

Vision Zero & the Public Health Perspective

HCPO Maui 2019

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Public Health
Quiz:
Which of the
following killed
more people in
Hawaii (2013-
2017)?

Option A: Rat Lungworm Disease

Option B: Pedestrian-involved fatal crash



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RANK

ALL AGES

1	Heart disease 12,403
2	Malignant neoplasm 11,875
3	CVD 3,400
4	Influenza and pneumonia 2,563
5	Unintentional injuries 2,503
6	Alzheimer's disease 1,901
7	Chronic lower resp. diseases 1,616
8	Diabetes mellitus 1,369
9	Nephritis, nephrotic synd. 1,037
10	Suicide 926

**Ten leading
causes of
death among
Hawaii
residents, all
ages, 2013-
2017**

Why public health and transportation planning?

Ten leading causes of injury-related deaths among Hawaii residents, by age group, 2013-2017

		infant-14y (86 deaths)	15-24y (348)	25-34y (473)	35-44y (454)	45-64y (1,186)	65+y (1,157)	all ages (3,707)
1		Drowning 19	Suicide 153	Suicide 177	Suicide 138	Poisoning 395	Falls 566	Suicide 926
2		MVC, pedestrian 16	MVC, occupant 61	Poisoning 77	Poisoning 126	Suicide 301	Suicide 152	Falls 708
3		Suffocation 15	Poisoning 33	MVC, occupant 58	Homicide 41	Falls 92	Suffocation 91	Poisoning 681
4		Homicide 13	MVC, motorcyclist 23	MVC, motorcyclist 40	MVC, occupant 33	Drowning 68	MVC, pedestrian 57	MVC, occupant 245
5		MVC, occupant 5	Drowning 16	Drowning 25	Drowning 21	Injuries of unk. intent 57	Poisoning 48	Drowning 194
6		Suicide 5	Homicide 16	Falls 16	Injuries of unk. intent 20	Homicide 49	MVC, occupant 47	MVC, pedestrian 155
7		Poisoning <5	Falls 15	Homicide 15	Falls 18	MVC, pedestrian 47	Drowning 45	Homicide 149
8		Fires/burns <5	MVC, pedestrian 12	Injuries of unk. intent 15	MVC, motorcyclist 16	MVC, occupant 41	Fires/burns 16	Suffocation 133
9		possible Homicide <5	Injuries of unk. intent 7	Aircraft crashes 14	MVC, pedestrian 12	MVC, motorcyclist 33	Homicide 15	MVC, motorcyclist 121
10		Struck by <5	Aircraft crashes <5	MVC, pedestrian 10	Suffocation <5	Suffocation 21	Injuries of unk. intent 12	Injuries of unk. intent 113

Health Data
and
Information
justifies our
investment in
saving lives

2017 Number
of Hospital
Charges Traffic
Related

Average Cost
of Charge

Total Cost

Emergency
Department

7,317

\$4,575

\$33.4
Million

Hospitalization
863

\$88,067

\$75.9
Million

**\$109.3 Million
Statewide**

Public Health and Vision Zero

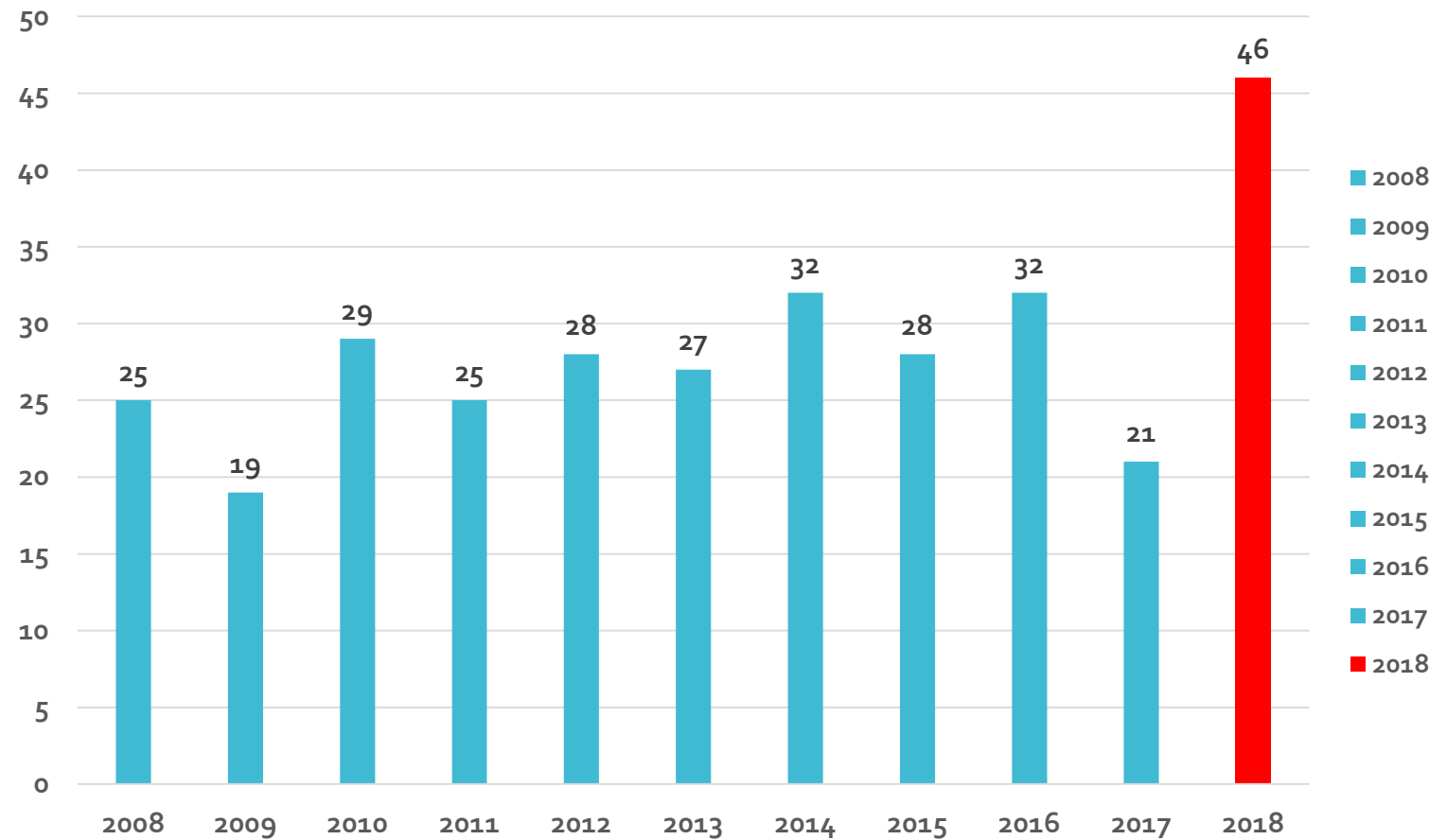
“**DATA-DRIVEN** City stakeholders commit to gather, analyze, utilize, and share reliable data to understand traffic safety issues and prioritize resources based on evidence of the **greatest needs** and impact.”

-Vision Zero Network 9 Components

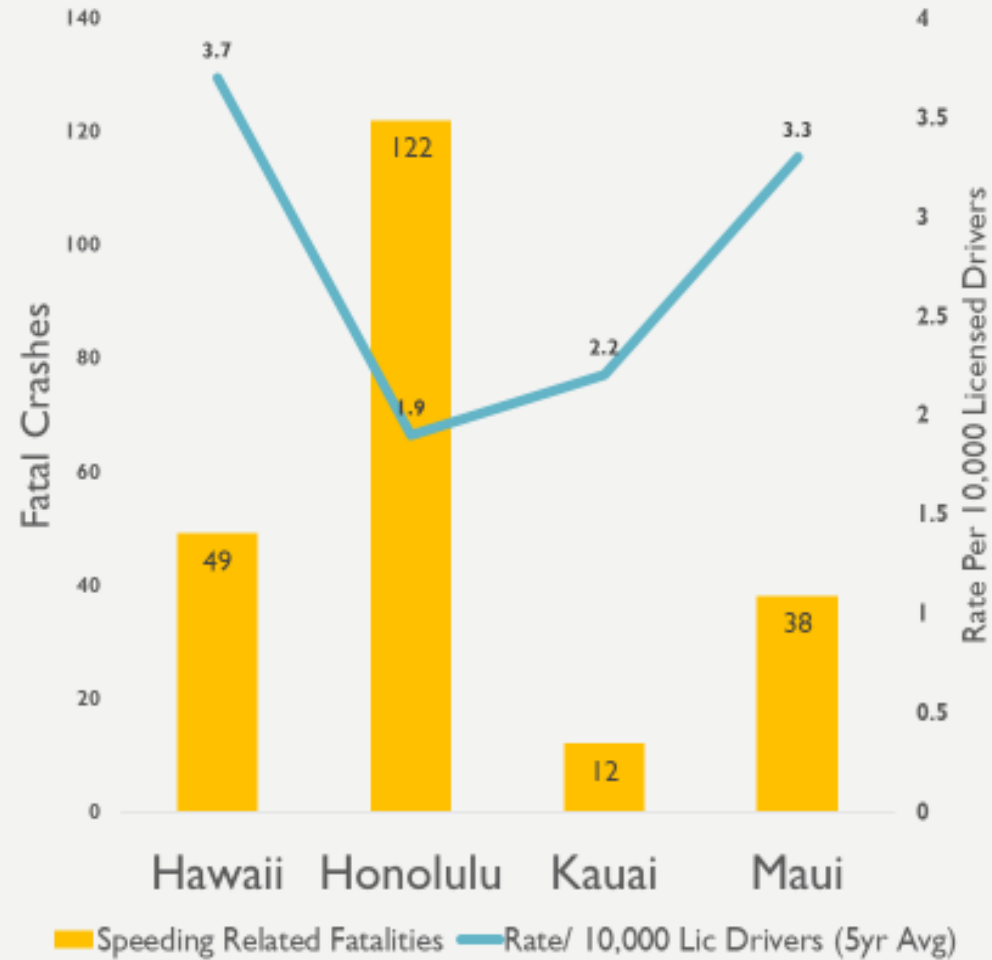
Public health provides
added analysis to
standard data

Common way
we look at
Fatality Data

Non- Motorist Fatalities by Year 2008-2018 * 2018
preliminary numbers/ non FARS



Public health approach to data



DRIVERS IN SPEED-RELATED FATAL CRASHES, BY COUNTY 2012-2016

Speed-Related Fatality Rate by County

Hawaii 3.7

Honolulu 1.9

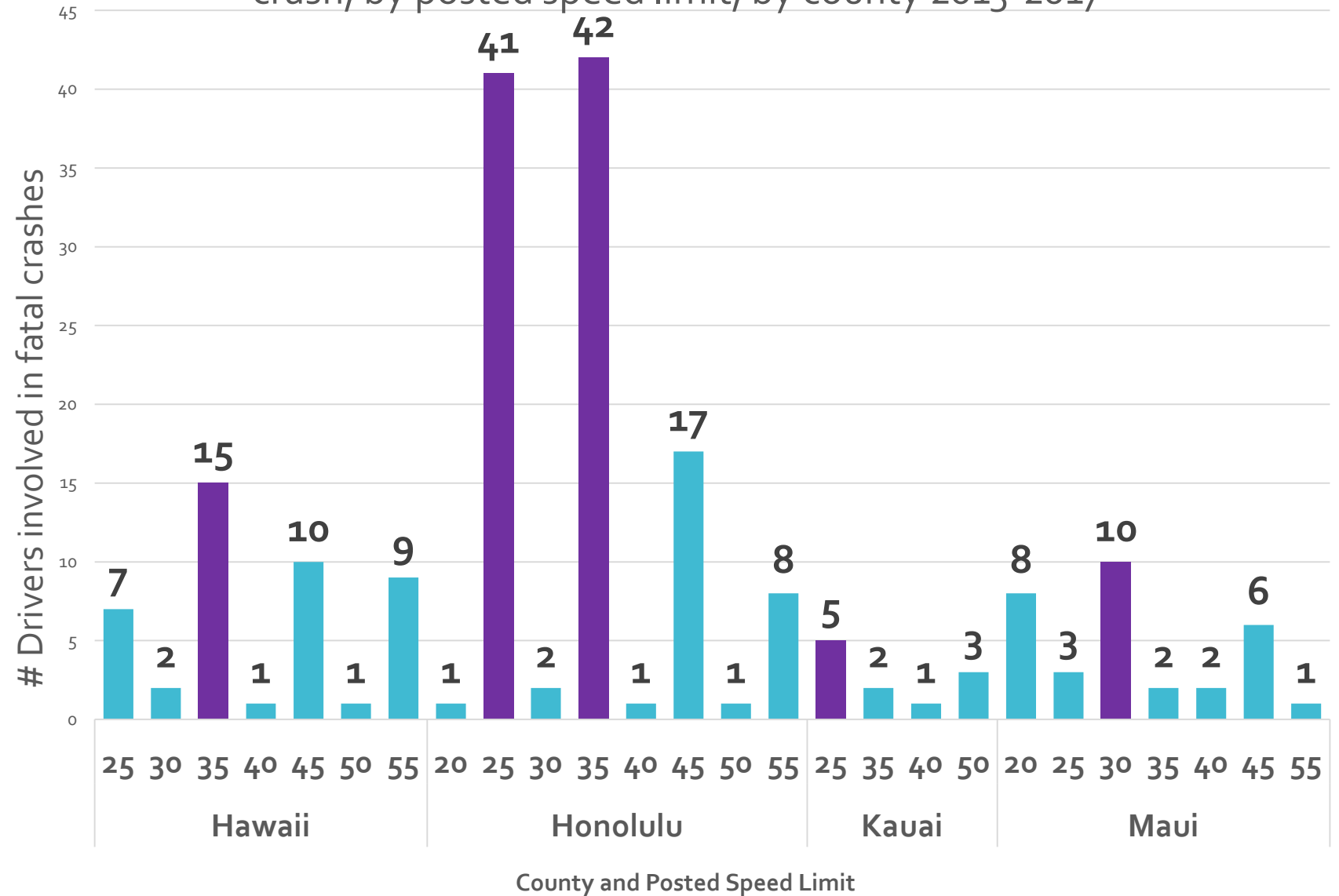
Maui 3.3

Kauai 2.2

Public health approach to data.

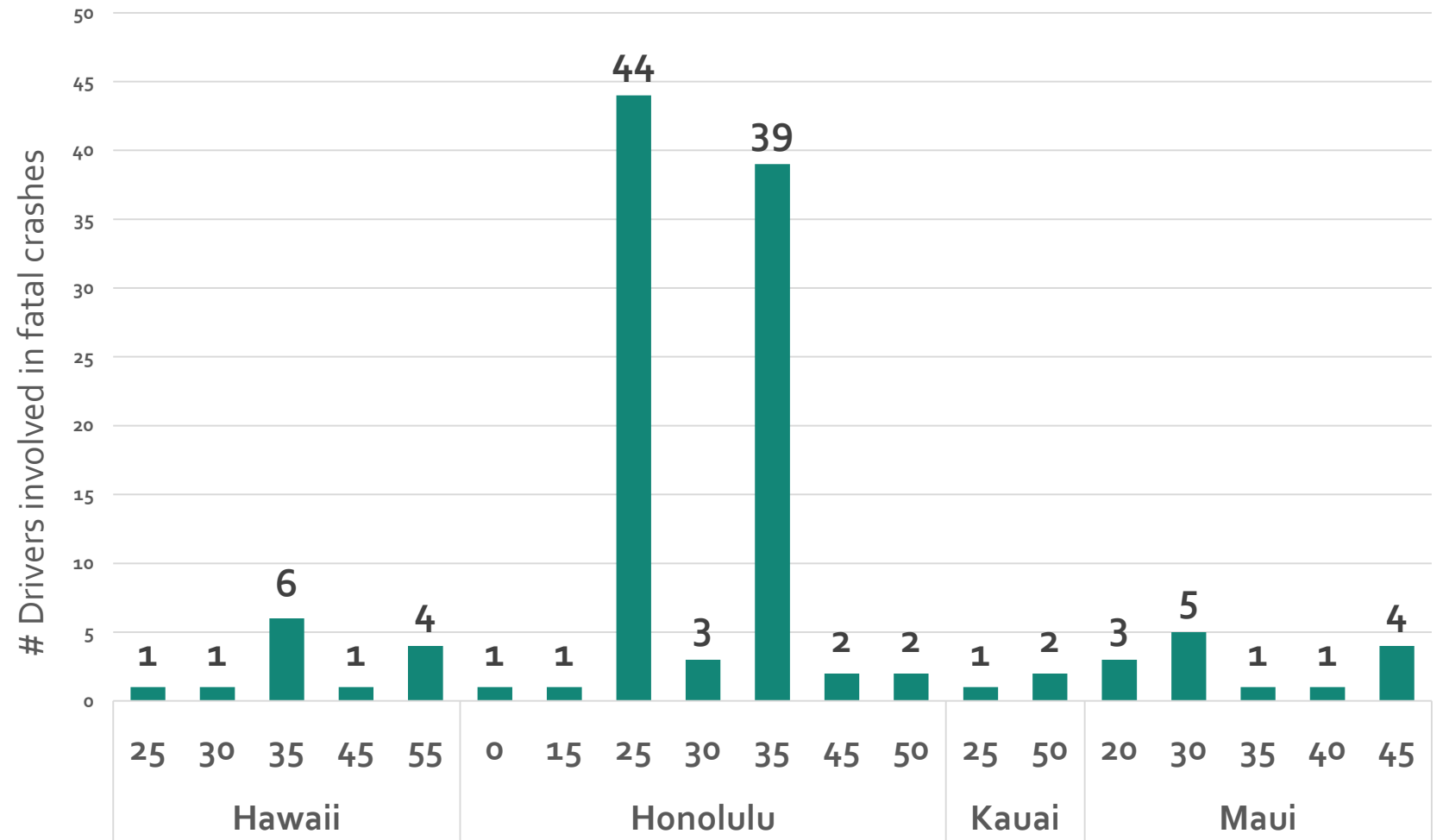
Digging deeper into speeding data

Drivers who were **reported as speeding** at the time of a fatal crash, by posted speed limit, by county 2013-2017



Public health approach to data

Drivers who were in a fatal crash involving a **pedestrian**, by speed posted limit, by county 2013-2017



County and Posted Speed Limit

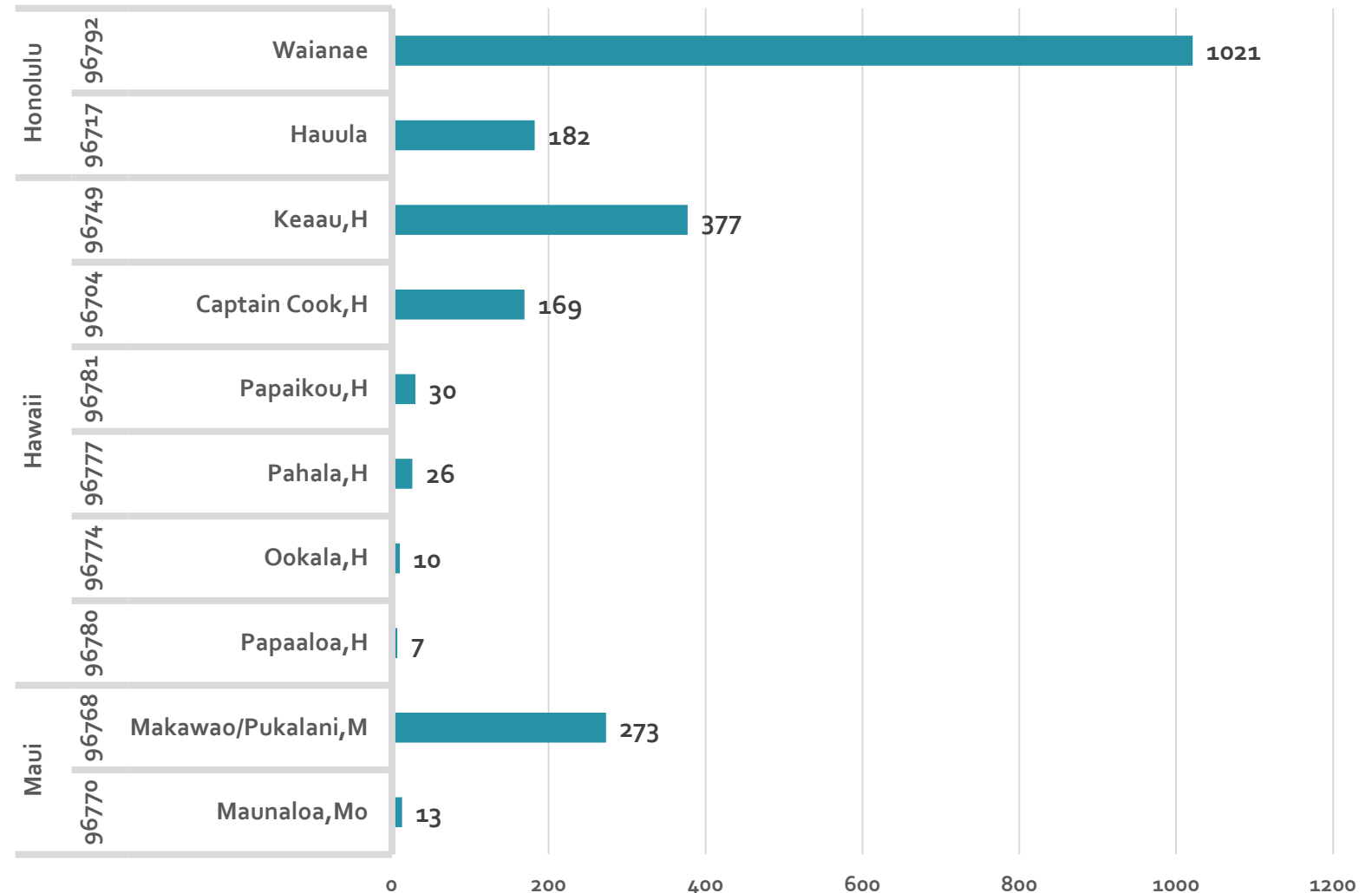
Public Health and Vision Zero

“**DATA-DRIVEN** City stakeholders commit to gather, analyze, utilize, and share reliable data to understand traffic safety issues and prioritize resources based on evidence of the **greatest needs** and impact.”

-Vision Zero Network 9 Components

Matching communities of greatest need with EMS responses to crashes provides us with an “equity - based data” lens.

EMS Responses to **All** Traffic Crashes by Zip Codes with a “Score of 5” on the Socio Needs Index. Crashes from 2013-2017

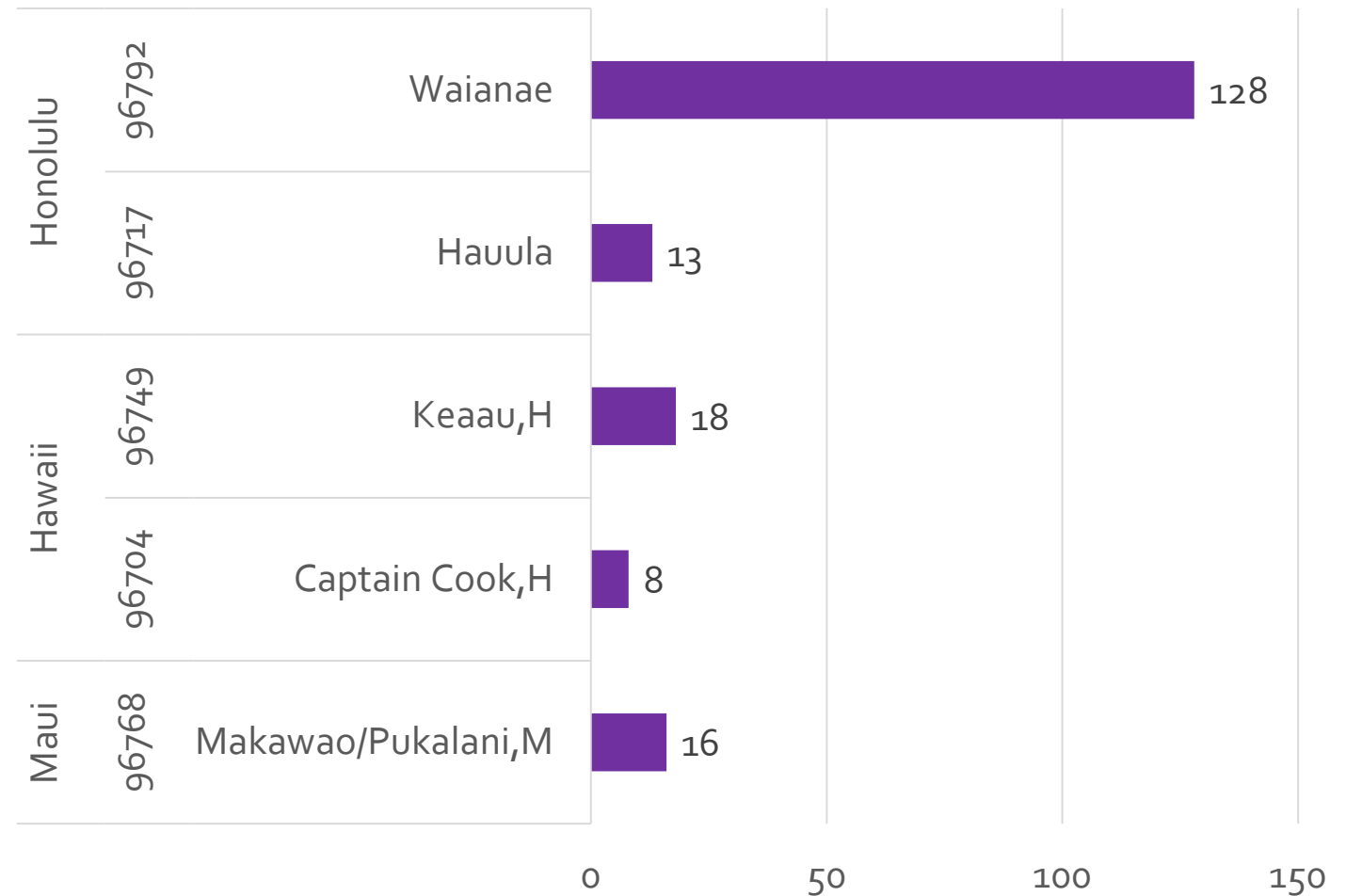


[Socio Needs Index Can be Found on the Department of Health Website under "hawaiihealthmaters.org"](http://hawaiihealthmaters.org)

Matching communities of greatest need with EMS responses to crashes provides us with an “equity - based data” lens.

Closer Look at Pedestrian Crashes

EMS Responses to Motor Vehicle Crashes involving **Pedestrians** by Zip Code, with a “Score of 5” on the Socio Needs Index. Crashes from 2013-2017.



[Socio Needs Index Can be Found on the Department of Health Website under "hawaiihealthmaters.org"](http://hawaiihealthmaters.org)

Where to find Data for Vision Zero and Transportation Planning

Data	Agency
Fatality Data	DOT compiled by DOT or DOH
EMS/ Fire Data	EMS/Fire compiled by DOH
Project Data	County or State Planning/ DPW
MVAR (Police Crash Reports)	Police / DOT
Equity Data	County and DOH

ACT 134

SECTION 2.

"§286- Vision Zero. The department of transportation and the county transportation departments shall adopt a Vision Zero policy that seeks to prevent and ultimately eliminate all traffic fatalities through a combination of engineering, enforcement, education, and emergency response strategies that focus on equity."

SECTION 3. (a) The state highway safety council, in collaboration with each of the county traffic or highway safety councils, shall develop an action plan to reduce traffic fatalities to zero. The action plan shall include but not be limited to:

- (1) Policies on how to reduce speeds on state and county roads;
- (2) Engineering recommendations on how to increase vehicular, pedestrian, and bicycle safety;
- (3) Data-driven enforcement recommendations on how to reduce speeding and operating a vehicle while under the influence of an intoxicant;
- (4) Additional steps that can be taken to eliminate vehicular, pedestrian, and bicycle fatalities on the road;
- (5) An implementation plan; and
- (6) Establishment of measures to track success.

(b) The department of transportation shall prepare and submit a report of findings based on the state highway safety council's efforts to the appropriate policy and fiscal committees of the legislature on or before January 1, 2020.

(c) The state highway safety council shall submit to the legislature the following:

(1) An interim progress report no later than twenty days prior to the convening of the regular session of 2020; and

(2) A final report, including the state highway safety council's action plan detailing its findings, recommendations, and proposed legislation, no later than twenty days prior to the convening of the regular session of 2021.

SECTION 4. New statutory material is underscored.

SECTION 5. This Act shall take effect upon its approval; provided that section 2 shall apply to any development for which planning or design commences on or after January 1, 2020.