

FATAL PEDESTRIAN CRASH REPORT
CRASH REVIEWS

PORTLAND, 2017-2019



Introduction

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

Crashes are grouped by area of the city (North, NE, SE, SW). No fatal pedestrian crashes occurred in NW during this three-year period.

The following are provided for each crash:

- A description;
- Maps and street views with markup;
- Discussion of crash factors; and
- Recommendations relating to infrastructure deficiencies, and to preventing similar crashes.

Two related reports accompany this one:

- 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.

Methodology

As much information as possible about each crash was collected. This includes police reports for all 48 crashes, Traffic Count data (traffic volumes, traffic speed, etc.) from the City of Portland (online), roadway information (speed limits, geometric measurements, lane counts, etc.) from City and State web sites, GIS and Google Maps, on-site observation and measurements (where noted), media reports including witness interviews where available, and other publicly available material. (Note: Inclusion of media and police reports is not an endorsement of them, or their accuracy or completeness.)

Diagrams, a description of the infrastructure, and a description of each crash were prepared.

Information from each crash was compiled in a data set (MS Excel) that was then used to produce the charts and graphs that are provided in the "Facts and Figures" and "Focus Issues" reports. Types of data compiled include: crash type, location descriptors, roadway characteristics (speed, functional classification, sight lines, etc.), traffic data, driver-related information, pedestrian-related information, neighborhood and equity-related information, and information relating to intoxication and distraction.

Limitations, Disclosures and Disclaimers

This review and the accompanying reports are intended to inform policy responses in a way that provides broader insight than can be gained from reviewing a single crash. It also seeks to provide greater community focus—and greater detail—than the statewide statistical data that the Oregon Department of Transportation provides. Our goal is to provide a clearer picture of “what happened” in particular crashes, identify the commonalities, trends and system failures that lead to fatal pedestrian crashes in Portland, and recommend policy change that will reduce and eliminate fatal crashes.

In striking a balance that is more than anecdotal but less than “big data,” we run the risk of failing to provide an evaluation of each crash that is comprehensive, and also failing to document statistical significance or causation. Larger studies do confirm some of the trends and disproportionalities we identify.

Significant care and attention went into reviewing each crash. However, due to the number of crashes reviewed (48), the large quantity of information, and particular types of information that were missing for individual crashes, it is impossible to achieve completeness or full accuracy. The authors will make every effort to correct errors that are identified.

Nothing in the report is intended to blame or exonerate any person or entity involved in a crash. The words “reportedly” or “allegedly” are generally not included in this report, only for brevity. The authors take no position as to the completeness, credibility, reliability, accuracy of any source or witness. The testimony of people killed is unavailable in every crash. This means our information is fundamentally incomplete. The authors have done their best to describe what is known or believed about what happened.

Limitations, Disclosures and Disclaimers, cont.

This is an all-volunteer project. None of the authors or consultants were compensated for their work. The data entry was performed with law firm staff time donated by Forum Law Group LLC, a firm in Portland specializing in representation of people injured in pedestrian crashes, under the supervision of attorney Scott F. Kocher. A working group of the Board of Directors of Oregon Walks provided guidance and input. Other professionals in the community who contributed expertise to the report include planners and engineers whose input was informal. Nothing in the report is intended as engineering guidance or legal advice.

As of initial publication (March 2021) quantitative information about street lighting at crash locations is a particular deficiency of this report. Inadequate street lighting is an issue that repeatedly appears in police narratives, and in review of conditions at crash locations. Additional engineering input to measure or model lighting levels and uniformity is needed to determine the full extent of the role inadequate lighting has played in contributing to fatal pedestrian crashes in Portland.

A Note on Privacy – Individuals and the Public

Each crash in this report is an individual, family and community tragedy. Each crash is also part of a larger public health crisis. All of the information included in these reports is public record. Many crash victims have been publicly identified in media reports. However, no family chose for their loved-one to be among the people killed.

Safety advocates must find a way to inform the community and policymakers about what is happening, and treat the people involved as people, not statistics. We acknowledge our inability to tell the narratives of the individuals, families and communities that are traumatized by particular crashes, and the additive effects of crashes as a whole, and other additive traumas and burdens. This report seeks instead to collect and communicate information to communities and policymakers that will enable change.

With this goal and these limitations, the authors have attempted to balance the private and public aspects of each crash. In many cases, personalized information is included in the report. In all cases it is contained in the underlying documents. The authors will make every effort to add or correct information about a crash, and remove particular personalized information upon request.

Trigger Warnings

The crash reviews and accompanying reports all relate to fatal pedestrian crashes. Photos of crash locations are street views, not police photos. Although no visually graphic information is included, the circumstances of the crashes are discussed. Media reports and police reports may contain disturbing images, or inaccurate or offensive portrayals. Those are contained in appendices and/or supporting information, less so in the reports themselves. Collecting these sorts of materials is not intended as an endorsement of their portrayals. Rather, incomplete, inaccurate and distorted portrayals of crashes is a topic that deserves attention and that we discuss in our Focus Issues report.

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01.
North Portland

N MARTIN LUTHER KING JR BLVD AND N UNION CT 05/12/2017

The crash location is a 4-lane Principal Arterial with 2 NB and 2 SB lanes separated by a slightly raised 3' wide concrete median and a speed limit of 55 mph. The roadway is higher in elevation than the surrounding terrain and there is limited access to businesses. There is a family mobile home park (Fox Run) 700 yds to the SE and various retail businesses to the west. The crash occurred in the evening (4:46 pm) in daylight.

The person driving was heading NB toward home after dropping off a friend. He had been awake for 16 hours as he had worked a night shift. "The minimum speed of [his] Dodge Durango when it began to skid was calculated to be 70.85 MPH (103.91 fps)" when he passed a slowing vehicle in the #2 lane.* He changed to the #1 lane when he saw a pedestrian closely ahead, attempted to brake hard, and failed to stop in time to avoid the collision.

The person walking was crossing WB just south of N Union Ct. pushing/pulling two strollers and a wagon filled with recyclables and other personal items. Responding officer notes indicate the person struck was experiencing homelessness, and state that he entered the road outside of a legal crosswalk. However, the only pedestrian crossings are 1.1 miles to the south and 0.9 miles to the north. The driver's speeding ticket resulted in a \$165 fine.



*Note: lanes in the driver's direction of travel are numbered in police reports by counting left to right from the driver's perspective. For example, a driver northbound ("NB") in the left lane of a street with 2 NB lanes is in the #1 lane.

N MARTIN LUTHER KING JR BLVD AND N UNION CT 05/12/2017



Driver Perspective



Pedestrian Perspective

N MARTIN LUTHER KING JR BLVD AND N UNION CT

05/12/2017

High Speed / Lack of Traffic Calming

Speed is currently set at 55 mph with 41.5% exceeding the speed limit and 177 drivers exceeding 65 mph daily. Extreme speed is a problem on this corridor.

No Crossings

The crash occurred near the midpoint of a 2-mile stretch with no crossings: from the signal 1.1 miles to the south at NE Columbia Blvd. and the signal 0.9 miles to the north at the I-5 overpass. It is one of the longest, and fastest, segments in Portland without any crossings, excluding the interstate freeways (which are access controlled).

Wide "Crossing"

75' curb-to-curb. The police report notes the center median was not of adequate width to provide a place of safety as the person walking slowly attempted to cross with his belongings.

Pedestrians Experiencing Homelessness

The police report states that known camps of people experiencing homelessness are located along this corridor. Based on the circumstances it appears. PBOT and ODOT currently do not operate their streets to reflect that the land use in these areas appears possible that the person walking

was living is residential, and that people walking and, likely, using mobility devices access camps from and cross streets such as NE MLK.

Sight Distance

The curve at the crash location provided the person driving approx. 791 feet to see the person walking (7.6 seconds at 70 MPH; 9.8 seconds at 55 MPH). This would be considered sufficient based on AASHTO minimum recommended sight distances.

No Street Lights

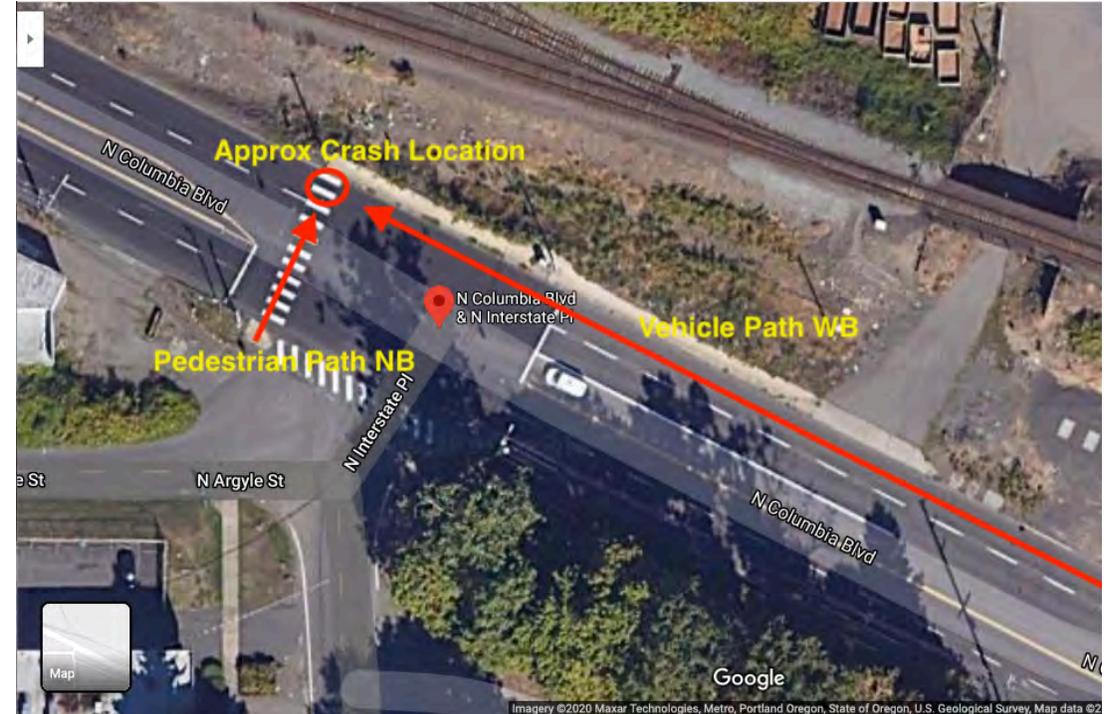
NE Martin Luther King Jr. and N Union Ct. (for a short distance from the intersection) are both Principal Arterials and subject to table 4 (1.5x calculation) guidelines in PBOT Appendix K. 1.5 Average Maintained fc, 3 Uniformity Ratio. Engineering analysis of lighting levels is not necessary to determine that lighting does not meet engineering standards: Based on Google Street View review, the nearest street lights are approximately 2,190 feet south of the crash location and 2,908 feet to the north. The lack of lighting on NE MLK does not appear to have been a causal factor in this particular crash, which occurred in daylight at 4:46 pm on 5/12/17.

N COLUMBIA BLVD AND N INTERSTATE PL 09/25/2017

The crash location is a T-intersection with marked/signalized crosswalks on the west and south sides. N Columbia Blvd. is a 5 lane (2 WB, 2 EB, center turn median) Principal Arterial with a speed limit of 40 mph. There are no sidewalks on either side of the road except for a short stretch on the north side leading to a business driveway to the east. One streetlight is located on the SE corner.

The person walking was on his way to work on a dark morning crossing Columbia Blvd NB in the west crosswalk on a “walk” signal. He was legally blind and was wearing a reflective vest and had a white and red reflective cane. The spouse of the person struck had petitioned the City to install the marked/signalized north/south crossing as this was his daily route to work.

The person driving was on his way to work after making a right onto Columbia Blvd. at the I-5 offramp 1750’ east of the crash location. He was travelling WB at or near the speed limit when he ran a red light and struck and killed the person walking within the crosswalk in the #2 outside lane.



N COLUMBIA BLVD AND N INTERSTATE PL 09/25/2017



Driver Perspective



Pedestrian Perspective

N COLUMBIA BLVD AND N INTERSTATE PL 09/25/2017

Lack of Traffic Calming

1750' between signals and no other calming elements on corridor.

Wide Crossing

63' curb-to-curb. Recommend refuge island on the west side of the intersection at this location.

Possible Inadequate Lighting

There are no streetlights on north side of the crash intersection. A single streetlight is located at the intersection on SE corner (115' from the location in the west crosswalk where crash occurred). Nearest other streetlights on the north side of the road are 450' east and 120' to the west. PBOT Appendix K guidelines recommend 1.0 Average Maintained fc, 3 Uniformity Ratio.

Possible Signal Timing Issue

Examine signal timing and lengthen if necessary to accommodate those with slower rates of walking or rolling.

Other: Lack of Sidewalks

There are well-worn "goat paths" on the north and south sides of Columbia showing regular pedestrian use despite lack of sidewalks. Paved sidewalks are needed to safely accommodate pedestrian access to nearby employers, other businesses and transit.

Other: Lack of Available Crossing

The nearest marked and signalized crosswalks are .7 miles east and .6 miles west of the crosswalk where the crash occurred.

N FESSENDEN ST AND N ALMA AVE 11/26/2017

The crash location is a T-intersection with unmarked crosswalks. N Fessenden St. is a 2 lane (1 WB, 1 EB) Major Collector with a speed limit of 35 mph at the time of the crash that was lowered to 25 mph after the crash by emergency order from Commissioner Chloe Eudaly. There are sidewalks, parking and bike lanes on both sides of the road. One streetlight is located on the NE corner. The crash occurred at night.

The person walking was on his way to a nearby taqueria with his girlfriend. They were holding hands and proceeded to cross in the west intersection heading NB across Fessenden. The person walking was a few steps ahead of his girlfriend and was hit in or near the south bike lane.

The person driving was travelling EB on Fessenden at an excessive speed (54-67 mph) when he hit the person walking. He did not stop, but proceeded EB. The case was an unsolved hit-and-run for two years until a person with knowledge came to police with a recorded confession by the person driving leading to his arrest. There was testimony that he was intoxicated the night of the cash.



N FESSENDEN ST AND N ALMA AVE 11/26/2017



Driver Perspective



Pedestrian Perspective

N FESSENDEN ST AND N ALMA AVE 11/26/2017

Speed Set Above Statutory

N Fessenden St. is a Collector in a Residence District and according to Portland Ordinance should be set at 20 mph. While an emergency order by Chloe Eudaly in response to crash history on the corridor lowered the speed from 35 to 25 in 2017, this stretch of Fessenden remains set above the speed directed by ordinance.

Other: Possible Inadequate Lighting

Though there was a streetlight on the direct opposite side of the road from where Mr. Ramsey was hit and killed, there are no street lights along the entire south side of Fessenden on this stretch. PBOT literature states that streets over 48' should have lights on both sides. Fessenden is 54' from curb-to-curb at the crash location. Engineering review is needed to determine whether street lights should be added to the south side of the corridor. PBOT Appendix K guidelines recommend 1.2 Average Maintained fc, 3 Uniformity Ratio at the intersection of Fessenden St. and Alma Ave.

Recent and Forthcoming Safety Upgrades

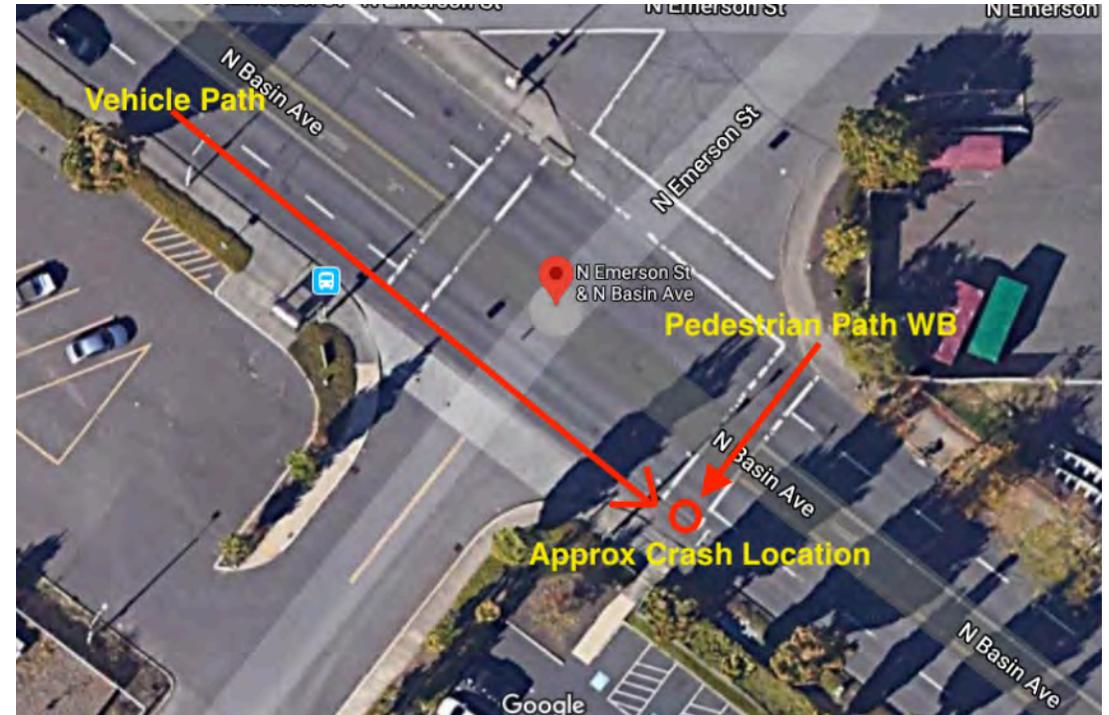
This location is part of the PBOT St. John's Truck Strategy Phase II plan which included the addition of crosswalks, refuge islands and speed bumps on Fessenden in 2018. At the time of the crash, excessive speeding was common due to the long straightaways, with 840 drivers daily exceeding 45 mph. An updated speed study is needed to see if the traffic calming is lowering driver speeds. Light upgrades are not currently a part of this plan and should be incorporated in future safety plans.

N BASIN AVE AND N EMERSON ST 03/23/2018

The crash location is a 4-way intersection with a parking lot entrance on the southwest side. There are 3 marked/signalized crossings on the NW, NE and SE sides. The speed limit is 35 mph on N Basin Ave. with 2 SB, 2NB lanes and a center median. There is one streetlight at the location on the S corner of the intersection above where the person walking was hit.

The person walking was working at a nearby business on the N corner as a security guard. He was crossing the street in the SE crosswalk to open a gate to a parking lot as part of his duties. The police report states he was wearing an all black work uniform with no reflectives and crossing on a “don’t walk” signal (unverified). The report does not evaluate whether street light location, white crosswalk striping, or other background colors should have enabled visibility.

The person driving was leaving work in the dark before sunrise, heading SE on Basin Ave. when he/she proceeded through a green signal (witness account) at Emerson St. and struck and killed the person walking within the crosswalk in the #2 lane. The person driving tested positive for THC Delta-9 Carboxy THC (7.7 ng/ml) and Delta-9 Carboxy THC (0.85 ng/ml) (report sic) but was determined not to be intoxicated. The person walking was in the crosswalk for approx. 12.6 seconds and in the driver’s view for approx.10.5 seconds before the impact.



N BASIN AVE AND N EMERSON ST 03/23/2018



Driver Perspective



Pedestrian Perspective

N BASIN AVE AND N EMERSON ST 03/23/2018

High Speed / Lack of Traffic Calming

64.5% of drivers exceed the posted 35 mph speed limit with, 13.7% (1314) daily exceeding 45 mph. There is a distance of 2050' between N. Leverman St. and N Emerson St. with no traffic calming.

Speed Set Above Statutory

Currently posted 35 mph. This is a Business District where the statutory speed is 20 mph.

Possible Signal Timing Issue

The person walking was an Older Adult. Confirm that signal timing is long enough to accommodate slower walking pace of Older Adults and those with mobility issues. It is unknown whether the person walking failed to use the push button walk signal and crossed against the light, or whether he failed to make it all the way across the last lane before the light turned against him.

Other: Possible Inadequate Lighting

A single LED streetlight is directly over crash location, but is the only one at the intersection. Measurement is needed to see if this provides .8 Average Maintained fc per PBOT Appendix K guidelines. Street lights located directly above or behind a crosswalk are less likely to provide adequate light to illuminate pedestrians from the direction drivers view them.

N WILLAMETTE BLVD AND N BUCHANAN AVE 11/15/2018

The crash location is a Major Collector in a Residence District (N Willamette Blvd.) with sidewalks on both sides. There are 2 lanes (1 NB, 1 SB) with a speed limit of 30 mph.

At the time of the crash, the person walking was on the sidewalk on the north side of the road near a house driveway entrance. The person walking was experiencing homelessness.

The person driving had left the food carts on N Lombard St. after drinking (BAC 0.18, which is more than twice the legal limit, and THC was present) and was driving home. He was rounding the left curving bend on N Willamette Blvd. speeding upwards of 53 mph when he lost control of his vehicle, hit another parked vehicle and struck and killed the person walking on the sidewalk before coming to a stop.



N WILLAMETTE BLVD AND N BUCHANAN AVE 11/15/2018



Driver Perspective



Pedestrian Perspective

N WILLAMETTE BLVD AND N BUCHANAN AVE

11/15/2018

Lack of Traffic Calming

Willamette Blvd is a Major Collector, with many people on bicycles, and walking, running and rolling. (This is reflected in in the police report as well.) There is a long unimpeded 1.4 mile stretch from N. Portsmouth Ave. in the south to N Richmond Ave. in the north with no traffic signals, stop signs or traffic calming infrastructure to reduce vehicle speed. Extreme speed is a daily occurrence with approximately 12 drivers daily exceeding 45 MPH. Recommend installing speed bumps along N. Willamette Blvd.

Speed Set Above Statutory

Willamette Blvd. is currently posted at 30 mph. This is a Collector (federal and TSP) and a TSP City Bikeway and Major City Walkway in a Residence District and should be posted at 20 mph under the Portland Ordinance, which supersedes* the 30 MPH SZO.

*It appears ODOT has never rejected a request to rescind this sort of SZO, and will do so promptly and without expense, should PBOT choose to notify ODOT of its action through the same “request to rescind” process that applies in other contexts.

Crash Data Collection

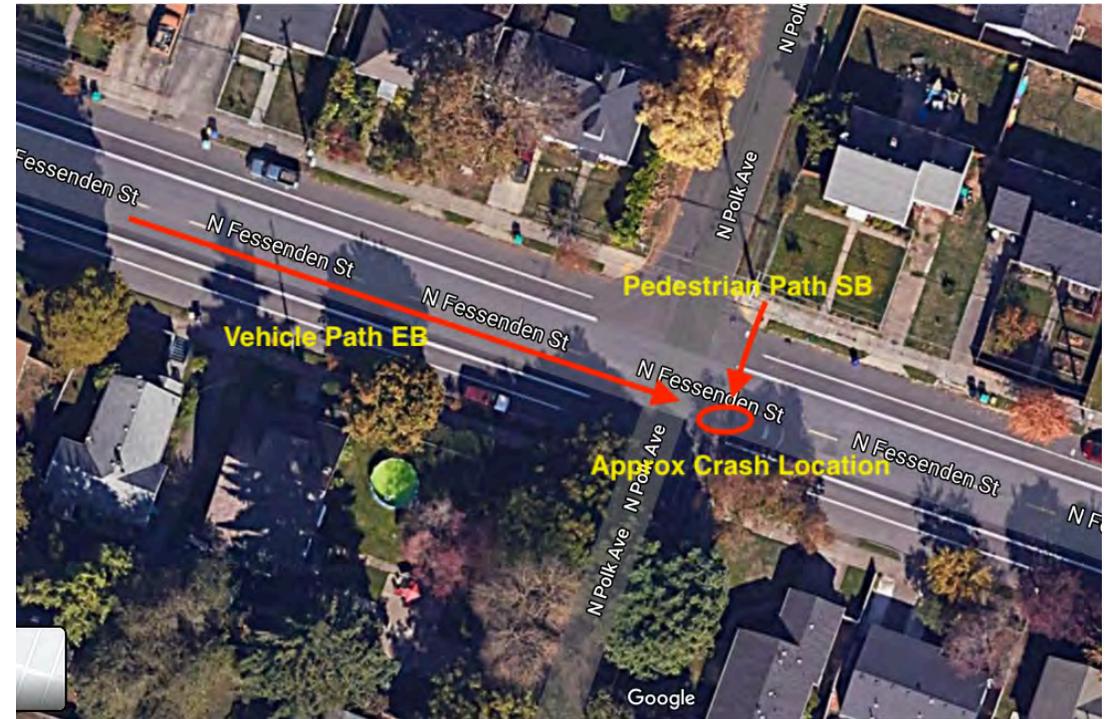
Officer checked the box for pedestrian “no contrast with background.” Accurate interpretation in ODOT crash data collection will depend on whether ODOT excludes this crash from other “no contrast with background crashes” based on the police report box being checked for pedestrian “not in roadway.” The authors suspect it is likely that ODOT will include this crash in its data reporting as belonging in a set of crashes in which ODOT will, explicitly or implicitly, fault the pedestrian for their “no contrast with background” clothing choice. The fact that the person was standing on the sidewalk when the driver left the roadway at high speed, came onto the sidewalk, and killed them, likely will be lost.

N FESSENDEN ST AND N POLK AVE 04/10/2019

The crash location is a 4-way intersection with unmarked crosswalks. N Fessenden St. is a 2 lane (1 WB, 1 EB) Major Collector with a posted speed limit of 25 mph. There are sidewalks, parking and bike lanes on both sides of the road. One streetlight is located on the NE corner. The crash occurred at night.

The person walking was an Older Adult with a mobility disability and walked with the use of a cane. She was crossing Fessenden SB in the unmarked crosswalk on the way to her home on the SE corner of the intersection after picking flowers from her neighbor's garden.

The person driving was heading EB on Fessenden and said he was going 35-40 mph (no witness accounts). He hit the person walking, killing her, and proceeded. Police found the abandoned vehicle and forensic investigation helped them to track down the person driving. He admitted to the hit-and-run and was arrested. He said that he had drank 2 Bud Lights shortly before the crash.



N FESSENDEN ST AND N POLK AVE 04/10/2019



Driver Perspective



Pedestrian Perspective

N FESSENDEN ST AND N POLK AVE 04/10/2019

Speed Set Above Statutory

N Fessenden St. is a Collector in a Residence District and according to Portland Ordinance should be set at 20 mph. While an emergency order by Chloe Eudaly in response to crash history on the corridor lowered the speed from 35 to 25 in 2017, this road remains set above the speed directed by ordinance.

This crash is remarkably similar to the 11/26/2017 crash noted above in which an (also eastbound) driver killed a person walking (also at an unmarked crossing—because they are all unmarked) just six blocks to the east of this location.

Multiple, similar pedestrian fatalities should be sufficient (and not necessary) for PBOT to comply with the speed-setting ordinance by posting N Fessenden at 20 MPH, and providing the calming and other safety improvements that needed to achieve that as the observed speed.

Other: Possible Inadequate Lighting

There no street lights along the entire south side of Fessenden on this stretch. PBOT literature states that streets over 48' should have lights on both sides. Fessenden is 54' from curb-to-curb at the crash location. Street lights should be added to the south side of the corridor. PBOT Appendix K guidelines recommend .8 Average Maintained fc, 4 Uniformity Ratio at the intersection of Fessenden St. and Polk Ave.

Recent and Forthcoming Safety Upgrades

This location is part of the PBOT St. John's Truck Strategy Phase II plan which included the addition of crosswalks, refuge islands and speed bumps on Fessenden in 2018. An updated speed study is needed to see if the traffic calming is lowering driver speeds. Light upgrades are not currently a part of this plan and should be incorporated in future safety plans.

02.

Northeast Portland

NE KILLINGSWORTH ST AND NE 75th AVE 04/30/2017

The crash location is a 5 lane Principal Arterial (2 WB, 2 EB, 1 center median) with bike lanes and sidewalks on both sides and a speed limit of 35 mph. The crash occurred on NE Killingsworth between 75th and 76th Avenues at night.

The person walking proceeded due west on the north sidewalk before entering the road and crossing, reportedly outside of a legal crosswalk in a SW direction.

The person driving was an Older Adult. She was heading EB at or slightly above the speed limit when she saw the person walking crossing the road. She thought person walking would stop or “run into the side of her car” so she proceeded and struck and killed her in the #2 outside lane.

The person walking was crossing in the roadway for approx. 18 seconds and was visible to the person driving for this entire duration. Police noted that driver “A-pillar” sightline obstruction was a possible factor in this crash. High vehicle Hood Leading Edge Height (vehicle was an SUV design) was also noted by police to have been a factor in this fatality.



NE KILLINGSWORTH ST AND NE 75th AVE 04/30/2017



Driver Perspective



Pedestrian Perspective

NE KILLINGSWORTH ST AND NE 75th AVE

04/30/2017

Lack of Marked or Unmarked Crosswalks

There are 2590' between marked/signaled crossings with 6 bus stops in between. Additional crossings are needed on this stretch to facilitate safe pedestrian transit use and crossing.

Wide Crossing

73' curb-to-curb. Enhanced crosswalks with refuge islands recommended (if the multi-lane cross-section is preserved).

High Speed / Lack of Traffic Calming

83.5% of drivers exceed the posted speed limit of 35 mph with approx. 3023 drivers daily exceed 45 mph. This high (17,783) ADTV road has 2590' between traffic signals at NE 72nd and NE 82nd Avenues. NE Portland Highway (45 mph) turns into NE Killingsworth St. (35 mph) 930' west of the crash location. There are two signs indicating a speed reduction, but no other infrastructure to prevent or discourage drivers from maintaining the higher speed.

Speed Set Above Statutory Limit

NE Killingsworth is currently posted at 35 mph. As an Arterial in a Business District, the street has a 20 mph statutory speed. Rescission of the Speed Zone Order setting a faster-than-statutory speed is recommended.

Possible Inadequate Lighting

Streetlamps are spaced 350' apart. Recommend review for possible additional lighting according to current PBOT Appendix K guidelines. 1.2 Average Maintained fc, 3 Uniformity Ratio.

Deadly by Design

This crash highlights the difficulties (and possibly futility) of searching for "user-level" crash factors. As noted at the outset, we don't have the pedestrian's "side of the story" for any of the crashes. This crash also illustrates, however, the conditions that are common to so many fatal pedestrian crashes in Portland: an extraordinarily wide street, with multiple lanes of fast traffic, poor lighting, bus stops, homes, businesses, churches, etc all around, and no safe way for people to cross for a very long distance in either direction.

As with many of the streets described in this report, ongoing operation of a street in this configuration by any transportation agency should not be tolerated.

NE MARTIN LUTHER KING JR BLVD AND NE DAVIS ST 09/23/2017

The crash location is a 4-way intersection with marked/signalized crossing on all sides. NE Martin Luther King Jr. Blvd. is a 4 lane SB one-way Principal Arterial with a shared MAX/bike/vehicle lane on the west side. The speed limit is 30 mph. The crash occurred in the early morning when it was dark.

The person walking was an Older Adult who walked with a cane. He was crossing EB in the south crosswalk from his home at a nearby apartment building on a “walk” signal at a slow pace (presumably to the bus stop on the east side of the road). The signal changed to “don’t walk” when he was halfway through the intersection.

The person driving was proceeding SB in lane #3 approximately at the speed limit when she saw a stopped vehicle with their hazards on. This vehicle turned off their hazards and made a lane change to the #4 lane. The person driving proceeded through the green light in lane #3 and hit and killed the person walking on the south side of the intersection in the crosswalk.



NE MARTIN LUTHER KING JR BLVD AND NE DAVIS ST 09/23/2017



Driver Perspective



Pedestrian Perspective

NE MARTIN LUTHER KING JR BLVD AND NE DAVIS ST

09/23/2017

Signal Timing Issue / Wide Crossing

The walk signal changed before the person walking could cross the entire 57' road presumably due to a mobility disability and/or slow walking pace (Older Adult). Recommend increasing signal time, reducing the crossing distance, and/or reducing the number of lanes that must be crossed to accommodate pedestrians who walk at a slower pace and nearby residents with possible mobility issues.

Possible Inadequate Lighting

LED street lights are located on the SE and SW corner of the intersection as well as vintage style high pressure sodium types on all corners, but a witness to the crash who was on the road at the time of the collision said that it was "dark, and difficult to see [the person walking] even with the street lights." Recommend review for compliance with PBOT Appendix K Guidelines 1.0 Average Maintained fc, 3 Uniformity Ratio.

Other: High Speed / Lack of Traffic Calming

There is a distance of 850' from signal-to-signal between NE Davis St and NE Lloyd Blvd. The ADTV is high (14097) with 155 drivers daily exceeding 40 mph where the speed limit is posted at 30 mph.

Deadly by Design

The lane configuration of NE MLK, which is conducive to high speeds and requires people walking and rolling to contend with four southbound lanes of fast cars and trucks, predictably places the street on PBOT's list of High Crash Corridors, where many deadly and serious injury crashes occur.

NE MARTIN LUTHER KING JR BLVD AND NE SIMPSON ST 10/27/2017

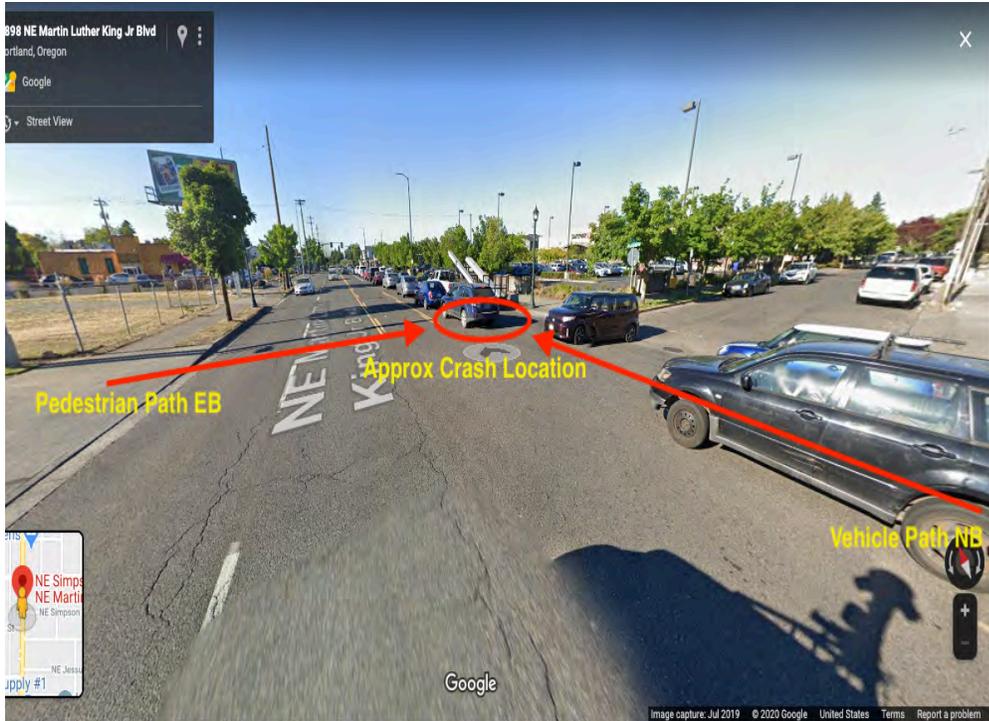
The crash location is a T-intersection on a 5 lane (2 NB, 2 SB, median turn lane) Principal Arterial where a pedestrian path crosses NE MLK without a marked crossing. The speed limit is 30 mph. The crash occurred at night.

The person walking crossed EB from the north end of the gas station parking lot driveway. He had consumed alcohol according to a “person with knowledge” (no toxicology report available) and not crossing at a legal crosswalk. A marked crosswalk with an island is 135’ south of the crash site. He stopped briefly in the median turn lane before proceeding EB in front of the vehicle.

The person driving was an Older Adult travelling NB at a slow speed (approx. 10-15 mph) driving a heavy truck with a refrigerator in the bed (curb weight over 5000 lbs.) when when he struck and killed the person walking the #2 outside lane. Police describe driver A-pillar sightline obstruction and pedestrian intoxication as factors in this crash.



NE MARTIN LUTHER KING JR BLVD AND NE SIMPSON ST 10/27/2017



Driver Perspective



Pedestrian Perspective

NE MARTIN LUTHER KING JR BLVD AND NE SIMPSON ST 10/27/2017

Speed Set Above Statutory

NE Martin Luther King Jr. Blvd. is a high ADTV (13865) City Walkway and Major City Bikeway (TSP classifications). The crash location is in a Business District on a Principal Arterial (federal classification) and subject to statutory 20 mph. Rescission of SZO is recommended.

Deadly by Design

The lane configuration of NE MLK, is conducive to high speeds and requires people walking and rolling to contend with multiple lanes of fast cars and trucks. There are long distances between safe crossings. These decisions in the design and operation of the street predictably place the street on PBOT's list of High Crash Corridors, where many deadly and serious injury crashes occur.

NE SANDY BLVD AND NE 79th AVE 12/20/2017

The crash location is at a 6-way intersection approximately 55-88 ft. SW of the marked crossing with a refuge island at NE Sandy Blvd and NE 79th Ave. The street (Sandy) is 4 lanes wide (2 NEB, 2 SWB) with a speed limit of 35 mph at the time of the crash (since lowered to 30 mph). The crash occurred in the evening at twilight.

The person walking was crossing NB from her residence on the SW corner toward a dumpster on the other side of the street carrying a bag of trash to throw away. She was technically considered to be crossing outside of a legal crosswalk because there is a marked crossing was located within 150'. (Note: this may be incorrect; a correct legal determination is complex and depends on precise crossing location and interpretation of ORS 801.220.)

The person driving was heading WB after turning onto Sandy Blvd from 82nd Ave when she hit and killed the person walking in the #1 inside lane.



NE SANDY BLVD AND NE 79th AVE 12/20/2017



Driver Perspective



Pedestrian Perspective

NE SANDY BLVD AND NE 79th AVE

12/20/2017

Possible Sightline Impairment

The police report notes that signs for the marked crossing on the west side of the intersection may block the driver view of pedestrians crossing on east side of intersection.

Crossing Infrastructure Additions

Due to the length and dangerous nature of crossing 79th Ave on the south side of the intersection where it meets Failing St., crossing improvements are needed from the east side of the intersection of NE Sandy Blvd. and NE 79th Ave. parallel to the one existing on the west side.

ORS clarification

ORS 801.220 states “Whenever marked crosswalks have been indicated, such crosswalks and no other shall be deemed lawful across such roadway at that intersection.” This could be interpreted as referring to the “intersection” of the particular sidewalk with the street. If so, it simply clarifies that the marked area, not the area geometrically defined by ORS 801.220(1), defines the crosswalk. Or, “intersection” could mean the entire intersection of two (or in this case more) roadways. The second interpretation would mean that marking one crosswalk renders nearby unmarked crosswalks illegal.

This certainly has not been PBOT’s intent, as this situation exists at numerous “intersections” in Portland where crossing at unmarked crosswalks is still clearly intended despite the marking of one.

The City of Portland should join with advocates to obtain legislative clarification, and/or train its police officers, so that pedestrians are not wrongly faulted for crossing outside a legal crosswalk in cases such as this one.

Designing for Humans

This crash also what traffic engineers know but rarely design for: just as drivers will rarely follow the speed limit if it “feels safe” to go faster, people walking will rarely go very far out of direction in order to cross a street. This is commonly observed where a driver finds a mid-block parking spot, and then crosses to a destination directly across the street without going to the corner (and back).

Appropriate designs will accommodate known human behaviors, and even human errors, so that they do not result in death. NE Sandy Blvd is a high crash corridor because PBOT fails to apply this principle, despite the needs and welfare of the people who live on and around the street. Only the interests of people who drive on it, and want to do so at potentially deadly speeds, are protected.

NE SANDY BLVD AND NE 20th AVE 08/25/2018

The crash location is just east of a 4-way intersection with marked/signalized crosswalks on all sides. NW Sandy Blvd. is a 4 lane Principal Arterial (2 SWB, 2 NEB) with a posted speed limit of 30 mph. The crash occurred at night.

The person walking was crossing SB in the east crosswalk (unknown walk signal status). He departed from the marked lines in a diagonal SE direction mid-way through the crosswalk on the way to his parked car on the south side. The SW/NE angle of Sandy means staying within the crosswalk stripes takes people walking farther out of direction than at an intersection with right angles.

The person driving (unknown identity) was travelling an estimated 55-65 mph (possibly racing another vehicle) through the intersection heading NEB when they hit and killed the person walking in the #2 lane (unknown exact POI). At typical walking speeds, the person walking would have been in the driver's view for an estimated 12 to 15 seconds before the driver struck him.



NE SANDY BLVD AND NE 20th AVE 08/25/2018



Driver Perspective



Pedestrian Perspective

NE SANDY BLVD AND NE 20th AVE 08/25/2018

Lighting Obstruction

Trees overhang and block the LED streetlight and cast shadows on the south side of the crossing where the person walking was hit.

Speed Set Above Statutory

Sandy Blvd. at this location is currently posted at 30 mph. This is Principal Arterial (Federal) and a TSP Major City Bikeway and Major City Walkway in a Business District and subject to statutory 20 mph. Rescission of SZO recommended.

Other: Lack of Bicycle Lanes

This corridor is designated a Major City Bikeway, yet there are no bicycle lanes. Adding bicycle lanes can reduce the width and number of lanes with cars and trucks that people walking must cross. Narrowing also discourages the extreme speeding behavior documented in this crash.

Deadly by Design

NE Sandy Blvd at this crash location is typical of the multi-lane, high-speed arterials that claim the most lives of people walking and rolling in Portland. These streets are conducive to dangerous driving behaviors, expose people walking and rolling to deadly speeds, and provide few “safe[r]” crossings. In addition, because speeds are high, people using the street (as drivers or pedestrians) have little time to react or avoid a crash.

PBOT’s decisions in the design and continued operation of NE Sandy Blvd predictably result in frequent crashes and deaths, and are the reason why the street is on PBOT’s list of High Crash Corridors.

NE BROADWAY AND NE GRAND AVE 04/19/2019

The crash location is a 4-way intersection with marked/signalized crosswalks on all sides. Both NE Broadway St. and NE Grand Ave. are Principal Arterials with speed limits of 30 mph. Grand Ave. is 4 lanes of NB one-way traffic. At the time of the crash NE Broadway was 4 lanes of WB one-way traffic (since modified to 3 lanes WB on the west side of the intersection). The crash occurred in daylight.

The person walking was crossing from the NW corner in the west crosswalk on a walk signal and walking south.

The person driving was making a left turn from the #2 middle lane of NE Grand Ave. from the south side of the intersection to the #2 WB lane on Broadway St. The person walking was struck and killed in the crosswalk approx. 20 ft. from the NW corner in the #2 lane of Broadway. The vehicle was a large semi-truck and police opined that the A-pillar sightline obstruction was a crash factor. At the time of the crash, the “walk” signal conflicted with the green light for the vehicle’s left turn (see issues and recommendations). That is, the walk signal was “walk” as the same time as NB drivers had green.



NE BROADWAY AND NE GRAND AVE 04/19/2019



Driver Perspective



Pedestrian Perspective

NE BROADWAY AND NE GRAND AVE 04/19/2019

Police Report Notes

“Changes were made to the intersection infrastructure after the crash. Investigator David H. Enz states On May 8, 2019, at approximately 10:00 AM, I again returned to the scene and observed several changes to the intersection (NE Grand Ave/ NE Broadway St.). I observed new signage attached to the signal post located on the NW corner of the intersection. The pedestrian control display box is also attached to this pole. The new signage alerts (NB) drivers on NE Grand Avenue that pedestrians may be crossing the intersection and for drivers to stop for pedestrians. This sign also has a direction indicator drawing the reader's attention to the crosswalk. I observed new white candle sticks atop the painted white line marking the bicycle lane along the north shoulder of NE Broadway Street (along the angled portion of this lane from the crosswalk to toward the north sidewalk). I observed the TCD light cycles and noted that the timing, or sequence had been changed in the days following this collision.

Speed Set Above Statutory

Speed at this location is currently at 30 mph. This is a Business District on a Principal Arterial and subject to statutory 20 mph. Rescission of SZO recommended.

NE COLUMBIA BLVD NEAR NE 63rd AVE 04/25/2019

The crash location is a Principal Arterial with 3 lanes of travel (1 WB, 1 EB, center median), sidewalks on both sides and a speed limit of 40 mph. The crash occurred at night.

The person walking was working at a trucking business on the north side of the road. He had parked his semi-truck in the median lane and exited the driver side cab to walk across the street to shut the business gate before departing.

The person driving was a Lyft worker transporting a customer from PDX Airport to home. He was heading WB on NE Columbia Blvd. Oncoming headlight glare of the semi-truck parked facing in his direction (EB) reportedly made it harder for the person driving to see the person walking as he exited the truck. It is unknown the extent to which the driver slowed approaching the stopped truck and the area of reduced visibility.



NE COLUMBIA BLVD NEAR NE 63rd AVE 04/25/2019



Driver Perspective



Pedestrian Perspective

NE COLUMBIA BLVD NEAR NE 63rd AVE 04/25/2019

Speed Set Above Statutory

The current speed at this location is 40 mph. As a Business District on a Principal Arterial the road at this location and subject to statutory 20 mph. Although dominated by car-oriented businesses, the number of pedestrian crossings, and crashes, on NE Columbia speaks to the grave need for PBOT to reduce speeds and operate the street in a way that is consistent with safety for all users. Rescission of SZO recommended.

Lack of Traffic Calming

52.4% of drivers exceed the posted speed limit of 40 mph. There is a high ADTV of 12,268. Several hundred vehicles (539 measured) exceed 50 mph on this corridor daily. There is a distance of 3212' between signals at NE 60th Ave. and NE Alderwood Rd. without traffic calming or features to slow traffic. These are potentially deadly speeds along a corridor with varied uses.

NE PORTLAND HWY NEAR NE 45th AVE 09/15/2019

The crash location is on NE Portland Highway (known as Lombard St.) between the T-intersections of NE 45th and NE 46th Avenues. It is a 4-lane Principal Arterial with 2 EB and 2 WB general lanes, a small median marked with double yellow lines, and bike lanes on both sides. There are no sidewalks on either side of the street. The crash occurred at night.

The person walking was crossing outside of a legal crosswalk from the north side of the road heading in a slight SW direction. Evidence suggests he may have been on a skateboard. Emergency responder records indicate the person walking (or rolling) was experiencing homelessness.

This was a hit-and-run. The person driving (identity unknown) was heading WB in the #1 inside lane of the NE Portland Hwy where they hit and killed the person, and continued WB.



NE PORTLAND HWY NEAR NE 45th AVE 09/15/2019



Driver Perspective



Pedestrian Perspective

NE PORTLAND HWY NEAR NE 45th AVE 09/15/2019

High Speed / Lack of Traffic Calming

57.5% of drivers exceed the posted speed limit of 45 mph. This is a high ADTV road (14,256 vehicles per day) with 727 drivers daily exceeding 55 mph. There is a 3-mile stretch between the signals at NE 60th Ave and NE Martin Luther King Jr. Blvd. with no impediments or signals mediating driver speeds.

Possible Inadequate Lighting

Police and a witness described how dark it is on the road where the person walking was hit. There are lights only on the south side. The person walking was hit on the north side. PBOT guidelines recommend 1.0 Average Maintained fc, 3 Uniformity Ratio.

Lack of Available Safe Crossing

Oregon law requires EB pedestrians to walk on the north side (facing traffic). ORS 814.070. There are no crossings to get to/from the north side. The nearest marked/signalized crossing from where the person walking was hit is 3,950' away. More marked/signalized crossings and lower speeds are needed on this corridor.

Other: Lack of Sidewalks

This road is designated as a City Walkway yet ODOT provides no sidewalks on either side of the street.

Forthcoming Safety Upgrades

This location is part of the PBOT Columbia-Lombard Corridor plan scheduled to be adopted summer of 2020. The entire corridor from MLK Jr. Blvd to I-205 is supposed to receive infrastructure upgrades to more safely accommodate pedestrian and vehicle. PedPDX, adopted in June 2019, identifies Lombard (Portland Hwy) as a priority for sidewalk gap completion and addressing crossing deficiencies. NE Lombard between NE 42nd Avenue and NE 60th Avenue is identified as a Tier 2 priority where crossing deficiencies will be addressed. North side lighting upgrades are not shown to be part of the existing upgrade plans. Speed reductions and reallocation of the multiple travel lanes are uncertain.

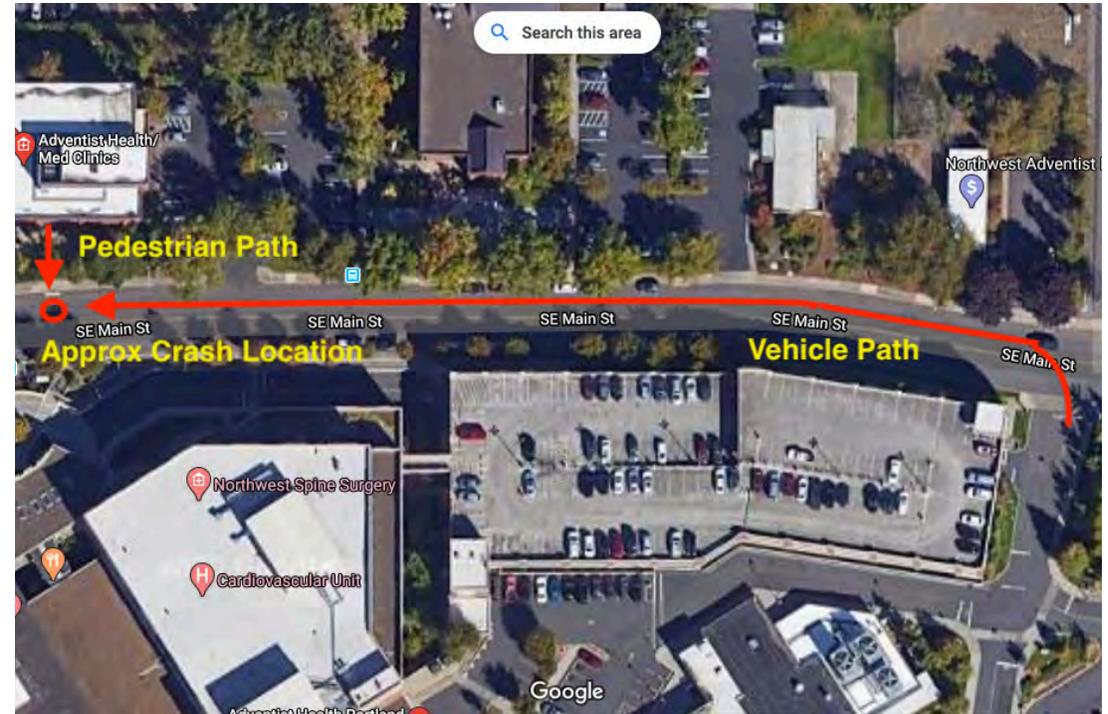
03.
East Portland

10100 SE MAIN ST 01/04/2017

The crash location is a mid-block marked crosswalk on a 2 lane (1WB, 1 EB) Local Service street with a posted speed limit of 25 mph that runs along the north side of a Hospital, and adjacent to other medical and professional office buildings. The crash occurred at night.

The person walking was a hospital employee heading toward the hospital entrance SB in the marked crosswalk.

The person driving left the parking lot to the east of the crash location and proceeded WB on Main St. travelling at approximately the posted speed limit. The person driving hit and killed the person walking in the marked crosswalk.



10100 SE MAIN ST
01/04/2017



Driver Perspective



Pedestrian Perspective

10100 SE MAIN ST 01/04/2017

Insufficient Crosswalk Infrastructure

Several improvements are possible for this mid-block crosswalk, including: a rapid-flash beacon, raised crossing, refuge island, curb extension on the north curb, etc. Someone, likely hospital employees, placed buckets containing orange flags for people crossing to carry or wave at drivers, as a self-help effort evidently motivated by the desire for improved crosswalk safety after this crash.

Speed Set Faster than Directed by Statute / Ordinance

This is a Local Service Street in a Business District and subject to statutory 20 MPH. There is no Speed Zone Order (“SZO”). At the time of the crash the speed was posted incorrectly at 25 MPH. It should have been 20 MPH. Other portions of SE Main are in Residence Districts. PBOT’s GIS system indicates 20 MPH postings as of 3/21, however signage has not been confirmed by street view or follow up site visit.

Advocacy notes: initial requests after this crash to post 20 MPH speeds in compliance with the ORS and ordinance were not immediately granted. Contrary to PBOT statements, the Portland Fire Bureau does not oppose speed limit reductions on emergency response routes such as SE Main, or have any role related to speed setting.

Anecdotally, it appears crashes near hospitals are particularly common, perhaps due to people coming and going to work shifts (in vehicles and by foot) at all hours, disproportionate use by Older Adults and people with medical or physical disabilities, or driver and pedestrian preoccupation related to medical emergencies, stressful work and/or interrupted sleep. This crash, for example, involved an employee driving striking and killing an employee walking.

Possible Inadequate Lighting

According to PBOT Appendix K, suggested illuminance of 0.4 Average Maintained fc with a 0.2 - 0.5 Average Vertical fc is recommended for this mid-block crosswalk. There is not a street light positioned in advance of the crosswalk to illuminate people using the crosswalk for EB drivers approaching the crosswalk.

SE STARK ST NEAR SE 148th AVE 03/09/2017

The crash location is on SE Stark St. just east of the intersection with SE 148th Ave. Stark St. is a Minor Arterial with 5 lanes (2 EB, 2 WB, center median) and a speed limit at the time of the crash of 35 mph which has since been lowered to 30 mph. This stretch of road is lined by strip malls and businesses. The crash occurred at night.

The person walking crossed from the curb on the north side heading SB. Emergency responders noted that the person killed was experiencing homelessness.

The person driving was going 59 mph at the time of impact (75 mph shortly before) and was unlicensed. He hit and killed the person walking in the WB #1 inside lane and fled the scene, turning himself in to police 4.5 hours later.



SE STARK ST NEAR SE 148th AVE 03/09/2017



Driver Perspective



Pedestrian Perspective

SE STARK ST NEAR SE 148th AVE 03/09/2017

Lack of Traffic Calming

92.1% of drivers exceed the posted speed limit of 30 mph. 22.8% or 2791 drivers daily exceed 40 mph. These rates of excessive speed are extraordinary. However, they are to be expected due to PBOT operating the street with such long, wide straightaways without anything to discourage or prevent excessive speed. There is a distance of 3,540' between the signals at 148th and 162nd Avenues with three marked crossings with refuge island in between (one crossing has a RRFB). Though there are crossing options there is no traffic calming (or signals or stops) to mediate driver speed on this long stretch. As one observer has described "they didn't build a street, they built a runway." As a result, observed speeds are far too high on this corridor. Recommend street design changes that are proven to save lives including centerline hardening, additional crosswalks, narrower travel lanes, and a potential "narrow road, wide node" street reconfiguration.

Distance Too Far Between Safe Crossings

Specifically as to crossings, there is a distance of 640' between marked crosswalks on Stark between 148th Ave and 151st Ave. The next marked crosswalk is at SE 155th Ave approx. 1000' further east, and the next is 1300' further east at 160th Ave. This area is lined by businesses and strip malls. The distances between marked crossings is too far to expect people walking or rolling to travel out of their way. There are bus stops that pick people up in the morning on their side of

Stark, but drop them off (often in the dark and rain, on the other side of Stark with no crossing. The TriMet stop at 155th, for example is 500' from the nearest crossing. Lack of crossing options makes crossing at mid-block or unmarked locations far more likely. More safe crossing options, reduced vehicle lane counts, and lower speeds are needed on this corridor and on most East Portland arterials. As for TriMet stops, PBOT removed plans to include safe crossings at all bus stops from its PedPDX pedestrian plan.

Speed Above Statutory Limit

This stretch of SE Stark St. is currently at 30 mph. The crash occurred near the divider between Business District and Residence District on an Arterial, but within Business District boundaries. PBOT should submit a rescission request for the SZO and provide a street environment compatible with 20 MPH vehicular travel.

Changes Rejected in Favor of Automobile Speed and Volume

This corridor is part of PBOT Safer Outer Stark project. The project rejects basic safety upgrades such as eliminating multi-lane crossings and long, fast straightaways in favor of "maintaining the road's current capacity for people driving."

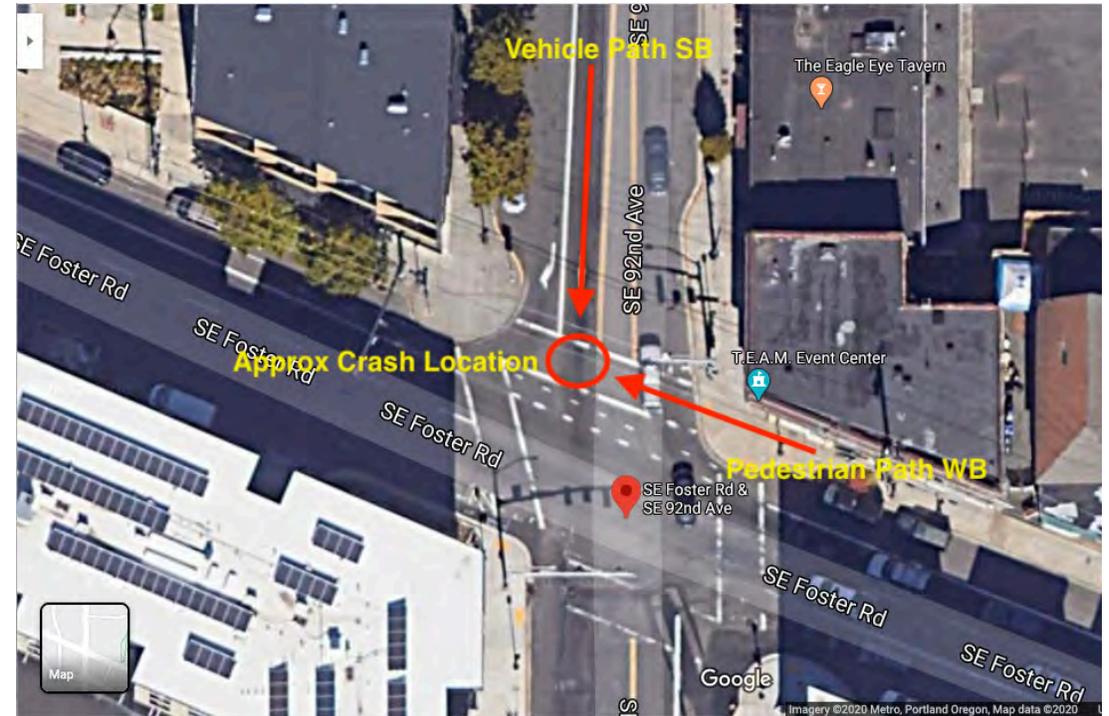
<https://www.portland.gov/transportation/planning/safer-outer-stark>

SE 92nd AVE AND SE FOSTER RD 04/26/2017

The crash location is a 4-way intersection with marked/signalized crossings on all sides. On SE 92nd Ave. there are 3 lanes (2 SB, 1 NB) with a small gap of unused space in the middle between double yellow lines. The speed limit at the time of the crash was 30 mph and has since been lowered to 25 mph. The crash occurred in the early morning when it was dark.

The person walking was crossing WB within the north crosswalk. Emergency responders indicate he was experiencing homelessness. The walk signal status is unknown.

The person driving stated he was on his way to work travelling SB in the #1 inside lane when he heard and felt an impact, stopped south of the intersection and realized he had hit the person walking in the marked north crosswalk. The traffic signal status is unverified though one witness said it was green. The person driving was reportedly travelling at or near the speed limit. The person walking was in the crosswalk and likely in view of the person driving for approx. 7 to 8 seconds before impact.



SE 92nd AVE AND SE FOSTER RD 04/26/2017



Driver Perspective



Pedestrian Perspective

SE 92nd AVE AND SE FOSTER RD 04/26/2017

Wide Crossing

The crosswalk is angled, and 55' curb to curb.

Speed Above Statutory Limit

The speed limit on SE 92nd Ave is currently posted at 25 mph. As a Business District on a Major Collector this road is subject to statutory 20 mph. Rescission of SZO recommended to reduce the likelihood and severity of similar crashes.

Possible Inadequate Lighting

A streetlight is located on northeast side of crosswalk. The person walking was hit and killed on the the northwest side. PBOT Appendix K recommends 1.2 Average Maintained fc, 4 Uniformity Ratio. It is unclear whether this streetlight or the more decorative lanterns in the area illuminate pedestrians from the perspective of approaching drivers.

SE 122nd AVE NEAR SE WOODWARD PL 07/03/2017

The crash location is on SE 122nd Ave. north of the intersection with SE Woodward Pl. in the road outside the driveway entrance to a restaurant. There are 5 lanes (2 NB, 2 SB, median turn lane) with bike lanes and sidewalks on both sides. The speed limit is 35 mph.

Although witness accounts conflict, there are indications that the person walking was suffering from a mental health crisis after possibly ingesting intoxicants (non-alcohol, possible LSD or cocaine). Reportedly, a person on the sidewalk tried to restrain him, but he ran into traffic heading EB across 122nd Ave.

The person driving was heading SB in the #2 outside lane at or near the speed limit when he hit and killed the person walking. The person driving was tested and found to be driving under the influence of alcohol (0.112 BAC which is over the current “legal limit” of 0.08).



SE 122nd AVE NEAR SE WOODWARD PL 07/03/2017



Driver Perspective



Pedestrian Perspective

SE 122nd AVE NEAR SE WOODWARD PL 07/03/2017

High Speed / Lack of Traffic Calming

PBOT operates SE 122nd with long, uncalmed straightaways that are conducive to high-speed driving. There is a distance of 1,970' between traffic signals at SE Division St. and SE Woodward Pl. with no crosswalks. 39.4% of drivers exceed the posted speed limit of 35 mph on SE 122nd Ave. The road has a high ADTV (10,296) with approx. 218 drivers daily exceeding 45 mph.

At these speeds, roadway users have little time to perceive and react to a potential collision, and any collision involving a person walking or rolling is likely to be fatal. PBOT's operation of the roadway provides no margin for human error, or for the full spectrum of abilities and disabilities of people who live on and around the street, or who use it as drivers or pedestrians. All of Portland's High Crash Corridor have these characteristics in common.

Other: Wide Crossing

Also notable in this area: SE 122nd Ave. is 75' curb-to-curb. The marked crossings at Division and Woodward do not have refuge islands.

Other: Speed Set Above Statutory

The speed limit on SE 122nd Ave is currently 35 mph. As a Business District on a Minor Arterial this road is subject to statutory 20 mph. Rescission of SZO recommended.

Forthcoming Updates

This location is part of the PBOT 122nd Ave Plan. Infrastructure updates were scheduled for 2020 on the stretch between NE Halsey St. and SE Powell Blvd. (completion to be verified). Upgrades were to include include: more street lighting, additional and enhanced marked crossing at 1-2 locations, protected or enhanced lanes for people on bicycles, scooters, etc, minor signal conflict changes, and transit priority changes at Burnside St. and Powell Blvd. It is unclear the extent these changes will fundamentally change the "deadly by design" aspects of PBOT's operation of this street.

SB I205 FWY AT SE WOODSTOCK BLVD 07/24/2017

The crash location is an Interstate Freeway (I-205 SB) with 3 SB lanes on an overpass above SE Woodstock Blvd. The speed limit is 55 mph. The crash occurred at night.

The person walking was reportedly intoxicated (alcohol and THC per witness accounts, no toxicology) after hanging out with friends on the night of the crash. He entered the freeway from the SE Woodstock onramp and attempted to cross the SB lanes heading EB.

The person driving was heading SB on I-205 driving a street sweeper truck from one work location to another. He hit and killed the person walking in the eastmost #1 left lane.

Additional facts and circumstances of this crash are unavailable at this time.



SB I205 FWY AT SE WOODSTOCK BLVD 07/24/2017



Driver Perspective



Pedestrian Perspective

SB I205 FWY AT SE WOODSTOCK BLVD 07/24/2017

Possible Inadequate Lighting

Streetlights along I-205 are spaced 500' apart and are old high-pressure sodium style. Multiple officers in the police report mention that this stretch of freeway is particularly dark.

Possible Freeway Crossings for Camp Access

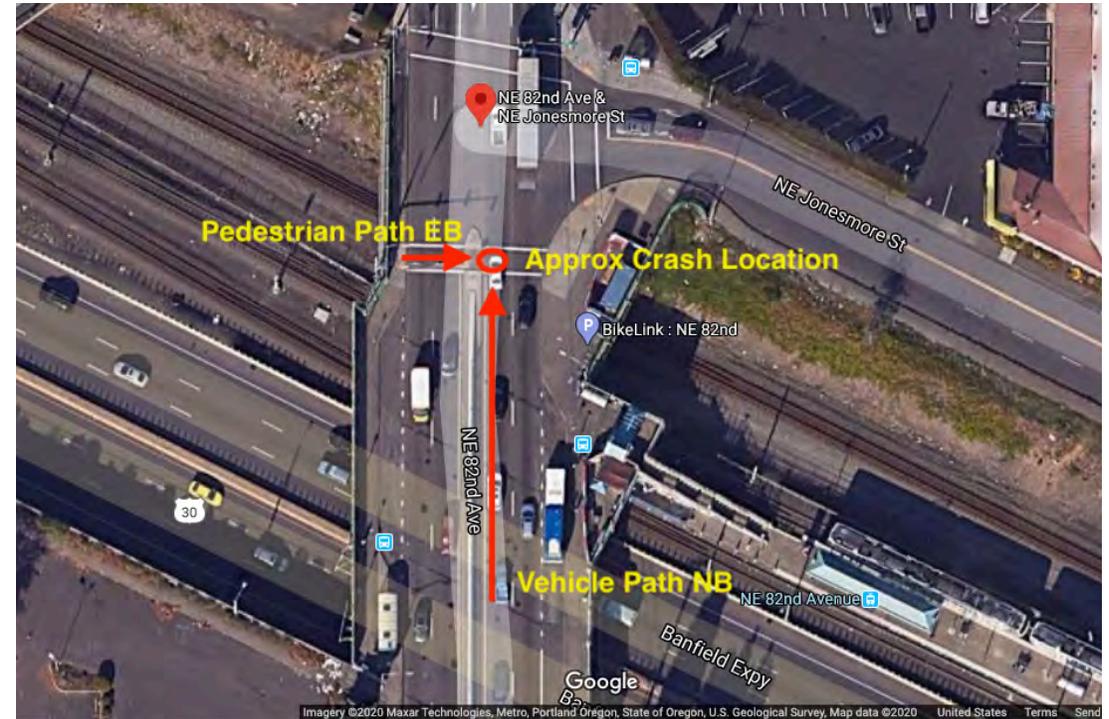
There are often encampments of people experiencing homelessness alongside the interstate at this location. For example, the Google Maps street view currently online shows a tent in the median between the Woodstock Blvd onramp and the freeway. It is undetermined the extent to which people living in tents in the area may cross the freeway and/or surface streets operated as high-speed roads to get to or from these areas.

NE 82nd AVE AND NE JONESMORE ST 10/07/2017

The crash location is a T-intersection with marked/signalized crosswalks on the north, east and south sides. NE 82nd Ave. is a Principal Arterial with 4 lanes (2 NB, 2SB) and a 7' high dividing wall in the median south of the intersection. This location is an overpass above I-84. There is a Tri-Met bus and MAX station on the SE corner with high pedestrian traffic. The crash occurred at night.

The person walking was crossing EB in the marked/signalized south crosswalk toward the bus and MAX station. The status of the walk signal is unknown. Tests indicate he was intoxicated (methamphetamine and cocaine).

The person driving was heading NB in the #1 inside lane along the dividing wall where she hit and killed the person walking in the marked crosswalk as he emerged from behind the wall and walked into the lane. It is not known if the traffic signal was green or red. Sightline obstruction by the wall (for both pedestrian and driver) was a factor in this crash.



NE 82nd AVE AND NE JONESMORE ST 10/07/2017



Driver Perspective



Pedestrian Perspective

NE 82nd AVE AND NE JONESMORE ST 10/07/2017

Sightline Impairment

There is a concrete dividing wall that separates NB and SB traffic on 82nd Ave that blocks the driver view of pedestrians crossing EB in the south marked crosswalk for NB vehicle traffic and likewise blocks pedestrian view of oncoming NB vehicle traffic for pedestrians crossing EB.

Speed Limit Set Too High

ODOT's operation of NE 82nd Ave in this area is notoriously dangerous. There is high pedestrian traffic at the intersection due to a MAX and bus station on the east side. With speed currently set at 35 mph at this intersection there is not ample stopping time when taking into consideration the existing sightline obstruction. Recommend lowering speed to 20 mph.

Possible Inadequate Lighting

As part of on-site wall assessment, lighting should be measured to see if it meets applicable standards for illumination and uniformity.

NE 102nd AVE AND NE SKIDMORE ST 11/30/2017

The crash location (102nd Ave) is a Minor Arterial with 4 lanes at the time of the crash (2 NB and 2SB) 1 NB lane has since been turned into a bike lane with a parking median. The speed limit was 35 mph at the time of the crash and has since been lowered to 30 mph. There is a marked crossing with a refuge island, RRFB and signs. The crash occurred shortly after sunset.

The person walking was crossing EB in the marked crosswalk. She proceeded across the SB lanes of traffic and through the refuge island in the middle lane into the NB traffic lanes. According to witnesses she did not activate the RRFB. The person walking was an Older Adult and tests indicated that she was intoxicated (0.072 BAC).

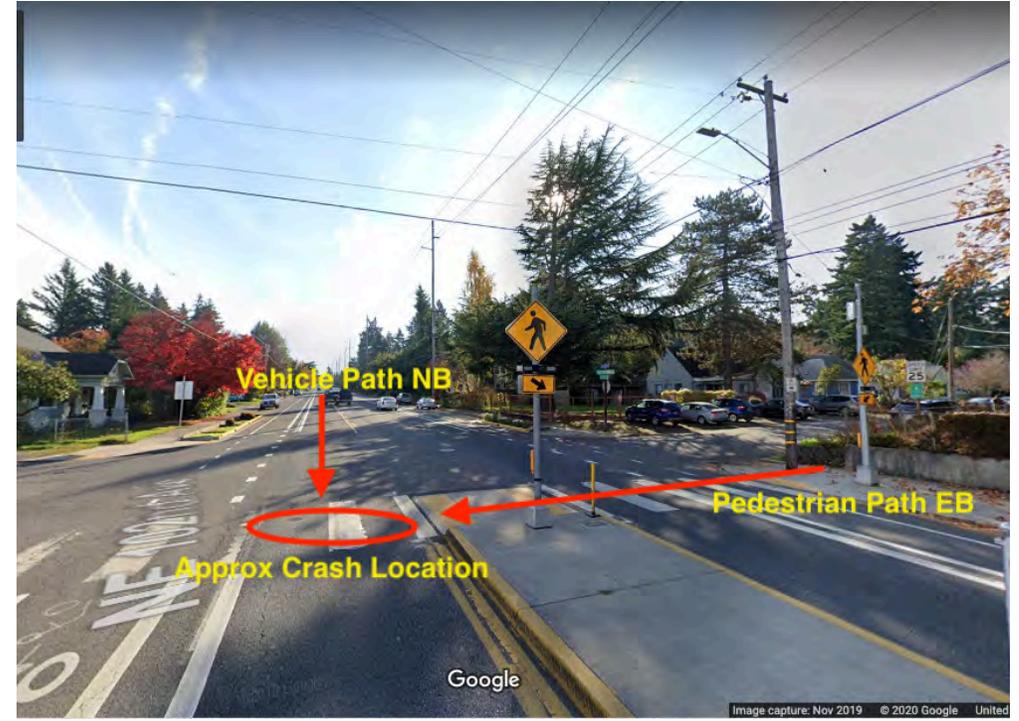
The person driving was travelling NB on 102nd Ave. He tried to swerve to the left when the person walking advanced from the refuge island but was prevented by the raised island. The person driving hit and killed the person walking within the marked crosswalk in the #1 inside lane.



NE 102nd AVE AND NE SKIDMORE ST 11/30/2017



Driver Perspective



Pedestrian Perspective

NE 102nd AVE AND NE SKIDMORE ST 11/30/2017

High Speed / Lack of Traffic Calming

63.1% of drivers exceed the 2017 posted speed of 35 mph with 510 drivers daily exceeding 45 mph. There are approx. 2000' in the direction of travel (NB) from the signal at NE Fremont St and the crash location between without signals, speed bumps, stop signs or other traffic calming. These high speeds through the neighborhood mean that a wide range of foreseeable human behaviors or errors are likely to result in collisions, and that those collisions will likely be fatal.

Possible Inadequate Lighting

One overhead streetlight is on the northwest side of the crossing. The crash occurred on east side of the crosswalk. LED light spread is not very wide. Recommended that lighting levels be reviewed and streetlight be installed as needed to illuminate pedestrians from the position of approaching drivers.

Other: Nearby Speed Ordinance Issue

According to Nov. 2019 Google maps photo, NE Skidmore is posted at 25 mph. PBOT's online GIS map (google Portland Speed Limits Map) indicates 20 MPH as of 3/2021. Posting at 20 mph as directed by the Portland Ordinance should be verified.

SE STARK ST AND SE 148th AVE 02/01/2018

The crash location is a 4-way intersection with marked/signalized crosswalks on all sides. Stark St. is a Minor Arterial with 5 lanes (2 EB, 2 WB, center median) and a speed limit at the time of the crash of 35 mph which has since been lowered to 30 mph. This stretch of road is lined by strip malls and businesses. The crash occurred at night.

The person walking was on her way home just ½ block away after going to the 7-11 on the SW corner of the intersection. She first safely crossed EB in the south crosswalk, then proceeded on a “walk” signal heading NB in the east crosswalk. The person walking had a mobility disability and used a red 4-wheel walker.

This was a hit-and-run. The person driving (unidentified) was travelling in the #1 inside lane of SE Stark St. at 60-100 mph and hit and killed the person walking within the east crosswalk. The person driving then sped away heading WB. This crash occurred just 250’ from another fatal crash on 03/09/2017 that involved similar excessive driver speed.



SE STARK ST AND SE 148th AVE

02/01/2018



Driver Perspective



Pedestrian Perspective

SE STARK ST AND SE 148th AVE 02/01/2018

Lack of Traffic Calming

92.1% of drivers exceed the posted speed limit of 30 mph. 22.8% or 2791 drivers daily exceed 40 mph. Speeds are too high on this corridor. There are 3540' between the signals at 148th and 162nd Avenues with three marked crossings with refuge islands in between (one crossing has a RRFB). Though there are crossing options there is no traffic calming (speed bumps, signals, stop signs) to mediate driver speed on this long stretch. Recommend street design changes that are proven to save lives including centerline hardening, additional crosswalks, narrower travel lanes, and a potential "narrow road, wide node" street reconfiguration.

Speed Above Statutory Limit

This stretch of SE Stark St. is currently at 30 mph. The crash occurred near the divider between Business District and Residence District on an Arterial, but within Business District boundaries. The speed should be statutory 20 mph. Rescission of SZO recommended.

Other: Distance Too Far Between Safe Crossings

There are 640' between marked crosswalks on 148th Ave and 151st Ave. The next marked crosswalk is at SE 155th Ave approx. 1000' further east and 1300' further at 160th Ave. This area is lined by businesses and strip malls. The distance between marked crossings is too far. Lack of crossing options makes dangerous mid-block crossings more likely. More safe crossing options are needed on this corridor

Other: Lack of Bike Lanes

SE Stark St. is designated a Major City Bikeway (TSP classification) yet there are no bike lanes on either side of the road.

Forthcoming Safety Upgrades

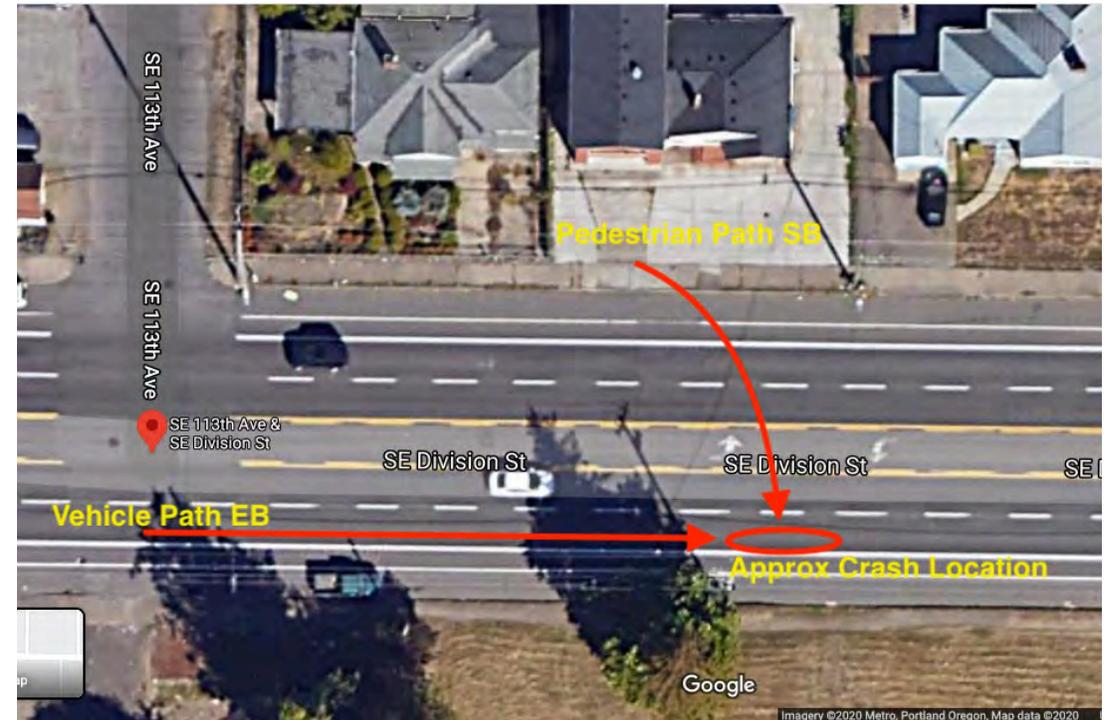
This corridor is part of PBOT Safer Outer Stark project with "access management project on east leg" scheduled for 2020.

SE DIVISION ST NEAR SE 113th AVE 03/11/2018

The crash location is mid-block on SE Division St. just east of the T-intersection at SE 113th Ave. The road is 5 lanes wide (2 EB, 2 WB, center median) with bike lanes, on-street parking and sidewalks on both sides. The speed limit is 30 mph. There are no streetlights on the south side of the road where there is a vacant field. The crash occurred at night.

The person walking was crossing from the Chinese Community Center on the north of the road from a point within 150' of an unmarked crossing at 113rd Ave in a slightly SE direction. He had a mobility disability and walked at a slow pace without the aid of a cane or walker.

The person driving was heading EB in the #2 outside lane where he hit and killed the person walking. Due to a slow walking pace, police determined that the person walking was in the roadway and within view of the person driving for approx. 25 seconds before the collision.



SE DIVISION ST NEAR SE 113th AVE 03/11/2018



Driver Perspective



Pedestrian Perspective

SE DIVISION ST NEAR SE 113th AVE 03/11/2018

Lack of Traffic Calming

77.8% of drivers exceed the posted speed limit of 30 mph with 766 drivers daily exceeding 40 mph (COVID traffic). There are 1756' between signals at 112th and 119th Avenues. Though the speed limit has been lowered from 35 to 30 mph since the crash, more needs to be done to lower driver speeds on this corridor.

Possible Inadequate Lighting

LED streetlights are located only on the north side of road. This crash occurred on south side of road where there are no lights. While the corridor is part of the PBOT Safety Action Plan for SE Division Street running through 2025, this specific site is not included for lighting upgrades. Ensure lighting is sufficient according to current PBOT Appendix K guidelines. 1.0 Average Maintained fc, 3 Uniformity Ratio.

NE SANDY BLVD NEAR NE 122nd AVE 03/21/2018

The crash location is east of the T-intersection of 122nd Ave. and NE Sandy Blvd., a Principal Arterial with 3 lanes (1 WB, 1 EB, median turn lane) bike lanes/shoulders on both sides, a sidewalk on the south side and speed limit of 30 mph. The location is bordered by a large parking lot and box store building to the south and on the north by a ditch, train tracks and a Portland Fire Department Training center north of the tracks. The crash occurred on a dark, rainy night.

The person walking was crossing NB from the west side of the box store entrance on the south side of the road after purchasing something at the store, possibly heading toward the Tri-Met stop on the north side. He was recently experiencing houselessness.

The person driving was heading WB when he hit and killed the person walking in the northern most lane. Investigators did not believe he was speeding, impaired or distracted. Not accounting for bad weather and lighting conditions, the person walking was in the roadway and in the person driving's view for approx. 9.5 seconds.



NE SANDY BLVD NEAR NE 122nd AVE 03/21/2018



Driver Perspective



Pedestrian Perspective

NE SANDY BLVD NEAR NE 122nd AVE 03/21/2018

Lack of Traffic Calming

43.9% of drivers exceed the posted speed limit of 35 mph. There are 3868' between signals at 122nd and 148th Avenues. 155 cars daily exceed 45 mph. Excessive speed without traffic calming is an issue at this location.

Speed Possibly Set Above Statutory

Recommend exploring whether this section of road qualifies as a Business District eligible for 20mph statutory speed.

Possible Inadequate Lighting

Lights are only located on the south side of the road. The person walking was hit and killed on the north side. Streetlights should be installed on the north side to meet current PBOT Appendix K guidelines. 1.2 Average Maintained fc, 3 Uniformity Ratio.

Lack of Sidewalk and Crossing

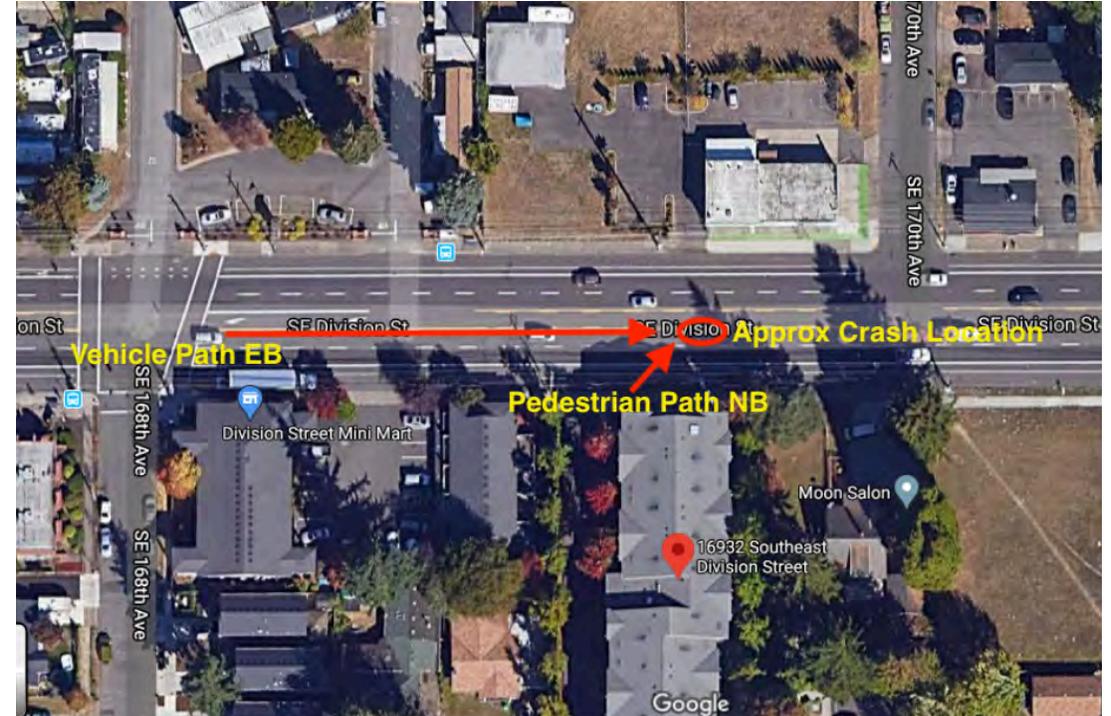
A bus stop is located on the north side of the road about 298' east of the crash location. The Police report mentions the person walking was possibly heading to this stop when he was hit and killed. There are no sidewalks on the north side of the road to allow safe access to this bus stop. It is approx. 625' to the nearest marked/signalized crossing at 122nd Ave. that would allow access to and from this bus stop. A sidewalk and more safe crossing are needed at this location to provide safe access to the north side bus stop.

SE DIVISION ST NEAR SE 169th AVE 05/08/2018

The crash location is mid-block, east of the 4-way intersection with SE 168th Ave. and the T-intersection with 170th Ave. SE Division St. is a 5 lane road (2 EB, 2 WB, center turn median) with bike lanes, parking and sidewalks on both sides. The road is lined with businesses and residences and had a speed limit at the time of the crash of 35 mph that has since been lowered to 30 mph. The crash occurred at night.

The person walking lived at the retirement home on the south side of the road and departed from a point near the east side of the parking lot entrance heading in a NE direction in the roadway. She was an Older Adult, had a mobility disability and used a walker. She had entered the road outside of a legal crossing.

The person driving was heading EB on Division and hit and killed the person walking in the #1 inside lane. The person walking was in the roadway and within view of the person driving for approx. 13 seconds prior to the collision.



SE DIVISION ST NEAR SE 169th AVE 05/08/2018



Driver Perspective



Pedestrian Perspective

SE DIVISION ST NEAR SE 169th AVE 05/08/2018

High Speed / Lack of Traffic Calming

80% of drivers exceed 35 mph with 1440 drivers exceeding 45 mph daily. The speed limit is 30 mph. There are 1184' between signals at 168th and 174th Avenues. High speed and lack of traffic calming over a long distance is an issue at this location.

Speed Possibly Set Above Statutory

Recommend exploring whether this section of street qualifies as Business District eligible for 20mph statutory speed.

Possible Inadequate Lighting

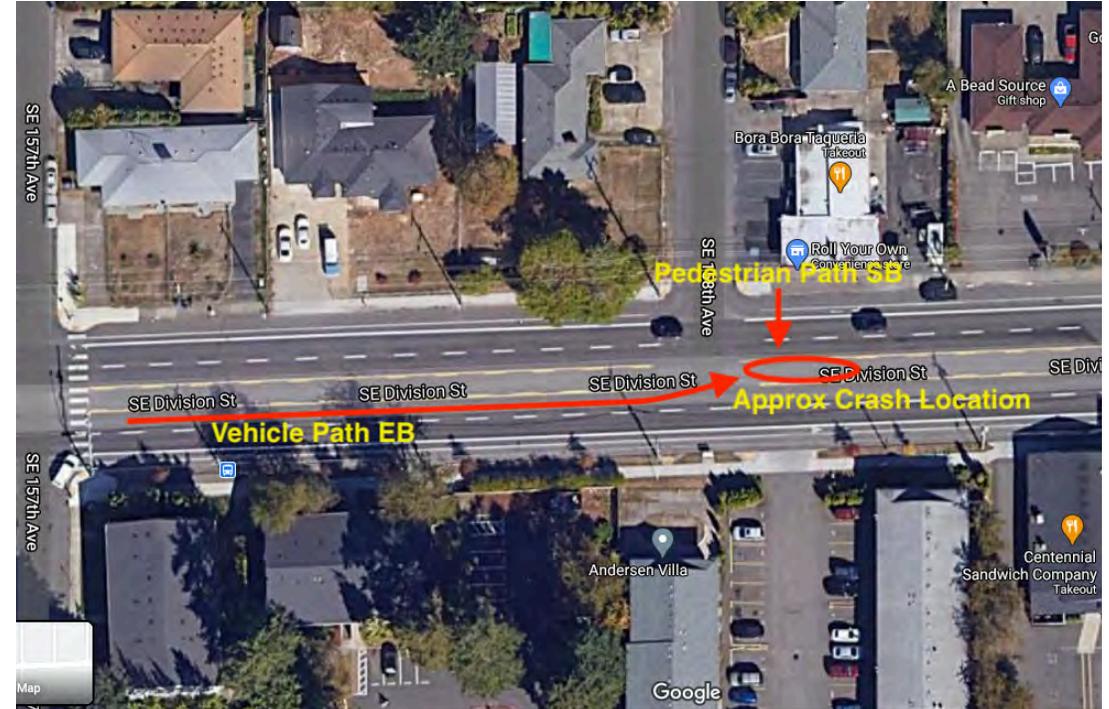
Streetlights are only installed on the north side of the road. The person walking was hit and killed on the south side. The PBOT Outer Division Safety Plan has future upgrades planned but nothing for this specific location. Lights should be installed on the south side of the road to meet PBOT Appendix K guidelines. 1.0 Average Maintained fc, 3 Uniformity Ratio.

SE DIVISION ST AND SE 158th AVE 07/23/2018

The crash location is a T-Intersection. SE Division St. is a 5 lane road (2 EB, 2 WB, center turn median) with bike lanes, parking and sidewalks on both sides. The road is lined with businesses east of the crash location and residences west of the crash location. The speed limit is 30 mph. The crash occurred at night.

The person walking was crossing Division street heading SB. It is unknown if he was within the unmarked crosswalk boundaries but investigators believe he was within or near the boundary. He had mobility issues due to a recent stroke and was living in assisted living nearby. He had recently gained mobility and used a walker.

The person driving was heading EB on Division in the #1 inside lane. He said that he smelled diesel from the vehicle in front of him and veered left into the center turn median to leave Division St. when he hit the person walking with the driver side of his vehicle.



SE DIVISION ST AND SE 158th AVE 07/23/2018



Driver Perspective



Pedestrian Perspective

SE DIVISION ST AND SE 158th AVE 07/23/2018

Speed Possibly Set Above Statutory

East of the crash location is a Business District and West of the crash location is a Residence District for a short stretch. If this qualifies as a Business District, the speed limit should be set at 20 mph.

Possible Inadequate Lighting

Streetlights are only installed on the north side of the road. The PBOT Outer Division Safety Plan has future south side streetlight installations planned between two separate sections on Division (82nd to 92nd and 122nd to 130th) but no upgrades are shown for this specific location. Lights should be installed on the south side of the road to meet PBOT Appendix K guidelines. 1.0 Average Maintained fc, 3 Uniformity Ratio.

SE DIVISION ST AND SE 139th AVE 10/10/2018

The crash location is a T-intersection without marked crosswalks. SE Division is a 5 lane (2 WB, 2 SB, center median turn) Principal Arterial with bike lanes, parking and sidewalks on both sides and a speed limit of 30 mph. SE 139th Ave. is a Major Collector with 2 lanes (1 NB, 1 SB), sidewalks, parking on both sides and a speed limit of 25 mph. The crash occurred at night.

The person walking was crossing in a slightly SW direction from the north side of Division after being dropped off by a vehicle near the Tri-Met stop after work. She was crossing just west of the intersection outside of the legal unmarked crossing boundaries.

This was hit-and-run. The person driving (unidentified) was coming from the north intersection making a right hand WB turn onto Division St. when they struck and killed the person walking near the dividing line of lanes #1 and #2. The person driving stopped after the crash, spoke to witnesses and others who had stopped, but left the scene before police arrived. It is not known whether the person driving stopped at the stop sign on 139th Ave. before making the right turn.



SE DIVISION ST AND SE 139th AVE 10/10/2018



Driver Perspective



Pedestrian Perspective

SE DIVISION ST AND SE 139th AVE 10/10/2018

Possible Lighting Issues

The police report notes that this is a “darker stretch of roadway” and that there are trees on the NW side of the intersection where the person walking was hit and killed that may block streetlights. There are no streetlights on the south side of the road. PBOT guidelines recommend 1.0 Average Maintained fc, 3 Unity Ratio. Lighting upgrades throughout the corridor are scheduled through 2021. No information about lighting upgrades is provided at this time. Recommend checking with PBOT about specific up-to-date lighting upgrade plans.

Upgrades Since Crash

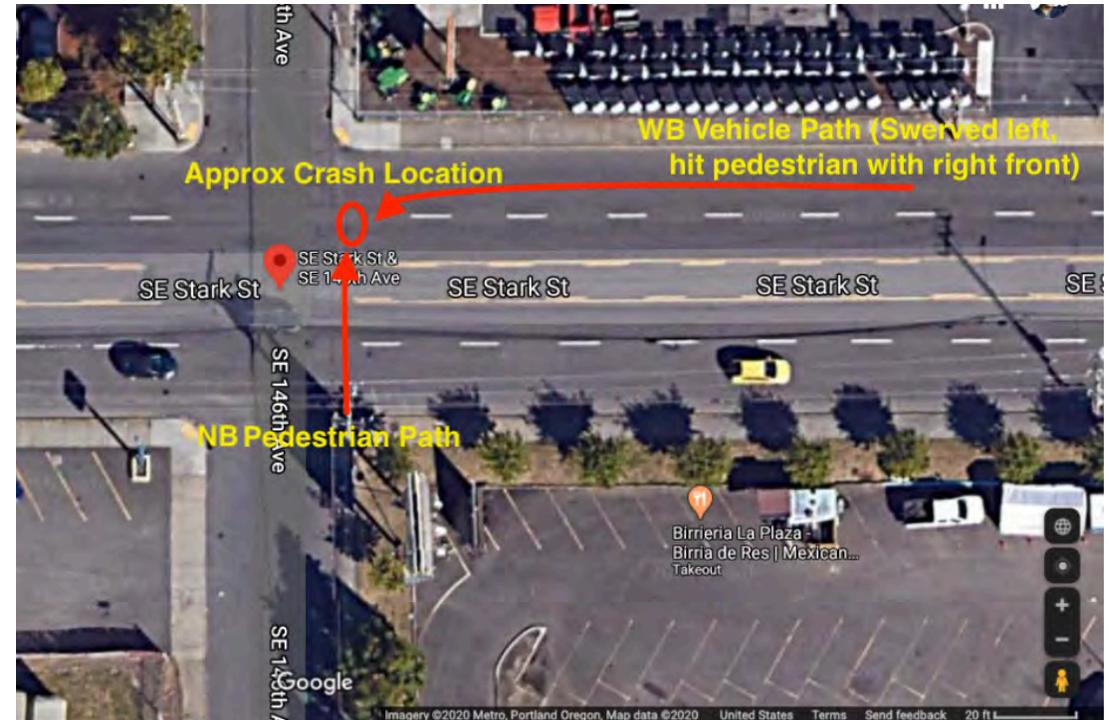
A marked crosswalk with curb extensions and signage (No RRFB) has been added 90' east of the crash site on the east side of the intersection of Division and 139th Ave. The crosswalks on the west corner of 139th Ave. and both corners of the 138th Ave. T-intersection have been closed “no ped x-ing” signage.

SE STARK ST AND SE 146th AVE 10/26/2018

The crash location is a 4-way intersection without marked crosswalks. SE Stark St. is a Minor Arterial with 5 lanes (2 EB, 2 WB, center turn median), sidewalks on both sides and a speed limit of 30 mph. The crash occurred on a dark, rainy night.

The person walking was headed home from a nearby 7-11. He was crossing NB in the east unmarked crosswalk. He had a mobility disability and walked with a limp at a slow pace.

The person driving was heading WB in the #2 outside lane. He swerved left toward the #1 inside lane in an effort to avoid the person walking but hit and killed him in the crosswalk. The person driving was legally intoxicated (alcohol .10 BAC, hydrocodone, and marijuana). Police determined Driver A-pillar sightline obstruction was also a possible factor along with lighting glare from a large business sign on the NE corner of the intersection.



SE STARK ST AND SE 146th AVE 10/26/2018



Driver Perspective



Pedestrian Perspective

SE STARK ST AND SE 146th AVE 10/26/2018

High Speeds / Lack of Traffic Calming

Though speed has been lowered from 40 to 30 mph by two separate SZO's since the crash, speed remains too high at this location with 87% of drivers exceeding the posted speed limit and 16.3% or 2181 drivers daily exceeding 40 mph. There are 2648' between signals at 148th and 139th Avenues with only one midblock crosswalk with RRFB and island to act as a traffic calming feature. Recommend street design changes that are proven to save lives including centerline hardening, additional crosswalks, narrower travel lanes, and a potential "narrow road, wide node" street reconfiguration.

Lack of Crossing Infrastructure

The location of the crash is 66' curb-to-curb, unpainted, without a signal, island, RRFB or signs. The nearest marked signalized crossing is 590' west at 148th Ave or at the mid-block marked/island/RRFB crossing 800' to the west. There is only one marked crossing in the 2648' stretch between 148th and 139th Avenues. More safe crossing options are needed.

Speed Set Too High

The speed limit is currently at 30 mph. This is a Business District on an Arterial and subject to statutory 20 mph. Rescission of SZO recommended.

Lighting Contrast Issue

The police report notes that there is a "large bright sign at the northeast corner of the intersection. While one would initially think that this bright sign would help in this matter [pedestrian visibility], one consideration is that this bright sign provided high contrast to the surrounding area and may have made seeing objects below the sign more difficult."

Forthcoming Upgrades

Safety upgrades by PBOT are scheduled at this intersection in 2021 as part of the "Safer Outer Stark" project. (As yet unspecified crossing infrastructure and lighting will be added on the north side of the road.)

NE AIRPORT WAY NEAR NE 138th AVE 11/13/2018

The crash location is just west of the intersection on NE Airport Way and NE 138th Ave by approx. 250'. Airport Way at this point is a Minor Arterial with 5 lanes (2 EB, 2 WB, center turn median) with bike lanes on both sides and a speed limit of 45 mph. The crash occurred at night.

The person walking was crossing NB from the curb outside of a crosswalk approximately 250' from the marked/signalized crossing to the east. The person walking was experiencing homelessness.

The person driving was travelling EB from a stop at the signal approx. 3446' to the west at 122nd Ave. The person driving hit and killed the person walking in the #1 inside lane without braking. Distraction, speeding and intoxicants were not a factor. The person walking was in the roadway in view of the person driving for approx. 5.5 seconds before impact and he had adequate stopping distance (145') and time to see the the person walking and stop.



NE AIRPORT WAY NEAR NE 138th AVE 11/13/2018



Driver Perspective



Pedestrian Perspective

NE AIRPORT WAY NEAR NE 138th AVE 11/13/2018

High Speed / Lack of Traffic Calming

43.3% of drivers exceed the posted speed limit of 45 mph with 137 drivers daily exceeding 55 mph. There are 3696' between signals at 122nd Ave and 138th Ave without any traffic calming (crosswalks, traffic islands, stop signs etc.) Recommend adding traffic calming to this road to bring speeds down.

Lack of Available Crosswalks

There are .7 miles between marked/signalized crosswalks at 122nd and 138th Avenues with no marked crosswalks in between. Marked/signalized crosswalks are needed on this stretch.

Speed Set Above Statutory

This road is an Arterial in a Business District and subject to statutory 20 mph. Rescission of SZO recommended.

Other: Wide Crossing

On this road there are 74' from curb-to-curb. Due to the wide crossing it is recommended that marked crosswalks with traffic islands and RRFB's be installed.

SE DIVISION ST AND SE 130th AVE 02/02/2019

The crash location is a 4-way intersection with marked/signalized crosswalks on all sides. SE Division St. is a 5 lane (2 EB, 2 WB, center turn median) Principal Arterial with bike lanes and sidewalks on both sides, and parking on the north side. The speed limit is 30 mph. The crash occurred at night.

The person walking was crossing from the NW corner heading SB in the westernmost marked crosswalk on a “walk” signal. He was blind and had a reflective red and white cane.

This was a hit-and-run. The person driving (unidentified) was travelling EB in the #1 inside lane at 35-40 mph (witness account) where they hit and killed the person walking within the marked crosswalk, ran a red light and continued EB.



SE DIVISION ST AND SE 130th AVE 02/02/2019



Driver Perspective



Pedestrian Perspective

SE DIVISION ST AND SE 130th AVE 02/02/2019

High Speed /Lack of Traffic Calming

70.6% of drivers exceed the posted speed limit of 30 mph with 620 drivers daily exceeding 40 mph. As a Residence District on an Arterial, this location does not qualify for statutory 20 mph. The speed limit is set too high and should be lowered for pedestrian safety. There is a 1880' stretch from 122nd to 130th Avenue with only one mid-block crossing with a traffic island to act as a traffic calming feature.

Inadequate Lighting

Police noted that all lights on the south side of the street where the person walking was hit and killed were out on the night of the crash from 122nd to 140th Ave. The nearest north side streetlight was 174 feet east of the crash site crosswalk and 194 ft. in a direct line to the spot where the person walking was hit on the south side of the street. The recommended foot candle lighting is 1.0 Average Maintained fc, 3 Uniformity Ratio. Current lighting conditions at the location should be examined and the circumstances surrounding the lack of south side lighting on the crash date should be investigated further to assess culpability.

Worn Crosswalk Markings

A Google Map street view from November of 2019 shows significant wear and missing areas of the reflective crosswalk markings due to vehicle traffic.

Wide Crossing

75' curb-to-curb. Assess signal timing to ensure that those with mobility issues and/or blindness have adequate time to cross the road on a "walk" signal.

Forthcoming Upgrades

This intersection is scheduled for upgrades in 2020-2021 as part of the PBOT Outer Division Safety Action Plan. Upgrades will include a median island, bike path separation, more road painting and improved signal timing.

SE HOLGATE BLVD AND SE 92ND AVE 03/01/2019

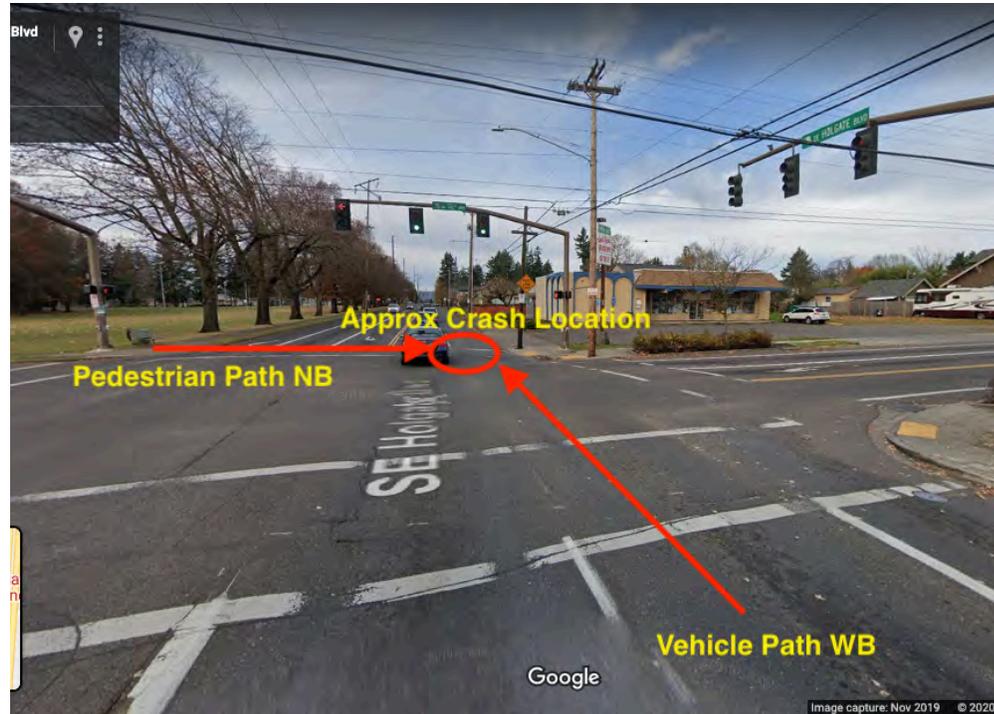
The crash location is a 4-way intersection with marked/signalized crosswalks on all sides. SE Holgate Blvd. is a Major Collector with 5 lanes (2 WB, 2 EB, center turn median) and a speed limit of 30 mph. This crash occurred in the morning during full daylight.

The person walking was crossing from the SW corner heading NB in the marked crosswalk. She started crossing on a “walk” sign which turned to “don’t walk” ¼ of the way through the length of the intersection. She proceeded on the “don’t walk” sign heading NB.

The person driving was travelling WB in the #2 outside lane and drove through the green light a 36.7 mph and hit and killed the person walking in the crosswalk near the dividing for the #1 and #2 WB lanes on the west side of the intersection. Conditional sightline obstruction due to stopped traffic and a large garbage truck in the turn lane was a factor for both pedestrian and driver. Police noted that “driver error” was also a factor as a driver should not proceed through an intersection with stopped traffic and sightline obstruction at such a high speed.



SE HOLGATE BLVD AND SE 92ND AVE 03/01/2019



Driver Perspective



Pedestrian Perspective

SE HOLGATE BLVD AND SE 92ND AVE 03/01/2019

Possible Signal Timing Issue

In this crash, the walk signal changed when the person walking was $\frac{1}{4}$ of the way into the intersection and they attempted to run the remaining $\frac{3}{4}$ of the way and was hit and killed. It is unknown if the person walking left the curb too late or if the signal time was too short. Signal time should be reviewed to ensure adequate crossing time for pedestrians and coordination with oncoming green light.

Speed Set Above Statutory

The crash location is in a Business District on a Collector and subject to statutory 20 mph. Rescission of SZO recommended.

SE POWELL BLVD AT I205 04/07/2019

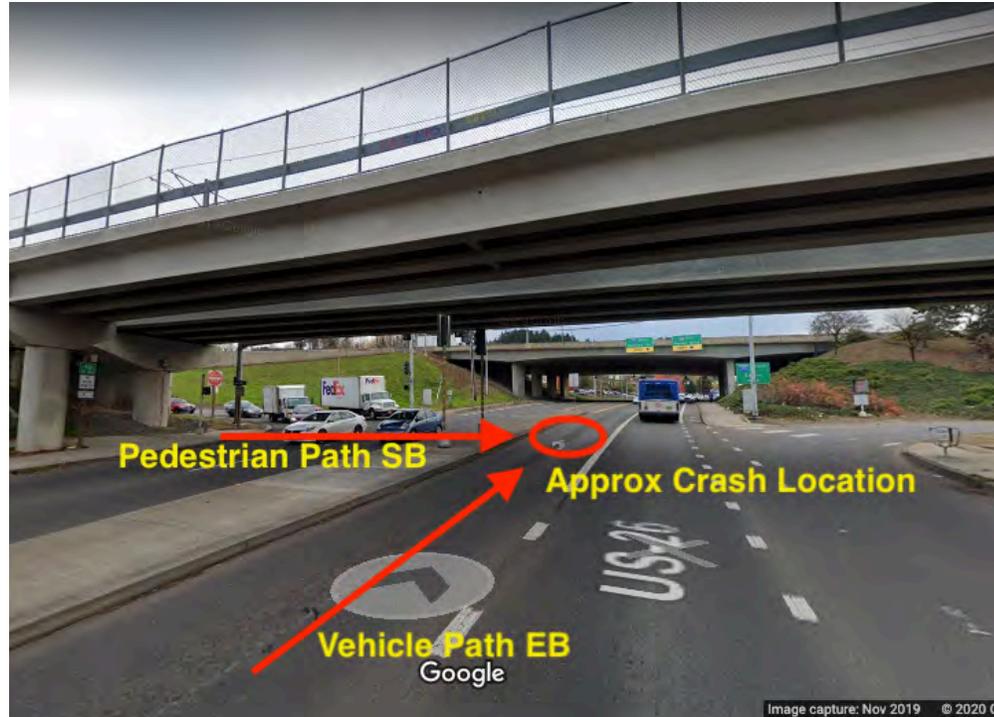
The crash location under the overpass of the SB I205 Interstate and the MAX line. Powell Blvd. is a Principal Arterial with 5 lanes (2 WB, 2 EB, center turn median/island) with bike lanes and sidewalks or both sides and a speed limit of 35 mph. This crash occurred at night.

The person walking was crossing Powell Blvd SB under the I205 multi-use path/MAX overpass (exact location unspecified) at or near the area where a “Crosswalk Closed” sign was posted.

The person driving was travelling EB in the #1 inside lane. He said that he was travelling below the speed limit (unverified) when he hit the person walking in the #1 lane.



SE POWELL BLVD AT I205 04/07/2019



Driver Perspective



Pedestrian Perspective

SE POWELL BLVD AT I205

04/07/2019

Inadequate Lighting

The police investigator note that “visibility issues from rainy weather and poor lighting were factors in this crash.” The recommended PBOT Average maintained fc is 1.2 with a Uniformity Ratio of 3 at this location. There are no lights under the I205 multi-use path/MAX overpasses where the person walking was hit and killed. The lights in the area are old style high pressure sodium and the police describe them as casting an “orange hue.”

NE HALSEY ST AND NE 141st AVE 07/24/2019

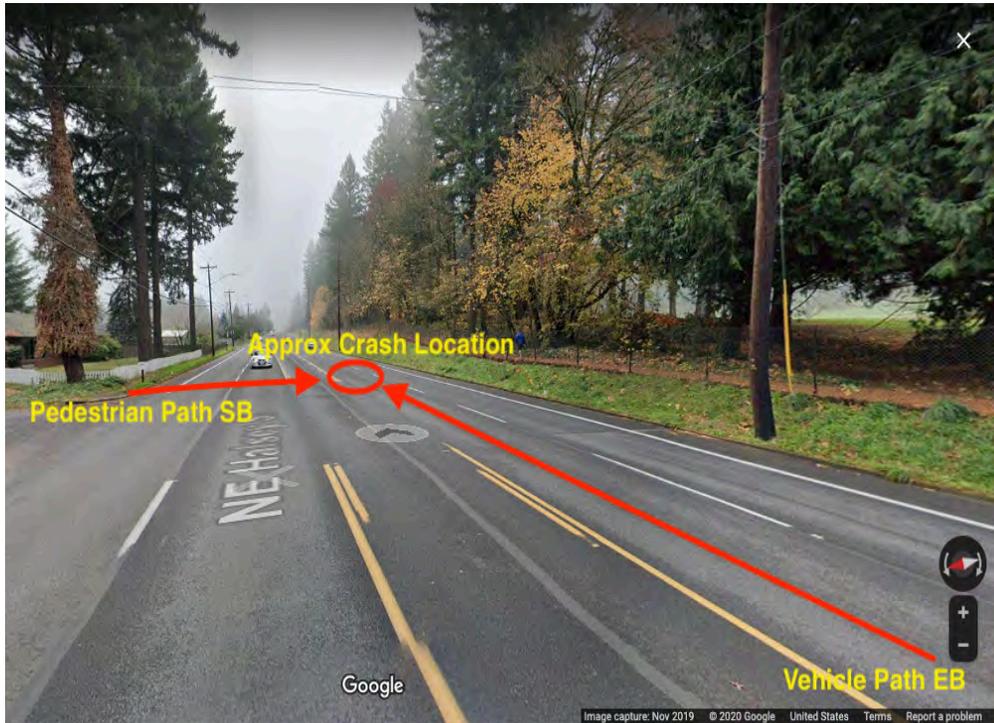
The crash location is on NE Halsey St. at the T-intersection with NE 148th Ave. Halsey St. is a 5 lane (2 EB, 2 WB, center turn median) Principal Arterial with bike lanes on both sides. There are no sidewalks on either side of the road. The speed limit is 40 mph. The crash occurred at night.

The person walking was crossing in the unmarked crosswalk on the east side of the intersection heading SB.

The person driving was travelling home in the #1 inside lane of Halsey St. when he hit the person walking as she entered the lane. He was going 50 mph at the time of impact with the person walking according to the vehicle EDR. The person driving was found not to be legally intoxicated, but had a BAC of .06% and the presence of THC in his blood according to the toxicology report.



NE HALSEY ST AND NE 141st AVE 07/24/2019



Driver Perspective



Pedestrian Perspective

NE HALSEY ST AND NE 141st AVE 07/24/2019

High Speeds / Lack of Traffic Calming

79% of drivers exceed the posted speed limit of 40 mph. Extreme speeds are a daily occurrence with approx. 1378 drivers exceeding 50 mph. There are 4563' between signals at 131st and 148th avenues with only one marked/signalized/traffic island crossing to possibly mediate driver speeds.

Possible Inadequate Lighting

There are streetlights only on north side of the road. The person walking was hit and killed on south side. 1.2 Average Maintained fc, 3 Uniformity Ratio per PBOT Appendix K guidelines is recommended.

Lack of Safe Crossing

There is only one marked/signalized crossing on the corridor between 131st and 148th Avenues. This crosswalk has an island and is 980' west of the crash location at 137th Ave. There is a 3032' stretch between this crossing and the next marked/signaled crossing at 148th Ave. The area is a Residence District, with houses lining the north side of the road.

Lack of Inclusion in Forthcoming Safety Project

The PBOT Outer Halsey Safety Project is set to address safety upgrades in spring of 2021. Upgrades are targeted from 114th to 133rd Ave. The stretch from 133rd to 162nd Ave. (where this crash occurred) is marked as "No Change" for the project.

Lack of Sidewalks

This location is designated a Major City Walkway (TSP classification) yet there are no sidewalks on either side of the road.

NE HALSEY ST NEAR NE 122nd AVE 12/27/2019

The crash location is on NE Halsey St. just east of the intersection with NE 122nd Ave. Halsey St. is a 5 lane (2 EB, 2 WB, center turn median) Principal Arterial with bike lanes and sidewalks on both sides. The speed limit is 35 mph. The crash occurred at night in cloudy, wet, foggy weather.

The person walking was crossing from the middle of the driveway of the Goodwill on the south side of the road heading NB within 200' west from the marked/signalized crosswalk. The person walking was experiencing homelessness and slept in a doorway nearby. Video from a nearby business shows that the person walking was moving slowly in the road until he stopped in the lane just before the crash.

The person driving was proceeding through the green light at 122nd Ave. heading EB in the #1 inside lane when she struck and killed the person walking in the #1 lane.



NE HALSEY ST NEAR NE 122nd AVE 12/27/2019



Driver Perspective



Pedestrian Perspective

NE HALSEY ST NEAR NE 122nd AVE 12/27/2019

High Speed / Lack of Traffic Calming

59.2% of drivers exceed the posted speed of 25 mph. There are 2582' between signals at 122nd and 132nd Avenues with a high ADTV of 13928. Extreme speed is a daily occurrence with 459 drivers daily exceeding 45 mph.

Speed Set Above Statutory

The location is a Business District on an Arterial and subject to statutory 20 mph. Rescission of SZO recommended.

Possible Inadequate Lighting

The officer noted that there was "some illumination" from the Goodwill on the south side of the road but that there are streetlights only on the north side of the road. NE Halsey is designated a Major City Traffic Street, Major City Bikeway and Major City Walkway. PBOT Appendix K recommends 1.2 Average Maintained fc, 3 Unity Ratio.

Forthcoming Safety Upgrades

122nd Ave is scheduled improvements as part of the PBOT 122nd Ave Plan. The Outer Halsey Safety Project is scheduled for 2021. The following improvements are slated: improve pedestrian crossing safety with 2 median refuge islands equipped with rapid flash beacons (119th, 128th Ave), improved street lighting at the new pedestrian crossings, infill missing sections of sidewalk (approximately 4,750 lineal feet), protected bike lanes between 112th and 132nd Avenues , no change in number of vehicle travel lanes.

04.

Southeast Portland

SE 82nd AVE NEAR SE FLAVEL ST 05/05/2017

The crash location is on SE 82nd Ave. 130' south of the 4-way intersection with SE Flavel St. At this location, 82nd Ave is a 5 lane (2 SB, 2 NB, median turn lane) Principal Arterial with a speed limit of 35 mph. The crash occurred at night.

The person walking was staying at the Del Rancho Motel after visiting friends. He left the north end of the parking lot, crossing the street WB to go to the 7-11 on the SW corner of the intersection. He was crossing outside of a legal crosswalk as the nearest crosswalk was 130' north at Flavel St.

This was a hit-and-run. The person driving (unidentified) was travelling SB in the #2 outside lane. They were travelling above the speed limit, possibly as fast as 50 mph. The person walking saw the vehicle coming from his right as he was crossing, tried to outrun it to safety on the west side of the road, but was hit and killed in the #2 EB lane. The person driving continued SB.



SE 82nd AVE NEAR SE FLAVEL ST
05/05/2017



Driver Perspective



Pedestrian Perspective

SE 82nd AVE NEAR SE FLAVEL ST 05/05/2017

Lack of Traffic Calming

This location has a high ADTV of 10687. There are 2557' between signals at Duke St. and Flavel St. North of the crash location. The driver traveled 2760' heading SB without traffic calming (assuming they went through a green light at Flavel) before hitting the person walking just south of the Flavel St. intersection. The Springwater corridor (pedestrian and bike trail) crosses 82nd Ave. just 1000' south of the crash location. More traffic calming is needed on this corridor.

Speed Set Above Statutory

The current speed limit at this location is 35 mph. 82nd Ave is an Arterial in a Business District and subject to statutory 20 mph. Rescission of SZO recommended.

Other: Possible Inadequate Lighting

While there are lights on both sides of the road just north of the crash location, south of the crash site there are no lights on the west side of the road. Measurement is needed per PBOT Appendix K guidelines. 1.2 Average Maintained fc, 3 Unity Ratio.

Forthcoming Upgrades

This location is part of a current PBOT Safety Plan to “support the incremental transformation of 82nd Avenue into a Civic Corridor, as envisioned in the Portland 2035 Comprehensive Plan.” No current details about safety upgrades at this particular crash location are available.

SE 80th AVE AND SE PINE ST 06/22/2017

The crash location is a 4-way intersection with stop signs on the north and south sides for traffic on SE 80th Ave. There are no marked or signalized crosswalks. The crash occurred on SE 80th Ave which is a 2 lane (1 NB, 1 SB) Local Road with a speed limit of 25 mph at the time of the crash that has since been lowered to 20 mph. The crash occurred in full daylight.

The person walking was returning to work at the nearby Sacred Heart Bakery after taking a walk during her lunch break. It is unknown where she was crossing, but evidence suggests she was heading EB in or near the north intersection unmarked crosswalk.

This was a hit-and-run. The person driving (unidentified) was heading SB on SE 80th Ave. when they hit and killed the person walking. The person driving was in a large truck and sped off WB on SE Pine St.



SE 80th AVE AND SE PINE ST 06/22/2017



Driver Perspective



Pedestrian Perspective

SE 80th AVE AND SE PINE ST 06/22/2017

Lack of Traffic Calming

SE 80th Ave. serves as a possible cut-through for vehicles from Burnside St. to the north and Stark St. to the south. This 900' stretch has only one stop sign intersection which is located at the crash site. Speed bumps and other traffic calming are recommended on this corridor.

Non-optimal Stop Sign Placement

At the north intersection of 80th and Pine, the stop sign is set back from the curb due to fire hydrant placement and possibly obscured from driver view by vehicles or a tree. Recommend exploring whether the stop sign can be moved closer to the intersection or made more visible otherwise.

Parking Setback Issue / Sightline Obstruction

There is a current lack of parking setbacks at the intersection which inhibits pedestrian and vehicle sightlines.

SE POWELL BLVD NEAR SE 50th AVE 07/14/2017

The crash location is on Powell Blvd. east of the intersection with SE 50th Ave by 170'. Powell Blvd is a Principal Arterial with 5 lanes (2 WB, 2 EB, the median alternates between turn lane and raised curb planters with trees and landscaping). The speed limit is 35 mph. The crash occurred at night.

The person walking entered the roadway from the driveway of the DV8 Club (since out-of-business) driveway on the north side of the road 170' east of the intersection with SE 50th Ave. He was heading SB across Powell Blvd when he dropped his phone in the WB #1 inside lane and bent over back into the lane to retrieve it.

The person driving had departed from the Plaid Pantry on 52nd and Powell and was heading WB in the #1 inside lane. He hit and killed the person walking as he backtracked into the #1 lane to retrieve his cell phone. Driver toxicology later indicated a concentration of 190 ng/ml of Benzoylcegonine which is associated with cocaine use. According to police the person driving "showed no signs of impairment" at the crash scene.



SE POWELL BLVD NEAR SE 50th AVE 07/14/2017



Driver Perspective



Pedestrian Perspective

SE POWELL BLVD NEAR SE 50th AVE 07/14/2017

Light Obstruction

There are trees in center lane planter at the crash location that block light and cast shadows on the road from overhead streetlights. The person walking was hit and killed under one of these shadows.

Speed Set Above Statutory

SE Powell Blvd is an Arterial in a Business District and subject to statutory 20 mph. Rescission of SZO recommended.

Lack of Lighting

A lack of lights on the building walls facing SE Powell Blvd.(previously DV8 Club) and the light obstruction from the trees in the center median planter combine to makes the sidewalk and roadway very dark at this location.

SE BELMONT ST AND SE 30th AVE 03/09/2018

The crash location is a 4-way intersection with marked/signalized crosswalks on all sides. Both SE Belmont St. and SE 30th Ave. are Major Collectors. SE Belmont Ave. is 2 lanes wide (1 EB, 1 WB) with a speed limit of 25 mph. The crash occurred in full daylight.

The person walking was crossing on a “walk” signal from the SE corner heading NB along the easternmost edge of the crosswalk just inside the painted line. He had cataracts in his left eye which impaired vision but was not legally blind.

The person driving was proceeding from a stop at the north intersection signal on a green light, making a left turn from SE 20th Ave onto NE Belmont St. He “cut the corner” and hit and killed the person walking near the painted yellow double lines in the crosswalk leading into the #1 EB lane of SE Belmont St.

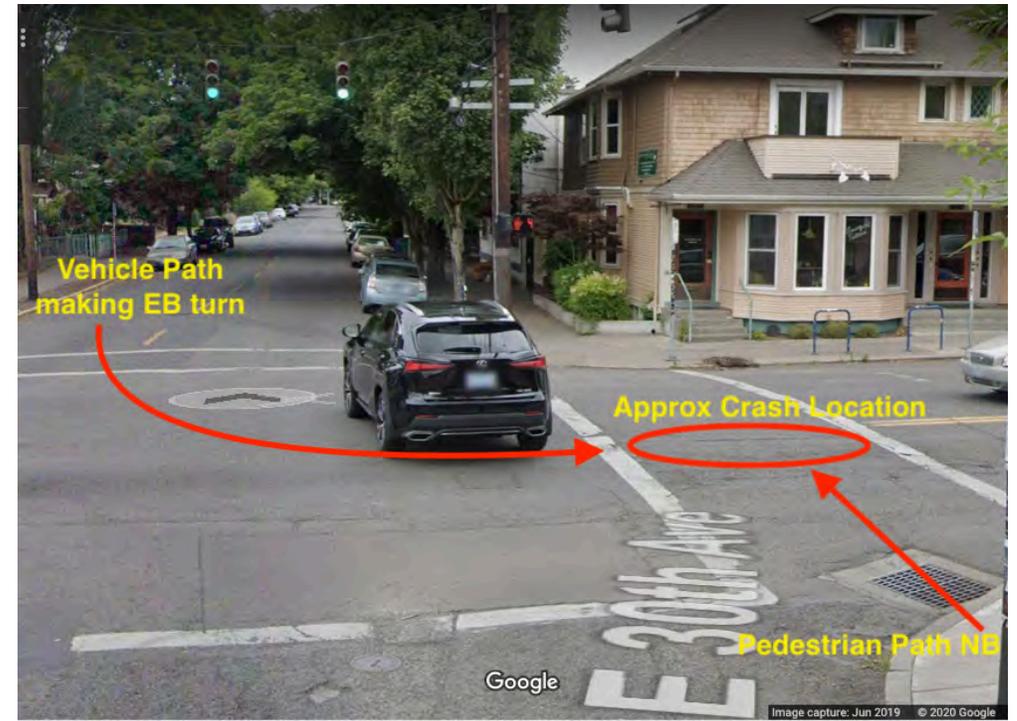


SE BELMONT ST AND SE 30th AVE

03/09/2018



Driver Perspective



Pedestrian Perspective

SE BELMONT ST AND SE 30th AVE 03/09/2018

Walk Signal Timing Issue

The walk signal conflicts with the turning vehicle's green.
Recommend re-timing to ensure protected pedestrian crossing.

Speed Possibly Set Above Statutory

There are a mix of businesses and residences on this stretch.
Recommend exploring whether this section of road qualifies as
Business District eligible for 20mph statutory speed.

Other: Possible Inadequate Lighting

Not a crash factor, but review notes there is only one lamp on the
SE corner of the intersection. Measurement is needed to
determine if this provides the necessary .8 Average Maintained fc
for all crosswalks at the intersection.

E BURNSIDE ST AND SE 55th AVE 10/11/2018

The crash location is a 4-way intersection with marked/signalized crosswalks on all sides. E Burnside is a Minor Arterial with 4 lanes (2 EB, 2 WB) and a speed limit of 30 mph. 55th Ave is a Local Road with 2 lanes (1 SB, 1 NB) and a speed limit of 20 mph. The crash occurred in full daylight.

The person walking was crossing from the SE corner heading NB in the east crosswalk. The walk signal status is unknown but the report states that if the person walking activated the signal with the button it would have been a “walk” signal.

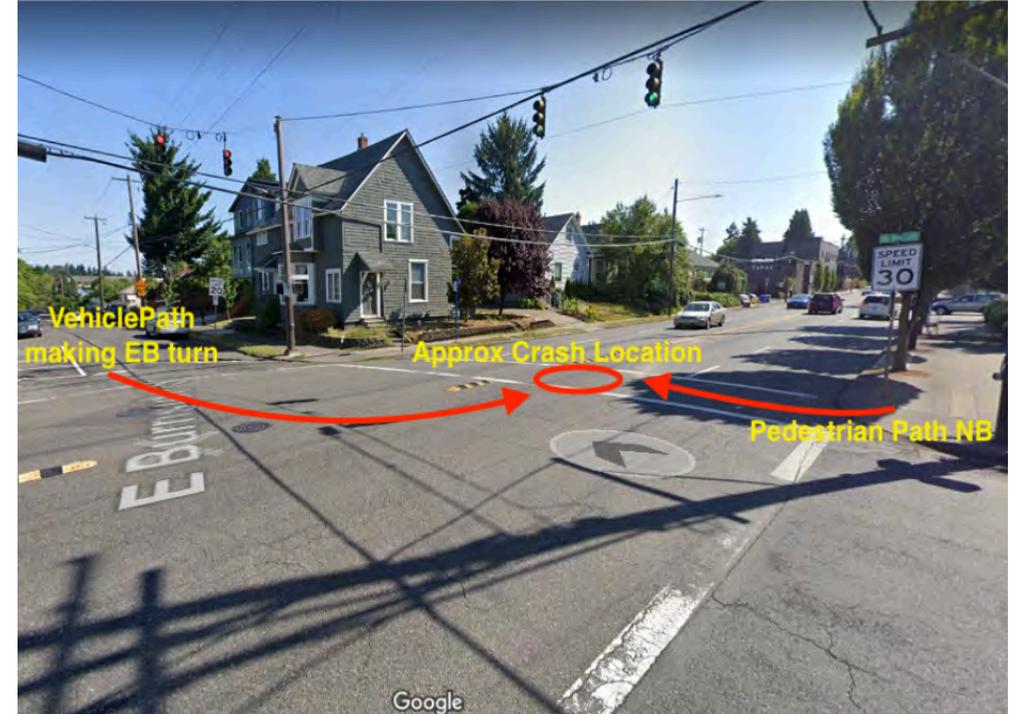
The person driving was returning home from work. He proceeded to make a left turn onto Burnside from a full stop at the north signal with 55th Ave. He hit and killed the person walking in the marked crosswalk in the #1 inside lane path for EB traffic on Burnside.



E BURNSIDE ST AND SE 55th AVE 10/11/2018



Driver Perspective



Pedestrian Perspective

E BURNSIDE ST AND SE 55th AVE 10/11/2018

Walk Signal Timing Issue

The walk signal conflicts with turning vehicle's green. Since the crash, the crosswalks have been painted with reflective stripes running north to south and an elevated bump has been put in that edges out into the intersection to discourage drivers from "cutting" the corner through the crosswalk. There is no note that signal timing has been adjusted since the crash.

Speed Possibly Set Above Statutory

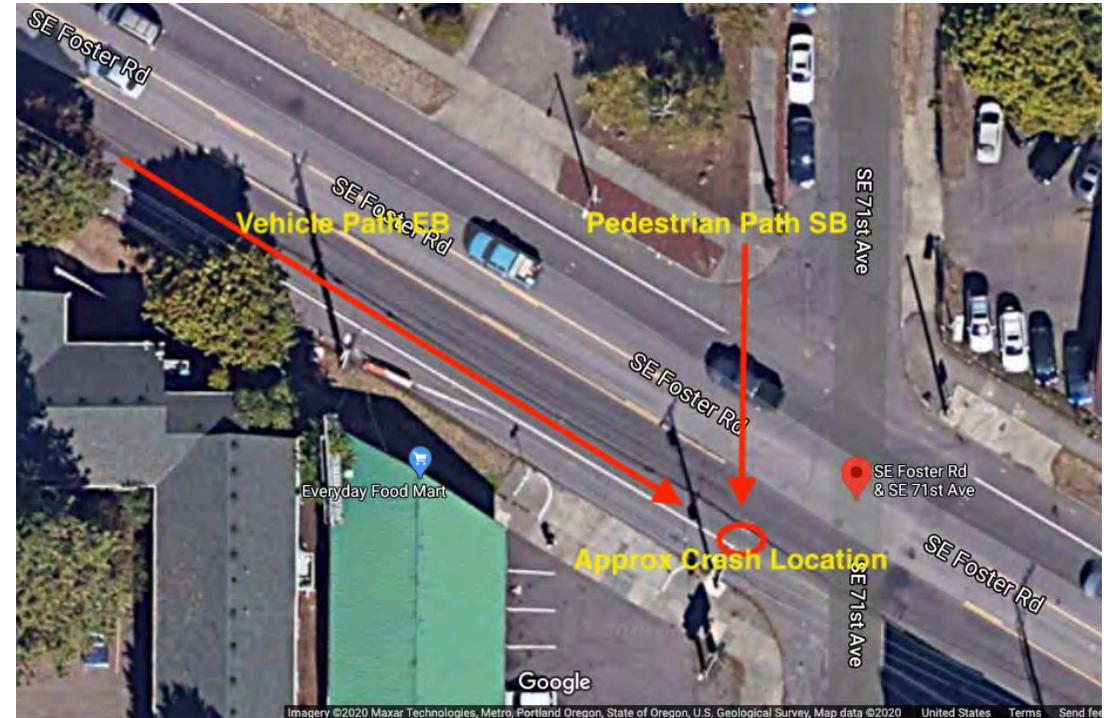
There are a mix of businesses and residences at this location. Recommend exploring whether this section of road qualifies as Business District eligible for 20mph statutory speed.

SE FOSTER RD AND SE 71st AVE 06/13/2019

The crash location is a 4-way intersection with no marked crosswalks. SE Foster is a Minor Arterial with 3 lanes (1 SEB, 1 NWB, center median lane) with bike lanes and sidewalks on both sides. The speed limit is 25 mph. The crash occurred in full daylight.

The person walking was crossing from the NW side of the intersection heading SB in the unmarked crosswalk. She was an Older Adult and had a mobility disability. The person walked very slowly without the use of a cane or walker.

The person driving entered Foster Rd. 926' west from the Dollar Store Parking lot heading SEB. She hit and killed the person walking within the crosswalk just north of the painted bicycle lane in the #2 outside lane. The person driving did not have a license and was operating the vehicle with only a permit. The person walking was in the roadway and visible to the person driving for at least 18 seconds before the collision.



SE FOSTER RD AND SE 71st AVE 06/13/2019



Driver Perspective



Pedestrian Perspective

SE FOSTER RD AND SE 71st AVE 06/13/2019

High Speed / Lack of Traffic Calming

84.7% of drivers exceed the posted speed limit of 25 mph with 1559 drivers daily exceeding 35 mph. There are 1451' between signals at 67th Ave. and 72nd Ave. without traffic calming.

Speed Set Above Statutory

The speed limit is currently set at 25 mph. This location is an Arterial in a Business District and subject to statutory 20 mph. Rescission of SZO recommended.

Wide Crossing / Lack of Available Safe Crossing

The unmarked crosswalk at the crash location is 76' wide. The nearest marked/signaled crossing is 310' east of crash location. Crossing infrastructure (RRFB, marked/signalized crosswalk) is needed at this location.

E BURNSIDE ST AND SE 22nd AVE 11/18/2019

The crash location is a 4-way intersection with a marked crosswalk with signage and a traffic island on the west side. All other intersection crosswalks are unmarked. E Burnside St. is a Minor Arterial with 4 lanes (2 EB, 1 WB, center turn median), parking and sidewalks on both sides. The speed limit is 30 mph. The crash occurred at night.

The person walking departed from The Standard tavern on 22nd Ave just north of Burnside heading to her nearby home. She was crossing Burnside heading SB. It is unknown if she was within the marked crossing area but the police investigator notes she was most likely in or near the crosswalk. Toxicology revealed she was heavily intoxicated (alcohol BAC .37).

The person driving was heading home from work travelling EB on Burnside in the #1 inside lane where she hit and killed the person walking as she was proceeding SB from the traffic island into the path of the #1 lane. The person driving was estimated (using the Searle Equation) to have been travelling 33.6-40.26 mph and the investigator noted that if she had been traveling the speed limit (30 mph) the crash could have been prevented as she would have had ample perception and stopping time.



E BURNSIDE ST AND SE 22nd AVE

11/18/2019



Driver Perspective



Pedestrian Perspective

E BURNSIDE ST AND SE 22nd AVE 11/18/2019

Possible Sightline Obstruction

The police investigator noted that signs and the reflective pillars on the traffic island may block the view of pedestrians for EB drivers as they provide high contrast light that obscures darker objects behind them. Though this crossing was updated as part of a 2016 PBOT safety plan, review of traffic island infrastructure is needed to ensure safety.

Speed Set Above Statutory

E Burnside St. at this location is a Business District on an Arterial and subject to statutory 20 mph. Rescission of SZO recommended.

05.

Southwest Portland

SW YAMHILL ST AND SW 17th AVE 02/07/2018

The crash location is a 4-way intersection. There are signalized crossings at the north, east and south sides of the intersection. The crosswalks are not painted but delineated by contrasting brickwork in the ground. The west side of the intersection is a MAX station with an exit for the EB train tracks. The speed limit on both roads is 20 mph. The crash occurred in the morning in full daylight.

The person walking was an Older Adult crossing from the SE corner heading NB in the east crosswalk on a “walk” signal.

The person driving proceeded on a green light through the north intersection, making a left hand turn onto Yamhill street. She was driving a large rented U-Haul pickup truck because she was moving. She travelled approx. 280’ unimpeded from the signal at SW Morrison before hitting the person walking in the crosswalk at the EB lane of Yamhill Street. The person walking died later in the hospital. Driver A-pillar obstruction may have been a factor.



SW YAMHILL ST AND SW 17th AVE 02/07/2018



Driver Perspective



Pedestrian Perspective

SW YAMHILL ST AND SW 17th AVE 02/07/2018

Walk Signal Timing Issue

The walk signal conflicts with turning vehicle's green.

As this is an intersection that services a MAX station and nearby Lincoln High School pedestrian traffic, this conflicting signal must be recalibrated (LPI) to protect pedestrians.

SW SALMON ST AND SW PARK AVE 01/04/2019

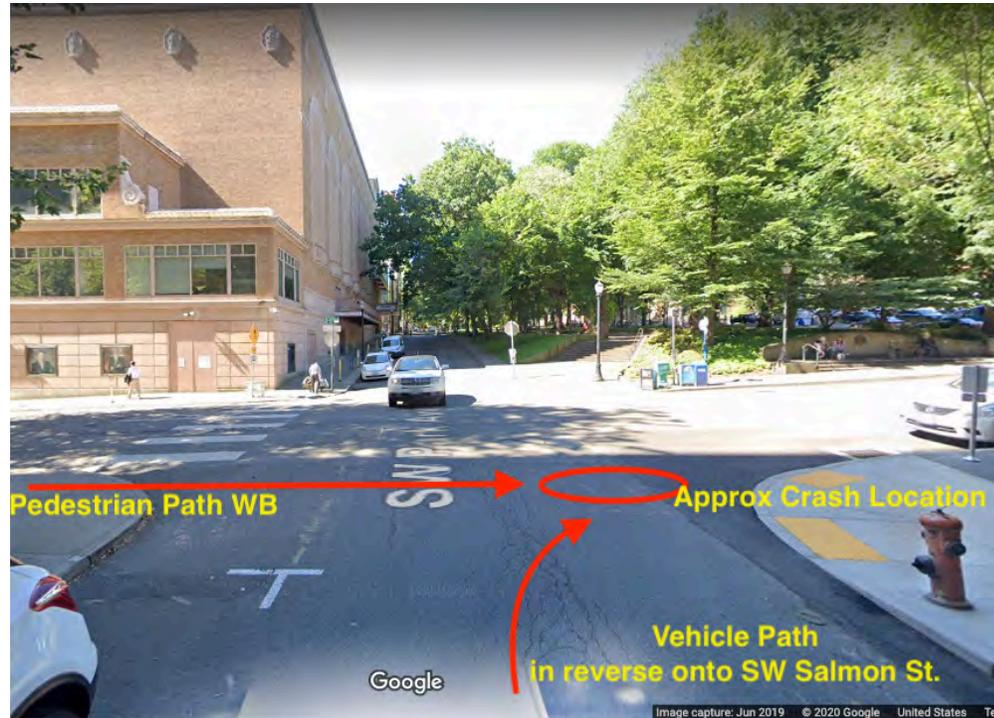
The crash location is a 4-way intersection with a marked crosswalk with a “ped x-ing” sign on the east side only. SW Salmon is a one way, 2 lane EB (with parking on both sides) Major Collector and SW Park Ave is a one way, 2 lane NB (with parking on both sides) Local Road. Both roads have a speed limit of 20 mph. The crash occurred in the morning when it was still dark.

The person walking had left his home at the apartment building on the NE corner and was crossing WB in the north unmarked crosswalk. He was an Older Adult with mobility issues and used a walker.

The person driving had made a NB turn from Salmon onto Park Ave. and the road was blocked by a stopped garbage truck. He put his vehicle into reverse and hit and killed the person walking in the crosswalk as he was backing up.



SW SALMON ST AND SW PARK AVE 01/04/2019



Driver Perspective



Pedestrian Perspective

SW SALMON ST AND SW PARK AVE 01/04/2019

Forthcoming Upgrades

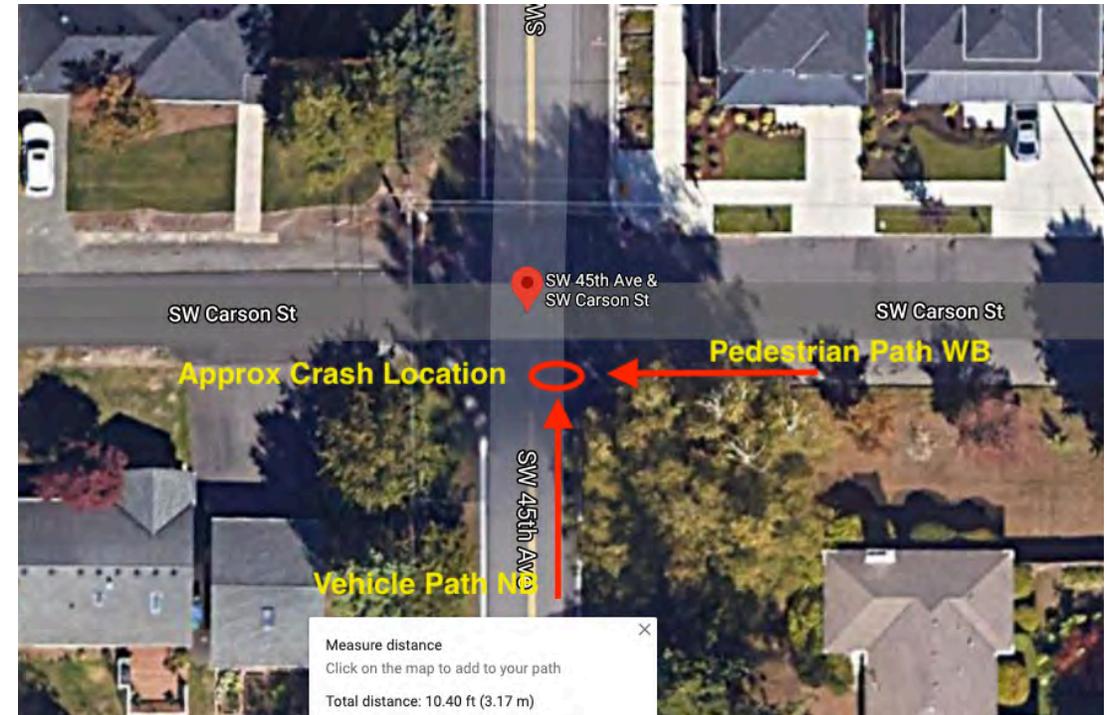
This intersection is part of the current Central City in Motion Plan (CCIM) and is scheduled to receive upgrades as part of Project 8 in 1-5 years according to the latest meeting minutes from January 2020. No info is available for project start time, but it is not slated for 2020-21. This particular intersection will receive extended curbs to decrease the crossing distance, fewer on-street auto parking spaces to improve sightlines at the intersections and will include a tabled intersection.

SW 45th AVE AND SW CARSON ST 03/19/2019

The crash location is a 4-way intersection in a residential neighborhood without marked crosswalks. There are no sidewalks along either road. SW Carson St. is a 2 lane (1 EB, 1 WB) Local Road without a center line with a speed limit of 20 mph. SW 45th Ave is a Major Collector with 2 lanes (1 NB, 1 SB) separated by double yellow lines with a speed limit of 30 mph. The crash occurred in the morning at dawn.

The person walking was an Older Adult on her morning walk through her neighborhood. She was crossing from the SE corner of the intersection heading WB in the south unmarked crosswalk.

This was a hit-and-run. The person driving was travelling NB on SW 45th Ave when he hit and killed person walking in the south crosswalk and sped away. The person driving was later arrested on unrelated charges and tied to the hit-and-run.



SW 45th AVE AND SW CARSON ST 03/19/2019



Driver Perspective



Pedestrian Perspective

SW 45th AVE AND SW CARSON ST 03/19/2019

Lack of Traffic Calming

There is a .8 mile stretch on 45th Ave. from SW Garden Home Rd. to the north and SW Taylors Ferry Rd. to the south. Most of the distance is through a wooded area with few residences. But there is a neighborhood where the pedestrian was hit with no traffic calming infrastructure or signs to alert drivers of pedestrians before they enter this more densely populated zone. Speed bumps and signage are recommended to slow traffic before it enters the neighborhood.

Speed Set Too High

The speed limit is currently set at 30 mph. This is a Residence District on a Collector and should be 20 mph per Portland Ordinance which supersedes 30 mph SZO. A KGW interview notes that an attempt was made in the decade prior to the crash to address high speeds with PBOT who told those concerned that it was ODOT's responsibility. Nothing has been done to date to address the issue.

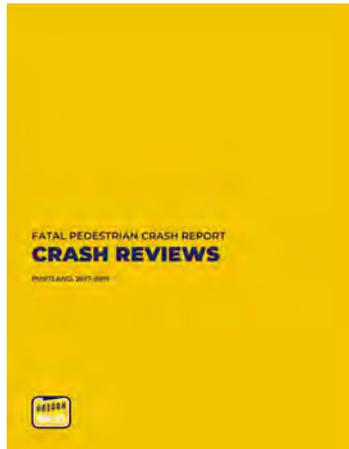
Lack of Available Crossing

There are no marked or signaled crossings in the area of the crash. Recommend installing marked crosswalks and providing "Ped X-ing" signs to alert drivers.

06.
Learn More

Read the Full Report

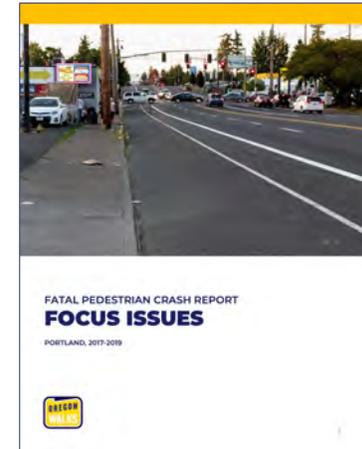
View and download the complete Oregon Walks Fatal Pedestrian Crash Report at www.oregonwalks.org/fatal-pedestrian-crash-report/
The full report contains three parts:



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.

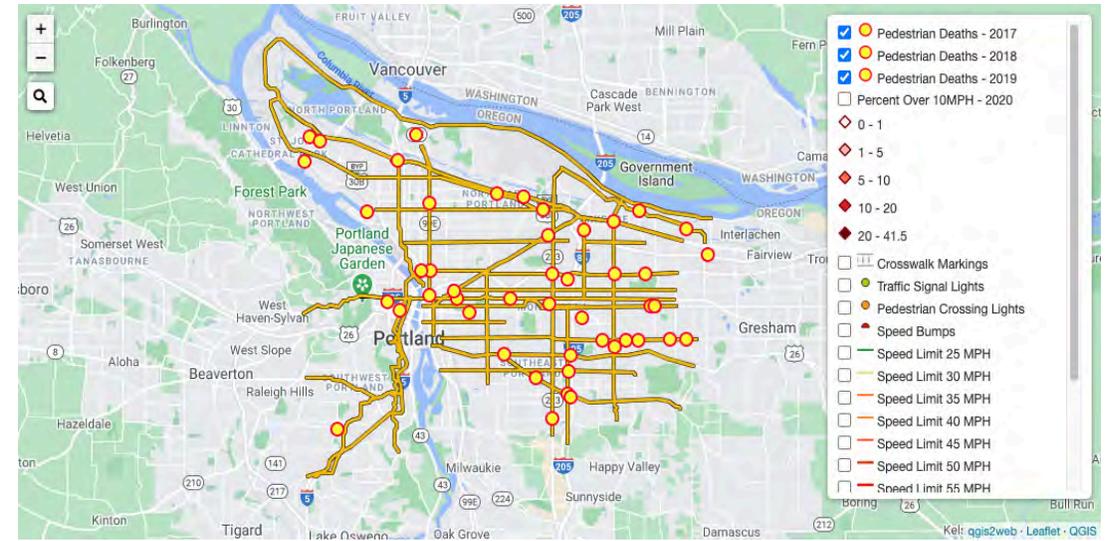


Focus Issues discusses in detail particular aspects of Portland's pedestrian fatality crashes that emerge from the crash reviews and data.

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