

FATAL PEDESTRIAN CRASH REPORT

FOCUS ISSUES

PORTLAND, 2017-2019



Oregon Walks is a 501 (c)(3) non-profit membership organization dedicated to promoting walking and making the conditions for walking and rolling safe, convenient and attractive throughout the Portland metropolitan region and statewide.

The Focus Issues report examines larger themes presented by fatal pedestrian crash review data from 2017-2019 in Portland, OR. The subjects of pedestrian transportation equity, people experiencing homelessness, street lighting, vehicle speed, SUVs and trucks, distraction, enforcement and post-crash considerations are explored.

The goal of the Focus Issues report is to supplement the infrastructure specific Crash Reviews report and the data-oriented Facts and Figures report with a broad discussion to guide transportation planning and pedestrian advocacy efforts in Portland.

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01.

Transportation Equity



Fatal pedestrian crash data from 2017-2019 reveals fundamental pedestrian transportation equity issues in Portland. Pedestrians walking in low-income communities, particularly in East Portland, who are part of traditionally underserved groups including those who identify as Black, older adults, or persons with disabilities are disproportionately more likely to be killed in a crash.

What is Transportation Equity?

The goal of equity in transportation is to establish fairness for all members of a community in matters of accessibility and mobility through transportation plans, resource allocation and communication that consider the unique circumstances of each community. An assessment of traditionally underserved populations' ability to safely travel as pedestrians is crucial to achieving a transportation environment that provides equitable access to services and destinations.

For the purpose of transportation equity assessment, the FHWA defines "traditionally underserved groups" as including individuals in at least one of the following categories: "Minority, Low Income, Limited English Proficiency, Elderly, or Persons with Disabilities." While the exact terminology used by the FHWA is contentious, this section will discuss fatal pedestrian crash data in Portland from 2017-2019 within the conceptual framework of the FHWA definition categories for traditionally underserved groups, looking at the role of Race, Income, Older Adults and People with Disabilities.

East Portland

A simple look at where fatal pedestrian crashes occur in Portland reveals a lot about existing transportation inequity. A disproportionately large number of fatal pedestrian crashes occurred in East Portland, defined as the area of Portland east of 82nd Avenue (inclusive). According to PBOT's East Side in Motion plan, **East Portland contains 28% of city population, yet was the location of 50% of pedestrian crash fatalities between 2017 and 2019.**

The death rate for pedestrian crashes in East Portland is more than double that west of 82nd Ave. **There were 12.9 pedestrian fatalities per 100,000 in East Portland as compared to 5 per 100,000 in West Portland.** 28 out of 30 PBOT identified High Crash Intersections are in East Portland.



East Portland is an underserved area with a significantly lower household median income, a larger percentage of people of color, less access to public transportation and more underdeveloped infrastructure (sidewalks, roads, marked crossings, etc.) than areas west of 82nd Ave.

Recent research has examined larger systemic patterns underpinning equity disparities between East and West Portland. Uneven development fostered by Portland's sustainability investment in the city core and the resulting suburbanization of poverty have contributed to the divide between the areas.

In 2007 the City of Portland Bureau of Planning recognized "**East Portland receives less City spending from all bureaus except police and fire and ranks lowest in the city in almost every "livability" category, from access to transit and parks to traffic fatalities and nighttime safety.**"

Accordingly, City institutions have begun to focus on bigger picture equity issues in recent years. The 2012 Portland Plan employs an equity lens in its 25 year plan for the city, the Bureau of Planning and Sustainability completed a Gentrification and Displacement Study in 2013 and the City released the Anti-Displacement Action Plan in 2020.

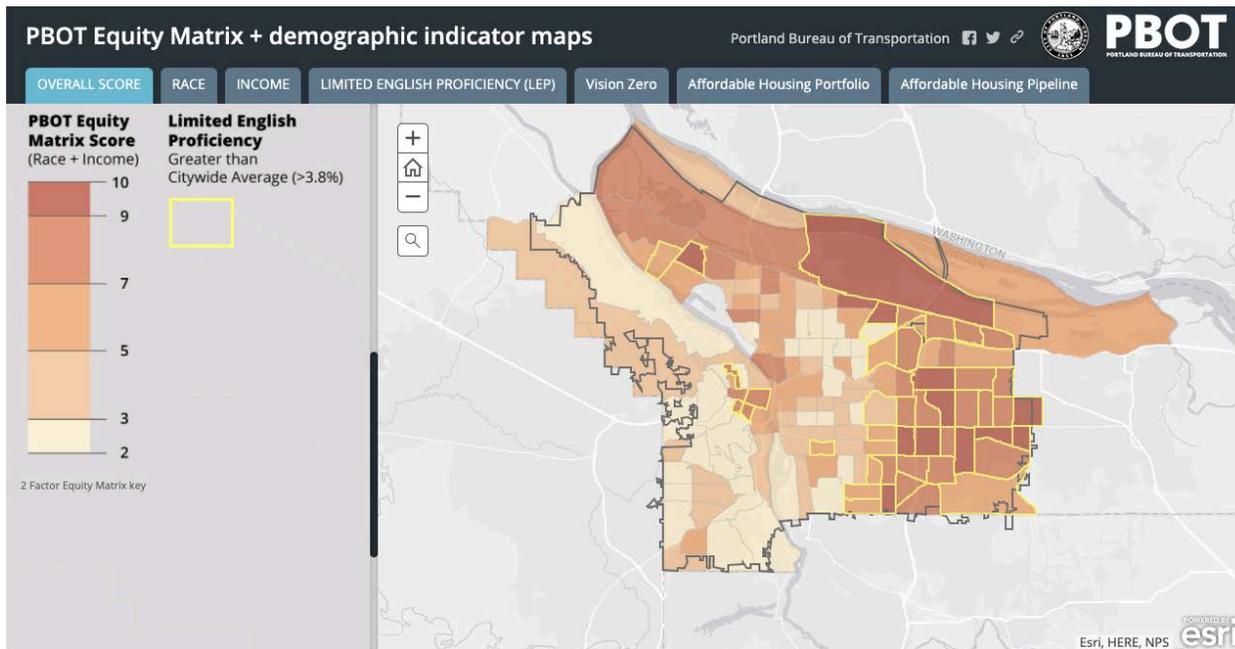


Image: PBOT

The PBOT Equity Matrix

The Portland Bureau of Transportation (PBOT) has focused on transportation equity by implementing a simplified equity matrix to inform their work, guide their investments, and rank many internal project lists, programs and procedures. Race and Income are each given a score in separate geographical areas of Portland defined by census tracts. (Despite the City’s Office of Equity and Human Rights guidelines, a Limited English Proficiency score is not included due to a relatively high level of uncertainty and error in the data. Analysis of LEP data will accordingly be excluded from this report.)

The Race score uses a scale of 1 to 5, with the percentage of those who identify as people of color/Hispanic/Latino ranging from 0% to 60% respectively. The Income score use a scale of 1 to 5 with median household income data ranging from \$13,318 to \$168,816 respectively. An Overall Equity Matrix Score (2-10) is the sum of Race and Income scores.

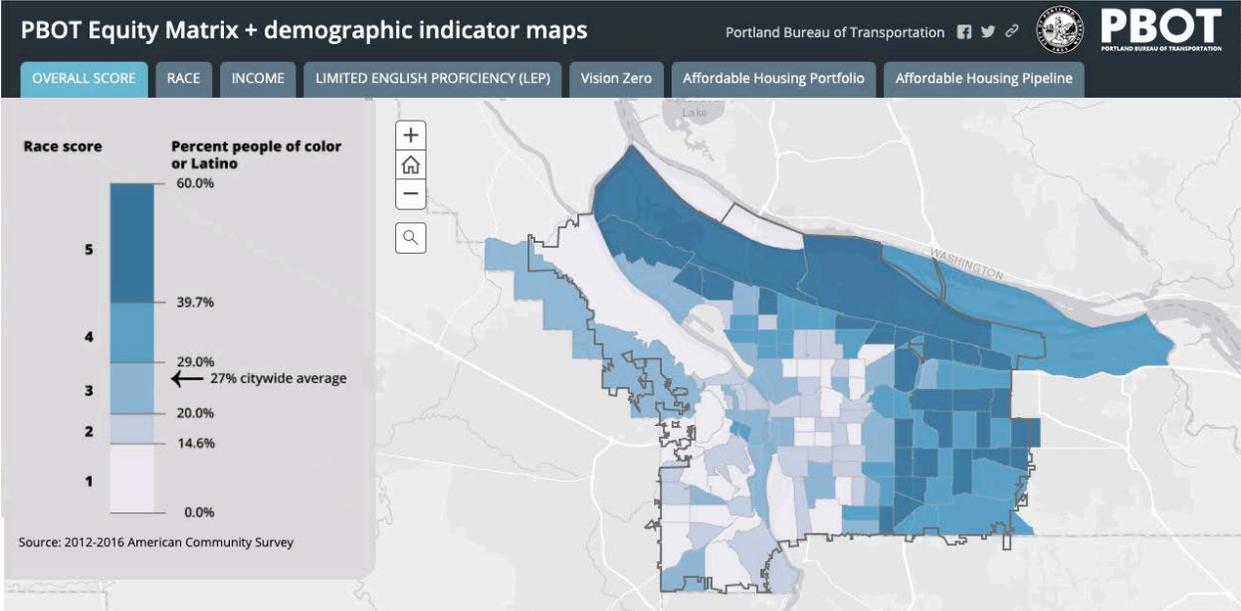
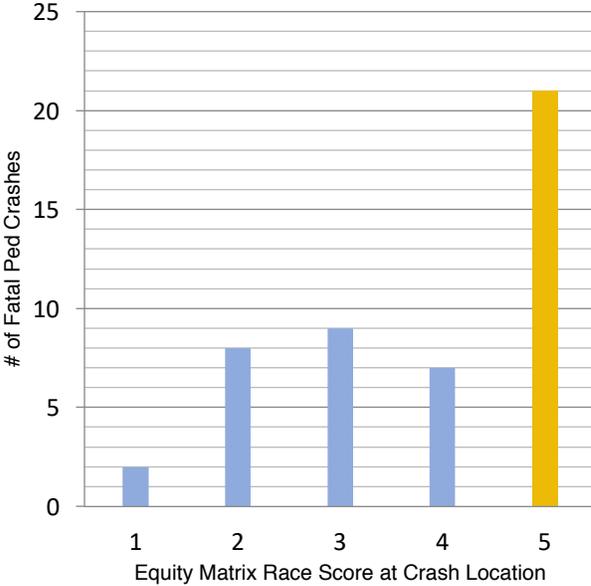


Image: PBOT

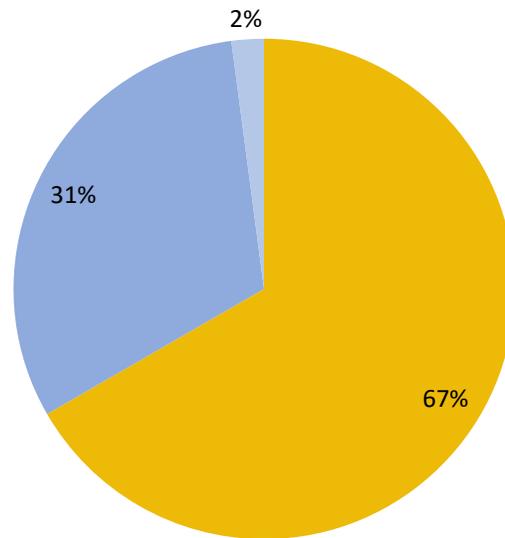
Race

Nearly half of all fatal pedestrian crashes (21) occurred in areas with the highest percentages of people of color and the highest race matrix score of 5.



% of Population Identified as POC at Crash Locations

■ Above City Average of 27% ■ Below City Average of 27% ■ No Data



The citywide average for population of people of color in the census tracts used by PBOT is 27%. **A majority (67%) of fatal pedestrian crashes occurred in areas where the percentage of people of color is greater than the citywide average.** Notably, the fewest crashes (only 2) occurred in areas with the highest white population and the lowest equity matrix score of 1.

While data shows that a proportional amount of people of color were killed in fatal pedestrian crashes as compared to Portland population percentages when taken as a block group (including Black, Asian, American Indian/Alaskan Native/Hispanic and Latino), the percentage of specifically Black pedestrians killed is disproportionately high. **US Census data shows that 5.8% of Portlanders are Black, yet 17% of Portlanders killed in pedestrian crashes were identified as Black.**

The death rate is correspondingly disparate with 20.77 deaths per 100,000 for Black people as opposed to 7.00 per 100,000 for white people.

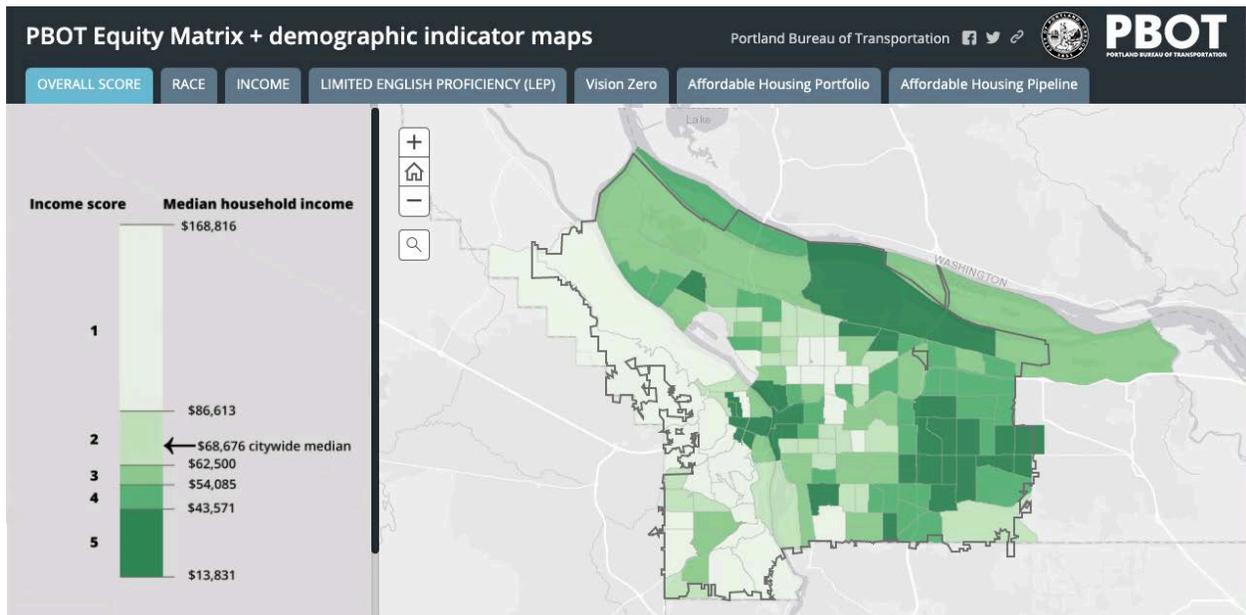
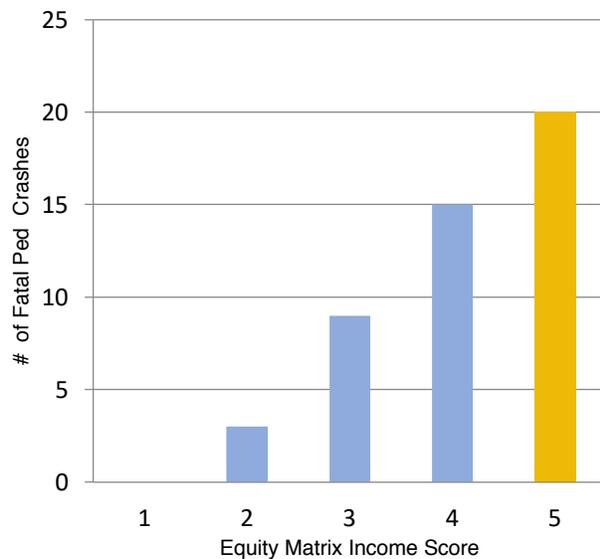


Image: PBOT

Income

Data for median income shows a similar correlation to that of race. Nearly half of fatal pedestrian crashes (20) occurred in areas with the lowest median income and a matrix score of 5 while no crashes took place in the wealthiest areas with the highest median incomes and a matrix score of 1.

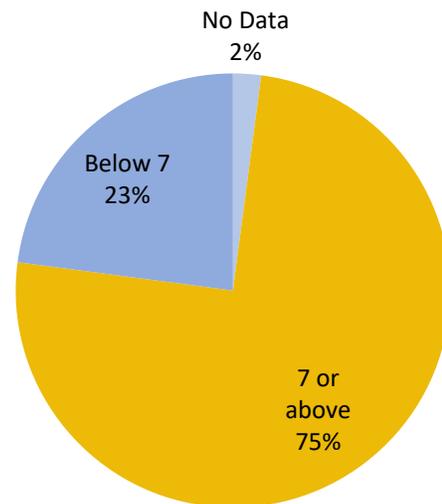
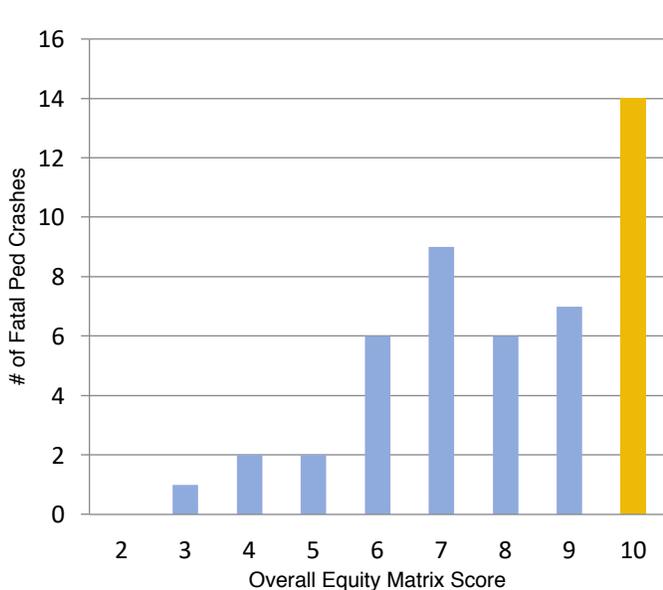
The citywide median income is \$68,676. **100% of fatal pedestrian crashes occurred in areas with a median income below the citywide median.**



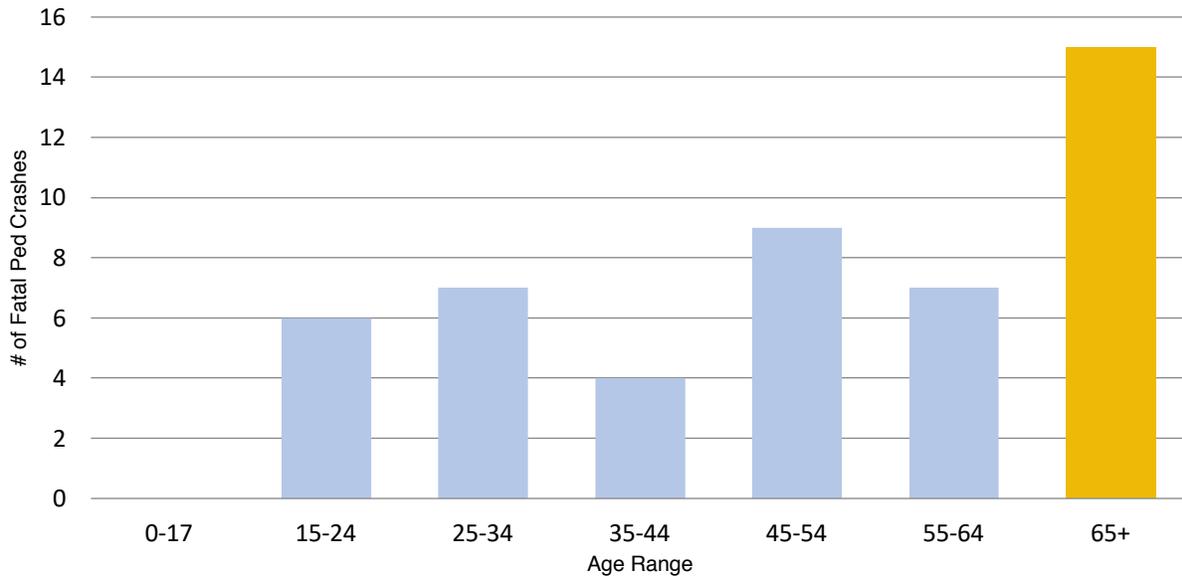
Overall Equity Matrix Score

Overall Equity Matrix Scores at crash locations show a correlation between higher scores and a higher number of fatal pedestrian crashes and vice versa. There are notably no fatal pedestrian crashes in areas with the lowest matrix score of 2 (least people of color and highest median income) and the most fatal pedestrian crashes at locations with a matrix score of 10 (most people of color and lowest incomes.) **75% of fatal pedestrian crashes occurred at a location with an overall matrix score of 7 or more.** PBOT recognizes areas with an equity score higher than 7 as “Communities of Concern”.

Put simply, **fatal pedestrian crashes are more likely to occur in poorer areas with more people of color and less likely to occur in more affluent white areas.** Black pedestrians are disproportionately at a higher risk of dying in a fatal crash.



Older Adults



For equity considerations, the FHWA defines the traditionally underserved group category of “Older Adults” as those who are 65+ years old.

The fatal pedestrian crash death rate for older adults is 18.36 per 100,000 whereas it is 5.67 per 100,000 for those under 65 years of age.

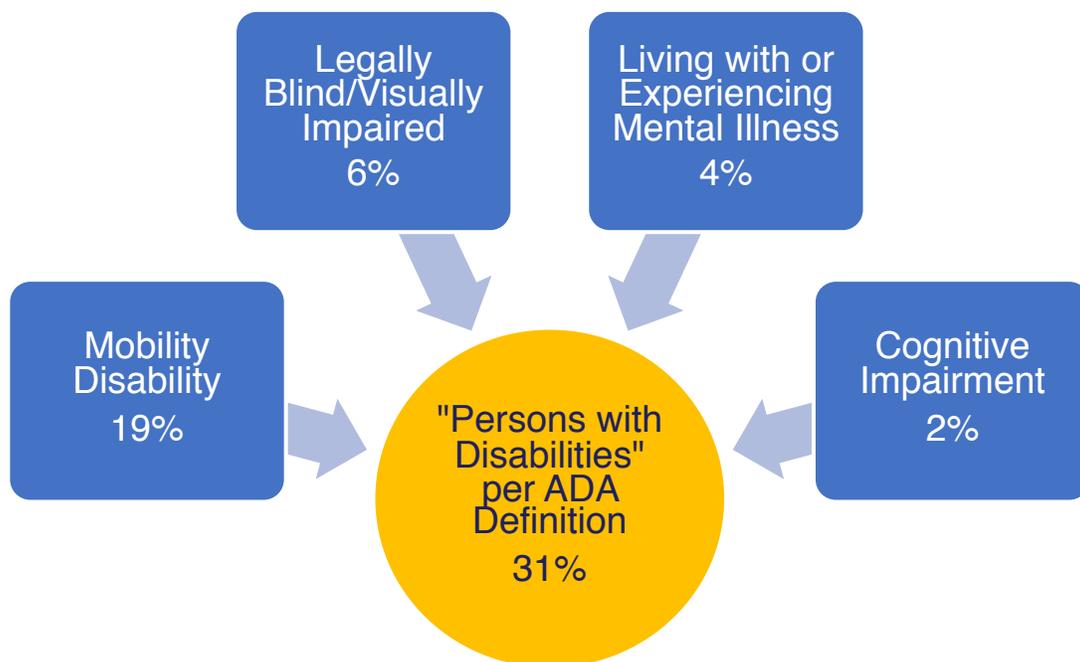
US Census data shows that 12.3% of Portlanders are 65+, yet a disproportionately high 31% of pedestrians killed in fatal crashes were 65+.

Persons with Disabilities

Recent **US Census estimate data puts the total number of persons with disabilities in Portland at around 12%**. The Census Bureau's American Community Survey defines a disability as those who have difficulty with hearing, vision, cognition, walking or climbing stairs as well as difficulty with self-care and independent living. The FHWA uses the similar ADA definition for a person with a disability: "one who has a physical or mental impairment that substantially limits one or more major life activities of such individual, a record of such an impairment, or being regarded as having such an impairment."

19% of pedestrians killed in crashes had a mobility issue (used walkers, physical walk speed limitations), 4% were legally blind, 2% were visually impaired (cataracts), 4% living with or experiencing mental illness, and 2% had cognitive impairment.

All together, this means that a **disproportionately high 31% of pedestrians killed in crashes fall under the Census Bureau and ADA definitions of "disabled" and thus FHWA inclusion in traditionally underserved groups.**



Conclusion

Fatal pedestrian crash data from 2017-2019 reveals fundamental pedestrian transportation equity issues in Portland. Pedestrians walking in low-income communities, particularly in East Portland who are part of traditionally underserved groups including those who identify as Black, Older Adults, or persons with disabilities are disproportionately more likely to be killed in a crash.

PBOT adopted their 5-year Racial Equity Work Plan in 2017 and the draft of their ADA Title II Public Right of Way Transition Plan Update is currently in review. Both plans seek to more effectively focus on underserved communities in Portland.

Increased focus must continue to be put on meeting the transportation equity needs of underserved areas and communities. East Portland should be the given priority for transportation plan resources, allocation of funds and community engagement. Particular attention should be given to traffic calming, crosswalk infrastructure (more marked signalized crossings with RRFB's when applicable), proper signal timing, and adequate lighting to accommodate those with slower mobility, visual impairment and intellectual disabilities.

References

Pedestrian and Bicycle Information Center: Pursuing Equity in Pedestrian and Bicycle Planning

http://pedbikeinfo.org/cms/downloads/PBIC_WhitePaper_Equity.pdf

Portland Census Data

<https://data.census.gov/cedsci/all?q=disabilities>

<https://data.census.gov/cedsci/table?q=disabilities%20Portland%20OR&tid=ACSST1Y2019.S1810&hidePreview=false>

The Economic Gap Between Portland's Outer Eastside and Westsiders is Wide and Growing

<https://www.wweek.com/news/2018/04/24/the-economic-gap-between-portlands-outer-eastside-and-westsiders-is-wide-and-growing/>

BikePortland: Inequity, car design are major factors in walking deaths says reporter Angie Schmitt

<https://bikeportland.org/2019/10/16/inequity-car-design-are-major-factors-in-walking-deaths-says-reporter-angie-schmitt-306265>

Uneven Development of the Sustainable City: Shifting Capital in Portland, Oregon

https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1106&context=usp_fac

PBOT Equity Matrix + Demographic Indicator Maps

<https://pdx.maps.arcgis.com/apps/MapSeries/index.html?appid=2e2252af23ed4be3a666f780cbaddfc5>

PBOT plans to re-focus 'Vision Zero' on far east side, where most traffic deaths occur

<https://katu.com/news/local/portland-plans-to-re-focus-vision-zero-on-east-side-where-most-deadly-crashes-occur>

PBOT 5-year Racial Equity Workplan

<https://www.portlandoregon.gov/oehr/article/622531>

PBOT ADA Title II Public Right of Way Transition Plan

<https://www.portland.gov/transportation/planning/adatransitionplan>

PBOT ADA Title II Public Right of Way Transition Plan
<https://www.portland.gov/transportation/planning/adatransitionplan>

Smart Growth America: The State of Transportation and Health Equity
<https://smartgrowthamerica.org/resources/the-state-of-transportation-and-health-equity/>

Smart Growth America: Dangerous By Design
<https://smartgrowthamerica.org/wp-content/uploads/2020/01/DbD-2020-Report.pdf>

<https://smartgrowthamerica.org/dangerous-by-design/>

02.

People Experiencing Homelessness



People experiencing homelessness die in fatal pedestrian crashes at a grossly disproportionate rate as compared to the rest of the Portland population and deserve equity consideration in transportation issues as a traditionally underserved group with disabilities.

Equity Lens on Homelessness

People experiencing homelessness are not distinctly included in the FHWA definition of traditionally underserved populations or the ADA definition of a person with disabilities.

A white paper by the Pedestrian and Bicycle Information Center for the FHWA notes that “traditionally underserved populations” are often referenced as “at-risk”, “vulnerable”, “low-resource”, or “disadvantaged” populations. The ADA definition of a person with disabilities is someone experiencing “a physical or mental impairment that substantially limits one or more major life activities”.

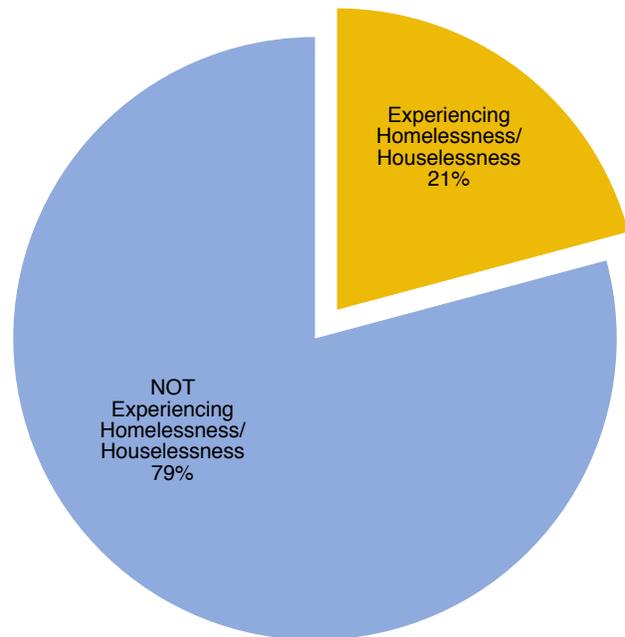
Through the equity lens of the above definitions, people experiencing homelessness can be viewed as a traditionally underserved population as persons with a disability. In addition to the vulnerability of basic survival considerations, lack of a physical home and food is a strong disadvantage and limitation to major life activities such as finding employment.

People experiencing homelessness deserve equity consideration in transportation issues as a traditionally underserved group with disabilities.

Homelessness in Portland

The exact percentage of Portland population who are experiencing homelessness is difficult to determine as many definitions are used and data collection is incomplete. A 2019 PSU report found that **2% of people in the Portland metro area in 2017 experienced homelessness**. The United States Interagency Council on Homelessness puts the Oregon homeless population at 2.81%. The Multnomah County “Point-in Time” 2019 report determined .5% of Portland’s population to be experiencing homelessness.

21% of Portlanders killed as pedestrians were experiencing homelessness. This is highly disproportionate to Portland’s homeless population percentage, indicating people experiencing homelessness are at a significantly elevated risk of dying in a crash compared to other Portlanders.



Death Rate

Between 2017 and 2019, **the death rate for pedestrians experiencing homelessness was 53.59 per 100,000 while the death rate for pedestrians not experiencing homelessness was 5.89 per 100,000.** Pedestrians experiencing homelessness are 10 times more likely to be killed by a driver.

Location

Though the data set for deaths of pedestrians experiencing homelessness is small (10 total) it is notable that 6 of the deaths occurred in East Portland (east of 82nd Ave.) with 9 occurring east of the Willamette River.

Conclusion

People experiencing homelessness die in fatal pedestrian crashes at a grossly disproportionate rate as compared to the rest of the population. Though technically outside of the FHWA and ADA definitions, people experiencing homelessness can be viewed as an underserved population living with a disability and should be accorded equity consideration.

A passing mention about consideration of data for people experiencing homelessness being important to transportation planning was made at the latest PBOT Vision Zero Task Force meeting in October of 2019 according to published minutes. However, there was no elaboration or discussion at that meeting. Similarly, the May 2020 public review draft of the PBOT Safe Streets report lists “people experiencing homeless” as an equity consideration factor, without further clarification. To date, there are no publicly available materials showing a methodology or implementation guidelines at PBOT for the equity consideration of people experiencing homeless for the purposes of planning and funds allocation.

Data for people experiencing homelessness must be researched and incorporated in the existing PBOT Equity Matrix map, even if in a limited way like that of Limited English Proficiency (LEP) data, in order to facilitate more broadly informed decisions.

While the transient nature of the homeless population makes traditional community outreach more difficult, infrastructure can and should take into account the realities of people living on the streets. Transportation planning should include a formal assessment of homelessness in project areas and address known increased risk factors as they relate to upgrades and development (encampments along or near roads, history of pedestrian crash deaths and injuries involving people experiencing homelessness).

Data shows that the majority of people experiencing homelessness were killed in East Portland, reinforcing the need for the prioritization of transportation projects to focus on areas east of 82nd Ave to address equity issues.

References

OPB: PSU Report Estimates 2% Of Portland Metro Population Was Homeless In 2017

<https://www.opb.org/news/article/portland-state-university-metro-homeless-report-2017/>

Multnomah County Point-in-Time 2019

<https://multco.us/file/82568/download>

U.S. Interagency Council on Homelessness: Oregon Homelessness Statistics

<https://www.usich.gov/homelessness-statistics/or/>

Governance, Costs, and Revenue Raising to Address and Prevent Homelessness in the Portland Tri-County Region

http://opb-imgserve-production.s3-website-us-west-2.amazonaws.com/original/embargoed_copy_psu_homelessness_study_1_1566338960157.pdf

Portland Vision Zero 2-year Update: June 2019

<https://www.portland.gov/sites/default/files/2020-05/portland-vision-zero-2-year-update.pdf>

PBOT Safe Streets Report (May 2020, Public Review Draft)

<https://www.portlandoregon.gov/transportation/article/761623>

03.

Street Lighting



Review of fatal pedestrian crash locations reveals that a majority of locations have possible lighting inadequacies and issues that disproportionately affect people of color and low-income neighborhoods, particularly in East Portland. Inadequate street lighting in Portland is more than an infrastructure concern, it is a fundamental transportation equity issue.

Portland Lighting Guidelines

In May of 2019 PBOT adopted the [Appendix K: City of Portland Recommended Light Levels and Guidelines for Roadway Lighting](#). The purpose of the document was to compare City lighting standards to current lighting industry practices, identify new recommended minimum light levels, and define a “recommended procedure” to develop “aspirational goals” for lighting Portland’s roadways.

While the Appendix K guidelines are intended for use in conjunction with new lighting projects as they are scoped, designed, and constructed, Oregon Walks crash reviews assessed current lighting conditions at fatal pedestrian crash locations according to the guidelines.

On-street Google Maps analysis and police report notes were used to cite possible lighting inadequacies and issues such as: lack-of or non-functioning lighting, long distance between streetlights, streetlights on only one side of the road, roadside lighting clutter (police determination) and streetlight obstruction.

Review of fatal pedestrian crash locations reveals that a majority of locations have possible lighting inadequacies and issues that disproportionately effect people of color in low-income neighborhoods, particularly in East Portland. Inadequate street lighting in Portland is more than an infrastructure concern, it is a fundamental transportation equity issue.

View the PBOT Appendix K Guidelines [here \(click on image\)](#):

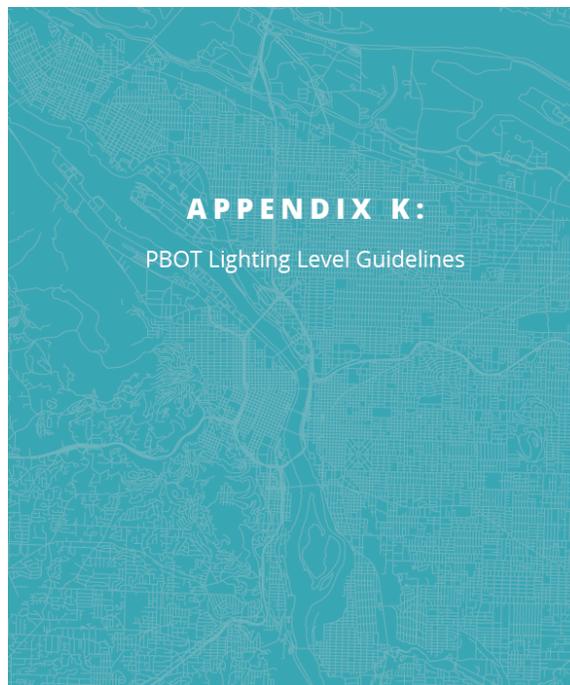


Image: PBOT

The PedPDX Plan

In June of 2019 the City of Portland adopted the PedPDX Plan, an update of the City's Pedestrian Master Plan from 1998, that seeks to prioritize sidewalk, crossing and other investments with the goal of making walking more safe and comfortable across the City.

The plan directly acknowledges citywide lighting inadequacies stating: **“pedestrian crashes after dark commonly occur in the presence of streetlights, suggesting that current street lighting conditions are not sufficient to ensure motorists and pedestrians see each other.”**

While Appendix K guidelines are passively described as an “aspirational goal” for new projects only, the PedPDX Implementation Plan actively asserts “the new street lighting guidelines will help to prioritize lighting improvements on underlit, high crash corridors, in support of Vision Zero.”

View the full PedPDX Plan here (click on image):

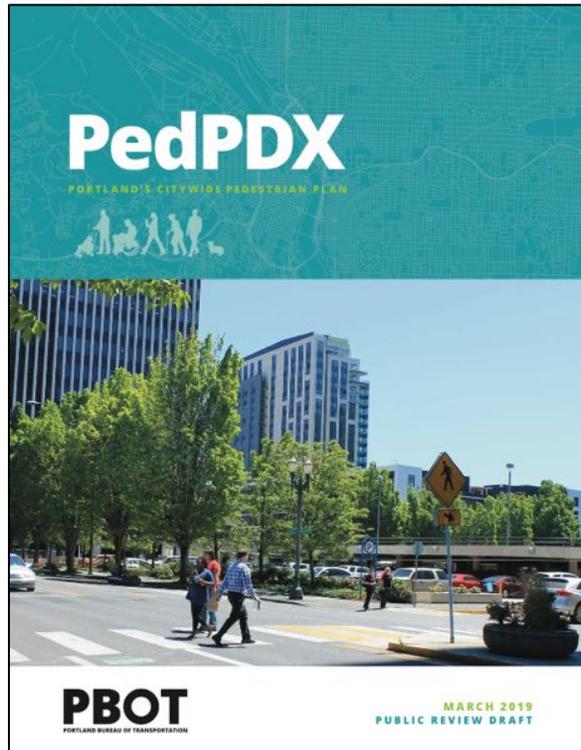
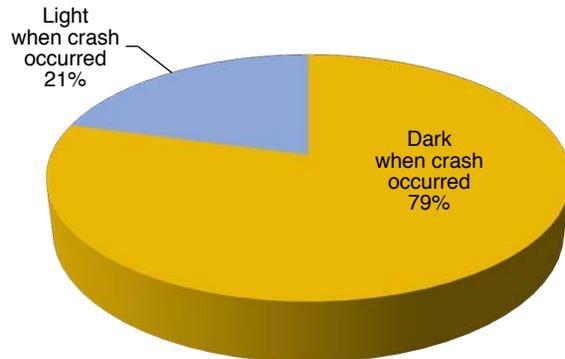


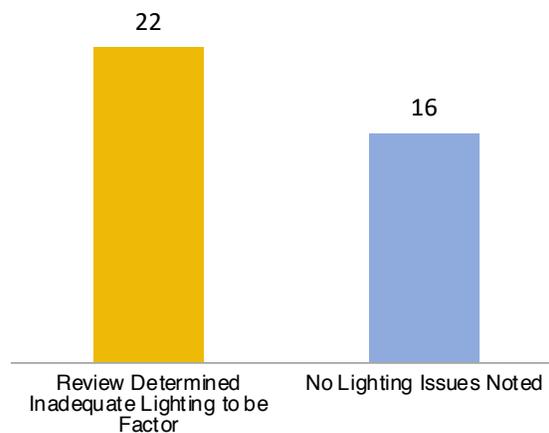
Image: PBOT

Crashes in Darkness

Fatal pedestrian crashes occurred when it was dark in a large majority of instances (38 out of 48 crashes, 79%).



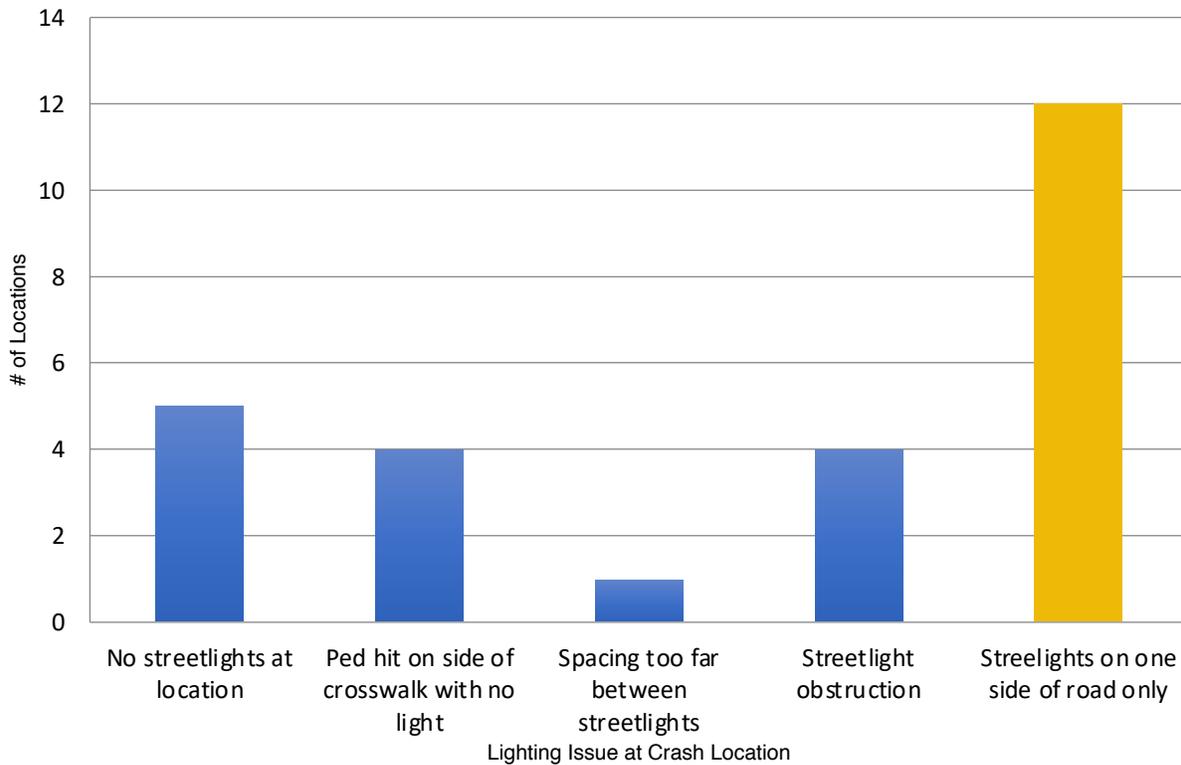
Of crashes that occurred when it was dark, review indicates possible lighting inadequacies as a contributing crash factor at 22 out of 38 or 58% of locations.



The most common lighting issue, found at 12 out of 22 or 55% of crash locations where inadequate lighting was determined to be factor, was a lack of streetlights on one whole side of the road.

There are currently 21 total fatal pedestrian crash locations with unresolved possible lighting deficiencies or issues.

Lighting upgrades or improvements have been made at 2 crash locations since the time of the crash. One of these sites was determined to have had inadequate lighting prior to the crash, the other did not have noted lighting issues.



Location Issues

PedPDX prioritizes improvements on PBOT defined High Crash Corridors.

18 out of 22 (82%) fatal pedestrian crash locations that were determined to have possible lighting issues are on High Crash Corridors. Considering existing issues and pedestrian death history, assessment and improvements should be made at applicable locations. The full list of locations with street lighting issues with Appendix K lighting recommendation noted is as follows:

10100 SE Main St.

Nearest light 54' east, no light at or west of mid-block crossing.

.4 Average Maintained Horizontal fc, 0.2 - 0.5 Average Vertical fc.

SE 92nd Ave. at SE Foster Rd.

Pedestrian was hit within a marked crosswalk on the side of road with no street light above. Ensure adequate illuminance. 1.2 Average Maintained fc, 4 Uniformity Ratio.

NE Killingsworth St. at NE 75th Ave

Spacing possibly too far between streetlights to provide proper roadway illuminance.

1.2 Average Maintained fc, 3 Uniformity Ratio.

SE 82nd Ave. near SE Malden St.

Streetlights only one side of the road. Possible streetlight obstruction by trees.

1.2 Average Maintained fc, 3 Uniformity Ratio.

SE Powell Blvd. just east of SE 50th Ave.

Streetlight obstruction by trees in median planter, lack of lighting on building to illuminate resulting dark sidewalk and roadway at 5021 SE Powell Blvd.

1.2 Average Maintained fc, 3 Uniformity Ratio.

SB I205 FWY just south of SE Woodstock Blvd. Overpass

No lighting at location for very long stretch/distance too far between streetlights.

Police report notes this is a very dark section of road. PBOT Appendix K does not provide guidelines for Interstate Freeways as this is up to ODOT.

N Columbia Blvd. at N Interstate Pl.

Pedestrian was hit on the side of the crosswalk with no streetlight. There is only one streetlight at the intersection that may not provide sufficient illuminance.

1.0 Average Maintained fc, 3 Uniformity Ratio.

NE 102nd Ave. at NE Skidmore St.

Pedestrian was hit on the side of the road in the crosswalk with no streetlight.

1.0 Average Maintained fc, 3 Uniformity Ratio.

SE Division St. just east of SE 113th Ave.

Streetlights on only north side of the road.

1.0 Average Maintained fc, 3 Uniformity Ratio.

NE Sandy Blvd. just east of NE 122nd Ave.

Streetlights on only one side of the road.

1.2 Average Maintained fc, 3 Uniformity Ratio.

SE Division St. just east of SE 169th Ave.

Streetlights on only north side of the road.

1.0 Average Maintained fc, 3 Uniformity Ratio.

SE Division St. at SE 158th Ave.

Streetlights on only the north side of the road.

1.0 Average Maintained fc, 3 Uniformity Ratio.

NE Sandy Blvd. just east of NE 20th Ave.

Streetlight obstruction by trees on south side of the road.

1.2 Average Maintained fc, 3 Uniformity Ratio.

SE Division St. just west of SE 139th Ave.

Streetlights on only north side of the road.

1.0 Average Maintained fc, 3 Uniformity Ratio.

SE Stark St. at SE 146th Ave.

Streetlights on only one side of the road.

1.0 Average Maintained fc, 3 Uniformity Ratio.

SE Division St. at SE 130th Ave.

Police note that all streetlights were out on the south side of the road where the pedestrian was hit on the night of the crash. Determine circumstances.

1.0 Average Maintained fc, 3 Uniformity Ratio.

SE Powell Blvd. at I205

Lack of lights under the MAX and multi-use path overpass.

1.2 Average Maintained fc, 3 Uniformity Ratio.

N Fessenden St. and N Polk Ave.

Streetlights on only one side of the road (north).

.8 Average Maintained fc, 4 Uniformity Ratio.

NE Halsey St. at NE 141st Ave.

Streetlights on only one side of the road.

1.2 Average Maintained fc, 3 Uniformity Ratio.

NE Portland Hwy and NE 45th Ave.

Streetlights on only one side of road (north).

1.0 Average Maintained fc, 3 Uniformity Ratio.

NE Halsey St. just east of NE 122nd Ave.

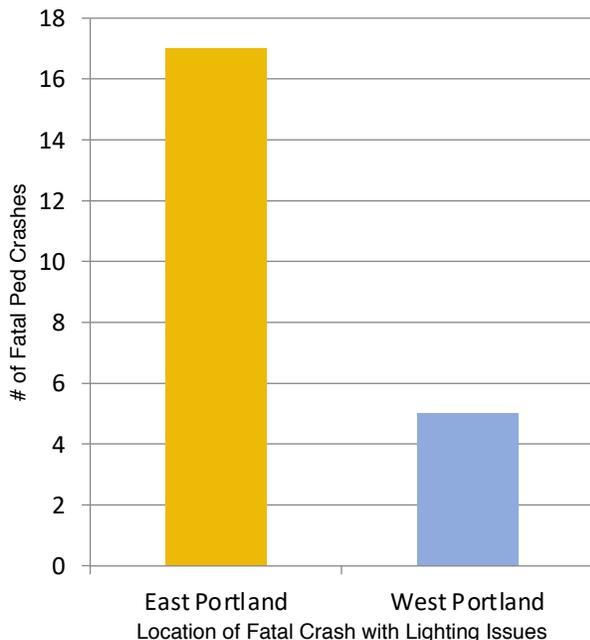
Streetlights on only one side of the road.

1.2 Average Maintained fc, 3 Uniformity Ratio.

Lighting and Equity

According to a *Mercury* article from March of 2019, PBOT acknowledged during a city council budget work session that “virtually all the high-crash roads west of E 82nd Avenue have adequate street lighting, while only 23 percent of high-crash streets east of 82nd—where many low-income residents and people of color call home—have adequate lighting.”

A majority (17 out of 22 or 77%) of fatal pedestrian crash locations with lighting issues were located in East Portland (east of 82nd Ave.) with all located east of the Willamette River.



Due to the initial disproportionately low response by people that identified as African American or Black to the PedPDX Citywide Walking Priorities Survey, the PedPDX project team headed two “Walking While Black” focus groups to intentionally elevate the voices of Black Portlanders. When asked to rate the traits that make walking difficult in Portland, the most notable difference in prioritization was that Black respondents rated “Poor Lighting” as the number one concern by a wide margin over white and other race respondents. Feedback indicated that inadequate street lighting was as much an infrastructure concern as a personal safety and security concern. Black Portlanders were worried about both not being seen due to inadequate lighting and darkness making them more vulnerable to racially motivated attacks and abuse.

While the data for racially motivated attacks and abuse is beyond the scope of this report, the lighting infrastructure concerns of Black Portlanders are strongly backed up by the data from fatal pedestrian crashes. **100% of pedestrian fatalities of those identified as Black occurred when it was dark. At 7 out of 8 (88%) crash locations where those killed were identified as Black, lighting issues were determined to be a factor.**

Detroit

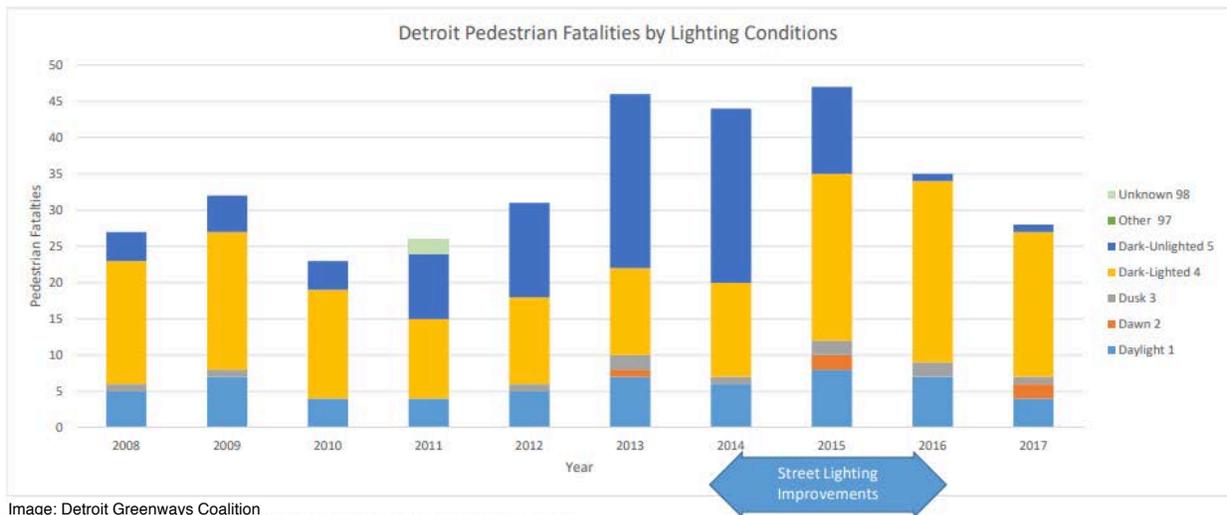


Image: Detroit Greenways Coalition

While improving Portland’s lack of adequate lighting may seem like a daunting task, Detroit has recently addressed a similar situation with great success.

Prior to 2016, Detroit’s pedestrian fatality rate was the highest in the nation out of U.S. cities with populations above half a million. The city assessed possible contributing factors to the high fatality rate and found that nearly 40% of streetlights were not working due to years of neglected maintenance. In 2014, they began rebuilding their street lighting system, finishing in 2016 after installing 65,000 LED lights.

A preliminary 2017 report by the Detroit Greenways Coalition found that while there were 48 pedestrian fatalities in dark, unlighted areas from 2013-2014, there were only 2 in dark, unlighted areas from 2016-2017. The report concluded that “public lighting improvements appear to be the primary factor behind Detroit’s dropping fatality rate.”

The sharp drop in pedestrian fatalities in Detroit correlated with lighting updates is relevant to Portland’s “Walking While Black” findings, as Detroit’s population is 79% Black. Detroit provides a strong affirmative case study that street lighting upgrades and installation can have a dramatic effect on decreasing pedestrian fatalities.

Conclusion

Lighting upgrades in East Portland are crucial to ensure both pedestrian safety and equity. In 2019 PBOT stated that it would take roughly \$12 million to fix all of east Portland's lighting issues. While sourcing and allocating funds has been a challenge for PBOT, Hannah Chinn in her essay "Blindsided" for Willamette Week states that **street lighting upgrades "would be one of the most cost-effective fixes the city could make; PBOT says the cost of street lighting infill is \$250,000 per mile, while the cost of new sidewalks is \$4 million to \$4.5 million per mile."** The low cost to safety benefit ratio should be a motivating factor to aggressively prioritize lighting upgrades in East Portland and elsewhere.

A June 2019 announcement was made by PBOT that they are "refocusing" Vision Zero to East Portland in recognition of the needs of the area. Accordingly, Vision Zero's "Strategic Commitments" now include a pledge to develop functional lighting layouts for wide High Crash Network streets in East Portland along with a funding strategy by 2021.

References

Appendix K: PBOT Lighting Level Guidelines

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What is PedPDX?

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PedPDX “Walking While Black”

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<https://detroitgreenways.org/wp-content/uploads/2018/07/Detroit-ped-fatals-by-lighting.pdf>

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<https://worldpopulationreview.com/us-cities/detroit-mi-population>

Portland Mercury: Bureau of Transportation Wants Funding to Fix Poorly Lit East Portland Streets

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Willamette Week “Blindsided”

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PBOT Vision Zero: How We Are Making Streets Safe

<https://www.portland.gov/transportation/vision-zero/how-we-are-making-streets-safe>

04.

Vehicle Speed



Photo: Jonathan Maus/BikePortland

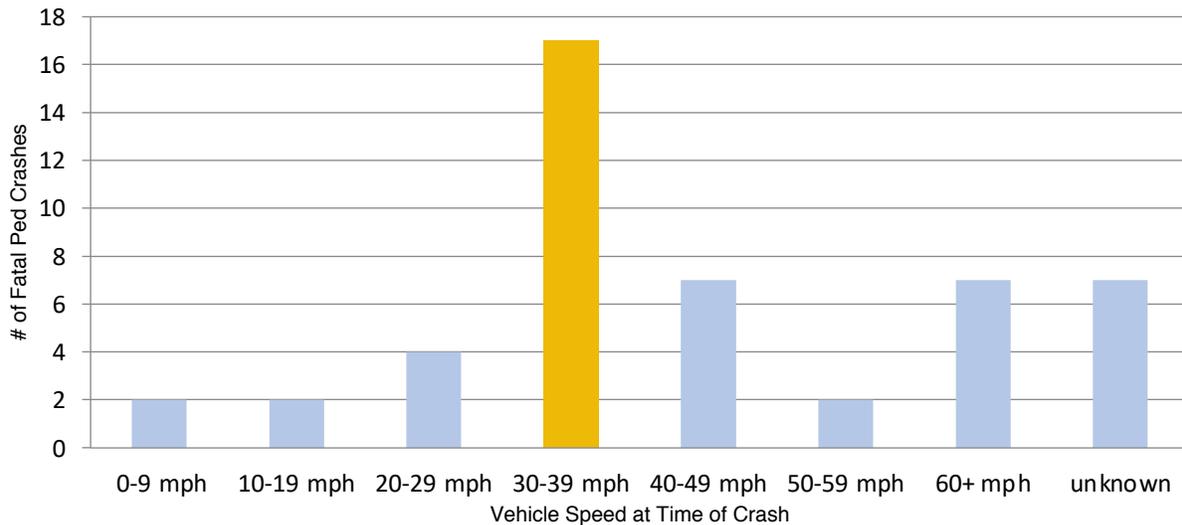
Police determination of speed as a crash factor is based on a driver-centric perspective, examining only whether the driver was going within a reasonable range of the existing posted speed limit. A more holistic view of vehicle speed as a crash factor should include a pedestrian perspective, taking into account whether the posted speed limit is safe for pedestrians.

Speed: A Pedestrian Perspective

Police reports determined that excessive driver speed was a factor in 25% of fatal pedestrian crashes where the vehicle speed was known via Event Data Recorder, video evidence, Searle Equation, and witness accounts. This data would suggest that excessive driver speed was not a significant factor.

However, Police determination of speed as a crash factor is based on a driver-centric perspective, examining only whether the driver was going within a reasonable range of the *existing posted speed limit* (often allowing up to 10 MPH in excess). A more holistic view of vehicle speed as a crash factor should include a pedestrian perspective, taking into account whether the posted speed limit itself is safe for pedestrians.

How Fast is Too Fast?



Numerous studies show that the faster a striking vehicle is travelling, the higher the likelihood of pedestrian death. Pedestrian fatalities rise sharply at impact speeds above 30 MPH.

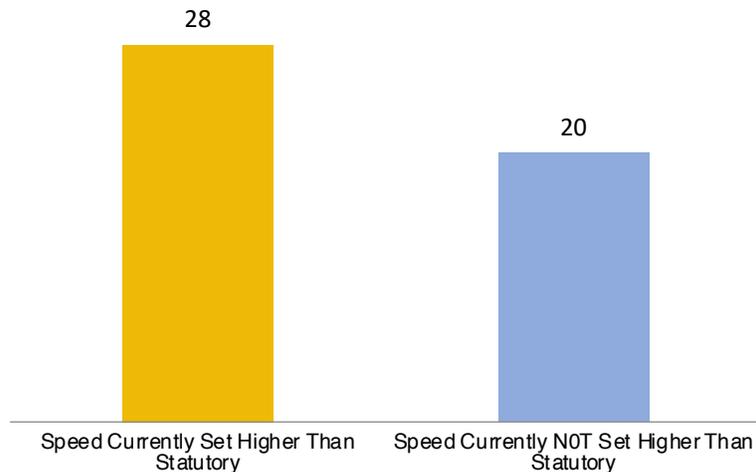
A National Highway Traffic Safety Administration (NHTSA) review of related literature and data notes that while about 5% of pedestrians die at 20 MPH impact, about 40% die at 30 MPH impact with the percentage rising significantly as speed increases.

Data for fatal pedestrian crashes in Portland between 2017-2019 bears this out. Out of crashes where the vehicle speed was known, 74% of pedestrian fatalities occurred at vehicle impact speeds of 30 MPH or greater.

A disproportionately high 55% of pedestrian fatalities occurred within the 30-39 MPH range. **In all of the 30-39 mph crashes, the vehicles were at or near the posted speed limit and determined by police not to be at excessive speed.**

82% of fatalities that occurred at a 30-39 MPH impact speed were on Arterial roads (federal classification). **Data shows that the highest number of fatal pedestrian crashes occurred on Arterials with a speed limit of 30 or 35 MPH.**

Statutory Speed



Review of all crash locations shows that 28 out of 48 (58%) crashes occurred where the statutory speed is 20 MPH. The speed was not posted at 20 MPH at any of those locations. This was typically because the location was a Business District to which Portland’s “20 MPH Ordinance” (188774) does not apply AND a SZO raises the speed above statutory.

Speed limits have been lowered at 8 out of 48 (17%) crash locations since the date of the crash. None have been lowered to the statutory speed.

At most locations speed reductions to 20 MPH are possible if PBOT submitted and ODOT approved rescission of existing Speed Zone Orders (SZO) to achieve statutory 20 MPH.

Locations with Speeds above Statutory 20 MPH

10100 SE Main St.

SE Stark St. just east of SE 148th Ave.

SE 92nd Ave. at SE Foster Rd.

NE Killingsworth St. at NE 75th Ave.

SE 82nd Ave. near SE Malden St.

SE 122nd Ave. at SE Woodward Pl.

SE Powell Blvd. At SE 50th Ave.

NE Martin Luther King Jr. Blvd. at
NE Simpson St.

SE Belmont St. at SE 30th Ave.

NE Columbia Blvd. near NE 63rd Ave.

SE Foster Rd. at SE 71st Ave.

NE Sandy Blvd. at NE 122nd Ave.

NE Fessenden St. at N Alma Ave.

N Basin Ave at N Emerson St.

SE Division St. at SE 168th Ave.

SE Division St. and SE 158th Ave.

NE Sandy Blvd. at NE 20th Ave.

E Burnside St. at SE 55th Ave.

NE Airport Way west of NE 138th Ave.

N Willamette Blvd. at N Buchanan Ave.

SE Holgate Blvd. at SE 92nd Ave.

SW 45th Ave. at SW Carson St.

NE Broadway St. at NE Grand Ave.

NE Columbia Blvd. near NE 63rd Ave.

E Burnside St. at SE 22nd Ave.

NE Halsey St. east of NE 122nd Ave.

NE Fessenden St. at N Polk Ave.

Collectors in Residence Districts



Image: Jonathan Maus/BikePortland

Portland Ordinance 188774 went into effect on April 1, 2018 and states: “Consistent with newly amended ORS 810.180, the City of Portland establishes by ordinance a designated speed that is five miles per hour lower than statutory speed on *non-arterial streets* under the jurisdiction of the City of Portland in a residence district.” [emphasis added]

“Non-arterial streets” by federal classification include both Collectors and Local Roads.

Four crashes occurred at locations on Collectors in Residence Districts where PBOT has failed to date to lower the speed limit to statutory 20 mph:

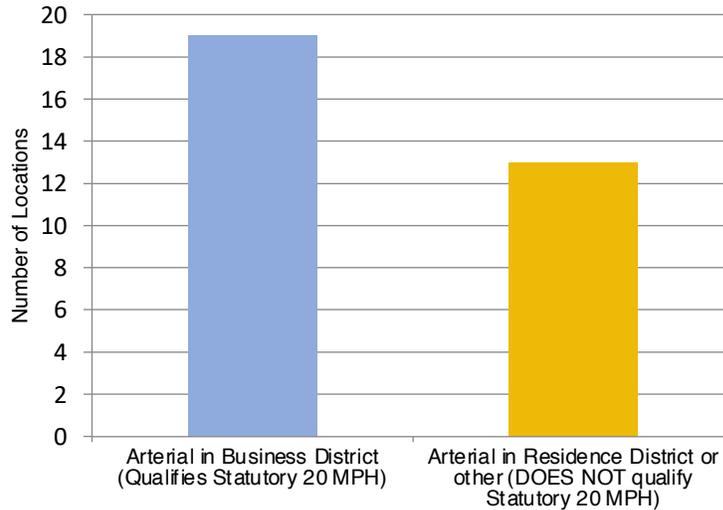
N Fessenden St. and N Polk Ave.

N Fessenden St. and N Alma Ave.

N Willamette Blvd. and N Buchanan Ave.

SW 45th Ave. and SW Carson St.

Arterials in Residence Districts



Lowering speeds on *all* Arterials is a more difficult prospect. Only 19 out of 32 (59%) crashes that occurred on an Arterial are in Business Districts and qualify for 20 MPH speed via the SZO rescission request process. The remaining 11 Arterial crash locations (41%) are outside of Business Districts or in Residence Districts where the statutory speed limit is 55 MPH.

Getting SZOs modified to lower speeds at these locations requires a request accompanied by an explanation letter from PBOT. The extra steps for PBOT make it more difficult than a rescission request, however inquiries can be sent to [safe\[at\]portlandoregon.gov](mailto:safe[at]portlandoregon.gov) to begin the process.

ODOT: New Speed Zoning Guidelines in 2020

On May 1, 2020 ODOT updated their procedure and manual guidelines for determining speed limits statewide. The more detailed new guidelines take into account land use context, pedestrian presence, and use 50th percentile speeds in newly designated Urban Areas (see table below).

ODOT describes the recent changes as a step toward addressing community concerns about unsafe speed limits. The changes were made without meaningful community input. The context classification system used runs the risk of further entrenching transportation equity disparities in Portland.

Under the new guidelines, the lowest speeds are designated in the Urban Core which is predominantly more white and affluent, with fewer fatal pedestrian crashes. Speeds increase in concentric circles extending outward from the urban core. The result is that underserved neighborhoods in East and North Portland with higher populations of people of color and lower median income will have higher speeds than whiter, more affluent close-in neighborhoods.

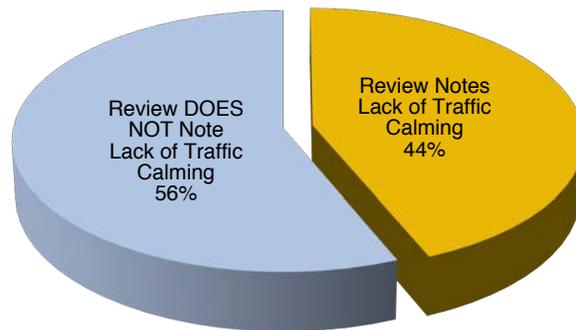
A public process is needed to change these ODOT guidelines to provide all neighborhoods the same level of comfort and safety regardless of proximity to the urban core.

Context >	Urban Core/CBD	Urban Mix	Suburban Commercial and Residential	Suburban Fringe
Roadway Class				
Arterial	20-25 Low	25-30 Med Low	30-35 Med High	35-45 High
Collector	20-25 Low	25-30 Med Low	25-35 Med	30-40 Med High
Local	20-25 Low	20-25 Low	25-35 Med	25-35 Med

Image: ODOT

Traffic Calming

Lowering posted speed limits is just one aspect of influencing vehicle speeds. An infrastructure-based approach focusing on traffic calming contributes to lower driver speeds without reliance on enforcement. Traffic calming features include road bumps, increased use of stop signs, chicanes, marked or signaled/RRFB or tabled crosswalks, narrower lanes, road diets, curb extensions, and pedestrian refuge islands. **44% of fatal pedestrian crash locations reviewed were identified as having long straightaways without features that would calm traffic (locations listed below) .**



- NE Killingsworth St. at NE 75th Ave.
- NE Martin Luther King Jr. Blvd at N Union Ct.
- SE 82nd Ave. near SE Malden St.
- SE 80th Ave. at SE Pine St.
- SE 122nd Ave. at SE Woodward Pl.
- NE Martin Luther King Jr. Blvd. at NE Davis St.
- N Columbia Blvd. at N Interstate Pl.
- N Basin Ave. at N Emerson St.
- SE Division St. at SE 168th Ave.
- SE Stark St. at SE 146th Ave.
- N Willamette Blvd. at N Buchanan Ave.

- SW 45th Ave. at SW Carson St.
- NE Columbia Blvd. at NE 63rd Ave.
- NE Halsey St. at NE 141st Ave.
- SE Stark St. at SE 148th Ave.
- SE Division St. at SE 138th Ave.
- NE Airport Way at NE 138th Ave.
- NE Airport Way west of NE Mason St.
- NE Portland Hwy. near NE 45th Ave.
- E Burnside at SE 22nd Ave.
- NE Halsey St. at NE 122nd Ave.

20 is Plenty

Since HB 2682 (giving Portland authority to reduce speeds on non-arterial streets in Residence Districts by 5 mph) was passed by the Oregon State Legislature in 2017 and PBOT enacted the “20 is plenty” campaign in January 2018, 70% of Portland streets have received 20 mph speed limit signs. A 2020 speed study by Portland State University (PSU) Civil and Environmental Engineering experts solicited by PBOT studied the effects of these speed reductions.

The study examined 58 locations before and after the posted speed limit was changed from 25 mph to 20 mph. 214,220 data points were collected.

The full report entitled *Effect of Residential Street Speed Limit Reduction from 25 to 20 mi/hr on Driving Speeds in Portland, Oregon* (click image to read) found an overall reduction in top-end speeding with “a 15.9% reduction in odds of observing speeds greater than 25 mi/hr, a 33.6% reduction in odds of observing speeds greater than 30 mi/hr, and a 49.6% in odds of observing speeds greater than 35 mi/hr” at locations where speed has been reduced to 20 mph, asserting that speed limit reduction “significantly decreases the odds of observed high speeds.”

While average speed remained roughly the same at studied locations since speed limits were reduced, the report notes that “changes [in top-end speeding] are more meaningful for the Vision Zero speed reduction efforts than the change in average speeding, given the link to crash severity for vulnerable road users”.

The study provides strong evidence that “20 is plenty” speed reductions are effective in reducing top-end speeding and a positive step toward a safe systems design that provides greater pedestrian safety.

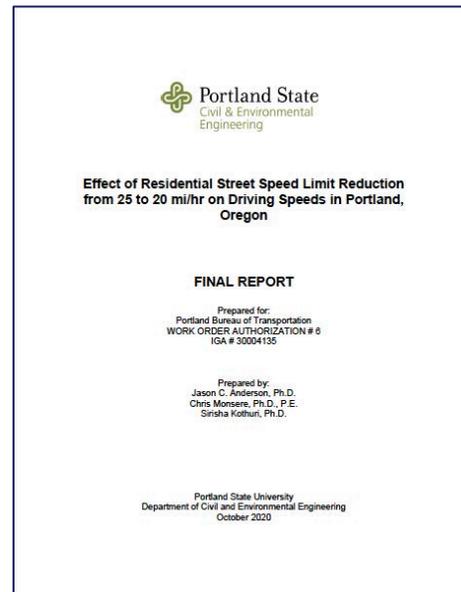
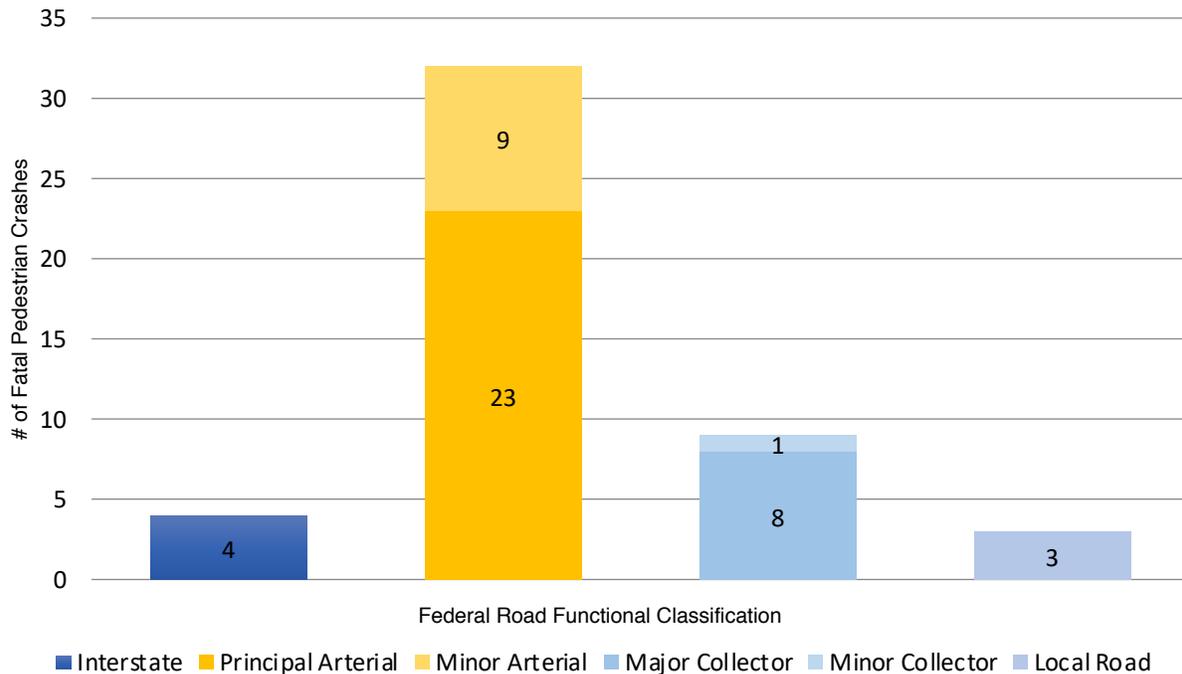


Image: Portland State University/TREC (click to read)



Despite data supporting the effectiveness of speed reductions, the PSU/PBOT report and campaign leave some considerations unaddressed.

The wording in the PSU report misstates the applicability of Portland Ordinance 188774, saying that speed reductions apply only to “residential streets... excluding arterials and collectors.” The ordinance more precisely designates a “speed that is five miles per hour lower than statutory speed on non-arterial streets under the jurisdiction of the City of Portland in residence districts.” **A “residential street” is not a proper federal classification. Both Local Roads and Collectors (federal classifications) are “non-arterial” roads and thus subject to speed limit reduction by Portland ordinance.**

While the PSU/PBOT data is encouraging, it includes a study group of primarily Local Roads. **Between 2017 and 2019 a large majority of pedestrian crash fatalities (83%) occurred on Arterials and Collectors, with 6% occurring on Local Roads. Arterials alone accounted for almost 65% of total fatalities.**

Speed reductions on Local Roads in Residence Districts are an important aspect of a safe systems approach, but more focus must be put on reducing speeds on empirically more dangerous Arterials and Collectors, particularly in underserved areas like East Portland.

Conclusion

At a majority of fatal pedestrian crash locations in Portland from 2017-2019 there is an opportunity to lower speed limits to statutory 20 mph through either rescission of SZO or adherence to Portland Ordinance 188774. Greater effort and advocacy are needed to lower the speed limit on Arterials in Residence Districts below 30 mph.

The City must be more thorough in implementing and precise in adhering to Ordinance 188774 and existing speed laws by doing the following:

- Collectors in Residence Districts must be lowered to 20 mph.
- School zones should be lowered to 15 mph as most are located in Residence Districts.
- On non-arterial roads in Residence Districts that are also “in a public park” (residences on one side, park on the other side), speeds should be lowered from statutory 25 mph to 20 mph.
- According to ORS 801.368 “narrow residential roadways”, defined as streets in a Residence District where the portion of the street “that is improved, designed or ordinarily used for vehicular travel exclusive of the shoulder” is not more than 18 feet wide, must be posted at 10 mph.

Traffic calming was lacking at nearly half of fatal pedestrian crash locations. PBOT currently has no Traffic Calming Division since it was de-funded. Re-establishing that program with a broad toolkit for implementation based on community needs is necessary to achieve pedestrian-safe speeds city-wide.

Equity considerations should be incorporated into ODOT’s guidelines and procedures to ensure that speed limit determination best serves all populations and areas.

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https://www.oregon.gov/odot/Engineering/Docs_TrafficEng/Speed-Setting-Update-2020-05.pdf

ODOT Speed Zone Manual

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Oregon Laws – ORS 801.368

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BikePortland – Portland should lower more speed limits, legal experts say

<https://bikeportland.org/2020/12/10/portland-should-lower-even-more-speed-limits-legal-expert-says-323813>

Effect of Residential Street Speed Limit Reduction from 25 to 20 mi/hr on Driving Speeds in Portland, Oregon

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05.

SUVs and Trucks



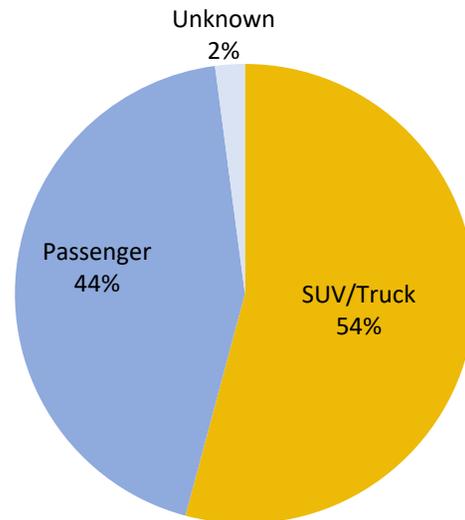
Image: Brandon Summers

A majority of fatal pedestrian crashes in Portland from 2017-2019 involved SUVs and trucks. Inherently dangerous vehicle design and lack of manufacturer regulation of pedestrian safety features are highly responsible for increasing SUV and truck related pedestrian deaths. While the political and cultural obstacles confronting PBOT in addressing the dangers of SUVs and trucks are appreciable, doing so is an integral aspect of the Vision Zero Safe System approach.

A Growing Danger

A majority (54%) of fatal pedestrian crashes in Portland from 2017-2019 involved SUVs and trucks.

The dangers of SUVs and trucks are increasingly apparent as various studies confirm they are correlated with the rising trend of pedestrian deaths in the US. Pedestrian fatalities in the US reached a 30-year high in 2019. A recent Detroit Free Press study found that SUV involvement in pedestrian deaths in the US is up 69% since 2009.



A 2019 Governors Highway Safety Association (GHSA) report found that fatal SUV-pedestrian collisions increased by 81% between 2009 and 2018, compared to 53% for passenger cars. The total number of SUVs on the road notably only rose by 37% over the same time period. Light trucks (LTV), the catch-all category often used to include SUVs, crossovers and pickup trucks, now make up the largest market share of all vehicle sales in the US at 69%.

Not accounting for driver behavior and cultural factors, inherently dangerous vehicle design and lack of manufacturer regulation of pedestrian safety features are highly responsible for rising SUV and truck related pedestrian deaths. The increasing presence of heavier and taller SUVs and trucks with driver sightline obstruction design flaws put pedestrian lives in danger.

Vehicle Weight

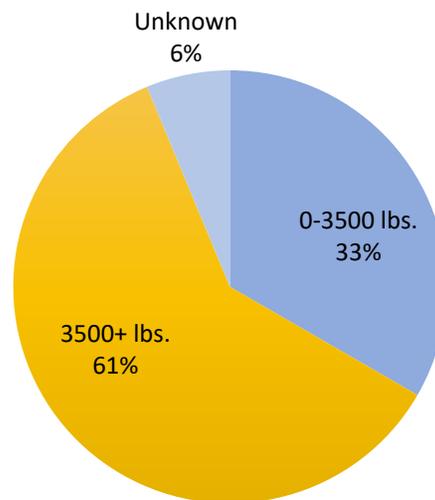
Data shows that SUVs and trucks are getting heavier. A study by The Oak Ridge National Laboratory sponsored by the US Department of energy shows that the average weight of pickup trucks increased by 1256 lbs. or 32% between 1990 and 2018.

While vehicle weight alone is not the sole characteristic in determining the risk of fatality for pedestrians in a crash, when considered with front-end design and speed it is an important factor. Heavier weight along with taller hood heights and flatter front grilles means that SUVs and trucks transfer more direct energy to the human body on impact, raising the likelihood of injury and fatality.

Though the UK government doesn't collect vehicle type data for fatal pedestrian crashes, a study by British academics found that pedestrians were 70% more likely to be killed if they were hit by someone driving a 2.4-litre engine vehicle like those found in heavier SUVs and trucks than a 1.6-litre model more commonly found in lighter passenger vehicles.

The National Highway Traffic Safety Administration (NHTSA) assigns passenger vehicles with curb weights (the weight of an automobile without occupants or baggage) above 3500 lbs. to the "heavy" category.

61% of all vehicles involved in fatal pedestrian crashes in Portland from 2017-2019 had a curb weight above the NHTSA "heavy" threshold for passenger vehicles. This overall figure includes 88% of the vehicles classified as SUVs or trucks involved in crashes.



Hood Height – Tall “Strike Zone”

The increasingly high hood height trucks (also technically known as Hood or Bonnet Leading Edge Height, HLEH or BLEH) and broad, flat front profile design of SUVs and trucks are particularly dangerous for pedestrians. For perspective, the hood height of the 2019 Dodge Ram 2500 is nearly 5 feet tall.

The higher, flatter front profiles on SUVs and trucks have a taller “strike zone” that transfers more impact energy directly to a pedestrian’s body center and vital organs, whereas lower profile passenger cars hit with the vehicle leading edge on pedestrian’s legs and energy is dissipated as they fall over the top of the hood.



Image: Brandon Summers

A NHTSA study shows that SUVs and trucks are 2.5 to 3.4 times more likely to kill pedestrians than passenger cars due to inflicting greater upper body and head injuries. Not only is the initial vehicle impact more dangerous for pedestrians, a recent study found a correlation between higher HLEH and greater head injuries due to secondary ground impact.

There is growing official recognition of the danger of high hood heights and large grilles. A 2020 report by the GHSA directly asserts “softer vehicle fronts...and replacement of the blunt front ends of light trucks with sloping, more aerodynamic (car-like) designs can reduce the risk of pedestrian deaths in the event of a crash.”

The Portland Police Major Crash Team described the danger of high HLEH/flat fronted “blunt profile vehicles” in a crash report from May 12, 2017 on NE Martin Luther King Jr. Blvd. near N Union Ct. Investigators noted that with blunt profile vehicle collisions the principal impact force is located at a higher point of gravity on the pedestrian body resulting in a “forward projection” where the “pedestrian's upper torso is rapidly accelerated in the direction of the vehicle impact” with the risk of being overrun by the vehicle.

Hood Height - Sightline Obstruction

In addition to being a greater impact risk, high hood heights create a dangerous driver sightline obstruction. Investigative reporting by Indianapolis news station WTHR found that **due to high hood heights, the driver blind spot in front of SUVs is up to 3 times larger than the blind spot in front of a passenger car.**

The driver blind spot in front of a 2014 Toyota Camry is 3' 3" whereas the blind spot in front of a 2016 Cadillac Escalade is 10' 9". Drivers of large SUVs and trucks see less of the roadway in front of them and have less time to react to pedestrians and other dangers in the roadway.

The frontal blind zone created by high vehicle front ends is an increasing safety hazard. NHTSA statistics show that the number of "frontovers" (when drivers roll vehicles forward and hit a child due to hood height sightline obstruction) rose by more than 60% from 2012 to 2019. Rear view cameras became mandatory for new cars in 2018, but there is no current regulation making front facing cameras mandatory.



Image: WTHR/Mehak Sandhu

Hood Height - Sightline Obstruction Example

██████ was driving by himself inside the vehicle. ██████ was traveling north on NE 172nd Ave where he was preparing to make a left hand turn to travel west on NE Glisan St. ██████ stated he had his truck in neutral and was coasting through the turn and preparing to shift his standard transmission Dodge into first gear when he suddenly observed the top of a persons head just slightly above the front hood of his Dodge. ██████

Excerpt from a police interview of a driver of a tall Dodge pickup after he drove over a woman in a crosswalk in Gresham (February 2020).

A-Pillar Sightline Obstruction

In 6 fatal pedestrian crashes in Portland from 2017-2019, police reports determined that the driver's view was blocked by the A-pillar of their vehicle. In all of these cases, the vehicle was a SUV or truck.

This is not a coincidence, but a result of changing vehicle design practices. Studies show that while passenger vehicles have a 10% chance of a rollover in the event of a crash, the larger size and height of SUVs and Trucks increases the risk of a rollover up to 25% or more. In response to this risk, manufacturers have made more robust, wider A-pillars on SUVs and pickups to withstand the greater crush force caused by a rollover of the heavier vehicles. This increase in driver safety comes at the cost of driver sightline obstruction and decreased pedestrian safety.

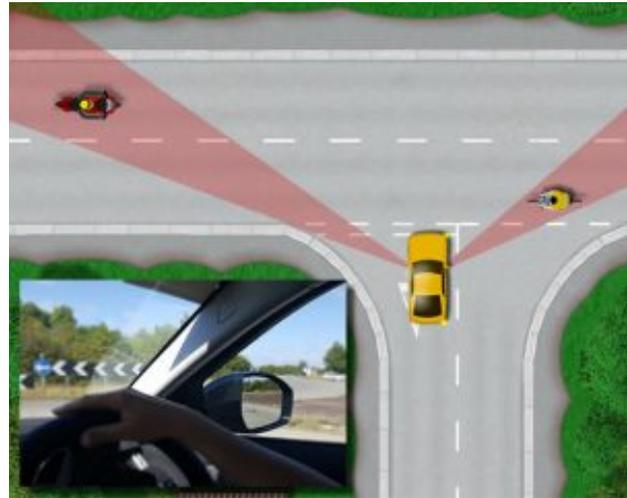


Image: Drivingtesttips.biz

Pedestrian Safety Vehicle Technology

While front facing cameras are optional equipment on most modern models, there is no current legal requirement they are installed on new SUVs and trucks. New manufacturer regulations state that automatic emergency braking and pedestrian detection alerts must be included on all models by 2022, but recent **American Automobile Association (AAA) testing found that on a course with dummy pedestrians crossing a road, vehicles equipped with pedestrian detection systems still struck a test dummy 60% of the time in daylight hours at a speed of 20 mph. The test found the systems to be almost completely ineffective in darkness.**

One vehicle involved in a fatal pedestrian crash in Portland between 2017-2019 had pedestrian detection technology. The top of the line 2018 Mercedes GLS 63 involved had “active blind spot monitoring, Collision Prevention Assist which scans traffic up to 1600 ft. ahead to help prevent front collisions, and PRE-SAFE braking with Pedestrian Recognition” systems. The driver hit and killed the pedestrian at night going roughly 30 mph. Vehicle computer logs showed that all of the technology failed to engage.

Manufacturer Pedestrian Safety Regulation

Auto manufacturer regulations in the US have not done enough to safeguard pedestrians. **The United States currently lacks a governmental or national consumer program for testing and rating the pedestrian safety of a vehicle.** A federal proposal to factor pedestrians into safety ratings for vehicles has been actively opposed and stalled by automakers.

The NHTSA New Car Assessment Program (NCAP) has recently received criticism for inaction on pedestrian safety testing. (A pilot program was put in place in 2018 to “consider” the use of pedestrian safety standard tests.)

In April of 2020 The US Government Accountability Office (GAO) released an audit, including a meta-analysis of crash statistics in the US, citing the NHTSA’s failure to instate a pedestrian safety testing program (click image to read). The report bluntly asserts that the NHTSA must: “(1) develop an evaluation plan with criteria for expanding its 2018 pilot program (2) make and communicate a decision about whether to include pedestrian safety tests in NCAP, and (3) document the process for making changes to NCAP. The Department of Transportation concurred with our recommendations.”

By contrast, the Euro NCAP Vulnerable Road User Protection Testing Program was initiated in 1997 with more stringent requirements added in 2002. The NCAP program currently tests and rates vehicles according to six in-depth pedestrian impact scenarios.

Pedestrian deaths in the US increased by 51% from 2009-2018 whereas pedestrian deaths in Europe decreased by 36% over the same time period.

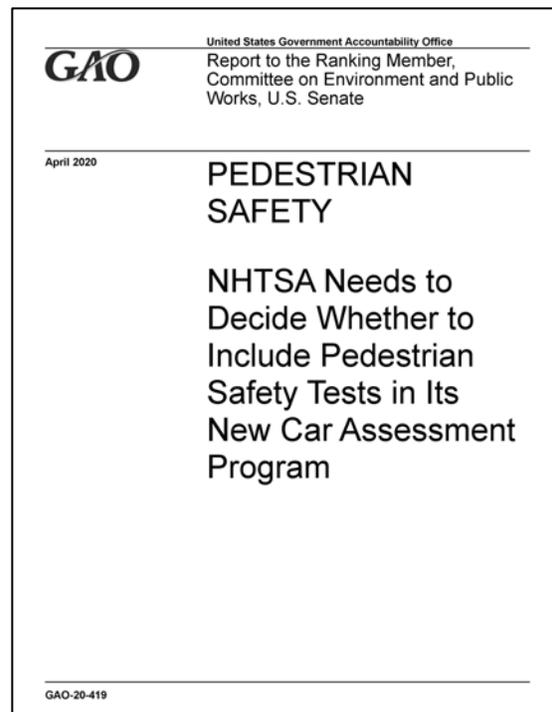


Image: GAO (click to read)

Conclusion

While large level solutions like manufacturer regulations and a vehicle pedestrian safety testing program are beyond the direct control of PBOT and ODOT, the dangers of SUVs and trucks merit greater recognition and discussion in Portland city government and transportation agencies.

In Berlin and London, increasing awareness of data and recent pedestrian crashes have opened active discussions about ways to safeguard pedestrians from large vehicles. Banning SUVs and passenger trucks within city limits or higher pedestrian concentration areas has been one proposed solution.

Portland is a city with its own unique situation and challenges. SUVs and trucks are not only killing pedestrians in the urban core and a targeted ban in the center of the city runs the risk of inequitably addressing the threat to pedestrians in East Portland in particular.

Scientists studying the subject in London have suggested that police reports should include data for vehicle body shape, weight and engine size in fatal pedestrian crashes to more accurately assess the dangers of SUVs and trucks. The current format of the Portland Police Bureau Crash report does not include this information.

The political and cultural obstacles confronting PBOT in addressing the dangers of SUVs and trucks are appreciable, but doing so is an integral aspect of the Vision Zero Safe System approach. The Towards Vision Zero website referenced by Portland Vision Zero for Safe System guidance lists safe vehicles as a component. The full documentation on Safe System Principals on the Institute of Transportation Engineers (ITE) website similarly cites “addressing exterior vehicle design as a key trait in the goal to accommodate human injury tolerance by reducing impact forces.”

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06.

Distraction



Distraction of drivers or pedestrians by cell phone or otherwise was not a contributing factor in any fatal pedestrian crashes in Portland from 2017-2019. While the dangers of distracted driving are well known, there is a common narrative about the prevalence of distracted walking as a cause for pedestrian crashes. Recent studies show this narrative to be both demonstrably false and dangerous in the way it shifts focus and action away from data supported crash factors.

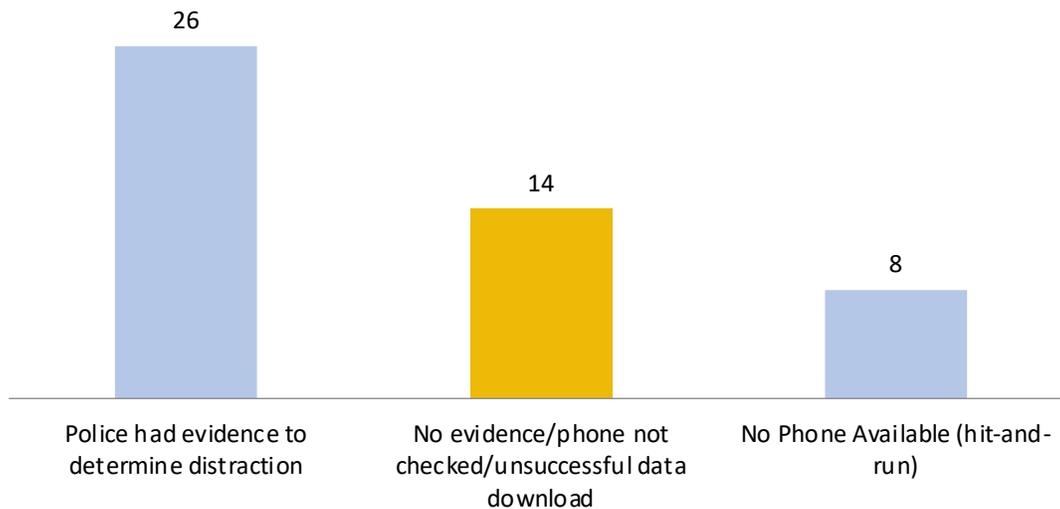
Distraction: The Data

Police determined that distraction of drivers or pedestrians was not a contributing factor in any fatal pedestrian crashes in Portland from 2017-2019.

In the Portland Police Bureau crash report form section listing separate driver and pedestrian factors there are check boxes for “Distraction” and “Cell Phone Use” for each party. None of these boxes were checked in any fatal pedestrian crash reports from 2017-2019.

Distraction by cell phone or otherwise was not indicated to be a factor in related police report summaries, witness accounts, investigation documents, video evidence, vehicle EDR logs, or cell phone forensic data examination.

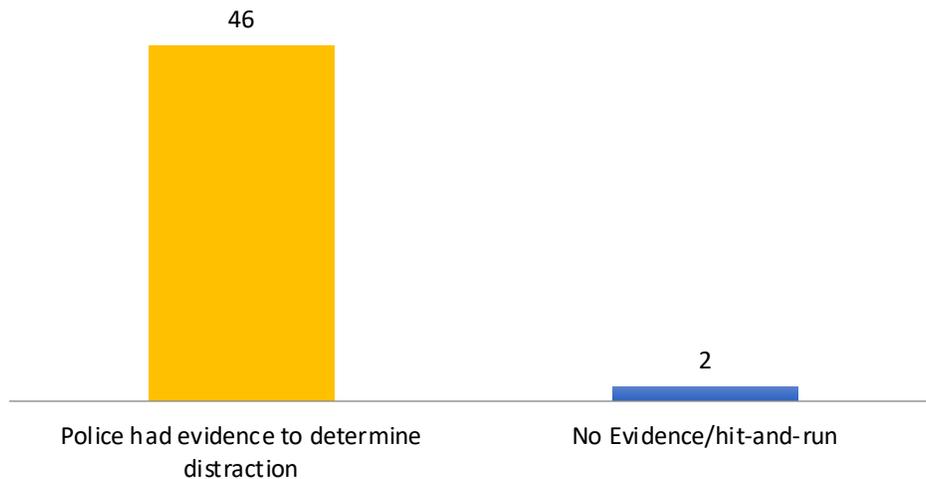
Driver Distraction



Police had evidence (on-scene cell phone examination, data log download) to determine driver distraction in 26 out of 48 crashes. Driver statements were used in all crashes (except for hit-and-runs) as a determining factor. Cell Phone data or witness evidence was not available for 8 hit-and-run crashes. **In 14 crashes police indicated driver distraction was not a factor but did not have evidence (no driver statement, phone not examined, phone data download unsuccessful due to technical errors).**

In one crash, a driver called months after the investigation had been closed and said that they had been using their cell phone at the time of the crash. A summary of the call was included in the police report but there was no report alteration or follow up.

Pedestrian Distraction



Police had evidence to determine pedestrian distraction (driver statement, witness account, video evidence) in 46 out of 48 crashes.

Pedestrian statements were not used in determining distraction in any crashes due to fatality. In two crashes, pedestrian distraction could not be verified as they were hit-and-runs with no witnesses. In both crashes, investigating officers did not check the box for distraction or find evidence to suggest distraction was a factor.

In one crash, a driver recounted that a pedestrian was “reaching back into the road” for a phone they had dropped while running across the street, but there was no indication by the driver or phone examination that the device was being used by the pedestrian at the time of the crash.

Is “Distracted Walking” an Issue?

The danger of distracted driving is well known and documented. Nationwide in 2018 distracted driving claimed 2,841 lives (1,730 drivers, 605 passengers, 400 pedestrians and 77 bicyclists). In Oregon from 2014-2018 there were 137 fatalities and 20,992 injuries caused by crashes involving a distracted driver. Oregon has had a strict “hands-free” driving law in place since 2017 with the highest penalties for texting in the nation (\$1000 for first offense).

The danger of “distracted walkers” is comparatively negligible. There is no available national data showing that any drivers have been killed by distracted walking. Experimental lab studies have indeed shown to differing degrees that walking while distracted may cause changes in pedestrian gait, slower walking pace, have a small effect on whether a pedestrian looks both ways before crossing, and increase the risk of being hit by a vehicle when crossing the street. An often cited GHSA statistic shows that the percentage of pedestrians killed while using cell phones went up from 1% to 3.5% (a 2.5% total increase) from 2004-2015.

But this data falls apart when scrutinized or compared with “real world” data. The GHSA data does not proportionately correlate with rising cell phone ownership which increased 27% over the same time period. Observational studies have shown that pedestrians who are distracted (using electronic devices or listening to music) are more likely to use a crosswalk and that listening to music on headphones while walking (a factor that accounts for up to 30% in some studies) has little to no effect on pedestrian behavior.

NHTSA Fatality Analysis Reporting System Data

Years	# of Pedestrian Fatalities Involving Electronic Devices	All Fatalities	% of Device Involved Pedestrian Fatalities
2010	6	4302	0.1%
2011	9	4457	0.2%
2012	5	4818	0.1%
2013	5	4779	0.1%
2014	1	4910	0.0%
2015	12	5376	0.2%
2016	6	6080	0.1%
2017	7	5977	0.1%
2018	7	6283	0.1%
9 Year Period	58	46982	0.1%

While distracted walking does exist, its roll in pedestrian deaths has been overstated. **NHTSA Fatality Analysis Reporting System (FARS) data shows that in the US from 2010-2018 there were on average over 3000 traffic fatalities per year (≈10%) involving distracted driving, with only 1 to 12 per year (0 to .2%) involving distracted walking over the same time period.**

Putting this data into a local context is revealing. Portland had an average of 17.3 pedestrian fatalities per year from 2017-2019. If Portland's data was consistent with national data, Portland would have a device related pedestrian death once every 46 years.

Recent Studies on Distracted Walking

A 2019 New York Department of Transportation study found that pedestrian distraction factored in just 2 out of 856 (.2%) pedestrian deaths in New York City from 2014 to 2017 while driver factors such as speeding, inattention and failure to yield accounted for 53% of pedestrian fatalities over the same time period. The report concluded that there is “little concrete evidence that device-induced distracted walking contributes significantly to pedestrian fatalities and injuries.”

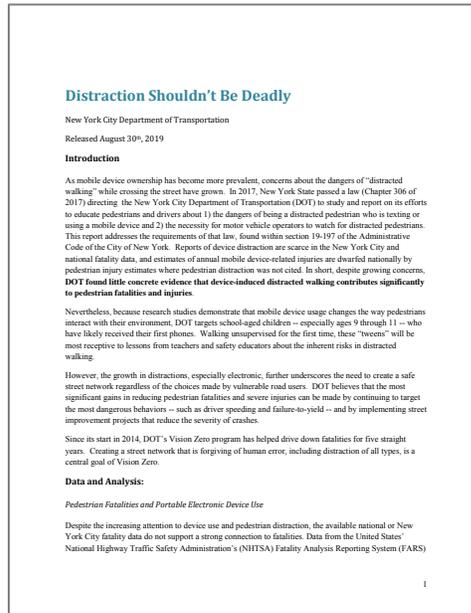


Image: NYC.gov (click to read)

In May of 2020 Dr. Kelcie Ralph and Ian Girardeau from Rutgers University published a comprehensive study of pedestrian distraction entitled “Distracted by Pedestrian Distraction.” The report includes the largest meta-analysis of major experimental, observational and publicly collected data done to date as well as a survey of published literature on the subject. The study concludes that “while distracted walking is relatively commonplace, it does not necessarily follow that it is responsible for a large—or growing—number of pedestrian deaths and injuries. Framing pedestrian deaths as a story of distraction may crowd out more effective solutions...”



Image: Transportation Research Interdisciplinary Perspectives (click to read)

Prevailing Misconceptions

Despite the lack of supporting data, there remains a common misconception that distracted walking is a prevalent cause of fatal pedestrian crashes. Many news articles both nationally and locally influence public perception, making a spurious correlation with the overall rising trend of traffic deaths and distracted walkers while failing to cite the percentage or proportion of deaths related directly to distraction.

A 2018 GHSA report on pedestrian fatalities in particular was taken out of context by national media. This report charted the rising trend of pedestrian fatalities to show the highest numbers since 1990 and made a passing reference to distracted walking as an unqualified factor. Media reports seized on this and in many cases insinuated a direct causal link between the rising trend of deaths and distracted walkers without asserting that there is no data supporting a causal relationship.

Portland's Vision Zero program does not recognize distracted walking as a risk factor but the misconception about distracted walking can be seen to frame discussions and effect decisions in city government. In 2018, Portland City Commissioner Jo Ann Hardesty voted "no" on an update to Portland's Vision Zero Program expressing, among other things, her concern that people walking while looking at electronic devices was a "huge issue", asking for local data and commenting that "we should have the expectation that people actually look where they're going when they cross the street and not be on their device."

Misconception about distracted walking even find its way into the transportation professional community. An informal poll conducted at the 2020 Annual Meeting of the Transportation Research Board found that one third of transportation practitioners surveyed, view distracted walking as a "large" problem, estimating that it was responsible for 40% of pedestrian deaths.

“Petextrians” and False Equivalence

The false narrative of the danger of distracted walkers persists in part because it is a simplistic, intuitive argument often backed up by anecdotal evidence. Many people think “I have seen people walking on sidewalks and in streets while looking at their phones” therefore it must be a large-scale problem.

While a failure to fully understand and account for data can be understood on a personal level, companies and institutions do a fair share of spreading misinformation and uninformed messaging about distracted walking.

In 2017 Ford Motor Company put out a press release falsely claiming that the NHTSA “has equated” the rise in pedestrian injuries to a “*global influx of ‘petextrians’*” [emphasis added] citing anecdotal evidence from a company employed traffic engineer who stated: “we were startled to see how oblivious people could be of a 4,000-pound car coming toward them. It was a real eye-opener to how distracted people are today.”

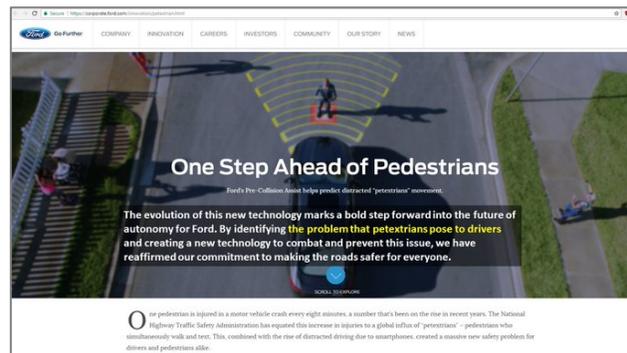


Image: ford.com

Ford’s messaging rests on the false equivalence of the “problem that petextrians pose to drivers”. A driver operates a heavy vehicle that is a disproportionate danger of death and injury to those outside of it in the case of a crash caused by distraction, while a distracted pedestrian poses a risk almost only exclusively to themselves.

Ford’s messaging primarily serves to divert the attention away from relevant dangers that conflict with their business interests, like the role of heavy vehicles and lack of pedestrian safety manufacturing regulation and testing, and focus the blame on the pedestrian.

Language and Messaging



Image: Montgomery County (Maryland) DOT



Image: Pedestrian Council of Australia

Portland Vision Zero rightfully does not officially recognize distracted walking to be a risk factor or area of focus and has wisely avoided uninformed public messaging campaigns.

However, the City of Portland currently has an article on their website titled “[Help End Distracted Walking](#)” in which they ask “Are you a pedtextrian?”. While the city surely has the best interests of pedestrian safety in mind, using language that has been created and bolstered to shift blame to pedestrians and create the perception of a large scale problem that lacks scientific merit is problematic and counterproductive.

Transportation professionals and governments in other cities (above) have seized upon the idea of the distracted walker as a path of least resistance. Meaningful changes to infrastructure, street design and reducing vehicle speed involves a long process that is often expensive and politically fraught. Educational materials and campaigns are by contrast easy to distribute and much less controversial. The resulting messaging from public awareness campaigns in recent years from some city governments outside of Portland has been at best misguided and at worst victim blaming.

Conclusion

While data nationally and in Portland from 2017-2019 shows that distracted walking is not a prevalent factor in pedestrian deaths, it remains an issue to the extent that false perceptions and a narrative about “petextrians” are common and mis-frame the public conversation about pedestrian crashes. The undue focus on pedestrian distraction is a red herring, diverting focus away from meaningful changes to infrastructure, road design and driver speed that more effectively save pedestrian lives.

The Portland Vision Zero Safe System approach provides a robust perspective for focusing transportation efforts. Individual level solutions, such as driver and pedestrian education campaigns are an important element of transportation planning, but system level solutions, such as speed reductions and infrastructure modification, remain the strongest tool to ensure safety for all.

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07.

Enforcement

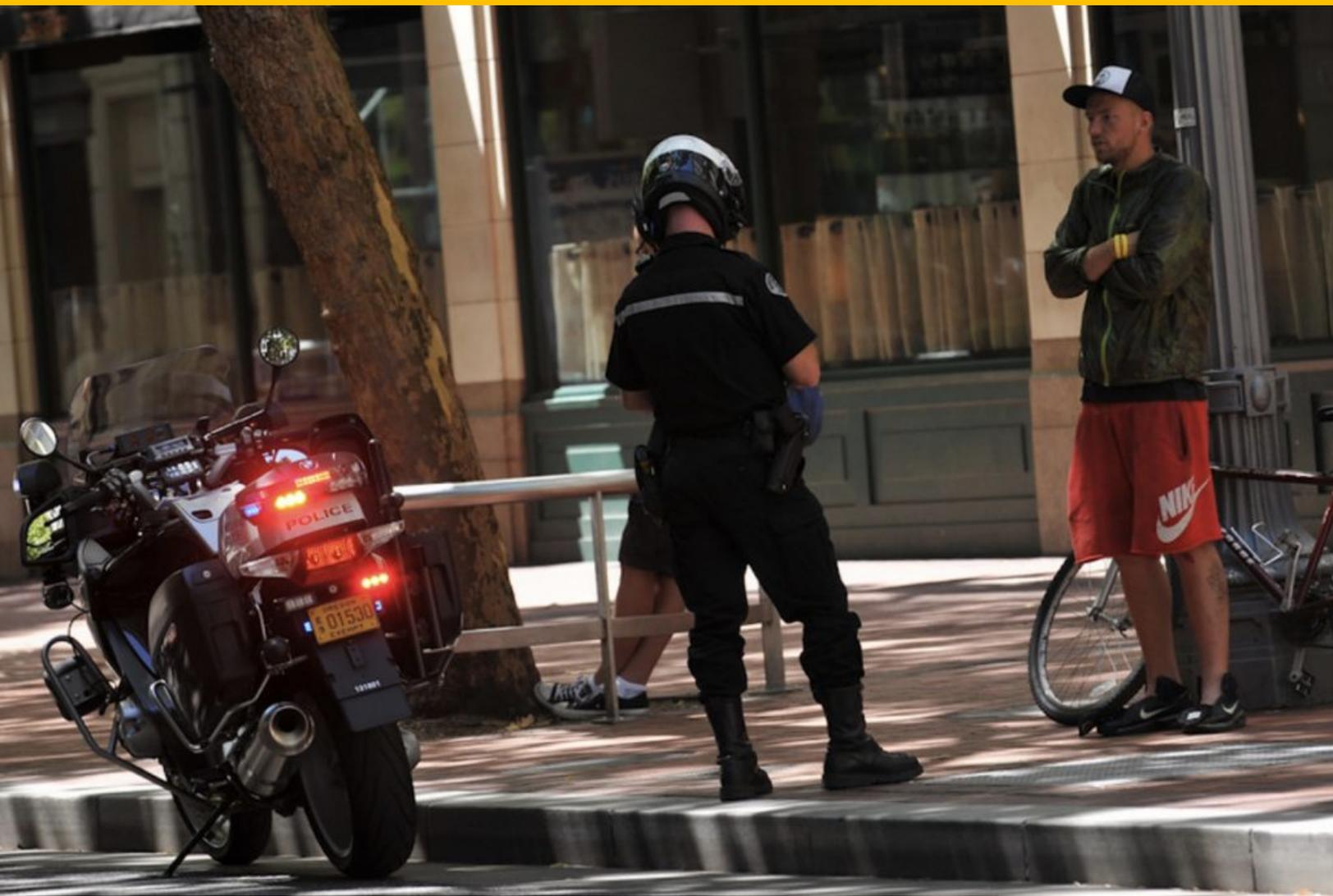


Image: Jonathan Maus/BikePortland

Community voices have been strong in calling out the historic and existing inequities of enforcement on pedestrians and drivers alike in underserved areas of Portland. There is now an opportunity to redefine enforcement in a more equitable way. It's time for new ideas and an expanded conversation.

Enforcement Concerns

The City of Portland website states that enforcement actions are limited in Portland's Vision Zero plan "in order to reduce the possibility of racial profiling and disparate economic impacts". The Vision Zero task force, made up of interagency and community members has been a vital part of focusing Vision Zero efforts on equity and calling into question the role of enforcement. Community voices have been particularly strong in calling out the historic and existing inequities of enforcement on pedestrians and drivers alike in underserved areas of Portland.

In light of these concerns, PBOT ended its 15-year collaboration with the Portland Police Bureau in July of 2020. The decision was communicated to hinge upon a disagreement about the inequitable impact of "secondary violations" on people with low income and in underserved areas. However, broader equity concerns may have been at play.

PBOT receives and reviews annual stops data from Portland Police. The data from the most currently available 2019 bolsters the case that treatment by Police of drivers and pedestrians alike is inequitable.

Drivers perceived to be Black/African American were stopped significantly more for Non-Moving Violations and were asked to consent to a search at almost twice the rate of all other perceived racial groups. Black pedestrians in Portland were significantly more likely to be stopped for Non-Traffic Offenses and were stopped at a disproportionately high rate of 15.8% as compared to the percentage of Black population of Portland at 5.8%.

In the most current publicly available meeting minutes from the Vision Zero Task Force on October 22, 2019, then Commissioner Eudaly directed PBOT to get more data and research about enforcement and wanted feedback from community members on how to "increase enforcement in the right way." To date, there is no publicly available update on this process.

In December of 2020 Commissioner Jo Ann Hardesty was put in charge of PBOT. She has been a strong critic of the role of police and enforcement in transportation and beyond. With her oversight there is now an opportunity to redefine enforcement in a more equitable way. It's time for new ideas, policies and an expanded conversation.

Fixed Speed Cameras

Portland's fixed speed camera safety program was approved in 2015 and adopted in 2016. According to a 2018 telephone survey by the City of Portland "75 percent of the individuals surveyed supported using traffic safety cameras on streets with high crash rates." **The 2020 study Legislative Report Outcome Evaluation of fixed speed cameras found a 57% decrease in the number of vehicles traveling over the posted speed limit and an 85% decrease in the number of vehicles traveling more than 10 mph above the posted speed limit. Fixed speed cameras are well accepted and effective.**

Still, the implementation of the cameras has been slow and limited, with the first 8 cameras on High Crash Corridors taking more than three years to install. In 2019 city leaders agreed to spend 50 million additional dollars on fixed speed safety cameras, but to date (January 2021) the cameras have not been installed.

PBOT must look at engineering and traffic calming solutions on High Crash Corridors and other dangerous roads first and where solutions can't be found, install fixed speed cameras. This process should be prioritized and expedited. The public will and the funding are there. More urgent action is needed.



Image: PBOT

Additionally, PBOT should explore more progressive ideas like the use of decoy cameras, as done in Sweden, that rotate around to different locations.

Equity and Legal Considerations

Though many perceive fixed speed cameras to be unbiased, implementation is not without equity concerns. Placement of cameras on roads in underserved areas runs the risk of becoming just another example of the surveillance and targeted punishment of disadvantaged communities. A flat rate fee structure from tickets also disproportionately affects those with lower incomes in underserved areas, with unpaid fees resulting in compounding debt and legal issues.

In-depth equity impact studies must be done in conjunction with inclusive neighborhood communication to determine where cameras should be installed. **Before installation, transportation agencies should lead with safe systems solutions by adding traffic calming and engineering updates to every approved camera location in order to ensure that underserved areas are not punished for past and existing underinvestment in infrastructure.**

To address the inequitable impact of fees, **an income based sliding scale fine system for traffic offenses should be introduced.** Those who make more would pay more and vice versa. Similar systems have been successfully implemented in Finland and explored in California and Chicago among other places.

As an additional step to limit the inequitable effect of enforcement on pedestrians alike, **petty pedestrian offenses should be eliminated.** For instance, Portland City Code makes it an offense to fail to cross at right angles. Such offenses are susceptible to being misapplied disproportionately against people of color and are often used as a pretext for racial profiling.

A 2014 study conducted by the FHWA used infrastructure factors to predict with 90% accuracy whether or not a pedestrian would cross mid-block. Eliminating petty pedestrian offenses prevents pedestrians from being punished for existing infrastructure inadequacies.

Expanding the Role of PBOT

In December of 2020 Portland Police Bureau Chief Chuck Lovell announced a reorganization plan that will result in zero officers dedicated to traffic law enforcement. While on the face it, this looks like a move that will leave Portland without oversight of drivers it can otherwise be viewed as an opportunity. PBOT is in a position to expand their role to address this new reality by doing the following:

Re-establish the Traffic Calming Division

The dedicated Traffic Calming Division was disbanded in the 90s with budget cuts. Before granting further funds to enforcement, City Council should first re-establish the Traffic Calming Division and provide it with a robust budget. Going safe speeds should be intuitive based on how PBOT and ODOT configure and operate their roadways.

Take Over Primary Crash Response

In the interest of reducing police-public interactions and fostering a safe systems approach, PBOT should take over primary crash response. In depth crash reviews with a focus on infrastructure and engineering solutions as well as systems oriented press briefs should be made available to the public.

Change after-hours parking enforcement from police to PBOT

Having police respond to calls of improperly parked vehicles on evenings and weekends is expensive, and a setup for racially-charged interactions which have occurred in Portland. PBOT parking enforcement personnel do it during business hours and this service should be expanded to after hours.

Change fixed speed safety camera citations from police to PBOT

Current legislation stipulates that a sworn police officer review all film from fixed speed cameras and sign each citation issued. This process has resulted in a backlog of ticketing and an inefficient system. Other cities, such as Denver, allow civilians to do this. In the interest of efficiency, the law should be changed to allow PBOT to take over the review of camera film and issuance of citations. An adequate budget should be provided by the City to facilitate this process.

Conclusion

With an awakening dedication to police reform and racial justice and a new commissioner-in-charge of PBOT, Portland is in an opportune policy window to figure out which tools are going to work best to make meaningful changes to enforcement practices.

Oregon Walks acknowledges that we don't have all of the answers, but the time has come to address enforcement equity issues. Our informed suggestions are made with an open recognition of the ongoing dialogue. New ideas and approaches will come with the engaged voices of our communities. Our hope is to move forward together toward a more equitable future.

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After a Crash

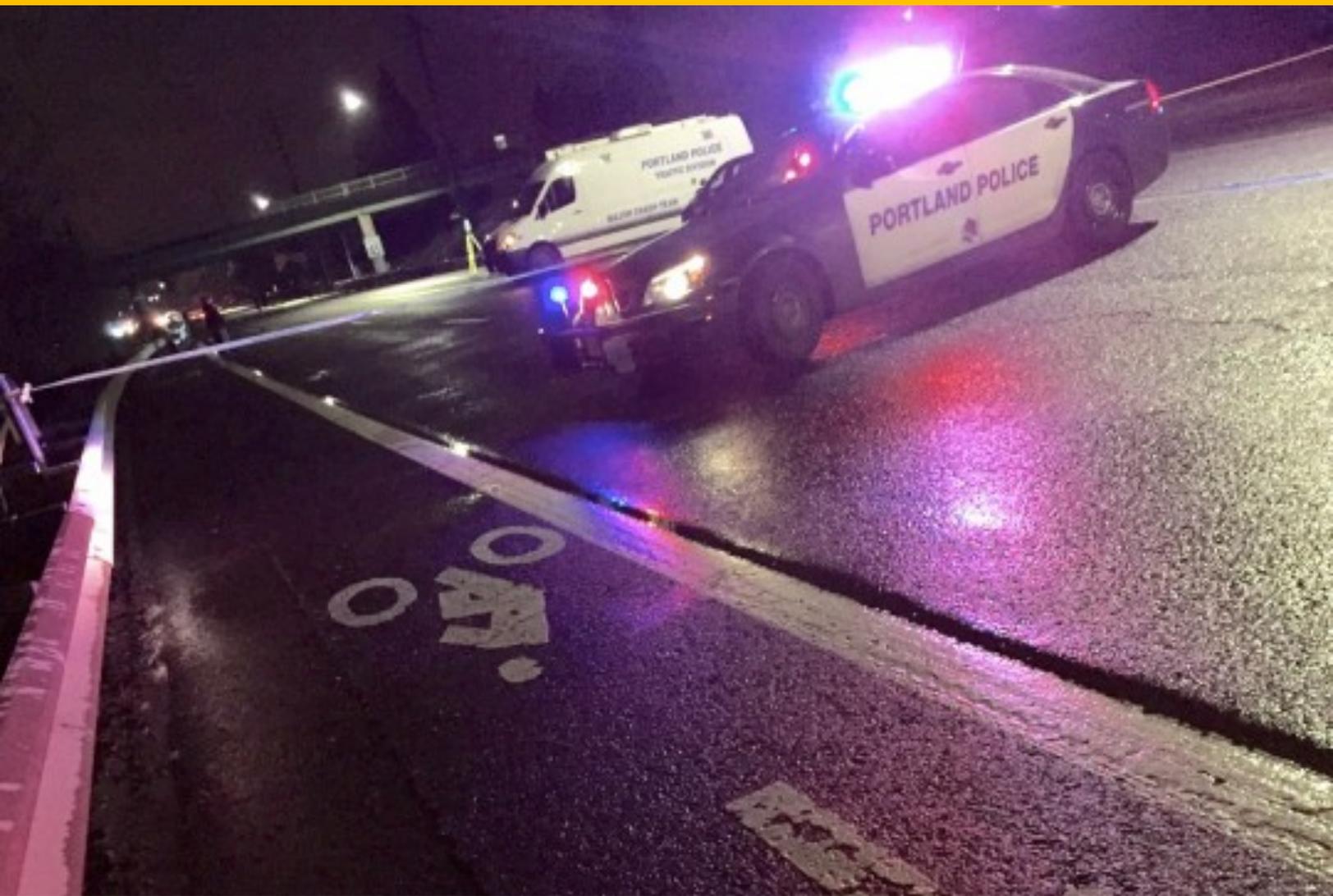


Image: Jonathan Maus/BikePortland

The flow of information from police press release to media narrative is vital in shaping the content and quality of media coverage. Bias due to selective information, omission of facts, and word choice in both police press releases and media coverage has strong implications on public perception and response to fatal pedestrian crashes.

The Flow of Information

When a fatal pedestrian crash occurs, the Portland Police Bureau files a state standardized report and the Major Crash Team conducts an investigation. While the resulting Major Crash Team investigation report is in depth, it is not available to the public until months after the crash with considerable bureaucratic obstacles and fees inhibiting access.

General public awareness of fatal pedestrian crashes comes instead from the initial press release published on PPB's news website and flash alerts at the time of the crash. This release is very brief, containing time and location of crash, short crash description, and whether the driver is absent or cooperating with the investigation. An "UPDATE" press release often follows with the name of the victim and/or driver arrest information.

Media outlets review these brief police press releases and a majority of the time release a correspondingly short news story using the exact wording and information from the press release without further research, investigative journalism, or follow up reporting (see example).

Oregon Walks collected and reviewed over 200 media articles from the web related to fatal pedestrian crashes from 2017-2019. A survey showed that in only 16 out of 48 crashes did media coverage go beyond an article restating the police press release information.

The flow of information from police press release to media narrative is vital in shaping the content and quality of media coverage. Bias due to selective information, omission of facts, and language focus in both police press releases and media coverage has strong implications on public perception and response to fatal pedestrian crashes.

Selective Information in Police Press Releases

Due to the tendency of news outlets to confine fatal pedestrian crash coverage to a simple restatement of the police press release, the information that is selectively shared or omitted by PPB is crucial. While survey of all available PPB press releases for fatal pedestrian crashes from 2017 to 2019 found that a majority did not contain information that was blatantly biased against pedestrians, **in a handful of crashes selective information released to the public painted an incomplete and insinuating picture of pedestrian culpability:**

- The April 26, 2017 press release for the crash on SE 92nd Ave and SE Foster Rd. states that the “pedestrian stepped out into the lane of traffic”. The full police report found that the pedestrian was “hit in the crosswalk” and there was no video or witness evidence to verify the status of the signal when the driver came through the intersection. The press release indicated the investigation was ongoing, but there was no media follow up. A Portland Tribune article directly quoted the police press release language (“the pedestrian stepped out into the lane of traffic”) without researching or citing driver or infrastructure factors, communicating a simplified account of pedestrian fault.

- The May 12, 2017 press release for the crash at NE Martin Luther King Jr. Blvd and N Union Ct. describes the pedestrian as "pushing a trailer full of empty cans and miscellaneous items and pulling a cart with additional items when he was struck by the vehicle." It also states that the driver was “not intoxicated”. The coded language for people experiencing homelessness used to describe the pedestrian encourages a value judgment by readers. The press release fails to mention that that the driver was cited for going 15 mph over speed limit (70 mph in a 55 zone) and did not apply brakes before the crash. All media reports used the language of the police report suggesting pedestrian homelessness and do not include the driver speeding citation, insinuating sole pedestrian fault.

Thematic Framing & Safe Systems Approach

Media coverage using thematic-framing (exploring infrastructure factors, crash history at the location, relation to larger trends or data, etc.) was noticeably scarce. **Out of the sample group of over 200 media articles surveyed, less than 20% included a mention or discussion of infrastructure factors, community member interviews expressing concern about infrastructure issues or data related to the crash location or larger crash trends. Less than 10 articles included direct interviews and quotes with transportation experts or PBOT representatives.**

While all police press releases for fatal pedestrian crashes included standard language to acknowledge Vision Zero (“The Portland Police Bureau is committed to working with our partners in government and the community to create safer streets and work towards reducing, and eventually eliminating, traffic fatalities as part of Vision Zero”) and some included a statement of YTD traffic fatality number, they were otherwise void of thematic-framing, instead focusing on episodic driver and pedestrian actions.

Mentions of infrastructure were made only to describe pedestrian location in some cases. The selective inclusion of thematic-framing contradictorily served to reinforce pedestrian bias in some crashes.

The April 30, 2017 crash on the 7500 block of N Killingsworth St. press release noted that “the location of the crash was mid-block where there is no marked or unmarked crosswalk or informal intersection crossing capabilities”, suggesting pedestrian blame for choosing a “dangerous” location. The press release fails to mention other thematic factors like the inadequate lighting on the corridor with 350’ between street lights, and the lack of crossing options and traffic calming on the corridor with 2600’ between signals and marked/signalized crosswalks.

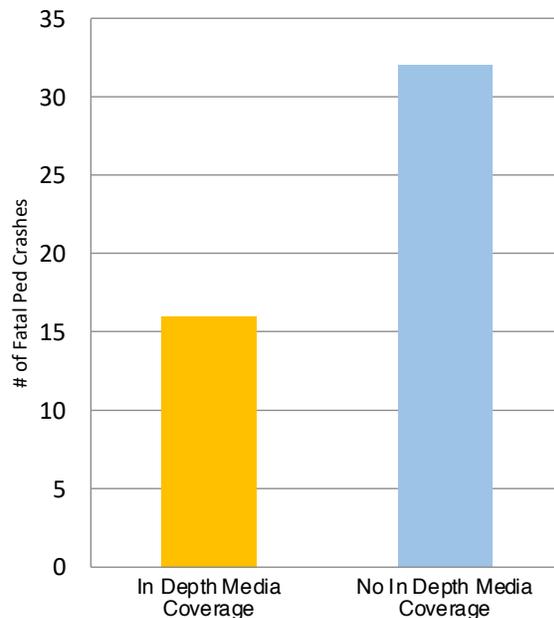
Studies show that episodic-framing that focuses on pedestrian and driver actions and circumstances encourages individual level solutions (i.e. educational programs, enforcement) whereas thematic-framed coverage that includes infrastructure and data driven information encourages systems-level solutions (i.e. lowering speeds, road design modification). **Portland’s Vision Zero relies on a Safe System approach and increased media coverage using thematic-framing is critical to ensuring public understanding of the role of infrastructure in crashes and the resulting community support for safety improvements.**

Which Crashes Receive Media Attention?

Only 16 out of 48 fatal pedestrian crashes in Portland from 2017 to 2019 received in depth media coverage. (For the purpose of this survey, “in depth” was defined as one or more media articles per crash that included information beyond restatement of the police press release such as interviews with witnesses, community members, or PBOT officials and any instances of systemic factors or infrastructure mention.) Independent news outlet BikePortland.org consistently provided the most detailed analysis of location systemic and infrastructure factors, as well as historic and current transportation agency response to crash locations.

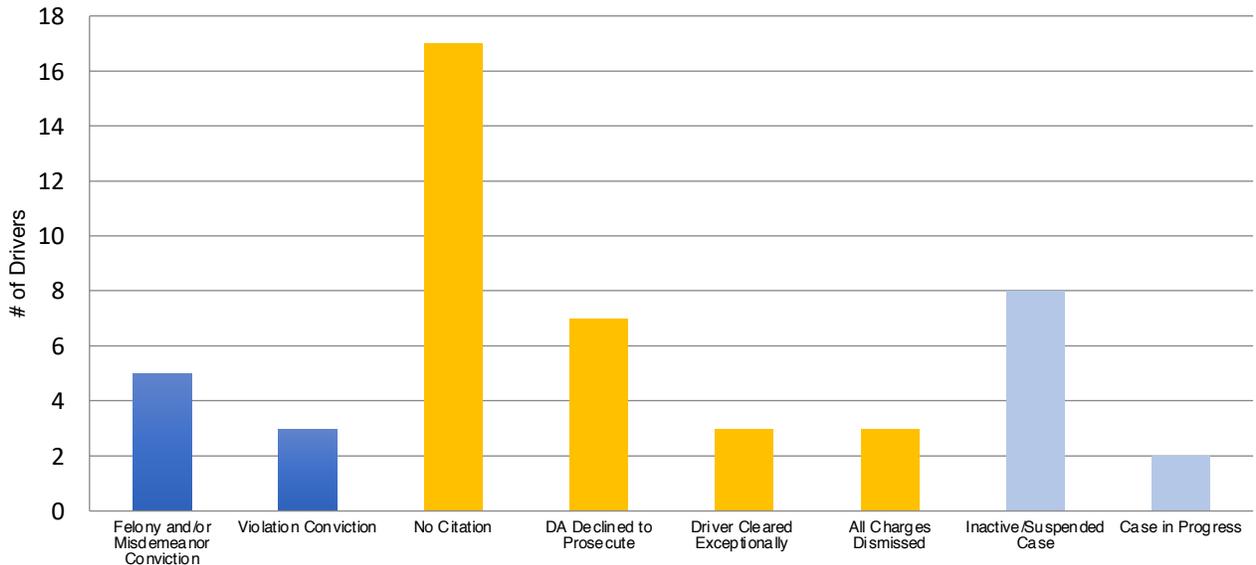
Review shows that hit-and-runs and exceptional driver actions (intoxication, extreme speed, street racing) predominantly received the highest amount of coverage. **Crashes involving people experiencing homelessness and pedestrians with known substance abuse factors or criminal records were excluded from in-depth media coverage.**

The media tendency toward episodic-framing means that the individual focus of in-depth articles was on empathetic pedestrians (victims of hit-and-runs, persons with disabilities, young people, older adults) and blatant driver negligence (hit-and-run, DUII, running a red light).



Media reporting of driver consequences and the humanizing aspect of victim biographies are important for developing public understanding of the urgency of the fatal pedestrian crash problem in Portland, but without thematic-framing in media articles that discusses infrastructure issues, there is a heightened risk that readers perceive crashes as an isolated tragedy or “accident” and fail to comprehend and encourage meaningful infrastructure-oriented safety solutions.

Driver Consequences



One result of the selective and minimal media coverage of fatal pedestrian crashes is that in many instances the public does not receive a follow up as to driver legal consequences or otherwise. In the February 26, 2019 Vision Zero Task Force meeting a Task Force member brought up the concern of driver consequences stating: "...you get the news reports and fatality reports. But we never find out what happened. We never find out what the driver...is punished with...Lot of leniency with 'I didn't see them'."

There were no legal convictions or citations for 75% of drivers involved in fatal pedestrian crashes in which the driver identity was known from 2017 to 2019.

Media Best Practices

In 2003 the British Medical Journal stopped using the use of the term “accident” because of the “undue neutrality” it conveys in suggesting inevitability and non-preventability. In 2016, the Associated Press Style Guide, a common reference for journalism language best practices, recommended that the words “crash” or “collision” be used instead of “accident.” **Despite AP Style guide recommendations, survey of articles covering fatal pedestrian crashes in Portland from 2017-2019 showed that the term “accident” is still in common use.**

Traffic crashes are not “accidents.” Better reporting practices play an important role in properly framing crashes as preventable occurrences with deducible contributing factors and solutions. A 2019 article from the Transportation Research Interdisciplinary Perspectives Journal makes the following recommendations for media best practices:

Shift away from pedestrian-focused texts

Example: “a pedestrian was hit and killed”

Better Practice: “a driver hit and killed a pedestrian”

Avoid non-agentive language

Example: “the pedestrian was hit and killed” (no agent)

Better Practice: “a person driving struck and killed a person walking”

Avoid object-based language and opt for person-based language

Example: “a vehicle veered onto the sidewalk”

Better Practice: “A driver veered onto the sidewalk”

Be aware of counterfactuals

If a pedestrian is noted to have been struck “outside of a crosswalk”, research Google Street View to determine if there are any crosswalks available and cite Portland City Code where applicable (16.90.085 and 16.70.210).

Include thematic-framing

YTD number of fatal crashes/injuries, Vision Zero statistics. Contact local transportation, urban planning, or public health experts to provide context.

Police Crash Reports

Police crash reports are currently the only publicly available examination of crash factors and circumstances besides the brief police press releases. Complete crash reports consist of a state standardized crash report form with driver, pedestrian and identity info, check boxes for limited contributing behavioral and infrastructure factors and vehicle make/model/year info. Fatal crashes include witness and persons of interest interview summaries, Major Crash Team investigation forms looking at infrastructure issues, toxicology and phone records and legal forms (search warrants, etc.).

But full crash reports are available to the public with appreciable bureaucratic process, fees and time lag. One can order a report on the PPB records portal. The cost is \$30 for the first 10 pages and \$2 per additional page. Complete reports are usually 10 to 60+ pages depending on the scope of the crash investigation and reporting. (A 50 page report would cost \$110). Reports are not available until all investigations are concluded which can take up to 6 months after a crash occurs and once ordered can take over 6 weeks to be delivered.

Full crash reports are more detailed than the police press releases, but they are not without issues:

- There is an inherent bias toward the driver in all reports as driver account is recorded but in all cases from 2017 to 2019 pedestrians were deceased or injury did not permit officers to interview them.
- There is public concern about the quality of race data collection as race determination is left subjectively to officers (see Portland Vision Zero Task Force meeting notes from October 22, 2019). Review of fatal crashes from 2017 to 2019 found two instances of questionable race identification (one each for both pedestrian and driver).
- Major Crash Team investigations provide a location description that notes infrastructure characteristics but there is currently insufficient inclusion of infrastructure factors on the standard Oregon Crash Report Form. There are check boxes only for Surface Type and Condition (“wet, concrete”), Light (“Dark-lighted way”), Event Location (“intersection”), Road Character (“Straight and Level”) and Traffic Control Type and Condition (“traffic signal, no malfunction”). These check boxes do not provide measurement or analysis of factors.

PBOT Rapid Response Task Force

The 2016 Vision Zero Action Plan included a commitment (SD3) to establish and deploy within 2 years a “multi-agency fatal rapid response team to fatal crash locations to evaluate the site for safety enhancements.” The formulation of this rapid response team was to be a cooperative effort by “PBOT, PPB, TriMet, Multnomah County, PF&R, and ODOT.” The Quarter 1 2017 Vision Zero Actions Report showed that progress to establish the fatal rapid response team was 25% complete and PBOT was “talking with partners to identify necessary and appropriate participants for the Fatal Response Team.”

But an October 2017 City Budget Office Council Work session document states: “It has been agreed upon by PPB and PBOT staff that having PBOT respond immediately to crash scene is not beneficial to PBOT staff. PBOT is better served responding to the scene once the investigators have had time to identify the contributing factors to the crash, as oftentimes road design is not a factor. To date, there has been one combined site visit.” The link to the 2018 Vision Zero Performance Measure update is currently broken. To date there are no publicly available materials showing the formation or deployment of the Vision Zero fatal rapid response team.

Rapid response by PBOT at the time of a fatal crash *is* both beneficial and crucial. Road design and infrastructure *are* often contributing factors to a crash. Accurate race information and robust infrastructure examination are central to the Vision Zero equitable data-driven Safe Systems approach.

PBOT cannot make fully informed decisions with the limited information and perspective provided by PPB crash reports. Waiting for PPB to complete an investigation delays urgent infrastructure changes that could save lives.

Altering the format of the current state crash report is a challenging prospect. PBOT must establish a functioning fatal rapid response team to ensure data is complete and relevant to the Vision Zero mission.

PBOT Crash Review

According to an April 24, 2018 PBOT press release, former commissioner Chloe Eudaly directed PBOT to create a new checklist to address road design flaws or engineering mistakes at crash sites. This checklist is not currently publicly available for review. In addition to the data from the standard state crash report, it is recommended that the Vision Zero rapid response task force review should include the following:

Vehicle

- Curb weight
- Hood Leading Edge Height (HLEH)
- Grille Profile
- Engine Size

Equity

- Pedestrian Race
- Median income in census tract where crash occurred
- Census racial data for census tract where crash occurred
- High Crash Corridor (yes/no)
- Community of Concern (yes/no)
- Race Matrix Score
- Income Matrix Score
- Overall Matrix Score

Street Lighting

- Measurement of Average Maintained fc and Uniformity Ratio for comparison with Appendix K Guidelines
- Distance between street lights
- Lighting obstructions (trees, structures, etc.)
- Environmental Light Factors (illuminated signs, business lighting, etc.)

Speed

- ADT
- Current Speed Limit
- % of vehicles over posted speed
- % of vehicles over 10 mph+ speed
- 50th percentile speed
- 90th percentile speed
- Speed Zone Order History (SZO)

Pedestrian Crossing

- Distance to nearest marked crosswalk from crash location
- Distance to nearest unmarked crosswalk from crash location
- Crosswalk Painting Condition
- Signal Timing: Does the current signal timing allow sufficient time for a person with the walking pace of a 65+ year old (2.71 mph) and/or persons with disabilities (\approx 1 mph) to cross?
- Parking Setback: Parking within ORS 811.550(17, 18) or Portland City Code 16.30.120 distances?

Transportation System Plan Classification:

- TSP Traffic Class
- TSP Bicycle Class
- TSP Pedestrian Class

Traffic Calming

- Distance between traffic impediments/calming (islands, signals, speed bumps)
- Distance from where pedestrian hit and nearest traffic calming device (street light, traffic island, speed bump) before crash location
- Road Width (curb-to-curb)

Bicycle Infrastructure:

- Bike Lane presence/condition

Location Use

- Are there known encampments of people experiencing homelessness within ¼ mile of the crash location? Slow speeds/provide traffic calming at location to accommodate.
- Are there noticeable “goat paths” or desire line paths in the area of the crash? Assess paving/sidewalk needs and crossing locations accordingly.
- Is there an Older Adults Home in the area? Time signals near crash location to accommodate greater likelihood of persons with disabilities and/or slower walking pace.
- Transit: Assess Tri-Met bus stop location in relation to nearest crossing and accessibility.

Reporting and Media

- Obtain a copy of the PPB Crash Report. Analyze for pedestrian bias and omission of relevant pedestrian data. Analyze for language bias.
- Analyze PPB Press Release for biased language and selective information
- Survey and archive media coverage.

Conclusion

In-depth assessment of crash locations by the rapid response task force would greatly help Vision Zero efforts. The data collected would form a strong basis for communicating a Safe Systems approach narrative.

In addition to the current PPB press release, PBOT should release a Vision Zero crash media brief for all fatal pedestrian crashes, using media best practices for language and data from the rapid response task force location assessment to present a pedestrian focused, thematic-framed perspective.

The hope is that by leading by example and giving media outlets another source to draw upon besides the PPB press release, language and perspectives in the media may be shifted to give a more holistic view of crashes that takes into account a greater Safe Systems approach acknowledgement.

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Recommendations



Image: Oregon Walks

We must reframe how we as individuals and as a community view pedestrian safety. Fatal pedestrian crashes are not “accidents”. They are a preventable phenomenon with identifiable contributing systemic and infrastructure factors that can and *must* be addressed. Oregon Walks has assembled a list of recommendations for agencies, policymakers, advocates and community members. Working together, we can achieve the common goal of zero traffic fatalities in Portland.

Reframing Pedestrian Safety

We must reframe how we as individuals and as a community view pedestrian safety. Fatal pedestrian crashes are not “accidents”. They are a preventable phenomenon with identifiable contributing systemic and infrastructure factors that can and *must* be addressed.

It is no coincidence that a higher number of crashes occur in underserved areas of Portland, nor that those people disproportionately killed in crashes are people of color, people experiencing homelessness, Older Adults and persons with disabilities. It is rather a consequence of historic government agency neglect and inequitable investment of money and resources. These inequities have to be addressed.

So too must people’s perspectives on the primacy of vehicles be reassessed. The cultural and deeply personal relationship of people with vehicles in the US is undeniable. For many people, cars offer a sense command over physical space that becomes nearly inseparable from a more innate sense of self-empowerment. In this light, it is understandable that Safe Systems changes that put limitations on vehicle speed and seek to balance the driver’s perceived dominance of the right-of-way with that of the perceptually weaker pedestrian are oftentimes seen as a threat.

But we must acknowledge that while taking actions to alter a system that is inherently dangerous to those walking and rolling may feel like a sacrifice to some who drive, it is for the greater good of all who share our roads and communities. A constructive conversation often begins with “what do you want for the street you live on and your family?” and then moves to understanding that we cannot have what we want for ourselves unless we do the same for others.

Oregon Walks has assembled a list of recommendations for agencies, policymakers, advocates and community members. Though these recommendations are targeted toward different stakeholders, they overlap in many of their actions and intent. It will take a unified approach from multiple angles to address traffic violence in Portland. Working together, we can achieve the common goal of zero traffic fatalities.

PBOT

Prioritize East Portland

Review of fatal pedestrian crashes from 2017-2019 shows people walking in low-income communities, particularly in East Portland, who are part of traditionally underserved groups including those who identify as Black are disproportionately more likely to be killed in a crash. Funding allocation and priority for all current and future projects should accordingly be devoted to East Portland, east of 82nd Ave.

Reestablish a dedicated Traffic Calming Division

Reviews show that speed is a nearly universal factor in crashes (typically excluding only those involving right turn movements). Moreover, traffic calming was identifiably inadequate at nearly half of fatal pedestrian crash locations surveyed. PBOT disbanded the Traffic Calming Division in the 1990s with budget cuts. This Division must be brought back. Traffic calming is more effective and equitable than enforcement to achieve safety (and livability) outcomes.

Follow Existing Laws to Lower speeds on Collectors, School Zones and Narrow Residential Roadways

Portland Ordinance 188774 designates a “speed that is five miles per hour lower than statutory speed on non-arterial streets under the jurisdiction of the City of Portland in residence districts.” Collectors are “non-arterial” streets. The statutory speed for Collectors in a residence district is 25 mph. Collectors in residence districts must accordingly be lowered to 20 mph in Portland. The Statutory Speed in school zones is 20 mph. Portland Ordinance 188774 directs a 5 mph speed reduction to 15 mph. “Narrow residential roadways” are streets in a residence district where the portion of the street “that is improved, designed or ordinarily used for vehicular travel, exclusive of the shoulder” is not more than 18 feet wide (ORS801.368). All Portland streets in residence districts that are 18 feet or narrower — not including shoulders or parking — must be posted 10 mph.

Lowering posted speed and making engineering changes are like chicken and egg. Engineers are likely to reject calming measures when the posted speed is high. The need for speed limit reductions and engineering measures to calm speed should not be used as an excuse to do neither.

PBOT, cont.

Prioritize streetlight upgrades and installation, particularly on Arterials and Collectors in East Portland

Data shows that 79% of crashes occurred while it was dark. 21 out of 48 total crash locations currently have unresolved possible lighting deficiencies or issues. Ensure all Arterials and Collectors, particularly in East Portland, meet or exceed PBOT Appendix K guidelines for foot-candle illuminance and uniformity ratio.

(Re)Establish a Fatal Pedestrian Crash Rapid Response Task Force

The 2016 Vision Zero Action Plan SD3 directed PBOT to “Deploy a multi-agency fatal rapid response team to fatal crash locations to evaluate the site for safety enhancements.” PBOT participated in response to one crash, and then quietly abandoned this directive. Even if training or hiring is required, this team should exist, and should review the crash location at the time of the crash and collect data to improve PBOT’s safe systems approach.

Release Vision Zero fatal pedestrian crash media briefs

Shortly after each fatality crash, PBOT should release a Vision Zero crash media brief using media best practices for language and preliminary data from the rapid response task force location assessment to present a pedestrian focused, thematic-framed perspective of the crash.

Analyze Crashes and Provide Information to Communities

PBOT should develop templates and protocols to perform and publish reviews of every fatal and serious crash in Portland. These should be posted on PBOT’s Vision Zero Crash Map, along with the public record copy of the police report for each crash. Driver and victim last names and addresses may be redacted, consistent with PBOT’s currently-adopted “first name last initial” compromise between humanizing crashes and respecting families’ privacy (which has typically already been lost due to media reporting).

Incorporate data for People Experiencing Homelessness into the existing Equity Matrix

PBOT must develop a methodology for assessing homelessness/houselessness (taking into account encampments, services, crash history and more) within census tracts to incorporate into the existing Equity Matrix. This data should be used to guide implementation of infrastructure improvements and safety plans as well as funds allocation prioritization.

PBOT, cont.

Address pedestrian safety infrastructure for Older Adults

Older Adults (65+) are disproportionately killed in pedestrian crashes in Portland. PBOT must survey crash history and specifics at locations where Older Adults were killed to determine how infrastructure may have contributed to crashes. Assessment should be made of where nearby assisted living homes and other services are located, as well as signal timing, lighting and proximity to crosswalks for those with slower walking pace or mobility issues. PBOT should establish a data collection methodology, identify actionable steps and fund upgrades.

Make changes based on Oregon Walks Crash Reviews

The Oregon Walks Crash Reviews report lists known and possible infrastructure issues for every crash location. PBOT should use these reports to inform upgrades at the crash location *and every other place where similar conditions exist*.

Expand Leading Pedestrian Interval (LPI) and protected left turn installation

A 2019 directive by PBOT Director Chris Warner called for the installation of 10 or more LPIs and 3 or more protected left turns in 2020. This program should be expanded with an assessment of intersections citywide with particular attention to pedestrian crash history data involving right turn and left turn right of way conflicts. Although LPIs can reduce the opportunity to make eye contact between people walking and people driving, and can place people walking directly in the path of turning vehicles if the signal timing is poor, there is some evidence suggesting LPIs can modestly improve safety. LPIs and, especially, protected left turns must be installed at all locations with a measurable history of pedestrian crashes and in future intersection designs. It appears left turning movements (and left hook collisions) are more dangerous to pedestrians than right hooks, particularly at large intersections. This is likely because drivers have more distance to gain speed, and because there is no opportunity (for anyone) to make eye contact before starting to cross. Separating these movements in time, or slowing left turns by channeling drivers into narrower lanes or smaller radius turns can help.

PBOT, cont.

Words Matter: Accidents, Crashes and Traffic Violence

Most journalists, professionals and policymakers now refer to “crashes” not “accidents.” Oregon Walks recommends a still-jarring term: “traffic violence.” This term reflects the fact that when a person driving a car strikes another person, the person(s) injured or killed have experienced a violent trauma. Violence (such as a “violent” volcanic eruption) does not require intent. The focus is on how the event affects people, regardless of the intent of any of the people involved. Introducing this term is sometimes more productive at the end, not the beginning, of a conversation about crashes. There is an informative article about the term traffic violence here: https://laist.com/2020/01/03/car_crash_accident_traffic_violence_language.php

Words Matter: Trauma Impacted Communities

PBOT has done excellent work mapping race, income, and areas where Portland has neglected basic pedestrian infrastructure. Oregon Walks supports PBOT’s work to understand “Communities of Concern,” but suggests instead the term Trauma Impacted Communities. A “concern” is typically a back-burner issue, not a priority. When did these communities become a “concern”? The term Trauma Impacted Communities shifts the narrative in two ways. First, it acknowledges that the effects of traffic violence on individuals and communities is additive. It piles on top of traumas which include economic instability, housing exclusion, a current unprecedented increase in gun violence, limited access to education and healthcare, and others. Second, the policy response to trauma is healing, not “us-vs-them.” Ending pedestrian fatalities is preventing and healing traumas.

ODOT

Reorganize, Restructure and Refocus

ODOT has developed into a highway-building agency. Its structure, funding priorities, and staff capabilities must re-orient from “business as usual” to implementing safety best practices even then they cost money or reduce motor vehicle speed or capacity; and to funding complete infrastructure for people walking on all facilities.

Stop Expanding Freeways

Freeways promote sprawling, car-based development that is typically inhospitable to pedestrians, and brings cars into urban areas where additional crashes occur.

Freeways also absorb huge amounts of taxpayers’ transportation dollars. We cannot spend nearly \$1 Billion to expand 1.6 miles of I-5 through central Portland, and defer basic safety improvements and infrastructure investments that have been so long denied to areas including East Portland.

Revise new speed zoning guidelines with an equity lens

The current speed zoning rules (OAR) that took effect in 2020 fail to address transportation equity considerations and may actually entrench existing inequities.

The concentric zoning system provides lower speeds in the more white, affluent central neighborhoods where fewer fatal pedestrian crashes occur. Underserved neighborhoods in East and North Portland with higher populations of people of color and lower median income with more fatal pedestrian crashes are left with higher speed limits. Community engagement is necessary.

Transfer ownership of Arterials in Portland to PBOT

PBOT has begun to make significant progress in reshaping its formerly deadly-by-design arterials so that they support high-capacity transit and all modes, including people walking and rolling. ODOT has not. ODOT’s streets within Portland used to be farm-to-market rural routes. Now they cut through neighborhoods with schools, parks, businesses and homes. ODOT continues to operate these streets as high-speed, high-capacity automobile routes. This is true even for streets that run closely parallel to freeways. Unlike freeways, these surface streets are not suitable for operating at high speeds in the neighborhood context. ODOT and PBOT need to reach agreement on who will fund the deferred investments these streets require and transfer jurisdiction.

Portland City Councilors

Reestablish a dedicated Traffic Calming Division

Review shows that traffic calming was inadequate at nearly half of fatal pedestrian crash locations surveyed. The Traffic Calming Division at PBOT was disbanded in the nineties with budget cuts. Portland City Council must bring this Division back and with a robust budget. Traffic calming focus should be on Local Service streets and Collectors in underserved communities.

Replace officer enforcement with cameras in locations that cannot be adequately engineered for calm or safety

Rotate dummy cameras from place to place, like Sweden does. That way drivers are mostly seeing cameras and slowing down, as opposed to mostly not seeing cameras and getting tickets.

Establish an income based fine system for traffic offenses

The current flat rate fee system is inequitable. A person with a high income can afford to pay fines without economic burden whereas those with a lower income paying the same fine may be impacted more heavily. As a prerequisite to replacing officer enforcement with cameras, the existing fee schedule should be amended so that fines are on a sliding scale with income.

Change after-hours parking enforcement from police to PBOT

Having police respond to calls of improperly parked vehicles on evenings and weekends is expensive, and a setup for racially-charged interactions which have occurred in Portland. PBOT parking enforcement personnel do it during business hours and this service should be expanded to after hours.

Reassign primary response for non-felony crashes to PBOT

Only a small fraction of the crashes in Portland each year require involvement by sworn law enforcement officers. Police response to crashes is costly, diverts scarce resources, and results in an estimated 4,000 police-public interactions each year. After a crash, trained PBOT staff should provide temporary traffic control, facilitate exchange of insurance information, and identify infrastructure problems that need to be fixed to prevent future crashes. ORS 153.058 authorizes PBOT to issue citations for traffic violations. Police are only needed when a crash involves more serious criminal behavior.

Portland City Councilors, cont.

Get rid of petty pedestrian offenses

City Code makes it an offense to fail to cross at right angles. The offenses that are susceptible to being misapplied disproportionately against people who are Black and Brown are the same offenses that were created as part of the early 20th Century transfer of rights from pedestrians to drivers. Nothing in our crash reviews supports the conclusion that having petty offenses on the books improves pedestrian safety.

Governor and State Legislators

Reclaim Freeway Dollars

Freeways promote sprawling, car-based development that is inhospitable to walking and rolling, and that brings additional cars into urban areas where crashes predictably occur. Freeways also absorb huge amounts of taxpayers' transportation dollars. The Governor and Legislature should reclaim the nearly \$1 Billion currently allocated to expanding 1.6 miles of I-5 through central Portland. If the 7 NB and 7 SB freeway lanes we have (on I-5, I-405 and I-205) indeed prove inadequate as transportation needs and technologies evolve ODOT should refocus on basic safety improvements and infrastructure investments that have been so long denied to Oregonians in their own neighborhoods.

Fund Basic Infrastructure

Completing basic infrastructure for people walking, rolling and using other non-motorized modes should receive funding priority ahead of motor vehicle projects until that infrastructure is completed for all communities statewide.

Establish an income-based fine system for traffic offenses

The current flat rate fines system is inequitable. A person with a high income can afford to pay fines without economic burden whereas those with a lower income paying the same fine may be impacted more heavily. As a prerequisite to replacing officer enforcement with cameras, the existing fines schedule should be amended so that fines are on a sliding scale with income. The curriculum for safety courses offered as an alternative to paying a fine should be updated.

Allow pedestrians to walk in two directions on one side of the street

ORS 814.070 requires pedestrians to walk facing traffic. This makes sense some places, but is a problem in others. For example, it may require a person walking or rolling to cross a major highway, twice, without a marked crosswalk in order to proceed a short distance from a bus stop to their home. For another example, many streets without sidewalks are wide enough for a decent walking shoulder on one side only. Restriping to provide a two-way walking shoulder on one side is a highly desirable configuration on many lower-speed neighborhood streets without sidewalks. This section should be amended to enable safe choices, and exciting new design options.

Governor and State Legislators, cont.

Clarify ORS 801.220 re marking a crosswalk does not close others

ORS 801.220 should be amended to make clear that striping one crosswalk at an intersection does not make it illegal for people walking and rolling to cross at other (unmarked) crossings at that intersection (unless they are posted as “closed”). One victim in our data set was faulted, unfairly, for doing so.

Create a Strong Framework for Speed Cameras and Equity

Communities should have the option to shift from officer enforcement to speed camera enforcement on streets where engineering solutions to excessive speed are not immediately practical. Legislation enabling community-led expanded use of speed cameras should accompany income-based fines, and non-fine alternatives. Dummy cameras should be encouraged so people are more likely to slow down and less likely to receive many tickets.

Change “Accident” to Crash in ORS and Agency Documents

Words matter. Change references to “accident” to “crash” throughout the Oregon Revised Statutes and in state agency documents.

Increase Driver Education

Currently, Oregon DMV is supporting legislation to eliminate testing for out-of-state drivers who move to Oregon. This would save DMV some work. We should be doing the opposite. Drivers need to stay up-to-date on traffic laws, need explicit information about the driving behaviors that most commonly cause crashes, and need to re-affirm their commitment to follow traffic laws. Periodic online courses and testing are needed.

Decrease Speeds 5 MPH at Night

79% of fatal pedestrian crashes occur at night. This is consistent with national data for all modes: driving at night is three times deadlier than during daylight. State law should provide that drivers shall reduce their speed to (not faster than) 5 MPH less than the posted speed during nighttime conditions.

Reduce BAC to 0.05

Oregon should follow the lead of Utah and the recommendation of the NTSB to reduce the legal blood alcohol limit for drivers from 0.08 to 0.05. The current 0.08 limit means drivers can potentially avoid consequences for driving after consuming approximately 4 beers in a short timeframe. Contrary to liquor lobby assertions, NTSB estimates 500 to 800 lives could be saved each year if states adopt this change.

National Policy

NHTSA: Include pedestrian safety tests and ratings in the New Car Assessment Program (NCAP)

The NHTSA lacks complete data on the relationship between vehicle characteristics and pedestrian injuries and has not committed to expand its pilot program to improve its data collection protocol for pedestrian injuries. The NHTSA must put in place a pedestrian safety testing and rating system like that of EuroNCAP.

In 2008, the United Nations Global Technical Regulation No. 9 was established and agreed to by the United States. This regulation seeks to improve pedestrian safety by requiring vehicle hoods and bumpers to absorb energy efficiently when impacted in a vehicle-to-pedestrian crash by setting two performance criteria for pedestrian head impact on hoods and leg impact on bumpers. To date, the NHTSA has failed to initiate the rulemaking process and guidelines for United Nations Global Technical Regulation No. 9.

NHTSA: Link crash data and vehicle information to medical and hospital records

Federal funding for this program was ended in 2013. Researchers are not able to effectively understand or study the relationship between vehicle characteristics and pedestrian injuries with the current police report injury rating/description system and lack of medical data. The program to link the data on a national level must be reestablished in the interest of forwarding safety research and inform future testing and regulations to vehicle design.

NHTSA: Make front facing cameras mandatory in new vehicles

High hood leading edge height on SUVs and light trucks in particular can make forward facing blind spots as long as 15 feet. The NHTSA must make front facing cameras mandatory by law in new vehicles.

Community Advocates and Neighbors

Complain

Portland has adopted a complaint-driven system for responding to many infrastructure needs, ranging from traffic calming and speed limit reductions to lack of safe space for walking on or crossing particular street(s). The complaint-driven system is inadequate because many safety problems are not apparent to the public, and inequitable because white, affluent Portlanders are more likely to complain. Until the complaint-driven system is discontinued, however, all traffic safety concerns should be emailed to safe@portlandoregon.gov or call 503-823-SAFE. Hazards such as a stop sign knocked down go to 503-823-1700 or pdxroads@portlandoregon.gov

Ask for Speed Reductions

Citizens should email safe@portlandoregon.gov to ask PBOT to reduce speeds on their street, or other streets where speed creates danger. Researching the legally correct posted speed can be complex and should not be necessary. However, a number of speed-related resources are available online. Google “Portland speed limits map” for an interactive GIS map of speed limit postings. Google “ODOT speed zone orders” to see Speed Zone Orders Online (setting speeds faster than statutory). Google “ODOT functional classifications” for maps of roadway classifications that are part of the determination of what the posted speed should be. Google “Portland traffic counts” to view data for the (surprisingly numerous) locations where observed speeds have been recorded.

Unless you live in NW, chances are there is a collector-classified street near you that should be posted slower than it is. Throughout Portland, school zones should be posted 15 MPH, and streets in neighborhoods that have a vehicle thru-travel width that is 18 feet or narrower should be posted 10 MPH. Email safe@portlandoregon.gov and ask PBOT to provide these speeds on streets in your community. You may wish to reference City Ordinance 188774.

Community Advocates and Neighbors, cont.

Organize to implement the non-officer enforcement statute, ORS 153.058

If your community is interested in seeing enforcement of particular traffic safety rules without the use of police officers, the citizen-initiated citation process may provide an option. It means you don't need police officers to enforce most of the laws that involve traffic safety. Advocacy and community organizations may wish to explore what kind of community-led enforcement aligns with community values, and to set up a process for implementation of this statute. PBOT staff have the same ability, however the agency has declined to exercise its non-officer enforcement powers.

Join an Organization

People who have lost a loved one in a traffic crash may wish to learn about and join Families for Safe Streets: <https://www.facebook.com/ORSafeStreets/>

Membership in our organization, Oregon Walks, is sliding-scale (contact us at info@oregonwalks.org), and open to everyone.

Every member counts:

<https://oregonwalks.org/>

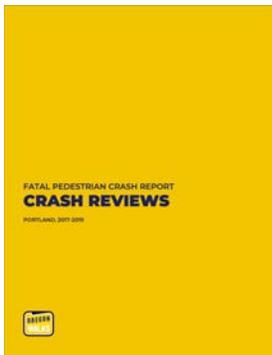
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[Learn More](#)

Read the Full Report

View and download the complete Oregon Walks Fatal Pedestrian Crash Report at www.oregonwalks.org/fatal-pedestrian-crash-report/

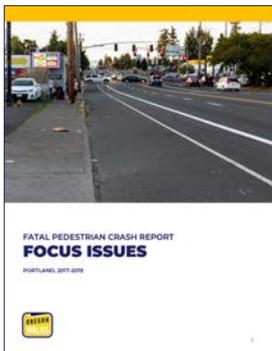
The full report contains three parts:



Crash Reviews provides information relating to each of the 48 fatal pedestrian crashes in Portland, Oregon from 2017-2019.

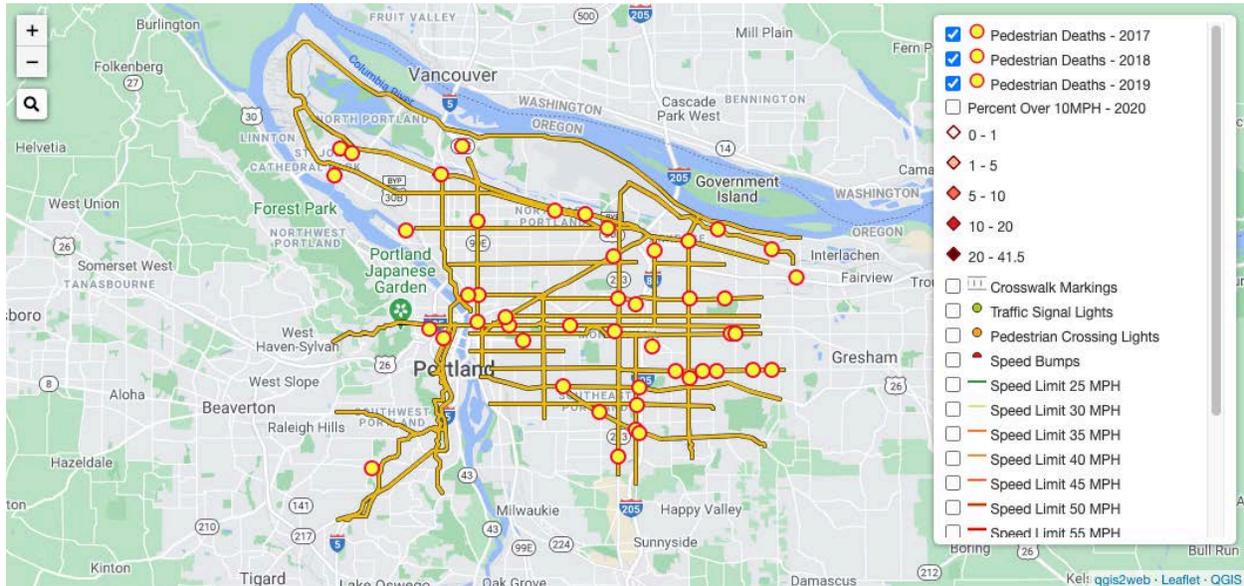


Facts and Figures presents a compilation of data from all 48 crashes, primarily in graphs and tables.



Focus Issues discusses in detail particular aspects of Portland's pedestrian fatality crashes that emerge from the crash reviews and data

View the Interactive Crash Map



Visit www.oregonwalks.org/fatal-pedestrian-crash-report/ to view the interactive crash map. The map is a valuable tool for visualizing the relationship between fatal pedestrian crashes and infrastructure factors:

- Click on each yellow circle to view the location and information for each of the 48 reviewed fatal pedestrian crashes in Portland from 2017-2019. Information includes: nearest intersection to crash location, whether the location is part of the PBOT High Crash Network, curb-to-curb crossing distance, number of lanes, speed limit at the time of the crash, estimated vehicle speed at the time of the crash, whether the crash location speed limit is set above the statutory limit, a Google Maps Street View link and a link to the respective Oregon Walks crash review.
- Click on the drop-down menu in the upper right to view data overlays of infrastructure characteristics (e.g. speed limits, street lighting, traffic signals, pedestrian crossing signals, crosswalks, speed bumps, driver speed studies), as well as an overlay of the Portland Bureau of Transportation High Crash Corridor Network.
- Click on the +/- icons on the left to zoom in and out, and use the magnifying glass icon to type in addresses or landmarks to review location infrastructure and proximity to fatal pedestrian crashes.

Dedication

This report is dedicated to the families and communities affected by traffic violence, and the individuals, in every capacity, trying to make a difference including Families for Safe Streets of Oregon & SW Washington.

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Thank You