

VISION ZERO ACTION PLAN

# SAVING LIVES WITH SAFE STREETS



**The Portland Bureau of Transportation is the steward of the City's transportation system, and a community partner in shaping a livable city. We plan, build, manage, and maintain an effective and safe transportation system that provides access and mobility.**

**Copyright 2016**

In compliance with Title VI of the Civil Rights Act and Title II of the Americans with Disabilities Act, it is the policy of the City of Portland that no person shall be excluded from participation in, denied the benefits of or be subjected to discrimination in any City program, service, or activity on the grounds of race, color, national origin, or disability. To help ensure access to City programs, services, and activities, the City of Portland reasonably: provides language translation and interpretation for limited English proficiency individuals; modifies policies and procedures; and, provides auxiliary aids, services and/or alternative formats to persons with disabilities. To request an accommodation, modification, translation, interpretation or language service; to file a complaint; or for additional information or questions on Civil Rights Title VI (race, color, national origin protections) and ADA Title II (protections for people with disabilities) matters (nondiscrimination in public City programs, services, activities) please call 503.823.5185, TTY at 503.823.6868, Oregon Relay Service at 711, or email [VisionZero@portlandoregon.gov](mailto:VisionZero@portlandoregon.gov).

Funding for this Vision Zero Action Plan has been provided in part by the ODOT Transportation Safety Division and the Federal Highway Administration. Thank you for the generous support.





## Letter from the Commissioner

Dear Friends,

One death on Portland's streets is one too many. Portland families deserve safe streets on which to walk, bike, operate mobility devices, access transit, and drive. Since 2010, serious traffic-related injuries have increased in Portland, with almost half of all fatalities involving people who walk or bike. This is unacceptable, and most importantly, preventable.

With the Vision Zero Action Plan, the Portland Bureau of Transportation has set a **goal of eliminating all traffic deaths by 2025**. Vision Zero is an international movement, designed to improve the safety and well-being of our communities. Other cities across the nation have implemented their own Vision Zero Action Plans and have seen a reduction in traffic deaths. Based on their success, we know there are measures we can take to reduce and eliminate the serious injuries and deaths that occur on our streets.

Through better street design, education, and public involvement, we will make Portland more accessible and safe for everyone. Together we will save lives and ensure the well-being of future generations.

A handwritten signature in black ink that reads "Steve Novick". The signature is written in a cursive, flowing style.

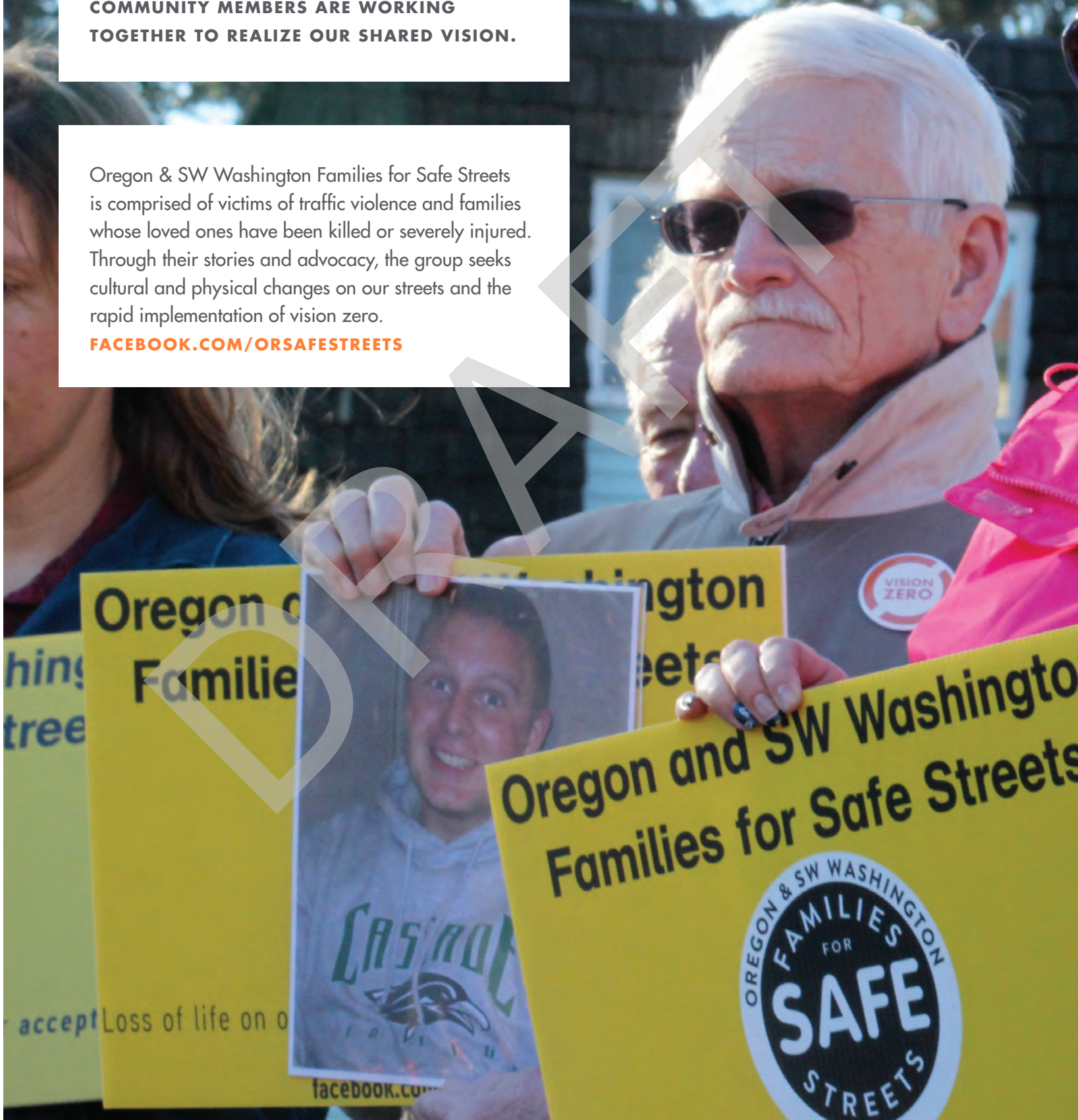
Commissioner Steve Novick  
City of Portland, Oregon



**PORTLAND CITY COUNCIL, IN JUNE 2015, UNANIMOUSLY PASSED A RESOLUTION COMMITTING PORTLAND TO VISION ZERO. CITY OF PORTLAND BUREAUS, PARTNER AGENCIES, PARTNER ORGANIZATIONS AND COMMUNITY MEMBERS ARE WORKING TOGETHER TO REALIZE OUR SHARED VISION.**

Oregon & SW Washington Families for Safe Streets is comprised of victims of traffic violence and families whose loved ones have been killed or severely injured. Through their stories and advocacy, the group seeks cultural and physical changes on our streets and the rapid implementation of vision zero.

[FACEBOOK.COM/ORSAFESTREETS](https://www.facebook.com/orsafeststreets)







Oregon and SW Washington  
Families for Safe Streets



DUSTIN FINNEY



d  
r  
i  
v  
e  
s  
o  
b

## VISION STATEMENT

Working together, we will take equitable and data-driven actions that will **eliminate deaths and serious injuries** for all who share Portland streets by 2025.

## GUIDING PRINCIPLES

These principles will guide the actions and performance measures of the Vision Zero Action Plan.

### EQUITABLE

The plan will be **Equitable**

- ▶ It will address the disproportionate burden of traffic fatalities and serious injuries on communities of concern, including people of color, low-income households, older adults and youth, people with disabilities, people with limited English proficiency, and households with limited vehicle access
- ▶ It will prioritize filling gaps in infrastructure where those gaps contribute to fatalities and serious injuries, or limit the transportation options of communities of concern
- ▶ It will not result in racial profiling

### DATA-DRIVEN

Actions in the plan will be **data-driven** to address the factors that lead to serious injury and death on Portland's streets

- ▶ **Safety data** will be gathered from both traditional and innovative sources to identify the location, behaviors, and circumstances—including street design—related to serious and deadly crashes
- ▶ **Equity data**, including demographics, risk factors, traffic enforcement data and infrastructure gaps linked to crashes, will be used to ensure the plan prioritizes the needs of communities of concern

### ACCOUNTABLE

The plan will be **accountable**, setting out clear objectives and measuring performance against them

- ▶ Progress will be communicated in annual reports and in an easily accessible dashboard
- ▶ Engagement with communities will be ongoing
- ▶ Success will be measured by the level of investment in communities of concern, as well as safety metrics

This Vision Zero Action Plan places a strong emphasis on equity and supports Portland's Citywide Racial Equity Goals. To learn more about Portland's Citywide Racial Equity Goals & Strategies, visit the Office of Equity and Human Rights website at [portlandoregon.gov/oehr](http://portlandoregon.gov/oehr)



# ONE DEATH ON OUR CITY STREETS IS TOO MANY.

WHY

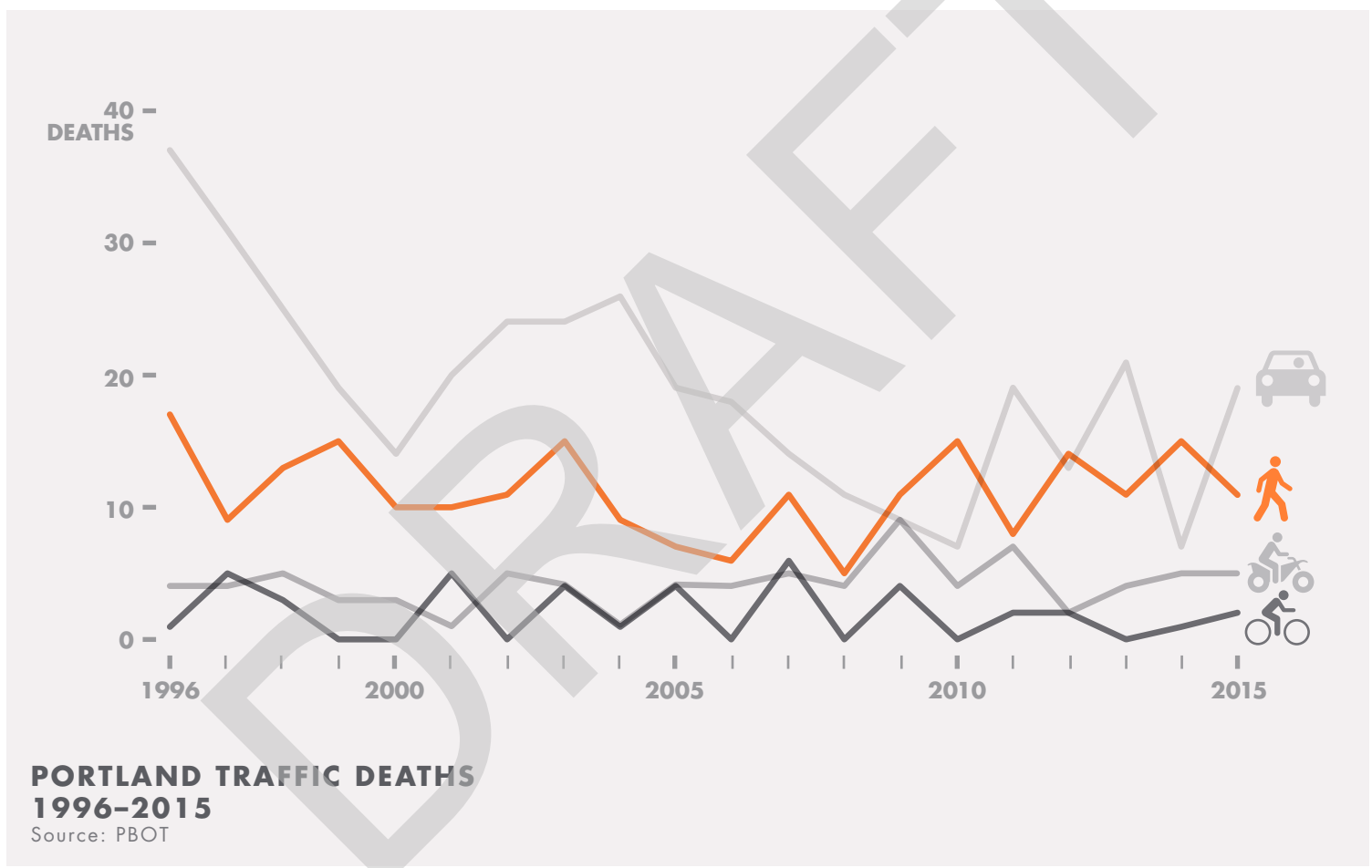


**PEOPLE KILLED IN TRAFFIC  
IN PORTLAND IN 2015**

# PORTLAND NEEDS VISION ZERO

Over the last 20 years, an average of 36 people died in traffic crashes annually on Portland streets. These people aren't just statistics. They are mothers, fathers, brothers, sisters, kids, and friends. They lost their lives in the course of the everyday act of moving from place to place. The impact on their families, friends and communities is immense and permanent.

These traffic deaths tell a story at odds with Portland's reputation as a walkable, bikeable, livable city. Thanks to seatbelts and vehicle improvements, driving is getting safer. Walking and bicycling on our streets, however, is not. In fact, while the overall number of traffic deaths in Portland has dropped over the past 20 years, the percentage of bicycle deaths has held steady and the percentage of pedestrian deaths has continued to rise.



## Marcos Castillo

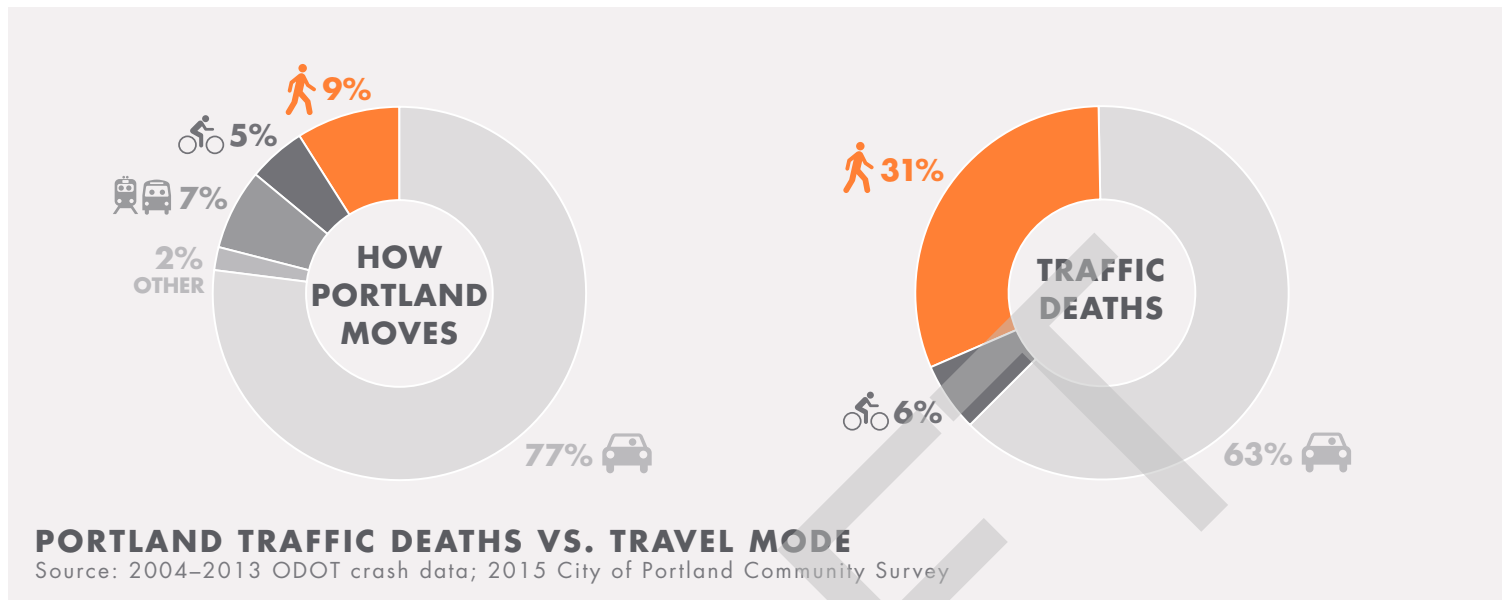
Kind, loving, and hard-working—Marcos was killed at age 50 on the way to work when his car was hit by a drug-impaired driver.

March 24, 2014

*courtesy of Marcos' wife*

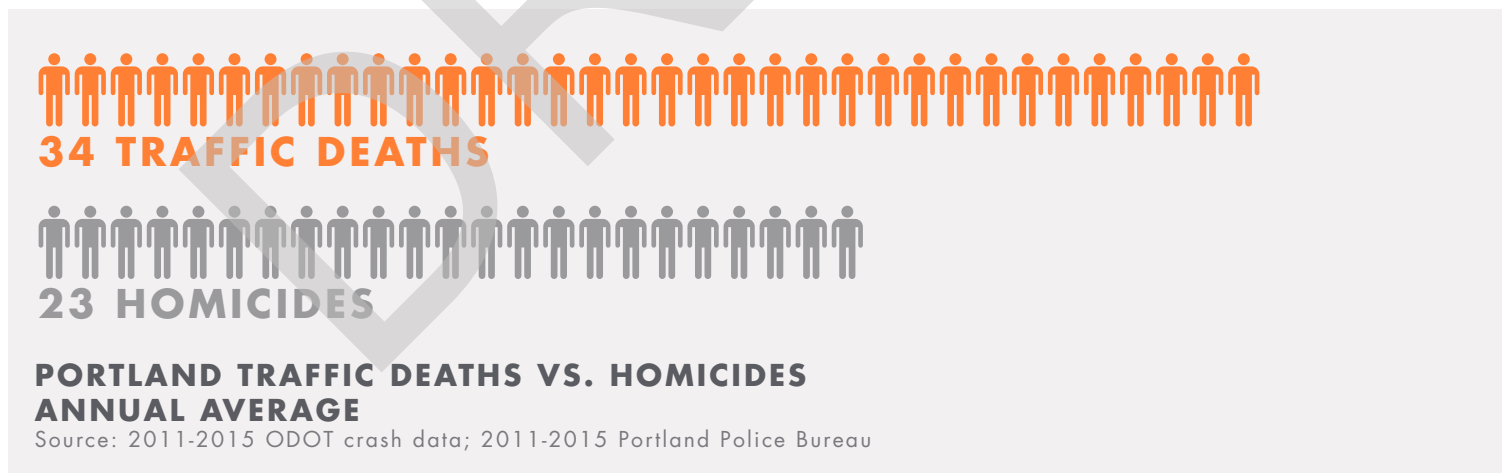


People walking in Portland streets are at the greatest risk. While about 10% of people identify walking as their primary way to travel in Portland, pedestrians make up nearly one-third of all traffic-related deaths.



**We are committed to ending traffic violence in our communities.**

Portland traffic deaths outnumber homicides year over year. All too often, we as a community have accepted this as an unfortunate but inevitable cost of moving around the city. Vision Zero rejects that assumption. With this action plan, Portland makes a clear statement that the cost is too high—and directs attention, commitment and resources to ending traffic violence in the city.



## WHY VISION ZERO?

Vision Zero is the bold goal to eliminate all traffic deaths and serious injuries on Portland streets by 2025. Vision Zero reaches beyond traditional transportation agency safety programs. It is a multi-agency, multi-partner initiative that requires cooperation, commitment, urgency, and action across the community.

### A transportation system centered around people

For decades, Portland has defined itself as a city for people. We are a leader in walking, bicycling, and public transit—and we are known nationally and internationally for our livable neighborhoods.

But a livable city must be a safe city, and as Portland grows it is clear that protecting the health of our residents means addressing behaviors and infrastructure gaps that put people's lives at risk. The need is ever more acute as gentrification and changing demographics force low-income, transit-dependent residents into neighborhoods where walking is especially dangerous.

### Working toward equitable communities

In the context of traffic safety, **equity means creating streets that are safe for all Portlanders, in all areas of the city, to move by all modes.** This is no small undertaking: East Portland has twice the number of pedestrian fatalities per capita compared to the city overall.

In areas of Portland where streets were built to move cars efficiently, they must be redesigned to move people safely. Vision Zero's guiding principles and actions prioritize infrastructure investment on our most dangerous streets in traditionally under-invested communities. The enforcement actions in this plan are limited in order to reduce the possibility of racial profiling and disparate economic impacts.

**“Reaching the goal of Vision Zero is achievable with a diverse group of community partners leading the way. I am proud to be sharing in this effort.”**

**MIKE MORRISON, B.S.N.**

Trauma Nurse, Legacy Emanuel Hospital



## Vision Zero in Other U.S. Cities

Since 2014, Vision Zero has been gathering momentum across the U.S. As of August 2016, 18 cities across the United States have committed to Vision Zero.

Early results are promising. Traffic deaths in New York City (the earliest U.S. adopter of Vision Zero) are down 22% since 2013, just before the city launched Vision Zero. Pedestrian deaths dropped to a record low in New York City in 2015.



**“Our neighborhoods are facing a public health crisis in the form of unsafe and incomplete streets, with preventable injuries and deaths unnecessarily tearing apart our families. Vision Zero is an initiative APANO has high hopes for.”**

**DUNCAN HWANG**

Associate Director, Asian Pacific American Network of Oregon



## TRAFFIC DEATHS AND SERIOUS INJURIES 2005-2014

Source: ODOT, PBOT

$\frac{7}{2}{1}$  = DEATHS

$\frac{13}{7}{2}{1}$  = SERIOUS INJURIES

# ENGAGING PORTLANDERS TO CREATE A PLAN

**A**chieving Vision Zero takes all of us. Portlanders played an important role in creating the goals, principles and actions in the Plan—and will be integral to realizing safe streets in Portland.

Over the course of developing the plan, we asked people at listening sessions, safety fairs, and community events about their Vision Zero priorities. Here's what we heard:

- ▶ A strong desire for infrastructure changes to improve safety and accessibility: narrowing streets, slowing traffic, providing sidewalks and safe crossings, and improving wheelchair access
- ▶ A call for more education about safe driving, and targeted enforcement to address violations that cause injury and death
- ▶ A sense of urgency for leaders—and the agencies that support them—to work together and aggressively pursue common goals.



OVER  
**1,700**  
PEOPLE  
REACHED

**19**  
OUTREACH  
EVENTS

**11**  
EMAIL  
NEWSLETTERS





ONLINE SURVEY  
IN 4 LANGUAGES:

**895**  
RESPONSES

DO YOU SUPPORT  
USING AUTOMATED  
CAMERAS TO TICKET  
PEOPLE WHO **SPEED**  
WHILE DRIVING?

YES  71%  
NO  29%

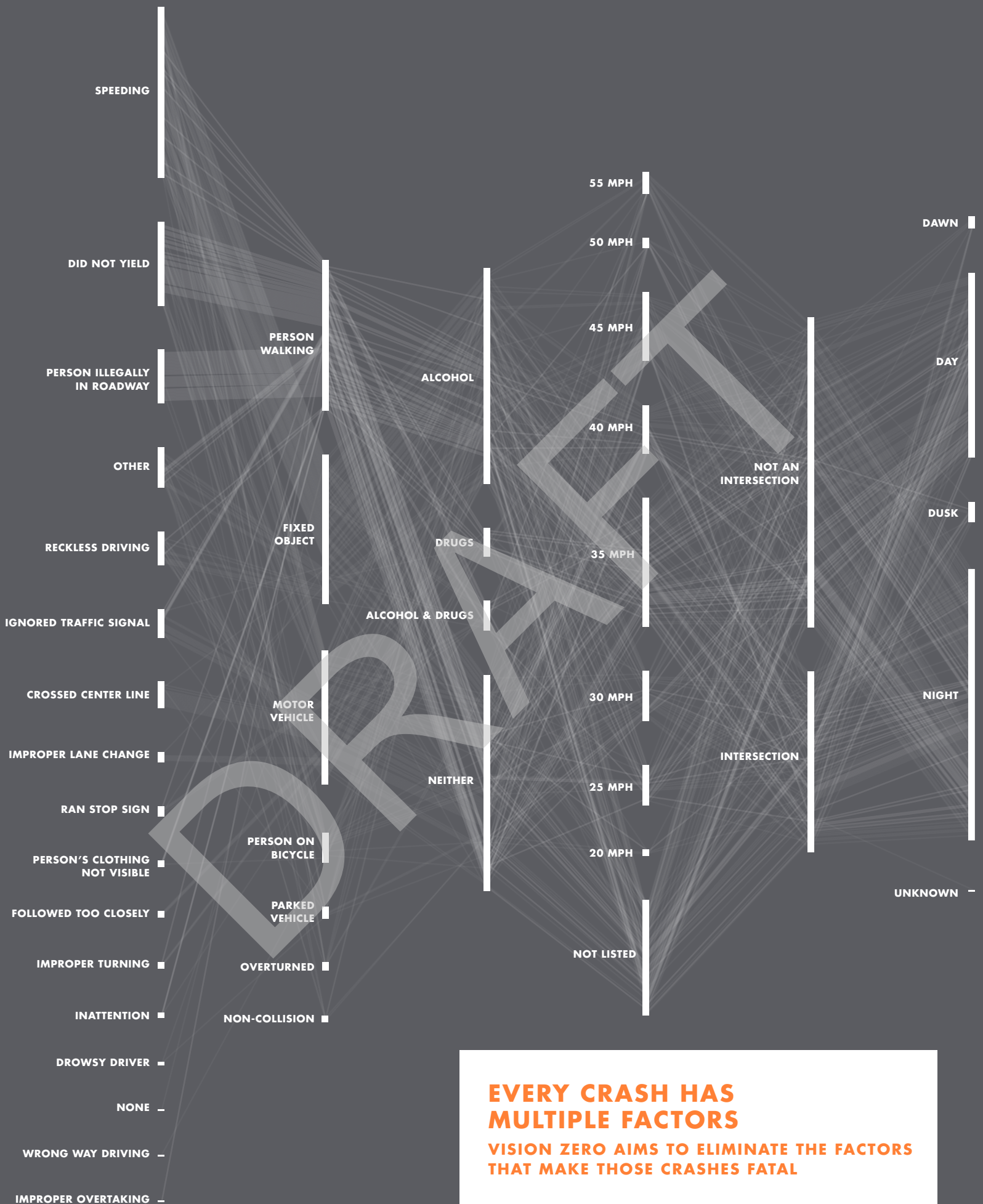
DO YOU SUPPORT  
USING AUTOMATED  
CAMERAS TO TICKET  
PEOPLE WHO **RUN**  
**RED LIGHTS** WHILE  
DRIVING?

YES  85%  
NO  15%



Moving forward, community members will continue to play a critical role in taking the plan to the streets. From community-based grants to project-level engagement and education campaigns, Portlanders will shape Vision Zero actions and priorities. An initial set of engagement actions and strategies are described in the “Taking Action” section of this report.





# CAUSES OF DEATHS AND SERIOUS INJURIES ON PORTLAND STREETS

WHAT

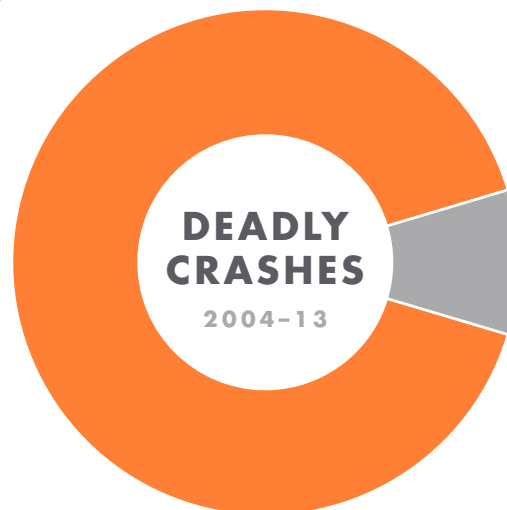
## “SERIOUS INJURIES”

also called “incapacitating” or “major” injury:

A non-fatal injury which prevents the injured person from walking, driving, or normally continuing the activities the person was capable of performing before the injury occurred

Vision Zero is data-driven. Crash data from 2004-2013 was analyzed in an effort to understand the causes of traffic violence in Portland. The data revealed significant factors contributing to deaths and serious injuries on Portland streets, as well as where most of those crashes occur. Close examination reveals that many deadly crashes happen as a result of dangerous behaviors—**speeding, driving impaired** by drugs or alcohol, and **violating traffic laws**.

**91%**  
INVOLVED SPEED,  
IMPAIRMENT  
AND/OR  
DANGEROUS  
BEHAVIORS



**9%**  
ENVIRONMENTAL,  
MECHANICAL  
AND/OR  
VISIBILITY  
FACTORS

Source: ODOT crash data

While a deadly or serious injury crash can happen anywhere, more of them happen on certain street types. Wide, fast arterials with multiple lanes in each direction see a disproportionate number of traffic deaths. All too often, these streets run through lower-income neighborhoods where people rely heavily on walking and transit.

# FACTOR: STREET DESIGN

Vision Zero recognizes that people make mistakes. Impairment, speeding, distracted driving, aggressive driving—these are behaviors to be discouraged, and Vision Zero lays out a coordinated set of actions to deter them.

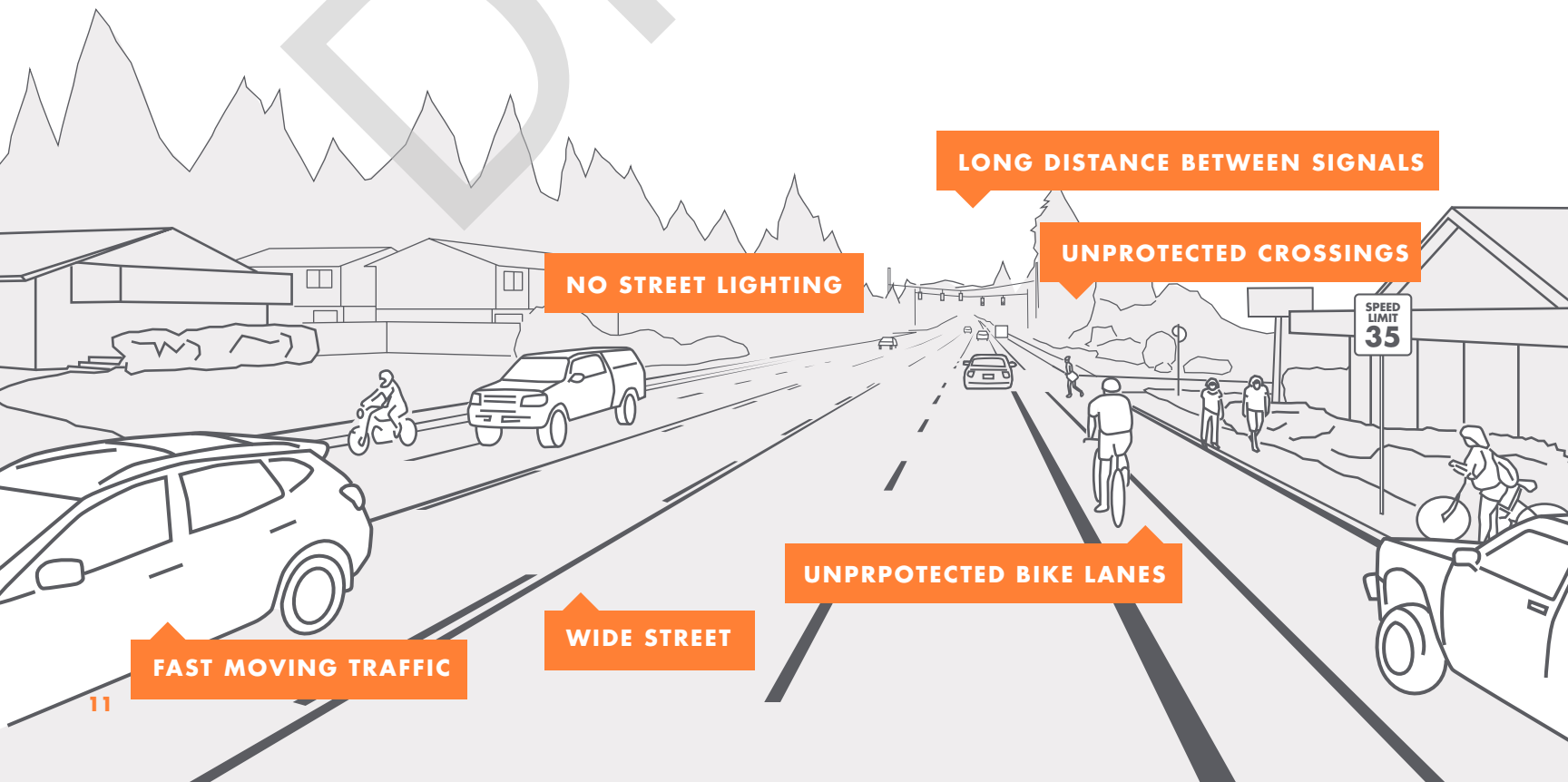
But we must also design streets that enable and encourage safe behaviors. Streets should discourage dangerous driving by design. The safest streets slow down traffic, provide separation between modes, and provide visual cues that make it clear that people using different modes share the space. These streets keep all people safer—even when they make mistakes.

At the other end of the spectrum, wide streets with four or more lanes of fast-moving traffic, unprotected pedestrian crossings and bike lanes, and longer distances between signals are the places where deadly crashes happen most often. While mistakes can occur anywhere, these streets are where those mistakes can have lethal consequences. In Portland, nearly half of deadly crashes occur on just 7% of our streets. The maps on pages 17-20 show where these are located. Fixing them is a central element of Portland's Vision Zero strategy.

**50%**  
**OF DEADLY**  
**CRASHES ARE ON**  
**7%**  
**OF PORTLAND**  
**STREETS**

## ANATOMY OF A DANGEROUS STREET

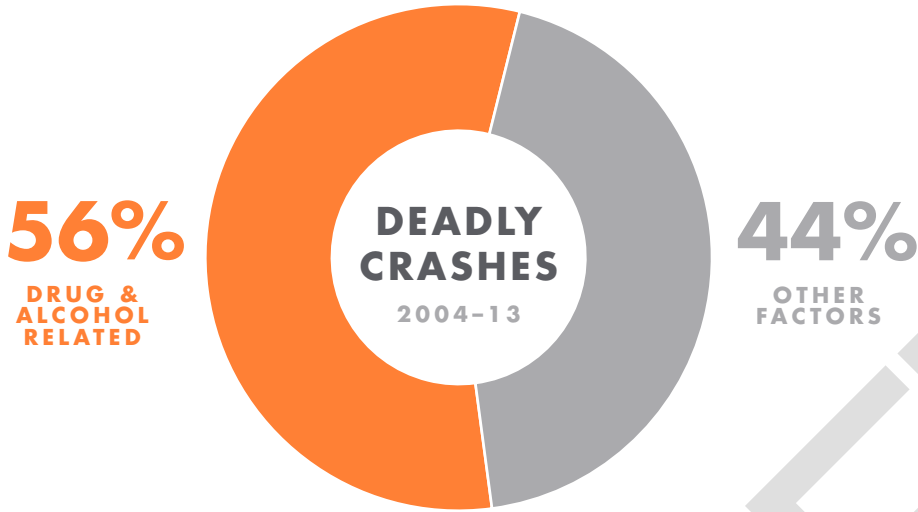
Safe street design is context dependent. This sketch is for illustrative purposes only.



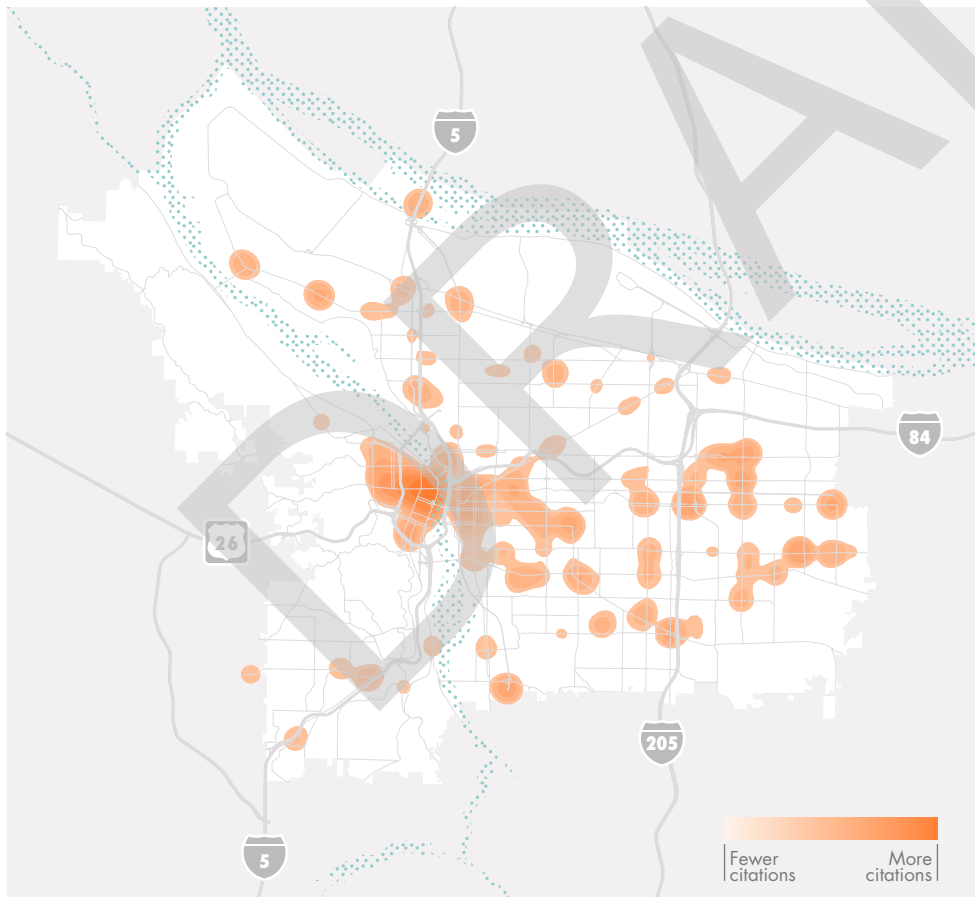


# FACTOR: IMPAIRMENT

Alcohol and drug impairment is a major contributor to death and injury on our streets. More than half of deadly crashes in Portland involve people who are intoxicated. On average, a drunk driver has driven drunk over 80 times before his or her first arrest.<sup>1</sup>



Source: ODOT crash data



During DUII stops or after intoxicated crashes, drivers are asked where they were last drinking. This heat map shows the concentrations of the reported establishments.

Identifying the source locations of DUII stops and crashes will help guide focused and collaborative education and outreach programs.

**3% OF REPORTED ESTABLISHMENTS**  
ACCOUNTED FOR:  
**22% OF CITATIONS (6,352 TOTAL)**

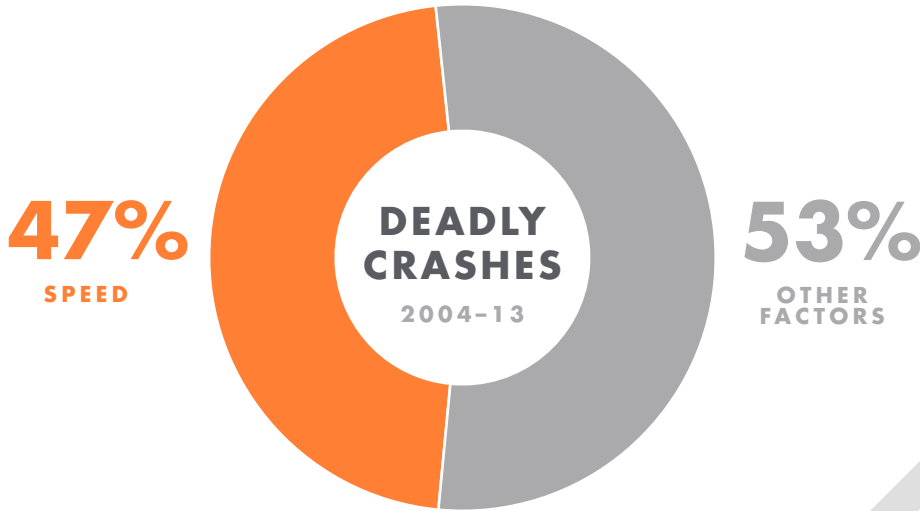
## ESTABLISHMENTS LINKED TO REPORTED DUII VIOLATIONS 2005-2014

Self-reported last drinking establishment  
Source: Oregon Liquor Control Commission

<sup>1</sup> Arrest data: Federal Bureau of Investigation, "Crime in the United States: 2014" from MADD *No More Victims* Page; [www.madd.org/drunken-driving/about/drunken-driving-statistics.html](http://www.madd.org/drunken-driving/about/drunken-driving-statistics.html)

# FACTOR: SPEED

Speed can be deadly. Alone or in combination with other factors, speed is a major factor in 47% of Portland's traffic deaths.



Source: ODOT crash data

And speed impacts the severity of a crash. A person walking struck by a person driving 40 mph is 8 times more likely to die than one struck by a person driving at 20 mph.

In a city where people walking make up a disproportionate number of traffic deaths, slowing speeds is critical. Getting there will take a suite of policy, infrastructure, education and enforcement actions.

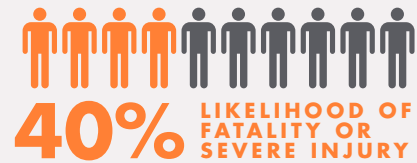
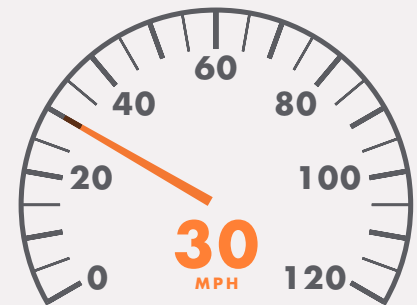
Posted speed limits tell drivers the speed at which they should be driving in normal conditions. In turn, the posted speed needs to match the speed that is safe. Street design is integral to achieving the desired driving speed, directly influencing the driving speed that feels comfortable. Street and lane width, signal spacing, markings, buffers, curb extensions and medians can all affect a driver's speed.

In tandem with design, working to change social norms, education and enforcement reinforce community expectations about safety and compliance.

**Vision Zero puts our desire to get somewhere fast in the context of the profound implications of speed on human life.**

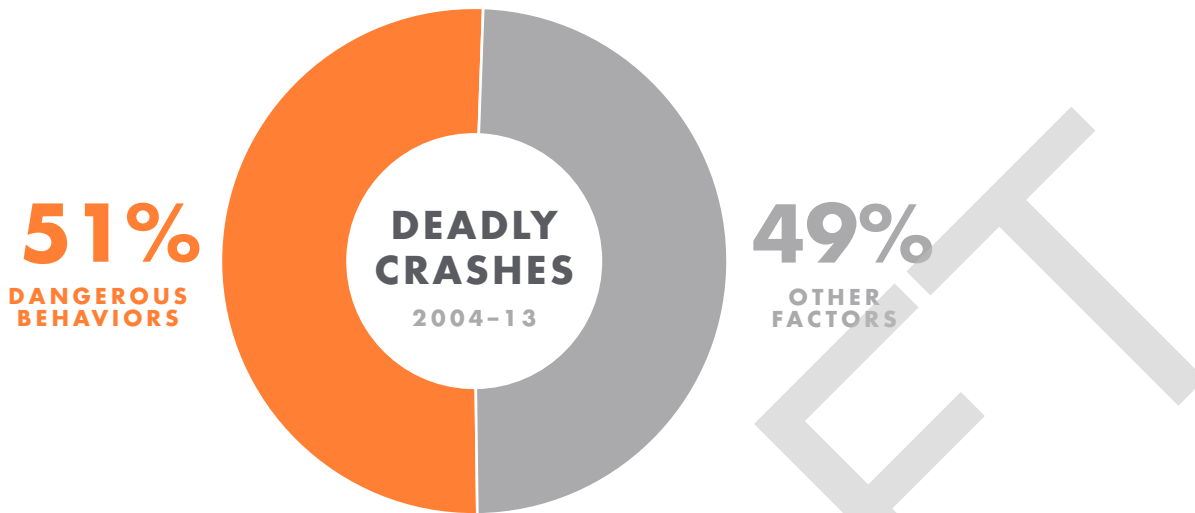
## DEATH DUE TO SPEED

Source: U.S. Department of Transportation, Literature Reviewed on Vehicle Travel Speeds and Pedestrian Injuries. March 2000.



# FACTOR: DANGEROUS BEHAVIORS

Dangerous behaviors include those that arise from aggressive or distracted driving. Disregarding traffic signals or stop signs, failing to yield the right-of-way when turning, or driving the wrong way—these unpredictable behaviors can lead in an instant to injury or death, especially for vulnerable street users.



Source: ODOT crash data.

Includes: Did not yield right-of-way, Passed stop sign or red flasher, Disregarded traffic signal, Drove left of center on two-way road, Straddling the center line, Improper change of traffic lanes, Disregarded other traffic control device, Wrong way on one-way roadway, Improper overtaking, Made improper turn



## Joe Stone

Fun-loving and beloved son, brother, and uncle. Joe was killed by an inattentive driver at age 25 while walking in a marked crosswalk.

October 4, 2014

*courtesy of Joe's mom*





# A CLOSER LOOK AT THE DATA

**D**ata drives our understanding of where and why deaths and serious injuries occur. Traffic crash data is an important tool to identify where deadly and serious injury crashes happen and what factors contribute to them. Reaching beyond crash data, other data sources used to develop this plan include equity metrics, demographic information, hospital trauma data, fire response data, and Oregon Liquor Control Commission (OLCC) data related to impaired driving (see map on page 12).

## Traffic crash data

Ten years of records (2004-2013) that included over 100,000 crashes and more than 225,000 participants were analyzed to identify top crash locations and contributing factors. The data was collected by the ODOT Crash Analysis and Reporting Unit.

## Equity data: Communities of Concern

“Communities of Concern” is a composite index of 10 equity indicators identified by TriMet, Portland's regional transit provider. The geographic area that makes up Communities of Concern includes the census blocks in Portland that scored in the top quartile of the following 10 equity indicators:

- ▶ People of color
- ▶ Low-income households
- ▶ People with disabilities
- ▶ Low English Proficiency persons
- ▶ Youth
- ▶ Older Adults
- ▶ Affordable housing
- ▶ Lower paying jobs
- ▶ Poor vehicle access
- ▶ Access to services

Persons who are members of Communities of Concern may live anywhere in the city, but comprise a higher percentage of the population in these areas.

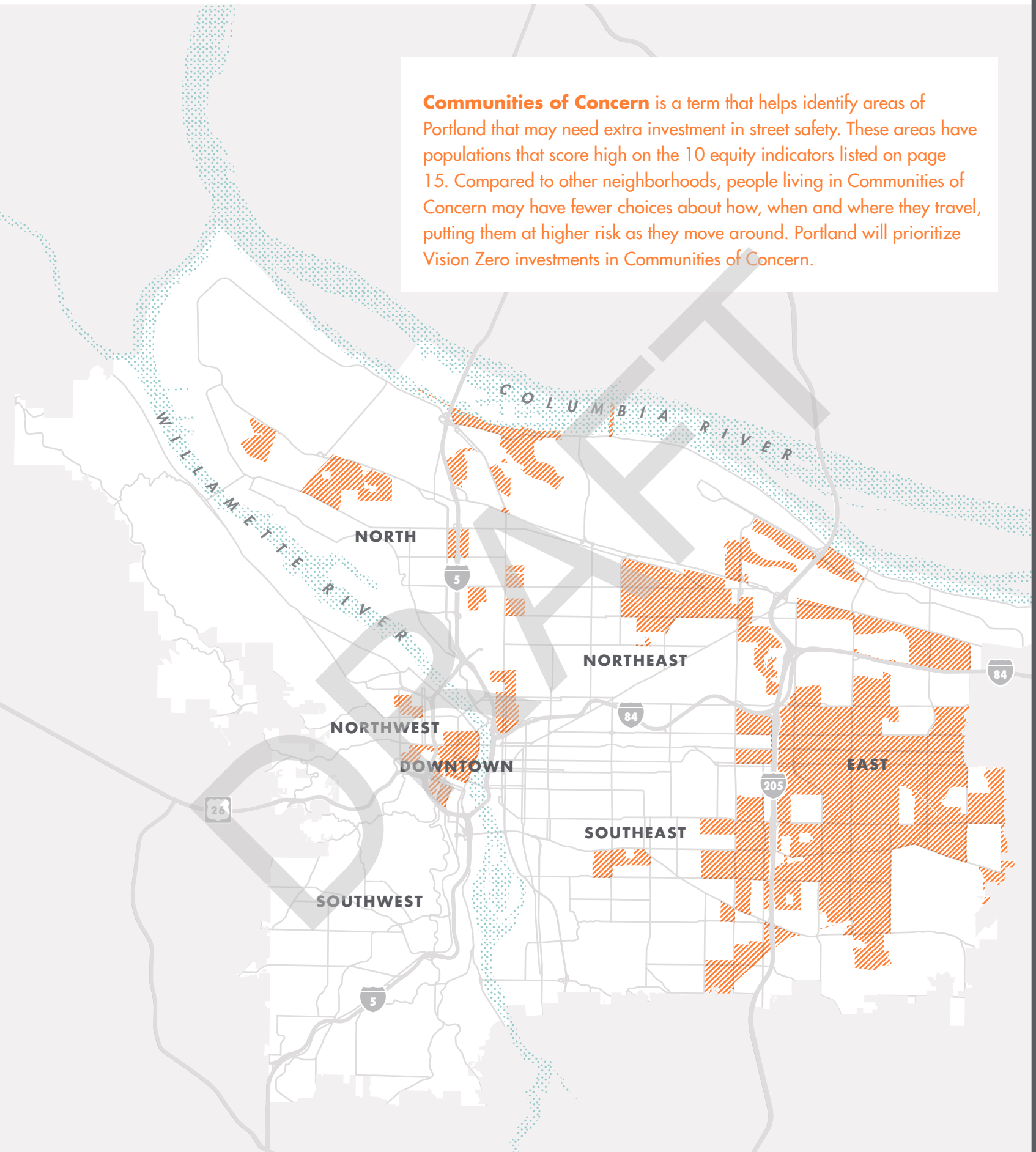
Traffic crash data has informed where Portland's most serious crashes are occurring and what factors are contributing to the crashes. Communities of Concern equity data focuses investments on the portions of those streets with the greatest safety needs. The Vision Zero guiding principles direct that both sets of data be used to identify and prioritize investment.

## Distracted Driving: A Dangerous Epidemic

**A person is injured in a distracted driver crash in Oregon every 3 hours**

A recent ODOT survey found that 84 percent of respondents feel uncomfortable riding as a passenger with a distracted driver. At the same time, 44 percent admitted to driving distracted with passengers, and 75 percent admitted to driving distracted when alone.

**Communities of Concern** is a term that helps identify areas of Portland that may need extra investment in street safety. These areas have populations that score high on the 10 equity indicators listed on page 15. Compared to other neighborhoods, people living in Communities of Concern may have fewer choices about how, when and where they travel, putting them at higher risk as they move around. Portland will prioritize Vision Zero investments in Communities of Concern.



## COMMUNITIES OF CONCERN

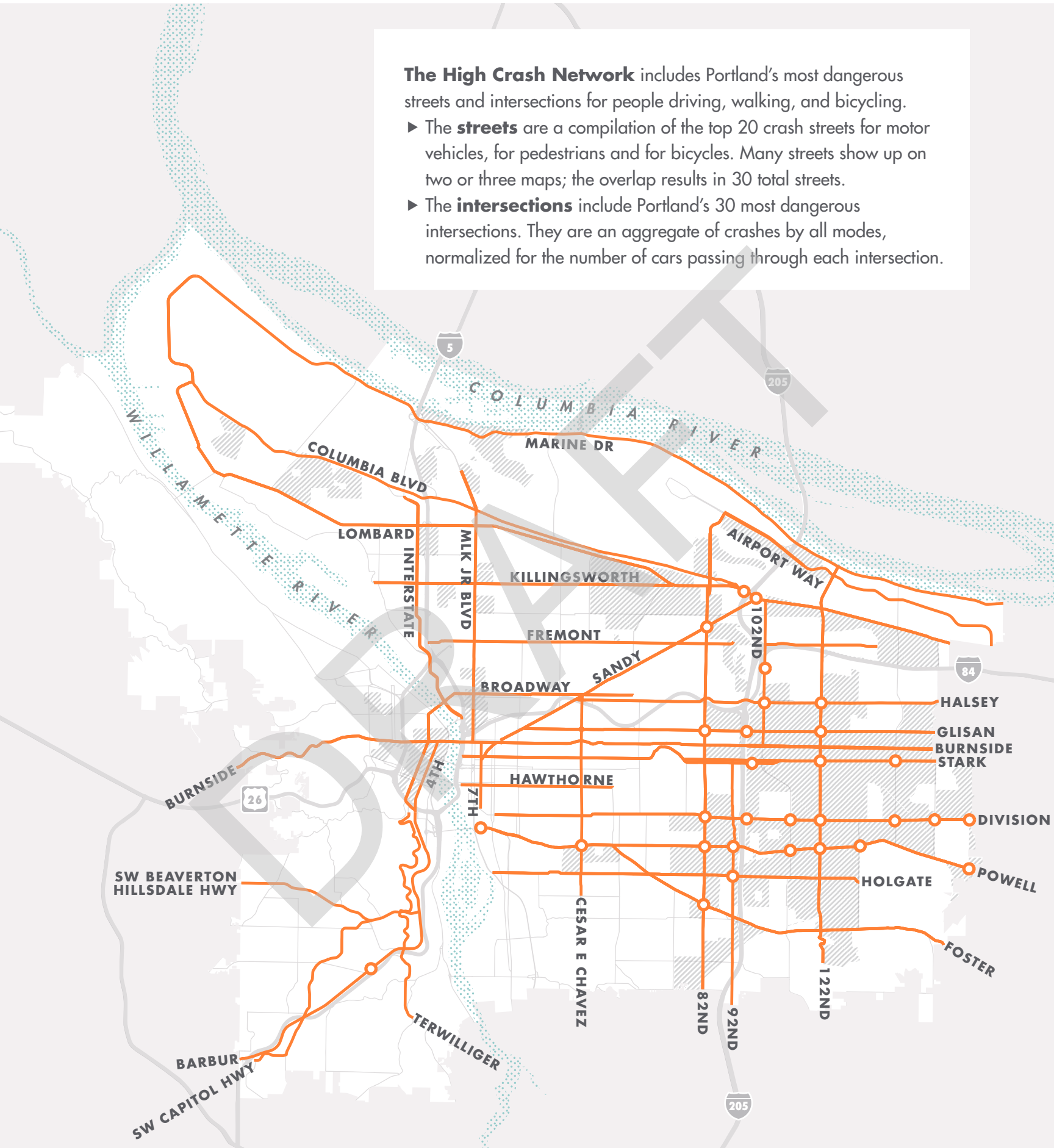
Source: TriMet Equity Index

 = **COMMUNITY OF CONCERN**

Communities of Concern is made up of the census blocks that scored in the top quartile of the ten equity indicators listed on page 15.

**The High Crash Network** includes Portland's most dangerous streets and intersections for people driving, walking, and bicycling.

- ▶ The **streets** are a compilation of the top 20 crash streets for motor vehicles, for pedestrians and for bicycles. Many streets show up on two or three maps; the overlap results in 30 total streets.
- ▶ The **intersections** include Portland's 30 most dangerous intersections. They are an aggregate of crashes by all modes, normalized for the number of cars passing through each intersection.



## HIGH CRASH NETWORK

Composite of motor vehicle, bicycle and pedestrian high crash networks

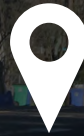
Source: PBOT

- = TOP 30 HIGH CRASH STREETS
- = TOP 30 HIGH CRASH INTERSECTIONS
- ▨ = COMMUNITY OF CONCERN



# LOCATIONS OF DEATHS AND SERIOUS INJURIES ON PORTLAND STREETS

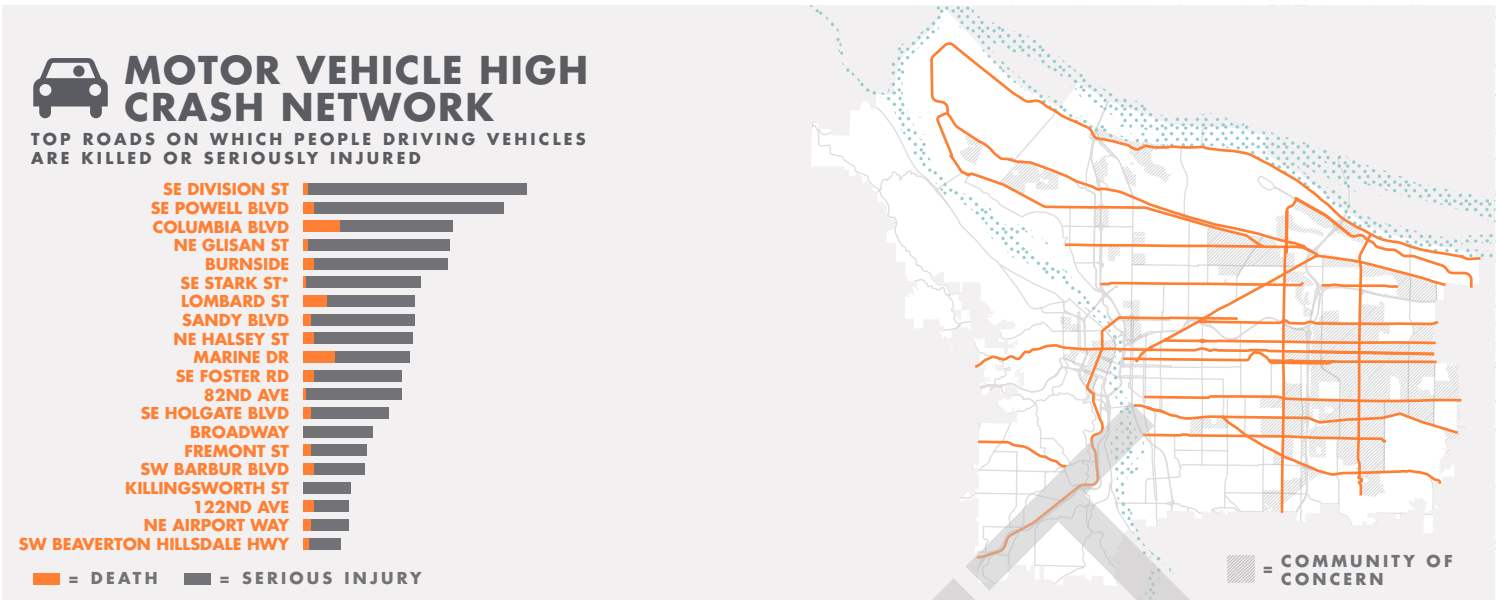
WHERE



**P**ortland's most dangerous streets cut across the City and touch every quadrant; the streets with the highest concentration of pedestrian, bicycle and motor vehicle crashes are Portland's High Crash Network. While crashes happen city-wide, the most dangerous intersections and many of the most dangerous segments on the High Crash Network are in neighborhoods where people of color and low-income Portlanders live. Many children and older adults live here, and people depend more on transit.

## **The High Crash Network**

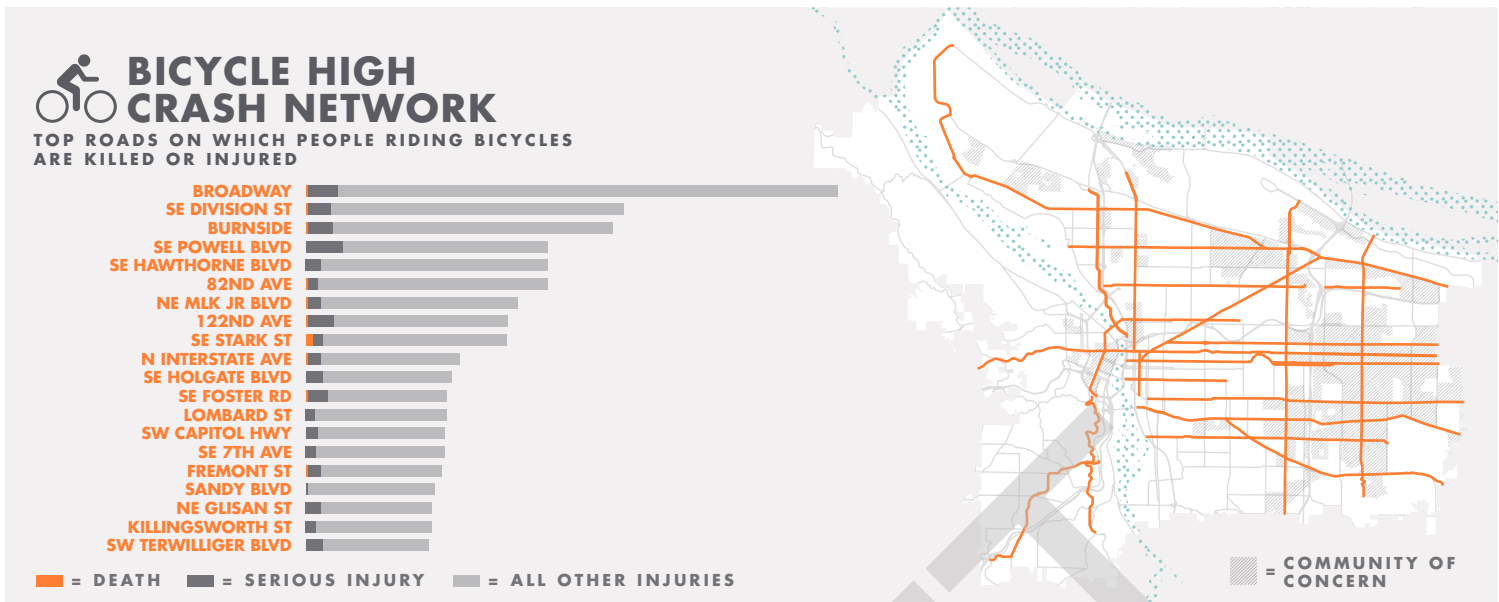
The maps on these pages reveal the most dangerous streets in Portland by mode—motor vehicle, pedestrian and bicycle—overlaid on Communities of Concern in gray. Together these streets and intersections make up the High Crash Network.



On the motor vehicle high crash network, orange lines show the 20 streets with the highest number of deaths and serious injuries for motor vehicle occupants in Portland between 2004 and 2013. The most dangerous streets are listed from the top, with orange bars indicating deaths and dark grey bars showing serious injuries.



The pedestrian and bicycle high crash networks show the top 20 most dangerous streets for people walking and bicycling in orange. Unlike the motor vehicle network, they contain all crash severities including serious, moderate, and minor injuries as well as deaths. This helps to paint a fuller picture of crashes involving the most vulnerable roadway users.



The High Crash Network layers the motor vehicle, pedestrian, and bicycle maps on top of one another. Many streets show up on two or three maps; the overlap results in 30 total streets making up Portland’s High Crash Network shown in the map on page 17.

The High Crash Network also includes the top 30 high crash intersections, bringing focus to the most dangerous points along the High Crash Network. The intersections are an aggregate of crashes by all modes, normalized for the number of cars passing through each intersection.



**Dustin Finney**  
 Son, brother, friend, advocate for equality of all people. Killed at age 28 by a drunk driver in a hit and run crash while riding in a bike lane on SE Division at 85th Avenue.  
 August 12, 2011  
*courtesy of Dustin’s mom*



# TAKING ACTION

**V**ision Zero addresses the causes and contributors to vehicle crashes by improving dangerous streets and by reducing dangerous behaviors through policy change, education, community conversation, and enforcement. Education and outreach activities will accompany all areas of action.

## ACTIONS TO ADDRESS DANGEROUS STREET DESIGN

Street characteristics influence behavior, and street design can exacerbate driver mistakes. Actions to address design focus on engineering solutions, but also include actions that establish policy and guidance for safe infrastructure. These are intended to create a system that protects all users—including people walking and bicycling—from deadly outcomes when mistakes and violations happen.

### 2-YEAR ACTIONS

#### SD.1

Build capital safety improvements on two segments and five intersections in the High Crash Network each year, prioritizing improvements in and engaging with Communities of Concern

#### SD.2

Secure a stable state-level transportation funding source dedicated to safety

#### SD.3

Deploy a multi-agency fatal rapid response team to all fatal crash locations to evaluate the site for safety enhancements

#### SD.4

Develop guidelines for marked pedestrian and bicycle crossings, including crossing enhancements, based on vehicle speeds and volumes, street characteristics, transit stops, and other factors

#### SD.5

Develop guidelines for protected bike lanes based on vehicle speeds, volumes and other factors

### 5-YEAR ACTIONS

#### SD.6

Review and provide recommendations for existing marked pedestrian crossings on the High Crash Network, including lighting, crossing enhancements and spacing frequency. Prioritize improvements and new marked crossings

#### SD.7

Partner to improve safety and pedestrian access to transit stops along key bus routes, prioritizing the High Crash Network in Communities of Concern, and where appropriate, in conjunction with increases in bus service frequency

#### SD.8

Add Vision Zero safety criteria to federal, state, regional and local funding decision processes



**Action SD.1** is an aggressive and significant commitment to infrastructure investment and street design by the Bureau of Transportation. The intent of this action is to change existing street design to support Vision Zero objectives.

**Vision Zero infrastructure projects will meet the following criteria:**

- ▶ Be constructed on Portland's High Crash Network, *and*
- ▶ Allocate a majority of the project cost to safety countermeasures\* that address a specific, documented safety risk

**Infrastructure projects will be prioritized by:**

- ▶ Location in Communities of Concern, *and/or*
- ▶ Improves safety for vulnerable users including people walking and bicycling, older adults and youth

PBOT is developing a High Crash Network infrastructure safety plan that will include design concepts for segments of the High Crash Network, prioritizing those that overlap with Communities of Concern. The design concepts will be shared with surrounding communities for refinement and feedback during the project design phase.

\*Examples include, but are not limited to, FHWA's 9 proven safety countermeasures: road diets, medians and pedestrian crossing islands, pedestrian hybrid beacons, roundabouts, access management, retroreflective backplates, safety edge, enhanced curve delineation, and rumble strips



## EDUCATION AND OUTREACH ACTIVITIES

### SD.EO.1

Outreach to accompany infrastructure improvements on the High Crash Network

### SD.EO.2

Integrate Vision Zero messaging with other City programs and projects

### SD.EO.3

Collaborate with partner agency traffic safety campaigns

## Accommodating Vulnerable Users in Work Zones

Safe choices should also be convenient. When streets and paths are disrupted by detours due to work zones, walking, biking and using a mobility device becomes challenging as people are forced to deviate from their path. The City of Portland, in partnership with community organizations, recently passed new work zone guidelines that prioritize direct routes for walking, biking and mobility devices to ensure safe movement during construction. This may mean making temporary changes to the street, such as creating a pathway in place of on-street parking for the duration of the project.

## ACTIONS TO ADDRESS IMPAIRMENT

These actions to address impairment include education activities, treatment services, and policy changes that aim to reduce the number of people driving under the influence of alcohol, drugs or both. Added enforcement of impaired driving is not included as an action at this time due to concerns about potential disparate impacts on people of color. Working with communities of color and law enforcement, the City of Portland will continue to seek actions that encourage safe behavior and reduce impaired driving in a way that is respectful to all.

### 2-YEAR ACTIONS

#### I.1

Work with driver-for-hire services (including taxi cabs, transportation network companies and other private companies), transit providers and bar owners to develop a targeted DUII program in Portland's entertainment district and other hotspots linked to DUII citations

#### I.2

Allow pre-payment for morning parking in specified districts (in combination with Action I.1) to encourage impaired drivers to leave their car overnight without concern of getting a parking ticket or being towed

Secure funding to increase the number of police officers trained as Drug Recognition Experts (DREs)

### 5-YEAR ACTIONS

#### I.4

Utilize marijuana or alcohol tax revenue to increase funding for DUII drug and mental health preventions and for treatment services

#### I.5

Increase access and expand referrals to driver diversion programs



### EDUCATION AND OUTREACH ACTIVITIES

#### I.EO.1

Focused education/outreach in locations with high number of establishments cited for over-serving alcohol

#### I.EO.2

Develop materials showing the prevalence and community impact of impaired driving for distribution at health clinics and doctors' offices

#### I.EO.3

Outreach to accompany enforcement actions

### Campaign to Address Impairment

Reducing impaired driving means addressing a complicated mix of personal behaviors, social factors, and legal liability. A combination of outreach, education, and incentives is critical to the success of these efforts. Actions will include:

- ▶ Partnering with driver-for-hire services (such as taxis, Uber, Lyft and pedicabs) to offer a subsidized ride home from drinking establishments
- ▶ Partnering with bars and entertainment venues to educate patrons on available transportation options other than driving
- ▶ Free or subsidized transit fares during holidays, festivals, and other days with high impaired driving rates
- ▶ Advertising pre-payment of morning parking downtown at bars, restaurants and other venues so impaired drivers feel comfortable leaving their car behind



## ACTIONS TO ADDRESS SPEED

These actions address the role speed plays in crash severity, particularly when a person driving a car crashes into a person walking, rolling, bicycling or riding a motorcycle. The actions will be paired with outreach to remind people that getting somewhere a few minutes faster is not worth the risk of ending a life.

### 2-YEAR ACTIONS

#### S.1

Pilot speed safety cameras on four high crash corridors in the first two years; expand program to additional high crash corridors following the pilot

#### S.2

Gain local authority for speed reduction on City of Portland streets; prioritize setting safe speeds on the High Crash Network

#### S.3

Improve street design to support safe speeds in conjunction with posted speed reduction on 4-6 streets (not including SD.1 improvements) annually in the High Crash Network, prioritizing improvements in and engaging with Communities of Concern



### EDUCATION AND OUTREACH ACTIVITIES

#### S.EO.1

High-visibility education and outreach paired with red-light and speed safety camera programs

#### S.EO.2

Outreach to accompany infrastructure improvement projects and enforcement actions

**Helping people understand the deadly consequences of speed is central to Vision Zero, as is creating a culture less tolerant of the risks that speeding creates. Specific educational efforts will accompany speed safety cameras, emphasizing the effectiveness of those cameras but also making sure people are aware of their existence and their intent—to reduce speeding, not as a revenue collection mechanism.**

## Designing Streets for Safe Speeds

The City of Portland standard is to design streets and street retrofits to the posted speed limit to ensure that all design elements of the roadway convey to drivers the appropriate speed. This is different from a traditional approach of designing streets to actual auto speeds, regardless of the posted speed limit.

## Street Design Actions to Lower Speeds

Changing the nature of a street can lower speeds. At the heart of Vision Zero is the recognition that better design changes behavior. Design elements that help reduce speeding can include adding visual cues that remind people that streets are for everyone. These include:

- ▶ Narrower travel lanes for automobiles
- ▶ On-street parking
- ▶ More frequent crossings with signals or stop signs
- ▶ Street trees, sidewalk landscaping
- ▶ Wide sidewalk with active uses like café seating
- ▶ Bicycle lanes with differentiated pavement color, treatments or marking

# ACTIONS TO ADDRESS DANGEROUS BEHAVIORS

These actions are intended to deter behaviors that contribute to deadly and serious injury crashes such as failure to yield, reckless, careless and aggressive driving.

## 2-YEAR ACTIONS

### D.1

Focus traffic enforcement on the High Crash Network and on behaviors contributing to fatal and serious injury crashes (including speed, impairment and dangerous behaviors); de-emphasize less serious infractions

### D.2

Use data-driven process to reorganize and expand red light safety camera program

### D.3

Include Vision Zero content in driver trainings for public agencies and contractors, and for private companies

## 5-YEAR ACTIONS

### D.4

Adopt and revise current Oregon distracted driving law to remove loopholes and be consistent with Federal guidance

### D.5

Support legislation to increase funding for and access to driver education, frequency of testing, and inclusion of urban transportation safety in test materials

### D.6

Develop and implement safety measures on heavy trucks owned or contracted by the City of Portland, including but not limited to truck sideguards, sensors, additional mirrors, educational messaging and enhanced driver safety training.  
Phase I: Education outreach for all and City fleet upgrades;  
Phase II: City contractors and service providers install truck upgrades



## EDUCATION AND OUTREACH ACTIVITIES

### D.EO.1

Communications and outreach that features photo stories of traffic crash victims

### D.EO.2

Communications and outreach that features messages from emergency responders at crash scenes

### D.EO.3

Integrate Vision Zero messaging with other City of Portland programs and projects

### D.EO.4

Hold "Truck's Eye View" safety demonstrations highlighting visibility limitations and blind spots from driver's perspective

## ENGAGEMENT AND ACCOUNTABILITY ACTIONS

Vision Zero will leverage community resources and assets by mobilizing existing and new forms of community engagement. These include the creation of outreach groups such as Street Teams—formed to carry out Vision Zero education and outreach teams in neighborhoods—and partnering with existing organizations such as Safe Routes to Schools.

A community grant program (Action EA.6) will support the work of community members to help shape and improve the most dangerous streets that travel through their neighborhoods.

### 2-YEAR ACTIONS

---

#### EA.1

Conduct multi-component education campaigns to build public awareness and leverage Vision Zero actions

#### EA.2

Form agency-led “street teams” that engage people driving, walking, biking and taking transit to raise awareness of Vision Zero and moving safely through Portland

#### EA.3

Develop targeted engagement for middle and high school students in traffic safety through the Safe Routes to School program, with a focus on empowering youth leadership to promote safe transportation in their own school communities, prioritizing Communities of Concern

#### EA.4

Regularly cross-check trauma data from the Oregon Health Authority against ODOT crash data to identify demographic patterns (age, race/ethnicity), geographic patterns and misreporting or under-reporting of serious injury crashes

#### EA.5

Improve timeliness of deadly and serious crash data processing and reporting

#### EA.6

Monthly PBOT and Portland Police Bureau Traffic Division meetings to include review of traffic crash data, equity data, and traffic safety performance

### 5-YEAR ACTIONS

---

#### EA.7

Create a community grant program to support a variety of safety-related efforts, including but not limited to street design visioning, outreach and education, and collaborative safety improvements in Communities of Concern within the High Crash Network

#### EA.8

Secure increased funding and personnel to staff timely investigation of deadly crashes

#### EA.9

Improve data collected on speed, impairment and distraction at serious and deadly crashes





# MEASURING PROGRESS

## Performance Measures

The guiding principles of this plan call for data-driven, accountable actions with regular progress reporting. Each action in the plan is paired with one or more performance measure. In addition, there are three overall performance measures that we will report on—traffic fatalities and serious injuries, funding, and location of infrastructure investment. Performance measures will be reported on annually.



### Overall Performance Measures

- 1 Number of people killed and seriously injured in traffic crashes in the City of Portland, disaggregated by mode, age, and geography, compared to prior years
- 2 Whether funding is secured from new local, regional or state sources for implementation of Vision Zero actions
- 3 Amount of Vision Zero infrastructure investment citywide and in Communities of Concern

### Action-specific Performance Measures

Item	Action	Leads	Action-specific Performance Measures (annual)
<b>ACTION AREA: STREET DESIGN (SD)</b>			
SD1	Build capital safety improvements on two segments and five intersections in the High Crash Network each year, prioritizing improvements in and engaging with Communities of Concern	PBOT, ODOT	Number of segments and intersections in the High Crash Network receiving capital safety improvements compared to prior years  Annual average number of deadly and serious crashes on improved segments, disaggregated by mode, age, and geography, compared to prior 5-year annual averages in the same segments
SD2	Secure a stable state-level transportation funding source dedicated to safety	PBOT, City Government Relations	Creation of a stable, state-level funding source dedicated to safety
SD3	Deploy a multi-agency fatal rapid response team to fatal crash locations to evaluate the site for safety enhancements	PBOT, PPB, TriMet, Multnomah County, PF&R, ODOT	Percentage of fatal crash locations for which a fatal rapid response team evaluated the site
SD4	Develop guidelines for marked pedestrian and bicycle crossings, including enhancements of crossings, based on vehicle speeds and volumes, street characteristics, transit stops, and other factors	PBOT	Percentage of marked pedestrian and bicycle crossings that meet guidelines
SD5	Develop guidelines for protected bike lanes based on vehicle speeds, volumes and other factors	PBOT	Number of protected bike lane miles installed using the guidelines
SD6	Review and provide recommendations for existing marked pedestrian crossings on the High Crash Network, including lighting, crossing enhancements and spacing frequency. Prioritize improvements and new marked crossings	PBOT	Number of existing marked pedestrian crossings improved annually on the High Crash Network  Number of new marked pedestrian crossings built annually on the High Crash Network  Percentage of the High Crash Network system that meets marked crossing frequency guideline
SD7	Partner to improve safety and pedestrian access to transit stops along key bus routes, prioritizing the High Crash Network in Communities of Concern, and where appropriate, in conjunction with increases in bus service frequency	PBOT, TriMet, ODOT	Number of improved transit stops along key bus routes 1) on the High Crash Network, and 2) within Communities of Concern annually
SD8	Add safety criteria to federal, state, regional and local funding decision processes	Metro, City Government Relations, PBOT, ODOT	Number of places where new safety criteria are included
<b>ACTION AREA: IMPAIRMENT (I)</b>			
I1	Work with driver-for-hire services (including taxi cabs, transportation network companies and other private companies), transit providers and bar owners to develop a targeted DUIL program in Portland's entertainment district and other hotspots linked to DUIL citations	PBOT, Drivers-for-hire, TriMet, local bar owners	Development of a targeted DUIL program  Percentage of DUIL citations issued in each targeted area compared to prior years
I2	Allow pre-payment for morning parking in specified districts (couple with Action I.1) to encourage impaired drivers to leave their car overnight without concern of getting a parking ticket or being towed	PBOT	Number of pre-pay parking passes purchased, by district
I3	Secure funding to increase number of police officers trained as Drug Recognition Experts (DREs)	PPB, PBOT	Increased number of police officers trained as DREs
I4	Utilize marijuana or alcohol tax revenue to increase funding for DUIL drug and mental health preventions and for treatment services	City Council, PBOT, Multnomah County Health	Legislation passed to increase funding
I5	Increase access and expand referrals to driver diversion programs	Multnomah County Court, PPB, Legacy Emanuel Medical Center, PBOT	Percentage of moving violations leading to driver diversion

## Action-specific Performance Measures (continued)

Item	Action	Leads	Action-specific Performance Measures (annual)
<b>ACTION AREA: SPEED (S)</b>			
<b>S1</b>	Pilot speed safety cameras on four high crash corridors in the first two years; expand program to additional high crash corridors following the pilot	PBOT, PPB	Number of speeding-related citations issued near speed safety cameras compared to baseline Percentage decrease of autos traveling 5+ mph over posted speed after speed safety cameras were installed
<b>S2</b>	Gain local authority for speed reduction on City of Portland streets; prioritize setting safe speeds on the High Crash Network	City Government Relations, PBOT	Obtain local authority for speed reduction Number of street segments where posted speeds have been reduced
<b>S3</b>	Improve street design to support safe speeds in conjunction with posted speed reduction on 4-6 streets (not including SD.1 improvements) annually in the High Crash Network, prioritizing improvements in and engaging with Communities of Concern.	PBOT	Number of high crash corridors receiving speed improvements each year Percentage decrease of autos traveling 5+ mph over posted speed after improvements
<b>ACTION AREA: DANGEROUS BEHAVIORS (D)</b>			
<b>D1</b>	Focus traffic enforcement on the High Crash Network and on behaviors contributing to fatal and serious injury crashes (including speed, impairment and dangerous behaviors); de-emphasize less serious infractions	PPB, PBOT	Percentage of citations focusing on identified dangerous behaviors, within Portland at large and on the High Crash Network
<b>D2</b>	Use data-driven process to reorganize and expand red light safety camera program	PBOT, PPB	Number of new red light safety cameras on Portland streets compared to baseline Annual average number of deadly and serious crashes at red light camera intersections after installation, compared to 5-year annual averages prior to installation
<b>D3</b>	Include Vision Zero content in driver trainings for public agencies and contractors, and for private companies	PBOT, other City bureaus	Number of public and private agencies incorporating Vision Zero content in employee driver trainings
<b>D4</b>	Adopt and revise current Oregon distracted driving law to remove loopholes and be consistent with Federal guidance	PBOT, ODOT	Oregon law revised to remove loopholes and be consistent with Federal guidance
<b>D5</b>	Support legislation to increase funding for and access to driver education, frequency of testing, and inclusion of urban transportation safety in test materials	PBOT, DMV, ODOT, schools, AAA, Metro, community partners	Increasing access to driver education and/or frequency of driver testing was placed on the City's legislative agenda Legislation was passed to increase access to driver education Legislation was passed to increase the frequency of driver testing Number of students who completed Driver Education through the increased funding and access
<b>D6</b>	Develop and implement safety measures on heavy trucks owned or contracted by the City, including but not limited to truck sideguards, sensors, additional mirrors, educational messaging and enhanced driver safety training. Phase I: Education outreach for all and City fleet upgrades; Phase II: City contractors and service providers install truck upgrades	PBOT, other City bureaus	Percentage of city fleet trucks with safety measures implemented Percentage of contractor and service provider fleet trucks with safety measures implemented Number of injuries, serious injuries or deaths, by mode, that involve heavy trucks
<b>ACTION AREA: ENGAGEMENT AND ACCOUNTABILITY (EA)</b>			
<b>EA1</b>	Conduct multi-component education campaigns to build public awareness and leverage Vision Zero actions	PBOT, City of Portland, community partners	Number of multi-component campaigns conducted compared to prior years
<b>EA2</b>	Form agency-led "street teams" that engage people driving, walking, biking and taking transit to raise awareness of Vision Zero and moving safely through Portland	PBOT, City of Portland, community partners	Number of street team events held in Communities of Concern Number of street team events held citywide
<b>EA3</b>	Develop targeted efforts to engage middle and high school students in traffic safety through the Safe Routes to School program, with a focus on empowering youth leadership to promote safe transportation in their own school communities, prioritizing Communities of Concern	PBOT, community partners	Number of students involved in traffic safety programs, in Portland at large and in Communities of Concern
<b>EA4</b>	Regularly cross-check trauma data from the Oregon Health Authority against ODOT crash data to identify demographic patterns (age, race/ethnicity), geographic patterns and misreporting or under-reporting of serious injury crashes	PBOT, PPB, OHA, ODOT	Frequency of cross-checks between trauma (OHA) and ODOT crash data Percentage of unmatched records in both OHA and ODOT data sets for serious injury crashes
<b>EA5</b>	Improve timeliness of deadly and serious crash data processing and reporting	PBOT, PPB, ODOT	Percentage of deadly and serious crash investigations completed within one week of crash event
<b>EA6</b>	Monthly PBOT and Portland Police Bureau Traffic Division meetings to include review of traffic crash data, equity data, and traffic safety performance	PBOT and PPB	Occurrence of monthly meetings
<b>EA7</b>	Create a community grant program to support a variety of safety-related efforts, including but not limited to street design visioning, outreach and education, and collaborative safety improvements in Communities of Concern within the High Crash Network	PBOT, City Council, community partners	Number of community grants awarded in Communities of Concern Number of community grants awarded citywide
<b>EA8</b>	Secure increased funding and personnel to staff timely investigation of deadly crashes	PPB	Increased funding and personnel for investigation of fatal crashes
<b>EA9</b>	Improve data collected on speed, impairment and distraction at serious and deadly crashes	PPB, ODOT	Percentage of serious and fatal crashes for which distracted driving data was collected Percentage of serious and fatal crashes for which speed data was collected Percentage of serious and fatal crashes for which impairment data was collected

### Abbreviations key

<b>DMV</b>	Oregon Department of Motor Vehicles
<b>ODOT</b>	Oregon Department of Transportation
<b>OHA</b>	Oregon Health Authority
<b>PBOT</b>	Portland Bureau of Transportation
<b>PF&amp;R</b>	Portland Fire & Rescue
<b>PPB</b>	Portland Police Bureau

# PARTNERSHIPS

The success of Vision Zero in Portland relies on multiple partner agencies and organizations coming together to take a coordinated, multidisciplinary approach to solving our most pressing traffic safety problems.

An ongoing Vision Zero Task Force will convene quarterly to flesh out details of actions, work on implementation, ensure annual performance measure reporting, update the plan as necessary, and track equity impacts of the actions.

The Vision Zero Action Plan will be updated as actions are accomplished and new needs arise, providing flexibility and responsiveness to tackle Portland's top safety needs. With each plan update, an equity analysis will identify how the actions have benefited and engaged Communities of Concern, and changes needed in order to do so in the future.

**We commit the resources, time and leadership to move this plan forward and see our goal of no deaths or serious injuries on Portland streets by 2025 become a reality.**





## PROJECT TEAM

### Portland Bureau of Transportation

Margi Bradway  
Clay Veka  
Matt Ferris-Smith  
Gabe Graff

### CH2M

Catherine Ciarlo  
Kate Drennan

### Design+Culture Lab

Joy Alise Davis

### DKS Associates

Scott Mansur  
Ben Chaney

### Paste in Place

Ryan Sullivan

### Toole Design Group

Rebecca Sanders

In addition, thank you to Technical Advisory Committee members and members of the public for your input on this plan

## TASK FORCE

Leah Treat, PBOT, Task Force Chair

Kelly Brooks, ODOT Region 1

Michael Crebs & Kelli Sheffer\*, Portland Police Bureau

Jae Douglas, Multnomah County Health Department

Tony DeFalco, Verde / Living Cully

Marie Dodds, AAA

Kristi Finney Dunn, Oregon and SW Washington Families for Safe Streets

Rebecca Hamilton & Roger Averbeck\*, Pedestrian Advisory Committee

JoAnn Herrigel, Elders in Action

Roberta Hunte, Portland State University

Duncan Hwang, Asian Pacific American Network of Oregon

Jana Jarvis, Oregon Trucking Association

Anne Marie King, Disability Rights Oregon

Tom Kloster, Metro

Don Russ, Portland Fire & Rescue

Alan Lehto, TriMet

Khanh Le, Oregon AFSCME

Charles McGee, Black Parent Initiative

Noel Mickelberry, Oregon Walks

Chris Monsere, Portland State University

Michael Morrison, Legacy Emanuel Trauma Services

Stephanie Noll & Rob Sadowsky\*, Bicycle Transportation Alliance

Vivian Satterfield, OPAL Environmental Justice Oregon

Kari Schlosshauer, Safe Routes to School National Partnership / Bicycle Advisory Committee

Bandana Shrestha, AARP

Steve A. Todd, Multnomah County Circuit Court

\*Organizations represented by only one Task Force member at each meeting

