph or less.

Many US cities have taken a "safe systems" approach to setting speed limits to reduce the frequency and severity of speeds by reducing speed limits on non-arterial streets to 20 MPH. Those cities include Denver, New York City, Portland, Seattle, and many others. Together these cities have demonstrated that slower speeds and reduced crashes can be achieved through speed limit changes alone.

Exhibit A

Complete Streets Projects Planned for High-Injury Locations

The City prepares Complete Streets plans for upcoming projects, including street rehabilitation projects. Consistent with the Complete Streets ordinance and the Honolulu Complete Streets Design Manual, these plans typically include safety features such as crosswalk improvements, protected bike lanes, traffic calming, lane reconfiguration, curb extensions, and lighting improvements. The City has developed Complete Streets plans for several corridors identified by this Plan as High-Injury Locations, and these are listed below. They are in various stages of design or implementation.

- **Ala Wai Blvd** / Speed limit reduction, curb extensions, pedestrian crossing beacons, new crosswalks, two-way protected bike lane
- **Kamehameha Hwy (Kāneʻohe)** / Sidewalk improvements, pedestrian crossing beacons, bike lanes
- **Keʻeaumoku St** / Pedestrian crossing beacons, pedestrian crossing islands, new pedestrian crossings, protected bike lanes, dedicated turn lanes
- **Kuʻulei Rd at Aulike St** / New traffic signal, curb extensions, protected bike lanes
- **Liliha St** / Pedestrian crossing beacons, lane reduction, curb extensions
- **Moanalua Rd at Ualo St** / New traffic signal with crosswalks
- **North School St** / Pedestrian crossing beacons, pedestrian crossing islands, curb extensions, bike lanes along sections, traffic calming
- **North King St** / Pedestrian crossing beacons, pedestrian refuge islands, curb extensions, bike lanes, buffered/protected bike lanes
- **Nuʻuanu Ave** / New sidewalks, pedestrian refuge islands, pedestrian crossing beacons, lane reduction, new curb ramps, curb extensions, traffic calming
- **Oneawa St at Uluniu St** / Curb ramps, curb extensions
- **Waimano Home Rd at Kuala St** / New pedestrian crossing
- **Kūhiō Avenue** / Dedicated bus lane, allows bicycles and trucks

Exhibit A

Recently Constructed Projects at High-Injury Locations

The City has regularly added innovative safety features and planned priority multi-modal improvements into street repaving and other projects. This is especially important to progress on multi-lane arterials which are overrepresented in Vision Zero crashes. Project descriptions from some completed projects at High-Injury Locations are listed below.

- **North King St at Richard Ln** / In November 2022, the City completed installation of its second RRFB to enhance pedestrian safety on North King Street at Richard Lane. In addition to the RRFB, the project constructed a median island which limits pedestrian exposure when crossing the road and allow pedestrians to focus on crossing one direction of traffic at a time.
- **King Street** / Completed in December of 2020, the City installed bus-only lanes on King Street between Dillingham Boulevard and Punchbowl Street. Bus-only lanes allow right-turning vehicles and bicycles. The project has improved bus speeds through this core downtown corridor while improving safety for bus passengers.
- **Ward Ave** / In May 2021, new protected bike lanes along Ward Avenue from South King Street to Ala Moana Boulevard were opened to the public. The bike lanes run in the mauka (toward the mountain) and makai (toward the sea) directions on each side of the street and provide a direct connection to the King Street protected bikeway. A three-foot buffer lined with delineator posts defines and protects the bikeway, and green painted crossbikes mark conflict zones at driveways and intersections.
- **Pensacola St** / In September 2020, a two-way protected bike lane on Pensacola Street from Wilder Avenue to Kapi'olani Boulevard was opened to the public. The bike lanes run in the mauka and makai directions on the Diamond Head side of the street and connect to the King Street protected bikeway. A three-foot buffer





LEFT: N King St at Morris Lane Pedestrian Refuge Island. RIGHT: Protected bikeway on Ward Avenue.

lined with delineator posts defines and protects the bikeway with green stripes marking conflict zones at driveways and intersections. In November 2023, HDOT in partnership with DTS, installed raised crossings on Pensacola Street at Elm Street, Rycroft Street, Ho'olai Street, and Kamaile Street. Combined, the improvements have reduced speeds, improved uncontrolled pedestrian crossings, and created a dedicated and safe space for bicycling.

- **California Ave** / In June 2021, the Department of Facility Maintenance installed an interim pedestrian refuge island along the busy and wide stretch of California Avenue near Makani Street. The interim pedestrian crossing improvement, designed by DTS traffic engineering staff, uses low-cost modular materials to create a median space that limits pedestrian exposure and allows pedestrians to focus on crossing one direction of traffic at a time. Permanent crosswalk improvements, a potential lane reconfiguration, and sidewalk upgrades are programmed, pending the availability of funds.
- **Nu'uanu Ave** / In July 2017, pilot curb extensions were constructed along North Pauahi Street at Nu'uanu Avenue, Smith Street, and Maunakea Street. The pilot project allowed for design testing and adjustments, and a safety evaluation found that the features reduced crashes at those intersections by nearly 40%. Curb extensions improve safety by reducing pedestrian crossing distances, enhancing visibility between drivers and pedestrians, and slowing the speed of turning vehicles. In 2021, as part of a roadway repaving project, the curb extensions along North Pauahi Street were upgraded with higher-quality materials. The curb extensions feature brick-colored pavers and decorative green metal bollards to protect the expanded space and tactile warning devices for pedestrians with low vision.

Red-Light Safety Camera Enforcement Program Pilot

Red-light running is a significant cause of crashes, injuries, and deaths at signalized intersections. HDOT, in partnership with Honolulu Police Department and DTS, launched the Red-Light Safety Camera Enforcement program to provide automated enforcement of red-light violations. The pilot program was installed at ten intersections on O'ahu, including seven intersections identified as High-Injury Locations by this Plan. The pilot has proven highly successful with a pre/post review of crash data for all sites showing an overall 47% reduction in crashes after the red-light cameras were installed. The High-Injury Locations included in the program are:

- Kapi'olani Blvd/ Kamake'e St
- N School St/Likelike Hwy
- Vineyard Blvd/ Pālama St
- Vineyard Blvd/Liliha St
- Vineyard Blvd/ Nu'uanu Ave
- S King St/Ward Ave
- Beretania St/ Pi'ikoi St

The fines collected can only be used for the establishment, implementation, operation, oversight, repair, and maintenance of the red-light safety camera enforcement system. As the pilot period has now been successfully completed, red-light cameras are a tool for future use at other locations.

Exhibit A

High-Injury Locations

The High-Injury Locations described in detail in Chapter 2 are a core focus of this Plan. These are the streets and intersections where safety needs are greatest and where our actions can achieve the most progress towards acheiving Vision Zero goals. Our method for selecting the most suitable safety treatments for High-Injury Locations takes into consideration location and crash characteristics. Based on these conditions at each High-Injury Location, a short list of proven and promising safety tools are recommended for consideration during project scoping. As the City advances with the implementation of safety projects to address High-Injury Locations, the analyses conducted during this planning process will help streamline the design.

The process for recommending potential project elements and phasing is broken out into three steps:

- **Document High-Injury Location characteristics** by mapping out key attributes about the roadway that are relevant for choosing a safety feature. This includes key factors including: the number of lanes, intersection controls, pedestrian crossing treatments, and how the location is prioritized under other existing plans such as the O'ahu Pedestrian Plan and the O'ahu Bike Plan.
- **Study the frequently occuring Vision Zero crashes** at that location and define the most commonly occuring crash types and contributing factors.
- **Identify proven and promising safety features that effectively address safety needs** within the roadway context . Different safety features address specific street safety issues and are not suitable for all types of roadways. DTS will recommend safety features best suited for each High-Injury Location.

Safety Feature Toolkit

DTS created a Safety Feature Toolkit which builds on the Complete Streets Design Manual to include safety rationale, decision-making guidance, and new safety features. It is a resource for selecting safety elements for future projects, based on reported effectiveness to reduce the types of crashes that are happening islandwide and at specific locations.



6

Our Commitment

The City and County of Honolulu is changing. For decades, transportation planning, design, operations, and maintenance have been largely focused on moving cars as efficiently as possible. Safety has been second priority to maintaining traffic flow with hesitation that safety improvements could result in longer travel times. O'ahu has a strong history of transit, walking, and bicycling, and in recent years, the City and County of Honolulu (City) has been focusing on building more transportation options through major transit investments and bicycle and pedestrian improvements. These investments provide better, more sustainable options and make a safer transportation system for all.

This planning process has illuminated that our transportation staff are ready to work together with federal, state, regional, and community-based partners to move away from conventional safety assumptions, toward Safe System principles that provide a wrap-around holistic approach to moving people safely.

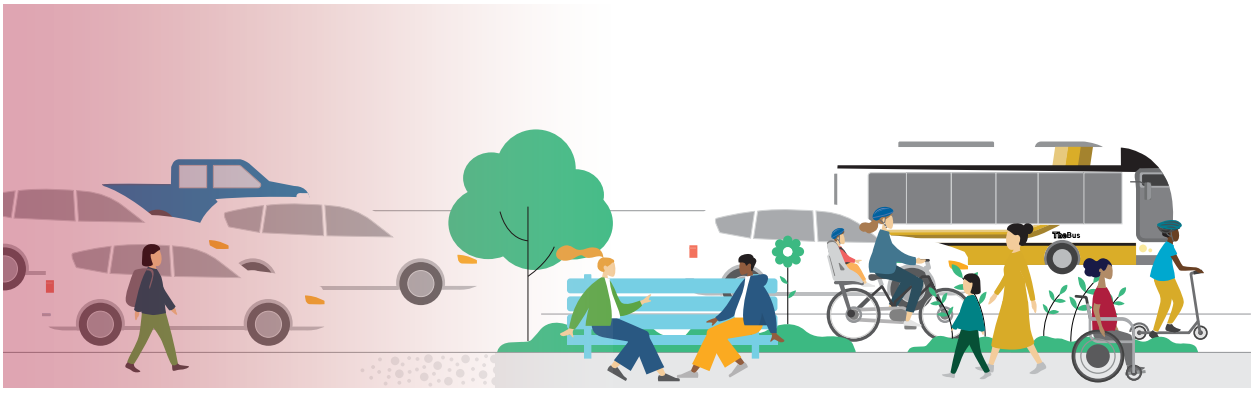


Exhibit A

Process

We have shifted how we think about safety. We have moved towards a proactive approach, that acknowledges that people make mistakes. Our Safe System approach uses design, enforcement, post-crash care, and careful decision-making to create a safety net that prevents crashes from having severe or fatal outcomes.

Safe System Principles - A Change in Approach





Exhibit A

Timeline to Zero Deaths

Based on community input, City leadership's readiness to act as stated in its 2018 Vision Zero resolution, the State of Hawai'i's commitment to support the City's safety goals, and the United States Department of Transportation's ambitious policy and funding commitment, our target timeline to get to zero traffic deaths is 2040. Our slope is steep, and we acknowledge the closer we get to our target, the harder it will be to reach. Meeting the target will require $44M-$48M annually and $708M-$755M over the course of the next sixteen years.

We began with the adoption of a transportation safety culture and will stay on course with a long-term commitment to accelerate progress, even as we face an uncertain future in transportation, which undoubtedly will include an increasingly older population, and changes in travel patterns with environmental, energy, and technology influences.

This target requires strong political resolve to integrate potentially unpopular tradeoffs into all decisions, to implement systemic safety actions to protect vulnerable road users, reduce dangerous driving behavior, and to make major safety improvements at High-injury Locations. For every action we take, and every decision we make, we will work with the intention of saving lives. We will monitor our work by collecting the data necessary to understand whether we are staying on target and make changes in either the target year or the actions accordingly if we learn we are not.

The timeframe assumes City leadership will build on its momentum by continuing to integrate safety into decisions about project prioritization, project scoping, and regular maintenance and operations. The share of our work plan's budgets will continue to tip away from vehicular capacity enhancements and toward safety and multimodal projects. If funding is not made available to scale up human and budget resources, the turn toward zero traffic fatalities and serious injuries will take longer.

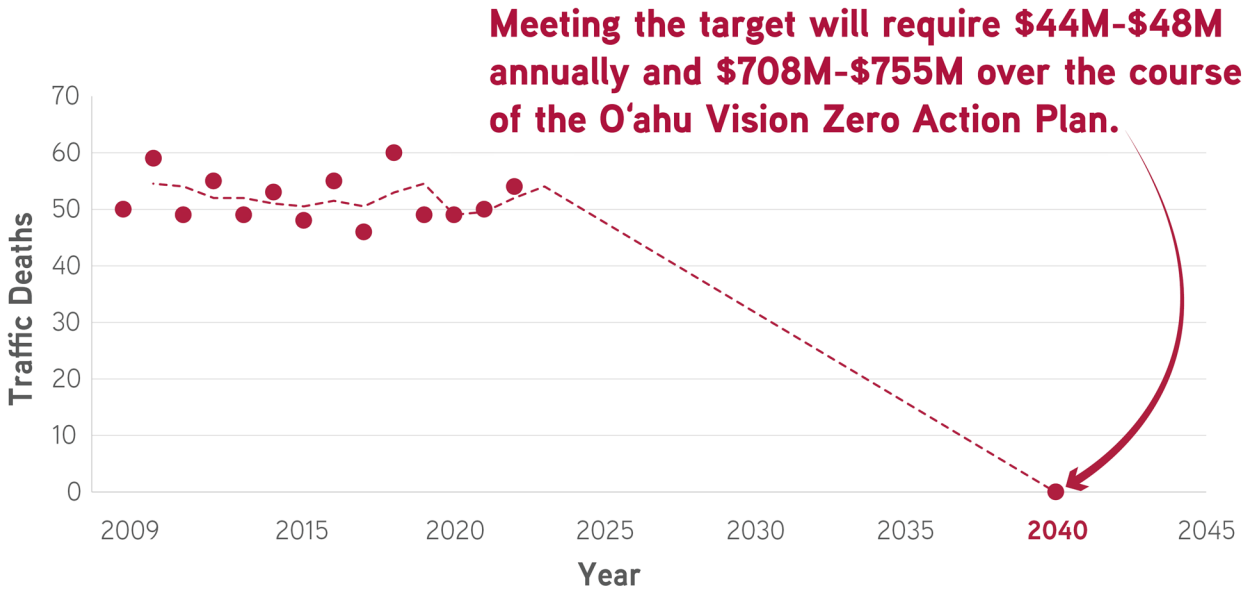


Exhibit A

Organization

The City's Vision Zero Coordinator has responsibility to oversee the implementation of this Plan. This civil service position also helps advance the City's multimodal goals as a project manager for preliminary engineering projects, including: Complete Streets, rail access, pedestrian facilities, traffic controls, parking management, multimodal transportation studies, and transportation planning and design. Consistent with the Complete Streets approach outlined in Revised Ordinances of Honolulu Chapter 14, Article 18, the position develops a comprehensive approach to balance competing uses of limited public rights-of-way, curb space, and roadway shoulders in an equitable manner.

The Complete Street Core Team, comprised of the City departments of Design and Construction, Facility Maintenance, Planning and Permitting, Transportation Services, and other partner City departments, and overseen by the Complete Streets Administrator (described in detail in Chapter 3), will be responsible for achieving Vision Zero. The Vision Zero Coordinator will be responsible for providing routine updates to the Complete Streets Core Team on progress on the actions identified in this Plan.

In the future, the Complete Streets Planning/ Vision Zero Branch of DTS should be expanded to better coordinate and advance the many actions needed to end traffic fatalities.

Finally, the Vision Zero Coordinator will be responsible for providing regular updates on progress to the Vision Zero Task Force, an extension of this Plan's Project Steering Committee.

Exhibit A

Critical Projects and Programs

This Plan outlines an extensive set of actions in Chapter 4. Each action will require investment, and this section summarizes and prioritizes some of the most critical projects and programs and the estimated dedication of funds needed. Before describing the priority projects and programs, it is important to note that the High-injury Locations described in Chapter 2 are tiered based on level of safety need and, as such, the Tier 1 High-injury Locations (HIL) are the highest priority (17 HIL Corridors and 12 HIL Intersections). Tier 2 High-injury Locations (41 HIL Corridors and 81 HIL Intersections) are second.

The following tables show high-level funding needs for the City to meet its target timeline.

Priority 1 Actions

Description			Annualized Cost (000)	Total Cost to 2040 (000)
Quick, High-Impact Projects	All HIL Quick-Build Program, including the O'ahu Pedestrian Plan High Pedestrian Injury Intersections and Corridors	Intersections (93)	$620	$9,300
		Corridors (39 miles)	$2,600	$39,000
	Quick-build high-priority walkway and bikeway projects		$2,000	$30,000
	Expand planning, design, and implementation staff to deliver projects (*does not include equipment costs)		$750	$11,250
Longer-Term, High-Impact Projects	All HIL Full-Build Program through stand-alone capital and roadway rehabilitation projects – including the O'ahu Pedestrian Plan High-Pedestrian Injury Intersections and Corridors	Intersections (93)	$3,100-$6,200	$46,500-$93,000
		Corridors (39 miles)	$20,800	$312,000
Total			$27,270 - $30,370	$448,050 -$494,550

Priority 2 Actions

Description	Annualized Cost (000)	Total Cost to 2040 (000)
Traffic calming program	$1,000	$15,000
Educational information campaigns	$500	$7,500
O'ahu Pedestrian Plan (2022) Tier 1 walkways implementation	$11,000	$167,000
O'ahu Bike Plan (2017) Priority 1 bikeway implementation	$5,000	$71,000
Total	$17,500	$260,500

Exhibit A

Holding Ourselves Accountable

The ultimate target of this Plan's implementation is zero fatal or serious injury crashes. The City will track and report on this metric annually.

Additionally, there are opportunities to incorporate more proximal performance measures. By keeping track of proximal measures, we can course correct more nimbly when they are going in the wrong direction.

These measures are both outcome-based and output-oriented, and they will help us learn from our efforts by keeping track of the behaviors and road design changes that influence the frequency and severity of crashes. The City will share the highlighted findings on its Vision Zero Performance Measures dashboard and in its Annual Complete Streets Progress Reports.

Outcome metrics describe how well our work extinguishes the behaviors that cause serious injury and death, such as awareness of the risks of speeding, support for safety investments, or reduction in driving while impaired.

Output metrics focus on the amount of work completed, including expenditures on safety, number of impressions on social media campaigns, and people participating in safety events.



Exhibit A

Metric	Source
Number of traffic-related fatalities • Pedestrian fatalities • Bike fatalities • Motor vehicle fatalities • Motorcycle/moped fatalities	Fatal Analysis Reporting System (FARS)
Number of traffic-related serious injuries • Pedestrian serious injuries • Bike serious injuries • Motor vehicle serious injuries • Motorcycle/moped serious injuries	State of Hawai'i Advanced Crash Analysis (SHACA)
Number of fatal and serious injury crashes involving youth under age 18	FARS
Number of fatal and serious injury crashes involving kūpuna (65 and older)	FARS
Number of fatal and serious injury crashes involving impairment and percent of total	SHACA + Vision Zero dashboard
Number of fatal and serious injury crashes involving speed and percent of total	SHACA + Vision Zero dashboard
Commute mode share for walking, bicycling, and transit	U.S. Census Bureau, American Community Survey
Number of people participating in Vision Zero education campaigns each year	Program specific
Number of High-Injury Locations improved	Project list
Pedestrian crossing improvements implemented	Complete Streets (CS) Annual Report metric
Walkways implemented	CS Annual Report metric
Bikeways implemented	CS Annual Report metric
Traffic calming projects implemented	CS Annual Report metric
Number of miles of streets with reduced speed limit	Project list
Percent of projects in Title VI/Environmental Justice equity areas	Project list
Number of automated red-light and speed enforcement installations	Program specific
Percent of crash reports with preceding action and contributing factor data	Crash report review
Percent of traffic studies conducted on High-Injury Locations	Program specific

Exhibit A

Forging Partnerships

A holistic and systemic approach to safety, that protects all residents and visitors using O'ahu's streets, must reach across agency and professional boundaries. The City Department of Transportation Services will coordinate the work, and bring in new partners as they accept their kuleana to our shared and safe streets.



Exhibit A

Exhibit A

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

CERTIFICATE

RESOLUTION 25-1

Introduced: 01/02/25 By: TYLER DOS SANTOS-TAM Committee: PLANNING, INFRASTRUCTURE & TRANSPORTATION (PI&T)

Title: ADOPTING THE FINAL O'AHU VISION ZERO ACTION PLAN DATED AUGUST 2024.

Voting Legend: * = Aye w/Reservations

01/02/25	INTRO	Introduced.
01/16/25	PI&T	Reported out for adoption. CR-20 5 AYES: CORDERO, DOS SANTOS-TAM, OKIMOTO, TUPOLA, WEYER
01/29/25	CCL	Committee report and Resolution were adopted. 9 AYES: CORDERO, DOS SANTOS-TAM, KIA'ĀINA, NISHIMOTO, OKIMOTO, TULBA, TUPOLA, WATERS, WEYER

I hereby certify that the above is a true record of action by the Council of the City and County of Honolulu on this RESOLUTION.

GLEN I. TAKAHASHI, CITY CLERK

TOMMY WATERS, CHAIR AND PRESIDING OFFICER