

Multnomah County REACH Transportation Crash and Safety Report

At the Intersection of Transportation, Health, Race and Justice



Rosa Parks Bus at The Henry Ford Museum - Source: UAW.org

Community Memorial Wall



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Acknowledgement

This report is meant to complement and build on reports from other partners – such as reports from the Coalition of Communities of Color and the Portland Bureau of Transportation. It focuses on health injustices; it is not an assessment of community strengths but we know there are many strengths, compelling stories and an enormous amount of resilience in the communities. The disparities in this report would undoubtedly be worse without those strengths.

The data presented in this report represent real people—sisters, brothers, cousins, mothers, and fathers in our county. The results are sobering, and may cause you to feel uncomfortable and upset regarding the unnecessary suffering and death these disparities and underlying inequities have caused in our community. Yet, it is through this discomfort that we, perhaps, can recognize the importance of these data in raising awareness and serving as a call to action.



Photo by Motoya Nakamura

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“Achieving health equity--or achieving equity period--doesn't mean there are winners and losers. There can be winners and winners. But we can't all be winners if we're not giving people what they need to enjoy a full, healthy life.”

Charles Brown, senior researcher with the Alan M. Voorhees Transportation Center and adjunct professor at the Edward J. Bloustein School of Planning and Public.

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Summary

This report presents data on transportation safety outcomes among the Black community in Multnomah County. It includes findings on six dimensions of transportation safety, highlighting the experience of Black residents and other people of color as they move through Multnomah County. Importantly, it emphasizes aspects of safety beyond physical injury, incorporating a definition of transportation safety that envisions public space where people are free from physical harm, biased behavior, harassment, violence, and unfair policing. Key findings of the report help transportation agencies measure progress toward equity in transportation safety.

These findings include:

- Racism and racist systems related to housing, transportation, law enforcement, and healthcare have produced avoidable and unacceptable inequities in transportation safety outcomes for the Black population in Multnomah County.
- The death rate from traffic crashes among Black residents in Multnomah County was nearly twice the rate among white residents during the period 2013-2017.
- Data suggest a disproportionate representation of Black patients among people seeking treatment for traffic crash injuries in emergency rooms and urgent care clinics.
- Road users exhibit biased behavior, such as failing to yield to Black pedestrians in a crosswalk.
- Black or African American people were the most common targets of racial bias crimes in Portland from 2015 through 2018. The impact of white supremacist attacks in the right of way causes people to choose travel routes and modes that maximize personal safety despite higher costs.
- Black or African American adults were four times as likely to enter the criminal justice system compared to white adults, and once within it, continued to experience disparate outcomes. A greater likelihood of being stopped by law enforcement in public spaces and in traffic contributes to higher levels of interaction with the criminal justice system.

Our findings reinforce the need for ongoing attention to the injustices experienced in our transportation system and the positive impacts that can come when policy, system, and environmental changes are made using an equity lens.

Introduction

Transportation is a key social determinant of health, and remains a civil rights issue connecting to numerous social inequities such as addressing poverty, unemployment, access to equal opportunities - including but not limited to safety net resources, healthcare and education.

In recent years, community groups have had notable success working with local governments to integrate health equity metrics into transportation planning processes. Examples include the City of Gresham Active Transportation Plan, the Portland Safe Routes to School Strategy, City of Portland Walking While Black Report/PedPDX, and the Regional Transportation Plan.

Examples of these goals and policy statements include:

Gresham Active Transportation Plan: Increase mobility and accessibility for underserved communities by ensuring the bicycle and pedestrian network is improved through equitable investments in infrastructure and programs.

PedPDX Equitable + Inclusive: Make Portland walkable and accessible for all, no matter who you are or where you live. Prioritize investment in areas with the greatest historic underinvestment in pedestrian infrastructure and with historically under-served populations to reduce disparities in access to safe pedestrian facilities.

Metro Regional Transportation Plan, Goal 10: Eliminate disparities related to access, safety, affordability and health outcomes experienced by people of color and other historically marginalized communities. Eliminate barriers that people of color, low income people, youth, older adults, people with disabilities and other historically marginalized communities face to meeting their travel needs.

In some cases, it's difficult to gauge progress toward the equity goals in these plans, particularly when data are not disaggregated by race and ethnicity. The purpose of this report is to establish baseline data on transportation safety for the Black/African American and African Immigrant/Refugee population that transportation planners and advocates can use to gauge progress toward racial equity goals.

Traffic crashes are a contributor to unintentional injury, the third leading cause of death in Multnomah County during the ten-year period of 2007-2016. The mortality rate from unintentional injury for Black/African American residents is 1.17 times the rate for white residents in Multnomah County, as displayed in Table 1. This difference is statistically significant ($p < 0.05$).

Table 1. Cause-specific standardized mortality ratios comparing Black and white population in Multnomah County, Ten leading causes of death, 2007-2016

Cause of death	Standardized mortality ratio
Malignant neoplasms (cancer)	1.3
Diseases of the heart	1.2
Unintentional injury	1.1
Cerebrovascular disease (stroke)	1.7
Chronic Lower Respiratory Disease	0.98
Alzheimer's	0.8
Diabetes	2.9
Intentional self-harm	0.5
Influenza and pneumonia	1.1
Essential hypertension	2.8

This high-level finding prompts further inquiry into the specific drivers of the disparity. On average, 5 Black residents in Multnomah County died in traffic crashes each year for the past decade. The death rate from traffic crashes among Black residents was 1.9 times higher than that for the white population during the period of 2013-2017. The context for this disparity is described in this report.

Multnomah County Health Department's Racial and Ethnic Approaches to Community Health (REACH) program focuses on reducing health inequities in the Black community in Multnomah County. The program defines "Black" as people who identify as African American, African immigrant, and African Refugee. Multnomah County has a history of systemic racism in housing, land use, transportation, and economic opportunity that reinforced racial segregation and inequities for Blacks and other communities of color. Today these concerns are still relevant in transportation systems and public spaces.

The REACH program developed this report to build awareness of safety concerns and the Black communities' experience. In addition, this report describes practical solutions to address the communities' concerns through policy changes that correct historic injustices, system changes that reinforce accountability, and environmental changes that alter the physical spaces (i.e., built environment) through which people travel. Since many local entities have new policies to model equity in a systematic manner, this report can be a resource for private and public agencies to reduce the health burden of travel-related decisions.

This report helps to overcome a barrier to measuring progress by establishing a baseline measurement of transportation safety in Multnomah County.

The intended audience for this document includes the REACH team and partner organizations, Public Health and Health Department leadership, transportation decision makers, non-profit advocacy and service organizations, urban planners and transportation planners from local, county, regional, state, and federal transportation agencies.

In investigating the contributing factors, we examine a wide array of transportation safety outcomes that capture experiences of road users.

While similar reports encompass only serious injury and death, this report presents local data on six intersecting concepts:

- Fatal injuries
- Non-fatal injuries
- Biased behavior among road users
- Biased Policing
- Harassment
- Violent crime

These six aspects of transportation safety can have direct adverse impacts on health and wellbeing, but there are also indirect impacts. Any barrier to safe transportation influences risk factors for chronic disease and can inhibit healthy lifestyles. Unsafe transportation options make it less likely people can engage in physical activity or access health-supportive resources like jobs, education, mental health care and community institutions. There are also important intersections with specific types of violence. For example, if a survivor of domestic violence does not have access to safe, affordable, reliable transportation, they may have a difficult time seeking safety outside the home or relationship, especially if it involves transporting children.

This report focuses on direct impacts, with the understanding that they are related to many indirect outcomes. Both the direct and indirect impacts are emblematic of a set of disparities arising from racism and racist systems. The following section details this context, followed by a brief overview of methods. Each of the six elements of transportation safety is presented with a description of the data sources and methods used. Finally, we discuss how policy, system, and environmental changes can contribute to continued progress on reducing health disparities.

Safety In The Context Of Racism

Multnomah County has a history of discriminatory policies and practices that produce inequitable conditions and uneven exposure to unsafe roadways. This history is documented in reports from the City of Portland, and the Coalition of Communities of Color [1, 2]. In summary: from 1844 through 1926, African Americans were excluded from Oregon by law. While Oregon is the only state to have had such a law, many other racist policies and practices are similar to those found elsewhere in the United States. As African Americans moved to Oregon to staff factories during World War II, the combination of sundown laws, restrictive zoning, racist real estate covenants, and unfair lending practices forced Black and African American residents into certain neighborhoods.

From the mid-20th century, these neighborhoods were targeted for urban renewal, freeway construction, and upzoning that continues to result in displacement. As a consequence, the Black population has decreased in inner neighborhoods and increased in neighborhoods farther from the central city. Many of these areas were developed before being incorporated into Portland and have substandard urban infrastructure. The result of exclusion laws of the past century to the current displacement issues is that Black/African American residents of Multnomah County are pushed into neighborhoods with more dangerous streets and fewer safety features like sidewalks, crosswalks and streetlights, and less consistent public transportation access. These conditions create a less safe built environment that contributes to lack of neighborhood cohesion and connection, exacerbated by poor transportation options, which in turn contributes to violence perpetration and victimization.

Racism and white supremacy overshadow the Black communities' experiences moving through public spaces in Multnomah County beyond crash injuries. A history of violence and harassment also influences these experiences. In one example from 2016, East County (Gresham), a white supremacist intentionally struck and killed a black teenager, Larnell Bruce Jr., with a Jeep. This resulted in the first hate crime murder conviction since the 1988 murder of Mulugeta Seraw in SE Portland. In that case, Seraw was traveling home from work when he was murdered by a white supremacist gang member due to skin color.

A more recent example from 2017 occurred on public transit. An older white man was verbally abusing two Black teenage girls when three bystanders, Micah David-Cole Fletcher, Ricky Best, and Talisen Myrddin Namkai Meche, intervened. The assailant stabbed all three, killing Best and Namkai-Meche.

Each of these deaths resulted from white supremacist attacks in public spaces while the victims were traveling to their destination. The extent to which these incidents influence travel choices for communities of color may never be quantified, but individual accounts of lived experiences suggest that they have lasting effects. The Portland Bureau of Transportation's Walking While Black report documents these influences as voiced by focus group participants. Such incidents on public transit or in public spaces highlight the cause of trauma and stress communities of color feel when they travel to and from everyday destinations.

Methods

This section contains an overview of methods for safety outcomes that were analyzed by Multnomah County Health Department for fatal and non-fatal injuries as well as methods for safety outcomes from secondary sources, including data sources, timeframes, and geographic extents for each topic area. Years of data do not align perfectly across indicators; differences arise chiefly from data availability. In the case of fatal injuries, we combine years to achieve more stable rate estimates.

The race categories used in this report are aligned with the REACH focus population. In most cases the category used is "Black/African American alone or in combination with any other race", a definition from the US Census Bureau that captures self-identified race(s) [3]. We chose to use this category because it is most likely to capture perceived race as well as self-identified race, which is relevant when using data sources such as emergency department records, where race may or may not be self-identified. This contrasts with another commonly used race category, "Black/African American alone", which differs in that it does not include people who identify as multiracial. As of 2017, there were about 60,000 people in Multnomah County, or 7.4 percent of the population, identifying as Black or African American alone or in combination with any other race. When possible Hispanic or Latino ethnicity is also included. Terms for race and ethnicity vary somewhat by data source.

Methods For Fatal Injuries

The data for fatal injuries include counts, mortality rates, and years of potential life lost per 100,000 population for five year time periods by race and ethnicity. Rates are age-adjusted because we expect race groups to have different age distributions and traffic deaths are age-related. Young people are more likely to be in a crash and older people are more likely to die from injuries [4,5]. Race categories are single race alone or in combination, and calculated separately for Hispanic ethnicity. Mortality rates are presented in two non-overlapping five-year periods to evaluate change over time. Using five-year periods smooths year-to-year variation in death rates from traffic crashes, and the larger count increases the reliability of rates when cross-tabulating. Also included is a 10-year time series of annual traffic crash death counts for the period of 2008-2017 among the REACH focus population. This is followed by a 20-year time series of annual traffic crash deaths for 1998-2017 for the total population.

All death data are summarized from Oregon Death Certificates compiled by the Oregon Health Authority Public Health Division and made available through the Oregon Public Health Assessment Tool (OPHAT). In accordance with guidance from OPHAT, non-overlapping 95 percent confidence intervals are interpreted as significant. Also, in keeping with OPHAT guidance, rates based on 5 or fewer events are suppressed. Traffic deaths are identified by injury intent and mechanism selecting the following categories of unintentional injury: All injury > All transport.

Methods For Non-Fatal Injuries

This report draws on two sources of non-fatal injury data: law enforcement crash reports and emergency department visit records. Law enforcement crash reports are compiled by the Oregon Department of Transportation and include an injury categorization depending on severity. Emergency department and urgent care visits are available in a statewide syndromic surveillance system known as the Oregon Electronic Surveillance System for the Early Notification of Community-Based Epidemics (Oregon ESSENCE). Using ESSENCE, staff identified emergency department and urgent care clinic visits related to traffic crash injuries. The query focuses on the chief complaint and discharge diagnosis fields; a complete specification can be found in the appendix.

The query and data dissemination plan were reviewed and approved by the Oregon Health Authority Public Health Division June 2018. Querying visits for the two-year timeframe of 2017-2018 resulted in identification of 18,031 traffic crash injury visits. These visits were cross-tabulated by the 'race' field to produce counts and percentages of total crash injury visits by race. Race categories are defined by health care providers. Race is not consistently reported, being missing or unknown in 21 percent of records. It may in some cases be selected by health care providers rather than reflecting the self-identification of the patient.

In addition to inconsistent reporting on race, using ESSENCE data has several limitations. It includes only the subset of injured people who seek care at an emergency department or urgent care clinic, not all injuries. ESSENCE data are visit-specific, not patient specific, so multiple visits from the same person for the same injuries will be counted multiple times. The data do not include any categorization of injury severity such as serious, critical, incapacitating, etc. that are commonly included in law enforcement reports. This characteristic limits comparability to other sources of crash injury data.

Data on the location and characteristics of fatal crashes is compiled from law enforcement records and maintained in a spatial database by Metro. In the development of the Regional Transportation Safety Strategy (2018), Metro analyzed locations with high counts of serious and fatal injuries, identifying high injury corridors throughout the region. Using Metro's analysis, we calculated the road-miles of high crash corridors and number of intersections in REACH census tracts in GIS using a 100-foot buffer around tracts in order to capture roads that form the border of census tracts. One limitation of this approach is that the Metro analysis identifies corridors that have high crashes relative to the entire region, not just Multnomah County. This limitation does not alter what the calculations reflect: spatial differences in the presence of the most dangerous roadways.

Methods for biased behavior among road users

Biased behavior among road users is a phrase intended to describe how the experience of racism is manifested in varying degrees of adherence to traffic laws, such as yielding at crosswalks or maintaining a safe passing distance. These actions are aggressions that may result in traumatic experiences that may result in death or injury in the roadway. To examine the role of biased behavior among road users in transportation safety, we conducted a focused literature review and summarized key articles. The review is based on the following key sources:

- Kahn, K. Racial bias in drivers' yielding behavior at crosswalks: Understanding the effect. National Institute for Transportation and Communities, 2017. [Available here.](#)
- Portland Bureau of Transportation (2019). PedPDX PBOT Walking While Black Focus Group Report. [Available here.](#)

Methods for biased policing

This section briefly describes disparities in interaction with law enforcement and the criminal justice system. Existing analyses of local data are summarized in this section, including the MacArthur-funded Safety and Justice Challenge reports led by the Multnomah County Local Public Safety Coordinating Council. Relative rates and qualitative data available from this effort are summarized as evidence of systemic bias.

Methods for violent crime

This section focuses on spatial variation in violent crime, highlighting areas where the density of violent crime is highest. Incidents of violent crime indicate real and perceived threats to personal safety, which in turn influence transportation choices and present barriers to using active modes. Incident counts are presented for person crimes (assault, kidnapping, etc.), as reported through the National Incident-Based Reporting System published by Portland Police Bureau and the Gresham Police Department. The data are reported slightly differently in each jurisdiction and are therefore mapped separately. Data are not publicly or readily available outside of these two jurisdictions. Portland reports neighborhood-level counts and Gresham reports point data. Each is summarized by neighborhood, normalized by area (square miles). This produces a calculation of incidents per square mile. This may not be an ideal method of presenting a rate, but it is sufficient to illustrate the concept of spatial variation. Unreported crimes are not included in these statistics, which means that these data may understate the true nature of the distribution of violent crime.

Methods for harassment

As used here, the term harassment refers to the emotional harm and fear of physical harm caused by a verbally or physically menacing road user. Local data on hate incidents is characterized below, including a summary of the Walking While Black appendix from the City of Portland's PedPDX Plan. Available data from the Portland Police Bureau and Portland United Against Hate (PUAH) on confirmed and suspected bias crimes is reproduced below. The summary includes incident counts by bias category and type such as "Anti-Black or African American" and "Anti-Islam (Muslim)". Data are included for all reporting periods available. Portland Police Bureau publishes data from 2015 onward, and PUAH data are available for a pilot period during 2018.

There are two important sources of data on bias crimes: Portland Police Bureau (PPB) and Portland United Against Hate (PUAH). Neither of these is county-wide, but they can provide a sense of the types of incidents that affect personal security during day-to-day travel. PPB data reflect crimes that were reported and investigated. PUAH is a platform for reporting incidents that was recently launched to create a database that can aid decision making based on voluntarily reported acts of hate in the City of Portland. PUAH data may or may not overlap with PPB data; some incidents may be reported in both data sets, while others appear in only one.

Fatal Traffic Crash Injuries

Key finding: The death rate from traffic crash injuries among Black Multnomah County residents was almost twice the rate among white residents during the period of 2013-2017.

Death rates by race and ethnicity are detailed in Table 2 for two five-year periods. In Multnomah County, the death rate for Black population was statistically similar to the rate for the total population during the period of 2008-2012. The rates for both groups increased in the period 2013-2017, but the increase was greater for the Black population. As a result, Multnomah County saw a statistically significant difference in death rates between race groups in recent years. The rate for the Black population is higher than that for the total population, the Asian population, and the white population.



Table 2. Deaths from traffic crash injuries by race and ethnicity in Multnomah County 2008-2012 and 2013-2017, age-adjusted rates per 100,000 population

	2008-2012		2013-2017	
	Rate (95% CI)	Count	Rate (95% CI)	Count
Total population	5.9 (5.1-6.7)	222	7.9 (7.0-8.8)	323
American Indian/Alaska Native alone or in combination	6.2 (2.3-13.4)	6	9.1 (4.6-16.3)	11
Asian alone or in combination	4.4 (2.1-8.1)	11	5.8 (3.5-9.0)	20
Black alone or in combination	7.9 (4.7-12.4)	19	13.9 (9.7-19.2)	38
Pacific Islander alone or in combination	<i>Unreliable</i>	1	<i>Unreliable</i>	2
White alone or in combination	5.8 (4.9-6.7)	184	7.4 (6.5-8.3)	254
Hispanic or Latino	3.8 (1.9-6.9)	14	8.2 (4.7-13.3)	28

Source: Oregon Death Certificates, All transport injury.

Table 3 summarizes deaths using a different measure: years of potential life lost before age 75. Years of potential life lost is an estimate of how many years a person would have lived had they not died prematurely, in this case before age 75. This number can be summed across the population for a given cause of death to get a sense of the burden of premature death. For example, a person dying at age 25 contributes 50 years of life lost to the population's burden of premature death. This measure can be especially helpful in understanding the causes of death that are common among young people and causes that are preventable, such as injury. Calculating it as a rate allows comparisons across groups.

In Multnomah County, the rates of years of potential life lost per 100,000 population have increased in recent years, as did death rates. Among the Black population, rates are higher than all other race groups except for American Indians and Alaska Natives.

Table 3. Years of potential life lost before age 75 from traffic crash injuries by race and ethnicity in Multnomah County 2008-2012 and 2013-2017, rates per 100,000 population

	2008-2012		2013-2017	
	Rate (95% CI)	Count	Rate (95% CI)	Count
Total population	182.4 (178.0-186.9)	6,388	265.0 (259.8-270.2)	9,955
American Indian/Alaska Native alone or in combination	242.2 (205.0-279.4)	163	557.1 (503.2-611.0)	410
Asian alone or in combination	77.6 (67.3-88.1)	214	147.8 (134.9-160.7)	502
Black alone or in combination	260.6 (240.0-281.2)	615	504.1 (476.9-531.4)	1,316
Pacific Islander alone or in combination	182.5 (138.2-236.5)	57	263.3 (214.0-320.6)	99
White alone or in combination	189.1 (183.8-194.3)	4,967	245.1 (239.1-250.9)	6,782
Hispanic or Latino	149.5 (137.4-161.6)	588	252.2 (237.4-267.1)	1,111

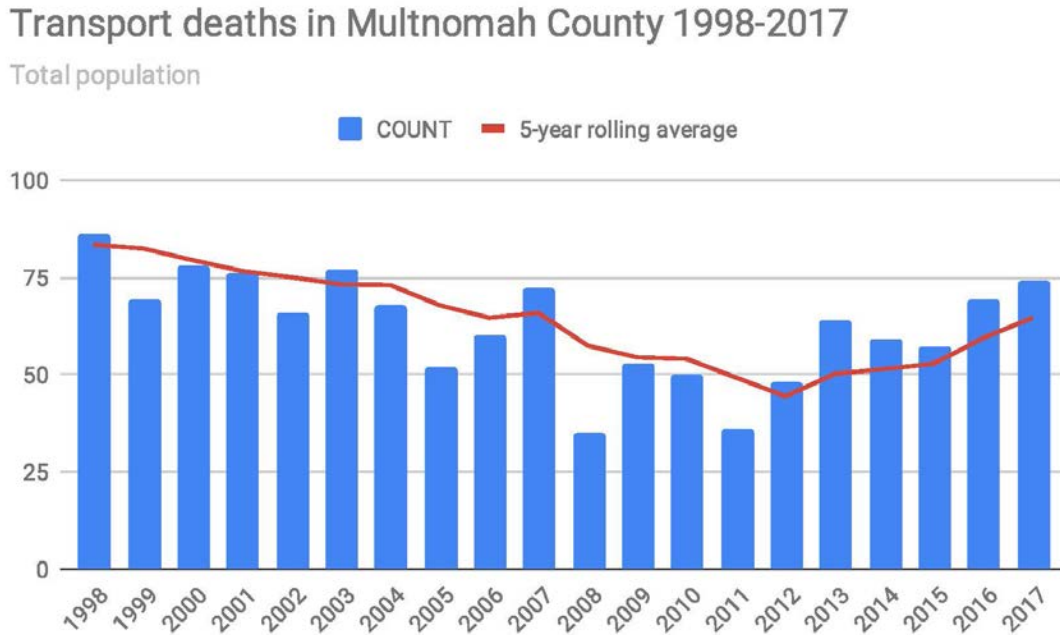
Source: Oregon Death Certificates, All transport injury

Death counts from transportation causes vary greatly across time in Multnomah County. Among the population as a whole during the period of 1998-2017, the highest annual count (86 deaths in 1998) was more than double the lowest (35 deaths in 2008). As shown in figure 1, deaths were trending downward until approximately 2011, and have been consistently higher in subsequent years. Taking population growth into account and calculating a rate per 100,000 residents, the death rate was significantly higher in the five year period of 2013-2017 than it was in 2008-2012.



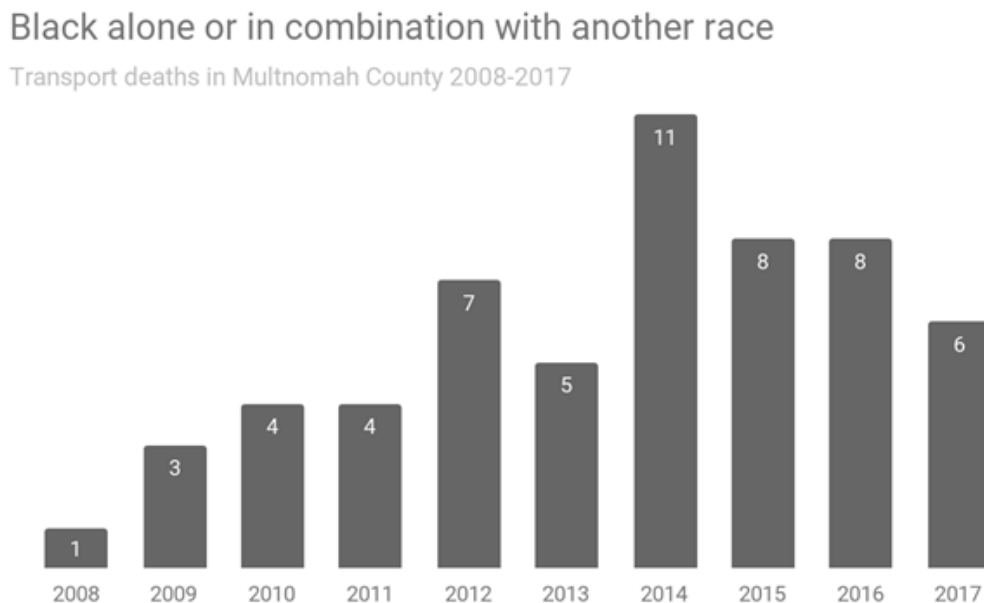
Trends in deaths among specific race groups are less clear because the smaller numbers make rate estimates less reliable. We cannot state with high confidence that traffic injury death rates have increased among the Black population, as the confidence intervals for estimates from the two analysis periods are overlapping. Among Multnomah County residents identified as Black (alone or in combination with any other race), there has been wide variation in the number of traffic deaths that shows a similar pattern to the total population. Following a low in 2008, counts have risen in recent years. On average, there were 5 deaths per year in the ten-year period 2008-2017.

Figure 1. Transport deaths in Multnomah County 1998-2017



Source: Oregon Death Certificates 1998-2017. All transport deaths.

Figure 2. Transport deaths, Black alone or in combination with another race, Multnomah County 2008-2017



Source: Oregon Death Certificates, 2008-2017. All transport deaths.

Non-Fatal Traffic Crash Injuries

Key findings: Black Multnomah County residents appear to be over-represented among patients visiting emergency departments for traffic crash injuries. 77 percent of high crash corridors pass along or through a REACH focus census tract.

Emergency Department Visits

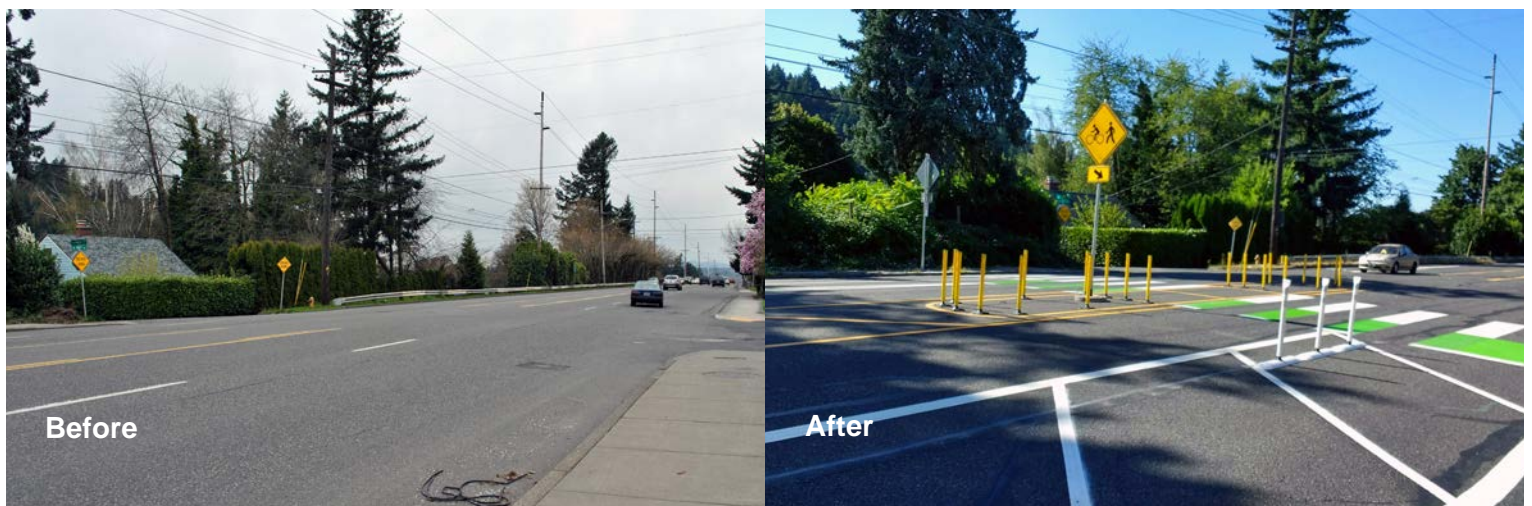
Emergency department and urgent care visits in Multnomah County in 2017 and 2018 were queried to identify 18,031 traffic crash injury visits in the two-year period. On average, there were 173 visits for traffic crash injuries per week during this time.

Black or African American patients appear to represent a disproportionate number of emergency department and urgent care visits for transportation injuries. Race was not reported in 21 percent of the records we analyzed. Of the 14,210 visits for which race was reported, 21 percent identified the patient as Black or African American.

Table 4. Traffic crash injury visits in emergency departments and urgent care clinics in Multnomah County by race, 2017-2018

Race Category	Percent of total visits	*Percent of visits with documented race	Percent of county population
American Indian or Alaska Native	1%	1%	3%
Asian	4%	5%	10%
Black or African American	17%	21%	8%
Native Hawaiian or Other Pacific Islander	1%	1%	1%
Other race	10%	13%	Unavailable
White	47%	59%	84%
Unknown	21%	--	--

Source: Oregon ESSENCE, 2017-2018. *excludes unknown/missing race data

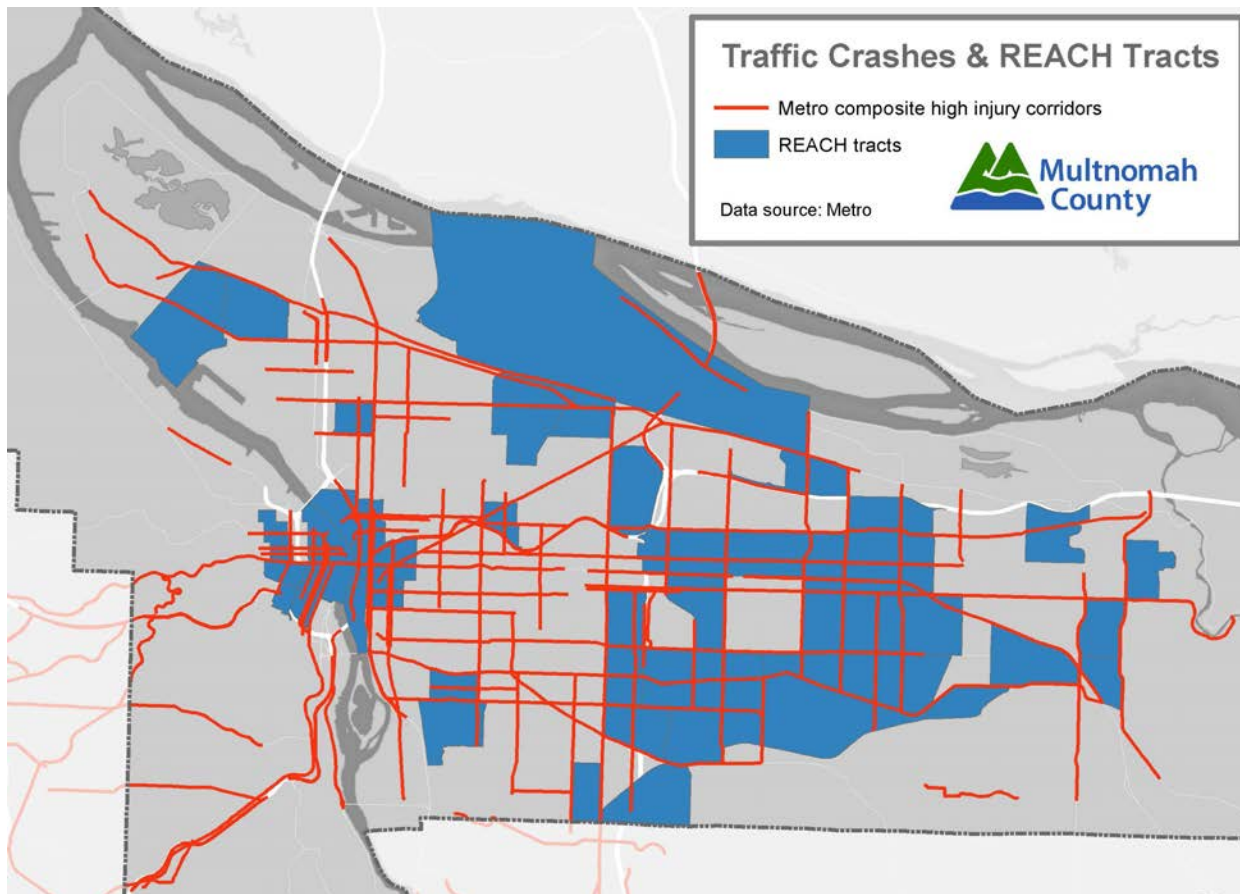


Law Enforcement Reports

Unlike medical records, law enforcement reports usually include a cross street or milepost, and are therefore the best option for analyzing spatial distribution of crashes. In preparation for their newly adopted safety strategy, Metro analyzed the law enforcement crash reports and identified streets with a high concentration of serious and fatal injury crashes. They found that 60 percent of fatal and severe injury crashes occur on just 6 percent of the region's road network. Nearly all of these high injury corridors are fast moving, multi-lane arterial streets.

The map below shows these routes overlaid with census tracts with a high proportion of Black or African American residents. All of the REACH focus tracts are touched by high crash corridors, with those in east Multnomah County and Portland central city especially exposed. Of the total length of high injury corridors in Multnomah County, 77 percent passes through or along a REACH focus census tract. High injury corridors offer a way to think of transportation as an exposure. In many neighborhoods it is difficult or impossible to travel between common destinations without traversing these risky streets; many people are unable to avoid exposure to dangerous streets.

Map 1. Metro high injury corridors and REACH focus census tracts



Biased Behavior Of Road Users

Black males waited 32 percent longer for cars to yield at a crosswalk in Portland.
Black residents experience microaggressions while traveling in Multnomah County.

Research from Portland State University found that compared to white pedestrians, drivers were less likely to stop for black pedestrians, and that when they did they were more likely to infringe on the safe crossing zone [6]. The study confirmed findings from a pilot study, also conducted in Portland, which found that Black males were passed by twice as many cars as white males, and waited 32 percent longer for drivers to yield.

The quantitative findings from the emerging research literature are corroborated by perspectives from Multnomah County residents. The Portland Bureau of Transportation conducted a series of surveys and focus groups with Black and African American residents to inform the City's pedestrian plan update, PedPDX. These outreach efforts produced the report *Walking While Black* [7]. The report points out differences in survey results between Black respondents and other respondents, noting a higher priority for street lighting among Black respondents. The focus groups produced findings on transportation safety. Participants described a heightened awareness of threats to personal safety, experiences with prejudice and enforcement, and microaggressions during travel. The cumulative effects of these experiences result in choosing travel routes and modes that maximize personal safety despite higher costs. Quotations from the report are reproduced below to further illustrate these findings:

"White people not sharing the sidewalk, expecting Black people to step out of their way instead of moving right to make space mutually, respectfully."

"Crosswalk White girl magic - where cars stop for White women, not for Black people."

"When you're Black [anywhere in Portland], you have to make sure that you are extra careful when crossing the street or using the crosswalk."

"I want to lose weight by walking but can't walk after 5 pm because I am afraid to exercise when it gets dark. I feel vulnerable, so I stay home or drive and it is impacting my health."

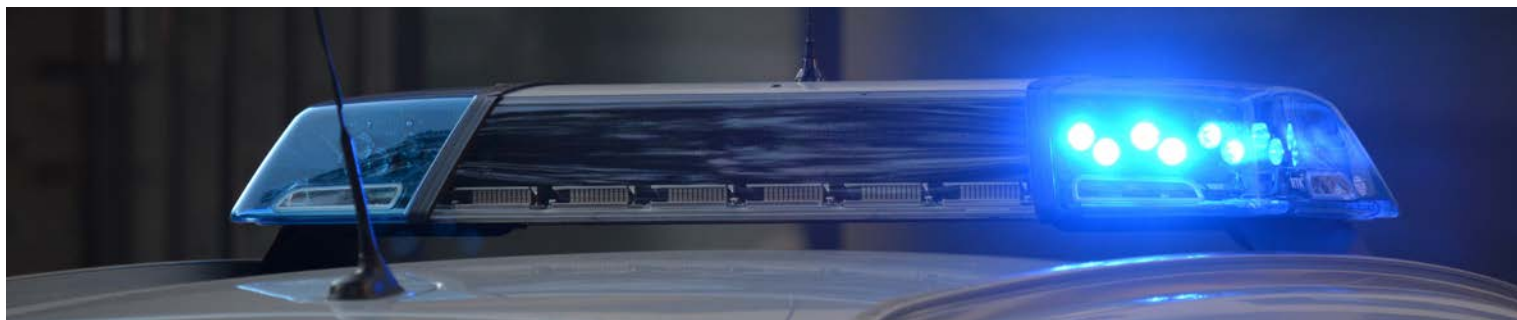
"Being the target of racial slurs when crossing the street. I press the button to get the green light, then someone yells racial slurs at me because they have a vehicle and don't like that they were made to wait for me."

Biased Policing

Key finding: In Multnomah County, Black or African American adults were four times as likely to enter the criminal justice system compared to white adults.

At its 2018 annual meeting, the American Public Health Association recognized the widespread impacts of police violence, issuing a policy statement calling on local jurisdictions to address it as a public health issue. Embedded in one's choice of travel mode and route is mitigation of the potential that an interaction with law enforcement could result in death, injury, trauma, or stress. Evidence from a national study demonstrates that police-related deaths in 2015 and 2016 were highest in neighborhoods with concentrated low-income residents and residents of color [8]. Evidence of racial bias emerges from common interactions such as traffic stops. In a national study of 100 million traffic stops from 2011 to 2017, researchers found that Black drivers were about 20 percent more likely to be stopped by police than white drivers [9].

Multnomah County is a recipient of funding from the MacArthur Foundation supporting an effort to examine racial and ethnic inequities in the criminal justice system. In a 2016 report, the Local Public Safety Coordinating Council found that Black or African American adults were four times as likely to enter the criminal justice system compared to white adults, and once within it, continued to experience disparate outcomes [10]. Additionally, the Portland Bureau of Transportation reports that Black pedestrians are stopped at higher rates than other races in the Portland area [7].





Harassment

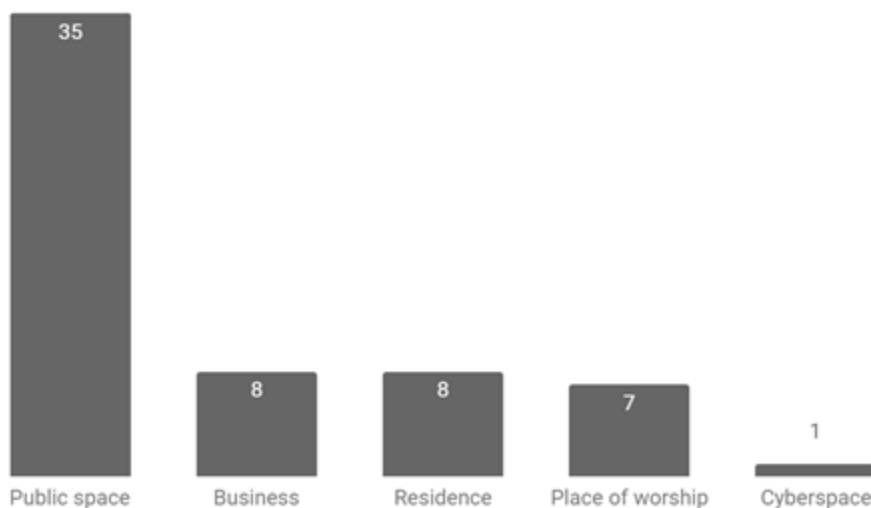
Key finding: Black or African American adults were the most common targets of racial bias crimes in Portland, 60 percent of which took place in a public space.

PPB bias crime data are summarized in an online dashboard, excerpts of which are presented below for the period of 2015 through 2018. During that time, Black or African American people were the most common targets of racial bias crimes, accounting for 21 percent of the total. In these incidents, offenders were mostly white (70%), mostly male (70%), and often a stranger (38%). As illustrated in Figure 3, nearly 60 percent of these crimes took place in a public space, a category that includes parts of the transportation system such as sidewalks and transit stops.

Figure 3. Confirmed bias crimes in the City of Portland, 2015-2018

Confirmed bias crimes in the City of Portland 2015-2018

Incident count by location



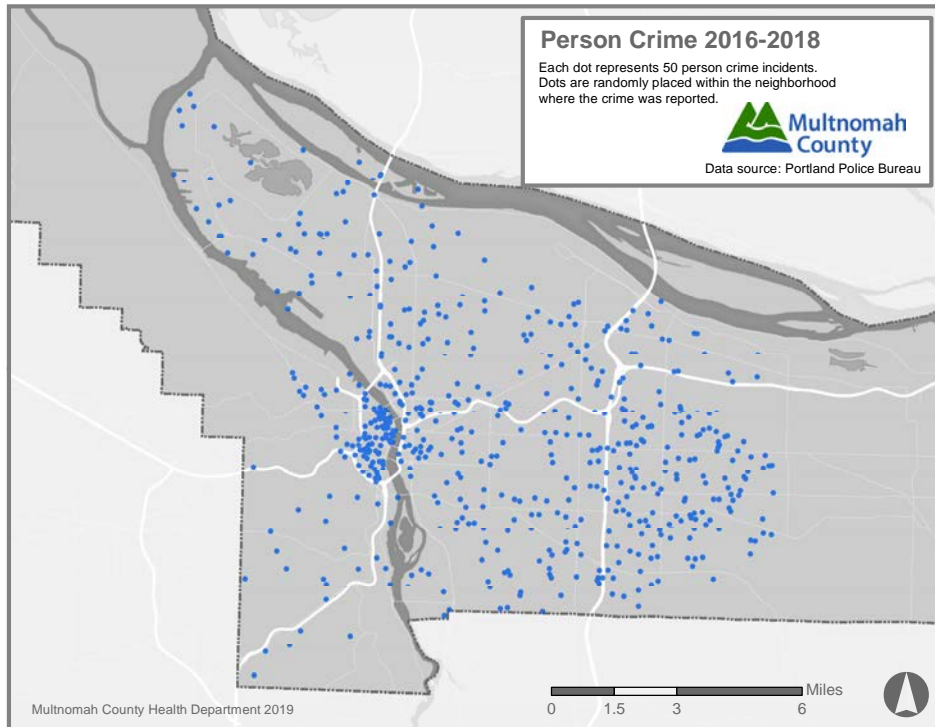
Data from Portland United Against Hate add nuance to our understanding of harassment and bias crimes. During the pilot period of September through December 2018, 138 hate incidents were reported in the City of Portland. Of these, about 54 percent were perpetrated against Latinx community members, and 13 percent were perpetrated against Black or African community members. Importantly, this tool is new and only captured a few months of data during its pilot phase. Continued implementation of the ReportHatePDX platform could provide further insight into the extent of hate incidents that create barriers to safe travel.

Violent Crime

Key Finding: *Danger from violent crime influences travel choices in the Black community.*

Real and perceived danger from violent crime, including hate crime, influences travel choices. In addition to the quantitative data presented below, it is clear that specific incidents have an outsized effect on perceptions of safety in transit. For example, the 2017 MAX stabbings were identified in Walking While Black as having a lasting impact. Data from the Portland Police Bureau and Gresham Police Department are presented in Maps 2 and 3.

Map 2. Person crime in the City of Portland, 2016-2018



Map 3: Person Crime in City of Gresham, 2016-2018

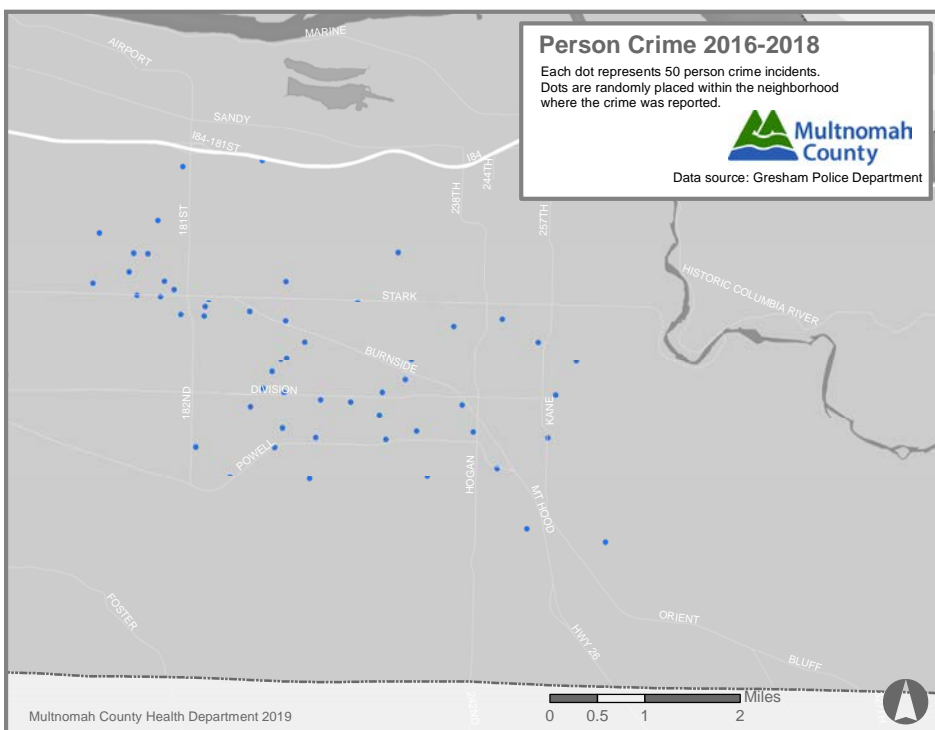


Photo by @davidvondiemar
source: unsplash.com

Data for the two cities are reported in slightly different formats and therefore not combined in a single map. When interpreting these maps, it's important to note that these are incident counts aggregated to neighborhoods and displayed at a random location within the neighborhood where they were reported. They do not account for differences in population or employment density (e.g. rate per 100,000 residents), but they illustrate differences in exposure to violent crime between neighborhoods.

In the City of Portland, there appears to be higher density of violent crime in the central city area. These maps emphasize that the experience of danger from violent crime affects neighborhoods differently across the county. This may result in an uneven influence of crime on transportation safety and related travel choices.

Discussion

Individuals' decisions around transportation can help to prevent chronic disease by encouraging physical activity, reducing air pollution, and improving safety. This report focuses on the ways that unsafe conditions create barriers to healthy transportation for a specific group: Multnomah County's Black community. Data disaggregated by race show that there are significant inequities in traffic crash injury fatalities, and disproportionate impacts to the Black community by several other measures of transportation safety. We cannot expect to make progress on reducing inequities in injury and chronic disease without addressing the barriers to safe transportation faced by Black residents of Multnomah County.

Black residents of Multnomah County experience racism through a greater exposure to transportation safety risks and fewer protections from them. While the disparity in fatal injuries documented in this report reflects a per-capita rate, it does not account for exposure to traffic, the basic cause of injury. It may be the case that Black residents spend more time in close proximity to fast moving cars than other groups. Our analysis showed that 77 percent of high injury corridors pass through census tracts with a high concentration of Black residents. According to the National Equity Atlas, the average travel time to work for Black residents of Portland in 2015 was 29.7 minutes, compared to 24.5 minutes for white residents [11]. The same report found that nearly one third of Black households do not have a car available, about twice the proportion of all other race and ethnic groups. Recent census data show that 1 out of every 5 Black residents of Multnomah County commutes by public transportation, about twice the rate of non-Latino white residents [12].

Differences in exposure to traffic injury risk are best understood in the context of gentrification and displacement, trends that have affected many Black families in Multnomah County. Local reports cited in this document, such as Historical Context of Racist Planning: A History of How Planning Segregated Portland, describe how institutional racism intentionally pushed out Black communities from North Portland to East Portland/East County. Many families now live in neighborhoods where the built environment lacks basic infrastructure for safe active transportation. This is quantified in Portland's PedPDX plan, which shows East Portland having inadequate sidewalks, cross walks and streetlights. It is also documented in Metro's map of streets that are barriers to bike and pedestrian travel. Similarly, public transportation routes may be sparse and not as frequent in some of these areas. These neighborhoods also contend with the stress and trauma caused by violent crime, recent white supremacist attacks and biased policing towards the Black community.

The impact of gentrification continues to impact health injustices among the Black community and contributes to unsafe travel conditions. In 2019, Portland saw 50 traffic deaths, the highest count in over two decades. These deaths occurred despite significant efforts toward Vision Zero. The disparities identified in this report should be viewed as a justification to increase investment in safety strategies that work, and should prompt a reappraisal of those that are not changing outcomes.

This report provides data that reinforce human stories illustrating how the Black population and other communities of color do not feel safe traveling throughout the county. It highlights data disaggregated by race in hopes that it can be a resource for local transportation agencies. We urge decision makers, in partnership with the Black community, to envision new approaches to transportation that will produce more equitable outcomes.



Conclusion and Recommendations

This report centers on the Black experience of transportation that includes walking, biking, public transportation, and driving in Multnomah County. The quantitative and qualitative data presented in this report is intended to help raise awareness of the existence of racism in the transportation system and how trauma influences the well-being and health of the Black population. The findings of the report demonstrate the need for programs, like REACH, to guide public agencies in leading with race and institutionalize racial equity. It also demonstrates the strength of a public health approach by emphasizing the power of prevention to improve the health of communities burdened by injury and chronic illness.

In partnership with community groups that have already led progress, jurisdictions in Multnomah County can correct these disparities and create safe transportation spaces for all by using a public health approach and focusing on policy, system, and environmental changes. Policy changes can correct historic injustices, system changes can reinforce accountability and promote a culture of racial equity, and environmental changes can alter the physical spaces that people travel through. Examples of positive steps recently taken by local governments include:

- Policy change: In 2018 the City of Gresham adopted an Active Transportation Plan that identifies policy goals and key projects that will make it safer to walk and bike.
- System change: The 2019 PedPDX plan changed the process for public input on pedestrian planning by conducting outreach in five languages and holding in-depth focus groups with Black community members.
- Environmental change: In 2016 Portland voters enacted a 10-cent gas tax that is supporting investments in neighborhoods with the greatest need for transportation safety infrastructure.

Transportation agencies are in a unique position to reduce health disparities in the African American, Black and African Immigrant & Refugee communities through the built environment. The communication, policy, system, and environmental strategies recommended below are action items that can accomplish this. The Multnomah County Health Department REACH program is both a model for improving racial equity and a potential partner in implementing the recommendations listed below.

Policy Strategies

Transportation decision making bodies should establish a policy and practice of authentic engagement with communities of color (See “Systems Strategies” below for recommendations on how to accomplish authentic engagement).

Transportation agencies should adopt a policy of establishing measurable equity goals and engaging in routine evaluation to assess progress. In alignment with Multnomah County’s Community Health Improvement Plan, transportation agencies should institutionalize evaluation in order to measure the impact of decisions that affect communities most burdened by inequities. Health Impact Assessments are one tool that can help accomplish this [13]. Working across jurisdictions and levels of government, transportation agencies should assess collective progress towards equity goals.

Systems Strategies

Transportation planners should regularly collaborate with public health agencies to analyze safety data disaggregated by race and evaluate progress on racial equity goals. Improve decision making structures to be more inclusive of community voice. To accomplish authentic community engagement, transportation planners should:

- Engage with culturally specific organizations and community organizations representing groups experiencing health disparities
- Compensate organizations and community members for their expertise
- Conduct planning and engagement on a timeframe and in locations that are accessible to community members
- Include community-based organizations and members in data analysis and collect feedback in a variety of formats.

Transportation agencies should sufficiently resource equity managers or equity offices in order to evaluate progress on equity goals.

Environmental Strategies

Transportation agencies should invest in scientifically supported infrastructure changes such as traffic calming [14], speed control, and mode separation [15] to reduce injuries. The World Health Organization recommends that urban streets should have speed limits of no more than 30 mph, estimating that a 5 percent reduction in average speed can reduce fatalities by 30 percent [16]. These investments should be prioritized in neighborhoods with a high proportion of Black residents.

TriMet should continue to prioritize service improvements in neighborhoods with a high proportion of Black residents. Transportation agencies should make investments that enhance feelings of safety and belonging. These include artwork, street name changes, and cultural events in the right-of-way [17]. As called for in the PedPDX report, *Walking While Black*, and supported by scientific evidence [18], transportation agencies should prioritize street lighting improvements.

Communication Strategies

Transportation and public health agencies should collaborate to undertake transportation messaging campaigns that center the Black experience, along with safety, equity and justice.

Recommended Tools

There are many tools and frameworks available to aid transportation agencies in making progress toward racial equity and incorporating public health. Recommended reading includes:

- [Multnomah County's Community Health Improvement Plan](#)
- [The THRIVE Toolkit](#)
- [The State of Transportation Health and Equity](#)
- [Healthy, Equitable Transportation Policy: Recommendations and Research](#)

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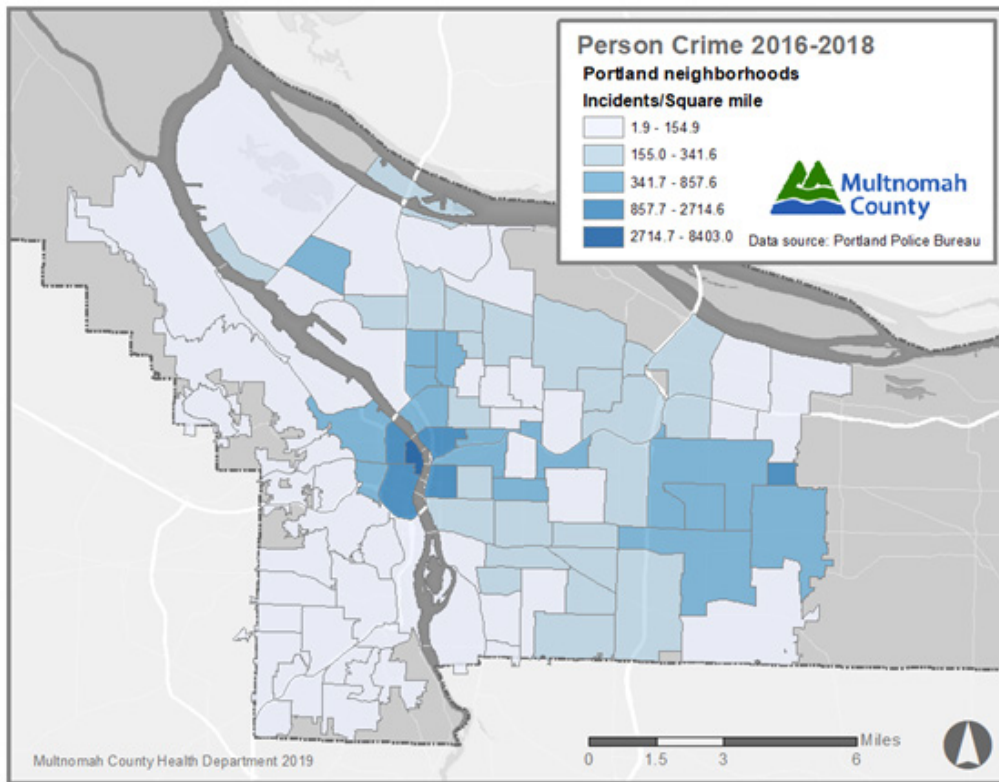
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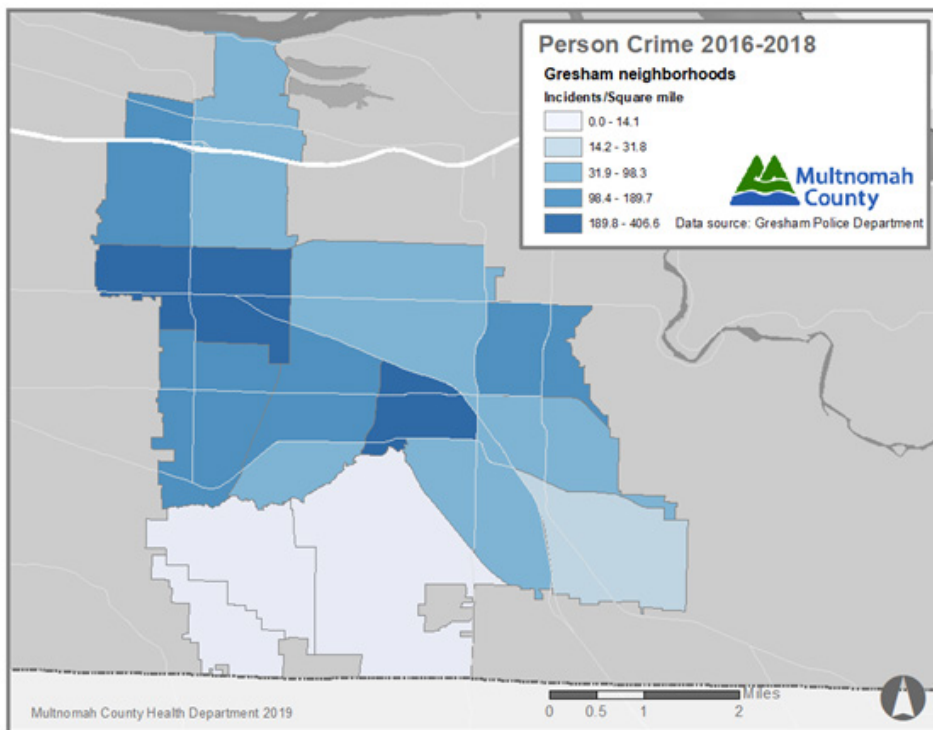
Appendix A. Specified ESSENCE query for traffic crash injuries

(,^;V0^,or,^ped^,or,^pedestrian^,or,^;V1^,or,^cycl^,or,^bike^,or,^pedalcycl^,or,^biking^,or,^bicycle^,or,^;V2^,or,^motor-cycle^,or,^;V7^,or,^;V81^,or,^;V82^,or,^ train ^,or,^streetcar^,or, ^ bus ^,or,^;V4^,or,^;V5^,or,^;V6^,or,^ MV^,or,^motor vehicle^,or,^ car ^,or,^collision^,),andnot,(,^;V001^,or,^;V002^,or,^;V003^,^cycline^,or,^ acyclovir^,or,^cyclic^,or, ^cycli-cal^,or,^menstrual cycle^,or,^menstral cycle^,or,^missed cycle^,or,^prolong cycle^,).

Appendix B. Crime maps
Portland Police Bureau Data Map



Gresham Police Bureau Data Map



Appendix C. Data Sources

Table C1. Data source overview			
Topic	Data source	Time frame/ data availability	Scope/Population
Fatal injuries	Death records	2008-2017 and 1998-2017	Multnomah County residents
Non-fatal injuries	Syndromic surveillance/emergen- cy department visits Law enforcement reports	2016-2018	Multnomah County residents
Biased be- havior	Local academic studies and focus groups	2016-2019	City of Portland
Harassment	Bias crime data from Portland Po- lice and Portland United Against Hate	2015-2019	City of Portland
Violent crime	Portland and Gresham police data	2016-2018	City of Portland and City of Gresham
Biased en- forcement	Existing county reports	2016	Multnomah County

[1] Note that this is a different figure than the number and percent of residents identifying as Black or African *alone and not in combination* with any other race. In 2017, there were about 44,000 people, or 5.5 percent of the population, identifying as Black or African American alone.



Rosa Parks Bus at The Henry Ford Museum - Source: UAW.org

