

PORTLAND POLICE BUREAU
STRATEGIC SERVICES DIVISION

STOPS DATA COLLECTION

2020 ANNUAL REPORT

AUGUST 3, 2021



TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
ITEMS OF NOTE.....	4
INTRODUCTION	5
BACKGROUND	5
POLICE BUREAU DISPARITY BENCHMARKS	6
<i>Traffic Division Benchmark</i>	<i>6</i>
<i>Non-Traffic Divisions Benchmark</i>	<i>7</i>
BENCHMARKING CONCLUSION	8
BUREAU-WIDE STOPS OF DRIVERS.....	9
STOP LOCATIONS	10
STOPPED DRIVERS DEMOGRAPHICS	11
<i>Traffic Division</i>	<i>12</i>
<i>Non-Traffic Divisions</i>	<i>13</i>
DRIVER STOP REASONS	15
SEARCH RATES.....	17
CONTRABAND HIT RATES.....	21
STOP OUTCOMES	22
BUREAU-WIDE STOPS OF PEDESTRIANS.....	25
STOP LOCATIONS	25
STOPPED PEDESTRIAN DEMOGRAPHICS	26
PEDESTRIAN STOP REASONS	27
SEARCH RATES.....	28
CONTRABAND HIT RATES.....	29
STOP OUTCOMES	29
APPENDIX A: STOPS DATA COLLECTION MASK.....	31
APPENDIX B: STOPS APPLICATION	32
APPENDIX C: DATA AND METHODOLOGY	35
DATA COLLECTION HISTORY	35
DATA SOURCE	36
DATA CONSIDERATIONS.....	37
ANALYSIS METHODOLOGY	37
RESULTS LIMITATIONS	38
APPENDIX D: BENCHMARKING DISCUSSION	39
<i>Census Limitation #1: Age and Accuracy of Data.....</i>	<i>39</i>
<i>Census Limitation #2: Only Includes resident Population</i>	<i>41</i>
<i>Census Limitation #3: Does Not Account for Differential Exposure</i>	<i>43</i>
APPENDIX E: TYPES OF SEARCHES	48
APPENDIX F: PERCEIVED GENDER ANALYSIS	49
STOP REASONS	50
SEARCH RATES BY GENDER.....	51
CONTRABAND HIT RATES.....	52

STOP OUTCOMES	52
APPENDIX G: PERCEIVED AGE ANALYSIS	54
STOP REASONS	56
SEARCH RATES BY AGE GROUP	57
CONTRABAND HIT RATES.....	58
STOP OUTCOMES	58
APPENDIX H: PERCEIVED MENTAL HEALTH STATUS ANALYSIS	59
STOP REASONS	60
SEARCH RATES BY PERCEIVED MENTAL HEALTH STATUS	61
CONTRABAND HIT RATES.....	61
STOP OUTCOMES	62

ITEMS OF NOTE

The following report provides in-depth statistical analysis of the decision points within the traffic & pedestrian stops conducted by the Portland Police Bureau during 2020. This section highlights changes from prior reports and actions the Police Bureau is undertaking to address areas of concern noted within the analysis.

- **Stop rates decreased in 2020:** Portland Police Bureau officers performed 24 percent fewer driver stops and 79 fewer pedestrian stops than in the prior year. The overall decrease in stops can be explained due to changes in traffic & pedestrian patterns during the pandemic along with reduced availability of officers as resources were shifted to responded to near nightly demonstrations impacted the stops rate. To account for the impact of these major changes, the report includes analysis on three distinct time periods: pre-pandemic (January 1 through March 15), the stay-at-home period (March 16 through May 27), and the enhanced protest response period (May 28 through December 31).
- **Non-moving violations:** The majority of driver stops (78.3%) were for Moving Violations. Traffic Officers stopped 69.4% of drivers for Major Moving Violations with speeding violations as the primary reason. Non-Traffic Officers were more likely to use Non-Moving Violations than Traffic officers, with expired license plates violations as the top stop reason. The use of Non-Moving Violations by Non-Traffic Officers has increased over the past five years. Black / African American drivers were more likely to be stopped for Non-Moving Violations than other drivers by both Traffic and Non-Traffic Officers.
Action Item: The Portland Police Bureau is taking steps to reduce the use of Non-Moving Violations as means to address the disparate impact on Black / African American drivers. As of June 2021, officers have been directed to focus any traffic enforcement efforts on high crash corridors, reckless driving, speed enforcement and other moving violations that place people in immediate danger.
- **Consent Searches:** The driver search rate decreased from prior years with consent searches remaining the most utilized search type. Black / African American drivers were searched at a higher-than-expected rate for the fourth time in the last five years. They were more likely to be asked to consent to a search than other drivers and were less likely to deny consent than White drivers. Hispanic or Latino drivers also denied a consent search at a lower rate than other drivers. While the hit rate for consent searches improved, they remained the least successful search type.
Action Item: The Portland Police Bureau is updating the consent search protocol to ensure individuals are informed of their right to refuse consent to a search. The updated consent search protocol will require officers to provide information in writing about the right to refuse a consent search to any person who has been asked for their consent to search. Information will be available in English and 5 additional languages. Officers will also be required to audio record and document any request for a consent search.
- **Appendixes:** The detailed explanation of the research and methodology behind the benchmarks used for stop rate analysis has been added to the report as Appendix D: Benchmark Discussion.

INTRODUCTION

The Portland Police Bureau produces an annual report to increase the transparency of the Bureau's use of stops in contacting members of the community. The data, and subsequent reports, highlight the demographics of people stopped by sworn PPB personnel and how those demographics have changed over time. Additionally, the report examines the discretionary decision making practices of police before, during, and after a stop to identify potential disparities across the bureau and within different operational divisions.

It should be noted that the data contained in this report are not necessarily an accurate proxy to aid in the determination of racial profiling. Instead, these data allow for an examination of disparities in stops between different demographic groups from an empirical standpoint. As such they allow for a more informed community-wide discussion about how best to keep the community safe and how to accomplish this in the most equitable manner possible. Through community and police partnerships, we can identify areas of potential concern, find solutions on ways to reduce racial bias and perceptions of racial bias, and develop new strategies for community policing and accountability.

Background

The Portland Police Bureau has been collecting data on traffic and pedestrian stops since 2001 based on recommendations from the Blue Ribbon Panel on Racial Profiling¹. From the program's outset, officers were required to log their perceptions of driver/pedestrian race, gender, and general age (minor vs. adult); the reason for the stop; whether a search was conducted, the type of search conducted, and results of the search; and the overall outcome of the stop. The Bureau's stops application automatically connects to the Bureau's computer-aided-dispatch (CAD) and electronic citation (eCite) systems to aid in the accountability of Stops report completion. The newest version of the stops data collection system launched on June 27, 2018. An example of the current Stops application system is provided in Appendix B.

¹ <https://www.portlandoregon.gov/police/article/32381>

POLICE BUREAU DISPARITY BENCHMARKS

Most discussion on the relative merits of different type of benchmarking strategies, including U.S. Census data, focus on their ability to accurately describe the racial and ethnic characteristics of the population in areas where law enforcement personnel operate (for a more detailed discussion of this topic, please refer to Appendix D). There are other reasons stop patterns may differ in the absence of bias, including the operational mission of officers². Where a unit operates, and who they may come in contact with, can be heavily influenced by their operational goals and objectives. To account for this differential, and how it may affect who is exposed to police activity, the Portland Police Bureau utilizes two different research-supported benchmarks for the different personnel divisions that initiate traffic stops.

TRAFFIC DIVISION BENCHMARK

Academic researchers have identified the demographics of drivers involved in injury collisions as a best-practice for benchmarking traffic stops³. Collision statistics are a reasonable proxy of road users because it describes the frequency that drivers are operating a vehicle, increasing their risk of being involved in a collision or being stopped by law enforcement personnel. Injury collision statistics also act as a proxy for driving location, as the most dangerous locations are over-represented in the statistics. The data can also describe the type of driving behavior that might warrant the attention of police – especially when at-fault drivers are included⁴. Finally, the data is an unbiased benchmark because police are required to respond to injury collisions, making it independent of any discretionary behavior that could intentionally, or unintentionally, alter the subject demographics.

The Traffic Division is the primary traffic enforcement arm of the Portland Police Bureau. The number one priority of Traffic officers is to address behaviors of road users, including drivers, bicycle riders, and pedestrians, that might lead to a collision. Officers from the Traffic Division spend the majority of their time patrolling⁵ the City's High Crash Network where more than half of the City's deadly crashes occur⁶. Many miles of the High Crash Network overlap low-income neighborhoods and communities of color⁷, increasing the likelihood that members of those groups could be involved in an injury collision or to be contacted by police. The 2020 Injury Collision

Table 1. 2020 Injury Collision Statistics, by Race of Drivers

Race/Ethnicity	2020	
	Count	Percent
American Indian/Alaskan	9	0.8%
Asian	66	6.2%
Black/African American	181	16.9%
Hispanic	113	10.5%
Native Hawaiian	3	0.3%
White	701	65.3%
Total	1,073	100.0%

² Withrow, B.L., Dailey, J.D., & Jackson, H. (2009). The utility of an internal benchmark strategy in racial profiling surveillance. *Justice Research and Policy*, 19, 19 – 47.

³ Alpert, G. P., Smith, M.R., Dunham, R.G. (2004). Toward a better benchmark: Assessing the utility of not-at-fault traffic crash data in racial profiling research. *Justice Research and Policy*, 6, 43 – 69.

⁴ Withrow, B.L. & Williams, H. (2015). Proposing a benchmark based on vehicle collision data in racial profiling research. *Criminal Justice Review*, 40, 449 – 469.

⁵ The Bureau produces an interactive dashboard to describe where traffic officers patrol and their enforcement actions. You can visit the dashboard at

<https://www.portlandoregon.gov/police/tableau/traffic/>

⁶ <https://www.portlandoregon.gov/transportation/54892>

⁷ Portland Bureau of Transportation. (2016). *Vision Zero action plan*. Retrieved from <https://www.portlandoregon.gov/transportation/71730>

(footnote continued)

Benchmark⁸ summarizes the identified race / ethnicity of involved drivers⁹ in injury collisions investigated by Portland Police Bureau officers¹⁰. Based on research-identified best-practices, the Injury Collision Benchmark is used for all stop analyses involving traffic officers.

NON-TRAFFIC DIVISIONS BENCHMARK

The mission of officers from other Non-Traffic divisions in the Portland Police Bureau, including patrol officers, Neighborhood Response Teams, and other specialty units, primarily relates to the reduction and prevention of violent crime in the City. The average patrol officer does not initiate traffic stops solely based on risky or dangerous driving behavior; rather, they use discretionary traffic stops to contact potential subjects of interest and investigate crimes in addition to reducing injury collisions. As described above, Non-Traffic officers primarily operate in parts of Portland that generate a high volume of 9-1-1 calls (and other calls for service) and have higher levels of violent crime. Utilizing an injury collision benchmark is not appropriate for Non-Traffic officers as it does not adequately describe their mission and population they are serving.

Discerning a race-based benchmark, predicated on crime involvement, is a tricky proposition. Some jurisdictions and researchers¹¹ have utilized arrest demographics as an internal benchmark for comparison with stopped subject demographics. However, analyses of this sort often fall short as they fail to discern biased behavior when the agency or jurisdiction as a whole is acting in a biased way in all aspects of police work¹². National¹³ and local¹⁴ statistics highlight long standing disparities in the criminal justice system for people of color, particularly African American individuals. Researchers have utilized reports from community members of individuals involved in suspicious activity to benchmark¹⁵; however, this can also be a biased measure because it incorporates biased behavior from community in regards to race¹⁶.

⁸ The PPB's records management system, RegJIN, does not include "Middle Eastern" as possible racial / ethnic category so the group cannot be included in any benchmark analyses.

⁹ RegJIN does not include an indicator if involved drivers were "at-fault", so all drivers are included in the analysis.

¹⁰ An additional 29 drivers involved in injury collisions were classified as "Unknown" in RegJIN. These were excluded from all benchmark totals.

¹¹ Gelman, A., Kiss, A., & Fagan, J. (2005). *An analysis of the NYPD's stop-and-frisk policy in the context of claims of racial bias*. (Columbia Public Law Research Paper No. 05-95). New York: Columbia University. Retrieved from https://scholarship.law.columbia.edu/faculty_scholarship/1390

¹² Walker, S. (2001). Searching for the denominator: Problems with police traffic stop data and an early warning system solution. *Justice Research and Policy*, 3, 63 – 95.

¹³ Puzzanchera, C. (2018). *Juvenile Arrests, 2016*. (Office of Juvenile Justice and Delinquency Prevention National Report Series Bulletin NCJ 251861). Washington, DC: U.S. Department of Justice.

¹⁴ Ferguson, J. (2016). *Racial and ethnic disparities and the relative rate index (RRI): Summary of data in Multnomah County*. Retrieved from http://media.oregonlive.com/portland_impact/other/RRI%20Report%20Final-1.pdf.

¹⁵ Ridgeway, G. (2007). *Analysis of racial disparities in the New York Police Department's stop, question, and frisk practices*. Technical Report TR-534-NYCPF, RAND Corporation.

¹⁶ Beckett, K. (2012). Race, drugs, and law enforcement: Toward equitable policing. *Criminology & Public Policy*, 11, 641 – 653.

(footnote continued)

Given suspect demographic reporting is unable to escape broader societal trends of bias, agencies and researchers have investigated using victims as a proxy to benchmark the population¹⁷. Victim demographics are a reasonable description of general area characteristics, including the personal characteristics of individuals in the area¹⁸. Not all crime is reported equally – the National Crime Victimization Survey¹⁹ routinely shows that many crimes go unreported each year, however almost all serious violent crimes are reported to law enforcement. Reported victimization can also vary significantly by race (in combination with other factors)²⁰, however, the seriousness of the crime is consistently found as the strongest predictor of reporting²¹. The 2020 Crime Victimization Benchmark²² summarizes the profiles of victims of FBI Indexed Crimes – Homicides, Forcible Sex Offenses, Robberies and Aggravated Assaults that occurred in the City of Portland²³ and is used for all stop analyses involving PPB Non-Traffic officers.

Table 2. 2020 Crime Victimization Benchmark, by Race of Victim

Race/Ethnicity	2020	
	Count	Percent
American Indian/Alaskan	41	1.0%
Asian	173	4.3%
Black/African American	773	19.0%
Hispanic	397	9.8%
Native Hawaiian	20	0.5%
White	2,663	65.5%
Total	4,067	100.0%

Benchmarking Conclusion

Determining the proper population benchmark is a complicated, but key, step to conduct an analysis of PPB's traffic stops. Using U.S. Census data is generally not advisable due to it being primarily focused on the residential population of an area. Additionally, the data does not account for differential exposure with police while being outdated in a city growing as rapidly as Portland. To account for the differing missions of the PPB, two different benchmarks are utilized: Injury Collision Statistics for Traffic Division officers and Crime Victimization Rates for Non-Traffic officers. Both measures provide a more accurate, less-biased measure of the individuals living, working, commuting, and visiting in areas that officers operate.

¹⁷ Gaines, L.K. (2006). An analysis of traffic stop data in Riverside, California. *Police Quarterly*, 9, 210 – 233.

¹⁸ Tseloni, A. & Pease, K. (2014). Area and individual differences in personal crime victimization incidence: The role of individual, lifestyle/routine activities and contextual predictors. *International Review of Victimology*, 21, 3 – 29.

¹⁹ Morgan, R. E. & Truman, J.L. (2018). *Criminal Victimization, 2017* (NCJ 252472). Washington, DC: Bureau of Justice Statistics. Retrieved from <https://www.bjs.gov/index.cfm?ty=pbdetail&iid=6466>

²⁰ Powers, R., Khachatryan, N., & Socia, K. (2018). Reporting victimization to the police: The role of racial dyad and bias motivation. *Policing & Society*, 1 – 17.

²¹ Bosick, S.J., Rennison, C.M., Gover, A.R., & Dodge, M.

²² The PPB's records management system, RegJIN, does not include "Middle Eastern" as possible racial / ethnic category so the group cannot be included in any benchmark analyses.

²³ An additional 95 victims were classified as "Unknown" in RegJIN. These were excluded from all benchmark totals.

BUREAU-WIDE STOPS OF DRIVERS

Officers from the Portland Police Bureau reported performing 24,991 driver stops across the City in 2020 – a 24 percent decrease over the previous year. It is the first time since 2016 that Traffic Division personnel

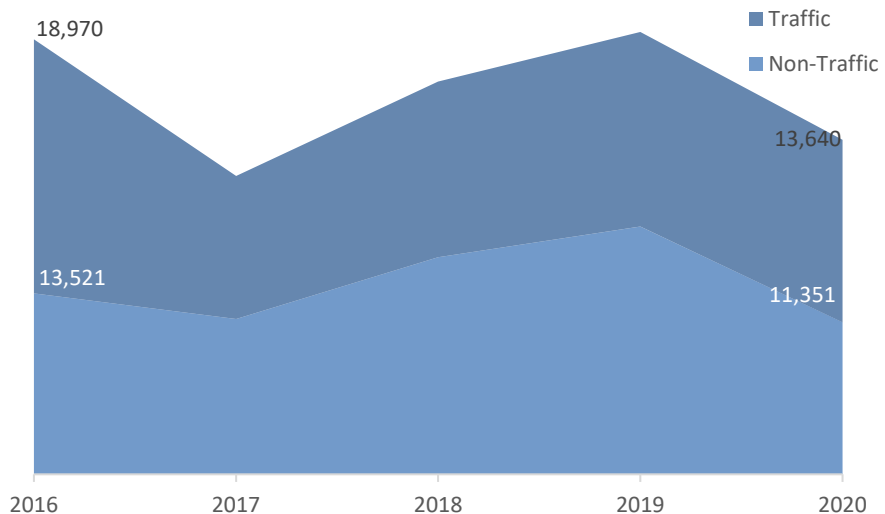
performed more stops than officers from other divisions, with Traffic officers accounting for 55 percent of all stops across the Bureau.

Traffic Division personnel decreased their total stop count by six percent over 2019 totals (13,640 in 2020 vs. 14,532 in 2019).

Meanwhile Non-Traffic officers saw a substantial 39 percent drop over the prior year (11,351 vs. 18,503) for the fewest

number of reported stops made by patrol, investigative, and support officers over the past five years.

Figure 1. Traffic officers stopped more drivers in 2020 than 2019 even though the overall number of stops Bureau-wide decreased.



However, figures from the entire year fail to show the complexity of the unique year that encapsulated 2020. The COVID-19 pandemic, and the accompanied restrictions on businesses and gatherings, significantly altered the activities of Portland residents, commuters, and visitors in public spaces around the City. From March 16, 2020 – the date all public schools were closed in the State²⁴ for in-person instruction – through May 27, 2020, traffic volume on highways within the City declined by 36 percent compared to the prior year²⁵. Bureau personnel also responded to 6 percent fewer calls for service with reported Group A offenses dropping by 8 percent over the same time period. With fewer calls for service and reported crimes across the City, officers increased their self-initiated activity – including traffic stops – by 14 percent.

The availability of all Bureau personnel – and their ability to conduct traffic stops – shifted quickly following the murder of George Floyd in Minneapolis by Officer Derek Chauvin of the Minneapolis Police Department. Following the first night of large-scale protests on May 28, 2021, the Portland Police Bureau assigned hundreds of officers from all divisions to respond to near-nightly demonstrations at various locations across the City. The Bureau launched a dedicated, full-time Rapid Response Team (RRT) of 42 officers to prioritize protest response while decreasing the number of permanent personnel assigned to the Traffic Division, patrol units, and investigative units. Patrol units were also assigned to Mobile Field Force (MFF) teams that would be activated mid-shift if needed, further decreasing the number of officers actively patrolling the City. These

²⁴ Executive Order 20-08. (March 17, 2020). Office of the Governor, State of Oregon.

²⁵ Calculated utilizing data from <https://portal.its.pdx.edu/home>.

staffing decisions – coupled with the loss of about 70 sworn personnel through separations or retirements – limited the number of personnel that were available to initiate traffic stops through the rest of 2020.

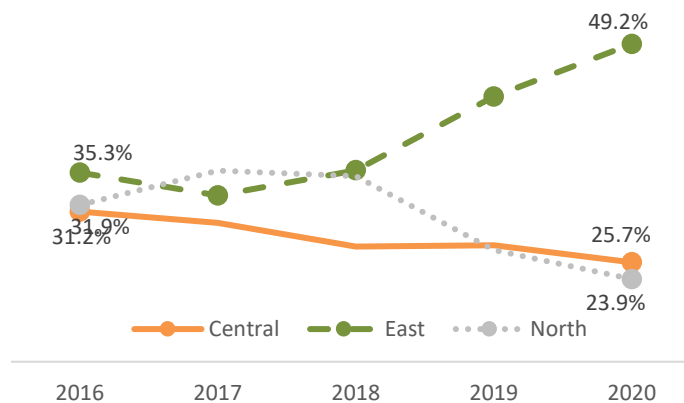
The historic and divergent conditions that affected the Bureau’s approach to staffing and availability to conduct traffic stops limits the ability to summarize an entire year’s worth of activity as prior reports have done. Therefore, the year has been divided into three distinct phases for analysis and definitional purposes: pre-pandemic (January 1 through March 15), the stay-at-home period (March 16 through May 27), and the enhanced protest response period (May 28 through December 31). All driver stops analyses present in the current report will include a comparison of these three distinct periods to highlight the differences that may have been present during those times. Additionally, the different phases are included as a separate independent variable – when appropriate – during statistical analyses and discussions.

Table 3. Stop rates throughout 2020 changed significantly depending on conditions in the City.

Operational Division	Pre-Pandemic			Stay-At-Home			Enhanced Protest Response		
	Count	Percent	Daily Rate	Count	Percent	Daily Rate	Count	Percent	Daily Rate
Traffic	4,095	47.2%	54.6	5,746	58.7%	78.7	3,799	58.2%	17.4
Non-Traffic	4,582	52.8%	61.1	4,037	41.3%	55.3	2,732	41.8%	12.5
Total	8,677	100%	115.7	9,783	100%	134.0	6,531	100%	30.0

The likelihood of an officer performing a traffic stop significantly varied²⁶ based on the different phases of 2020. Officers reported making 115.7 stops per day prior to statewide Stay-At-Home orders – slightly higher than the 90.5 stops per day made throughout 2019. Daily stop rates increased by 16 percent – to 134.0 – once the Stay-At-Home period began in mid-March; however, this is mainly attributed to additional activity by officers from the Traffic Division. Stop rates from Non-Traffic officers actually decreased during the Stay-At-Home period even though calls for service and reported offenses declined from mid-March through the end of May and total time for self-initiated activity increased. Stop rates fell precipitously for all operational groups during the Enhanced Protest Response period as officers were making about one-third as many daily stops as they did throughout all of 2019.

Figure 2. East Precinct has seen the most driver stops over the past five years.



Stop Locations

Portland Police Bureau officers typically focus on a distinct geographic area during the shift (such as Patrol officers work a particular patrol district or Traffic officers monitoring a High Crash Corridor), but may respond to incidents and initiate stops anywhere in the state.

²⁶ $\chi^2 = 656.399, p < .001, df = 2$
(footnote continued)

Of the stops with a valid location²⁷, the largest plurality of driver stops in 2020 occurred in East Precinct, followed by North Precinct and Central Precinct. East Precinct has seen significant growth over the past five years²⁸ (35.3% in 2016 vs. 49.2% in 2020), whereas Central Precinct has seen a significant decrease over the same time frame²⁹ (31.2% in 2016 vs. 25.7% in 2020). Stop rates have also declined in North Precinct over the past five years (31.9% in 2016 vs. 23.9% in 2020), but at a non-significant rate since the decline has not remained consistent³⁰. Stop rates for locations outside of Portland have remained statistically similar since 2016³¹ (1.6% in 2016 vs. 1.2% in 2020).

Stopped Drivers Demographics

Traffic and Non-Traffic officers execute traffic stops of drivers in support of different missions in an overall effort to improve the safety and livability for residents and visitors in Portland. These diverse missions lead officers to concentrate their efforts in different areas of the City, often encountering diverse communities and people during their missions. The differences in missions and the populations encountered make using a single benchmark to discern any potential bias as a Bureau-wide measure difficult; rather different benchmark analyses are used for the broad operation groups of the Portland Police Bureau (Traffic vs. Non-Traffic).

On June 27, 2018, the PPB transitioned to a new data collection application for Stops data to meet new State reporting requirements outlined in ORS 131.935³². The State of Oregon Criminal Justice Commission (CJC) mandated several changes to PPB's collection of the perceived race and ethnicity of stopped subjects. Two new race/ethnicity categories were added in June 2018: "Middle Eastern" and "Native Hawaiian or Other Pacific Islander"³³. The State also mandated that officers assign a named category for each stopped subject, eliminating the use of the "Other" and "Unknown" categories after June 2018. The PPB has not traditionally included this group in quantitative and benchmark comparisons due to low sample sizes and interpretation problems. Additionally, the removal of these groups, along with the addition of two other racial groups, complicate the analysis of long-term trends for all racial groups³⁴. Without a systematic way to account for these changes, and acknowledging the utility of long-term trend analysis, the best method is to approach interpretation of results with caution until the new perceived classification system has been active for several years.

²⁷ About 7 percent of stops since 2016 cannot have their location verified by the system due to non-standard location entries, such as landmarks or highway ramps, or typographical errors. These stops are excluded from location analyses.

²⁸ $p < .05$, $r^2 = .79$

²⁹ $p < .008$, $r^2 = .93$

³⁰ $p < .14$, $r^2 = .58$

³¹ $p < .57$, $r^2 = .12$

³² https://www.oregonlegislature.gov/bills_laws/ors/ors131.html

³³ Shortened to "Native Hawaiian" in all tables and charts.

³⁴ As an example, did a particular perceived racial / ethnic group increase due to a greater number of stops of that population or because people previously categorized as "Unknown" or "Other" were predominantly reclassified as that group?

Table 4. Racial Demographics of Stopped Drivers, since 2016.

	Race/Ethnicity	2016		2017		2018		2019		2020	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	American Indian/Alaskan	22	0.1%	10	0.1%	16	0.1%	30	0.2%	33	0.2%
	Asian	999	5.3%	527	4.9%	701	5.3%	813	5.6%	678	5.0%
	Black/African American	1,664	8.8%	1,162	10.9%	1,384	10.6%	1,630	11.2%	1,720	12.6%
	Hispanic or Latino	1,378	7.3%	799	7.5%	1,125	8.6%	1,429	9.8%	1,522	11.2%
	Middle Eastern*	--	--	--	--	101	0.8%	182	1.3%	140	1.0%
	Native Hawaiian*	--	--	--	--	48	0.4%	89	0.6%	77	0.6%
	White	13,869	73.1%	7,666	71.8%	9,360	71.4%	10,359	71.3%	9,470	69.4%
	Unknown/Other^	1,038	5.5%	510	4.8%	380	2.9%	--	--	--	--
	Traffic Total	18,970	100%	10,674	100%	13,115	100%	14,532	100%	13,640	100%
	Race/Ethnicity	2016		2017		2018		2019		2020	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Non-Traffic	American Indian/Alaskan	82	0.6%	67	0.6%	116	0.7%	125	0.7%	60	0.5%
	Asian	641	4.7%	474	4.1%	754	4.7%	842	4.6%	472	4.2%
	Black/African American	2,701	20.0%	2,527	21.8%	3,782	23.3%	4,058	21.9%	2,548	22.4%
	Hispanic or Latino	1,285	9.5%	1,046	9.0%	1,608	9.9%	1,855	10.0%	1,130	10.0%
	Middle Eastern*	--	--	--	--	123	0.8%	297	1.6%	155	1.4%
	Native Hawaiian*	--	--	--	--	63	0.4%	159	0.9%	104	0.9%
	White	8,266	61.1%	7,060	60.8%	9,463	58.4%	11,167	60.4%	6,882	60.6%
	Unknown/Other^	546	4.0%	433	3.7%	302	1.9%	--	--	--	--
	Non-Traffic Total	13,521	100%	11,607	100%	16,211	100%	18,503	100%	11,351	100%

* Middle Eastern and Native Hawaiian options were added as an available option on June 27, 2018.

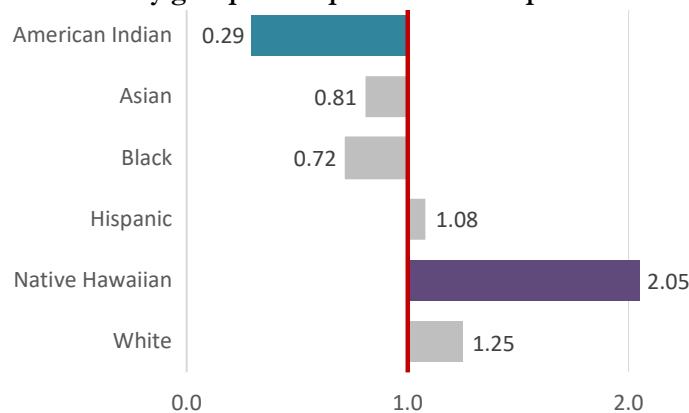
^ Unknown / Other options were removed as an available option on June 27, 2018.

TRAFFIC DIVISION

Officers from the Traffic Division are the primary traffic enforcement arm of the Portland Police Bureau. Officers routinely patrol the High Crash Network³⁵, Portland's most dangerous streets and intersections for road and sidewalk users, to help prevent road injuries and change user behavior. Traffic officers, in conjunction with the Portland Bureau of Transportation, also perform enforcement missions to support the City's Vision Zero Action Plan, whose goal is to eliminate deaths and serious injuries on Portland streets by 2025. Given the intense focus by Traffic officers on driving behavior, the Injury Collision Benchmark (see Table 2) is the best indicator to assess potential biases of officers enforcing traffic laws.

The racial demographics of drivers stopped by PPB Traffic officers has significantly changed over the past five years, with officers stopping significantly more Hispanic (7.3% vs. 11.2%)³⁶ and

Figure 3. Native Hawaiian or Other Pacific Islander drivers were the only group overrepresented in stops in 2020



³⁵ <https://www.portlandoregon.gov/transportation/54892>

³⁶ $p < .004$, $r^2 = .96$

(footnote continued)

Black / African American (8.8% vs. 12.6%)³⁷ drivers while stopping significantly fewer White drivers (71.3% vs. 69.4%)³⁸. This trend mirrors the overall demographic patterns in the area, with communities of color growing at a faster rate than White residents. In 2020, drivers perceived to be Native Hawaiian or Other Pacific Islander were the only groups to be stopped at a disparate rate compared to the 2020 Injury Collision Benchmark³⁹ whereas drivers perceived to be American Indian or Native Alaskan were stopped less than expected; however, both groups represent less than 1 percent of all performed stops and drivers involved in injury collisions and are susceptible to small-sample size analysis problems. No other groups were over- or under-represented in stops performed by Traffic Officers over the entire year.

Table 5. Individuals perceived to be BIPOC were more likely be stopped during the protest period.

Race/Ethnicity	Pre-Pandemic				Stay-At-Home				Enhanced Protest Response			
	Benchmark		Stop Rates		Benchmark		Stop Rates		Benchmark		Stop Rates	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
American Indian/Alaskan	0	0.0%	8	0.2%	2	1.5%	11	0.2%	7	1.0%	14	0.4%
Asian	16	6.2%	241	5.9%	7	5.3%	267	4.6%	43	6.3%	170	4.5%
Black/African American	46	17.8%	467	11.4%	20	15.2%	734	12.8%	115	16.8%	519	13.7%
Hispanic or Latino	13	5.0%	399	9.7%	17	12.9%	684	11.9%	83	12.2%	439	11.6%
Middle Eastern	--	--	46	1.1%	--	--	66	1.1%	--	--	28	0.7%
Native Hawaiian	0	0.0%	11	0.3%	0	0.0%	30	0.5%	3	0.4%	36	0.9%
White	183	70.9%	2,923	71.4%	86	65.2%	3,954	68.8%	432	63.3%	2,593	68.3%
Totals	258	100%	4,095	100%	132	100%	5,746	100%	683	100%	3,799	100%

Stops reported by Portland Traffic officers significantly⁴⁰ varied throughout the year depending on the different stage of the coronavirus pandemic and protest activity, whereas the injury collision rates throughout 2020 remained roughly the same⁴¹. Stop rates were generally higher for Black / African American and Hispanic or Latino during the Stay-At-Home and Enhanced Protest Response Periods, whereas the stop rates for White drivers declined during those periods. Even with the varying stop rates, there were no disparate findings for the different analyses periods when compared to the Injury Collision Benchmark.

NON-TRAFFIC DIVISIONS

Officers from Non-Traffic divisions – namely, Patrol, investigations, and other support divisions – focus on preventing and responding to criminal activity in the city. By focusing on crime interdiction, officers are likely to spend more time in communities with a high preponderance of violent crime. The Crime Victimization Benchmark⁴² (see Table 5) is used as a proxy measure for drivers in these areas, regardless if they are residents, commuters, or visitors to the community.

³⁷ $p < .03$, $r^2 = .84$

³⁸ $p < .02$, $r^2 = .89$

³⁹ The Disparity Index compares the proportion of stopped drivers to a benchmark for each racial group. Races with a disparity index greater than 2.0 would indicate a meaningful overrepresentation, while a value below 0.5 would indicate a meaningful underrepresentation of the stopped group.

⁴⁰ $\chi^2 = 56.427$, $p < .001$, $df = 12$

⁴¹ $\chi^2 = 11.899$, $p < .07$, $df = 6$

⁴² The benchmark includes all Portland victims of the FBI Indexed Crimes of Homicide, Forcible Sex Offenses, Robbery, and Aggravated Assault.

Non-Traffic divisions have seen no significant changes in demographic stop rates over the past five years. Officers stopped fewer White drivers⁴³ (61.1% vs. 60.6%) and more Black / African American⁴⁴ (20.0% vs. 22.4%) and Hispanic⁴⁵ (9.5% vs. 10.0%) drivers – but all at non-significant rates. No perceived racial or ethnic group was meaningfully over- or under-represented in stops when compared to 2020 Crime Victimization Rates.

Figure 4. Non-Traffic officers stopped drivers in-line with the Crime Victimization Benchmark in 2020.

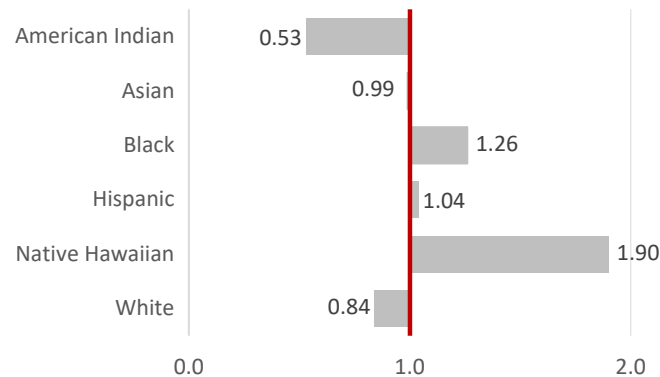


Table 6. Black / African American individuals were stopped at higher rates during the Stay-At-Home period despite little change in crime victimization rates during that period.

Race/Ethnicity	Pre-Pandemic				Stay-At-Home				Enhanced Protest Response			
	Benchmark		Stop Rates		Benchmark		Stop Rates		Benchmark		Stop Rates	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
American Indian/Alaskan	15	2.0%	19	0.4%	4	0.6%	21	0.5%	22	0.8%	20	0.7%
Asian	40	5.2%	213	4.6%	27	4.2%	143	3.5%	106	4.0%	116	4.2%
Black/African American	115	15.0%	984	21.5%	103	16.0%	984	24.4%	555	20.9%	580	21.2%
Hispanic or Latino	88	11.5%	469	10.2%	54	8.4%	398	9.9%	255	9.6%	263	9.6%
Middle Eastern	--	--	81	1.8%	--	--	40	1.0%	--	--	34	1.2%
Native Hawaiian	5	0.7%	36	0.8%	4	0.6%	38	0.9%	11	0.4%	30	1.1%
White	504	65.7%	2,780	60.7%	452	70.2%	2,413	59.8%	1,707	64.3%	1,689	61.8%
Totals	767	100%	4,582	100%	644	100%	4,037	100%	2,656	100%	2,732	100%

The racial / ethnic demographics of crime victims⁴⁶ and those being reported as stopped by Non-Traffic Officers⁴⁷ significantly changed throughout the year depending on the stage of the pandemic and protest activity. The Stay-At-Home period saw the largest discrepancies between Victimization Benchmark and driver stop rates, as White individuals were significantly more likely to be victims of violent crime while the group's stop rates remained flat throughout the year. The stop rates for Black / African American drivers increased during the "Stay-At-Home" period even though their victimization rate was similar to pre-pandemic norms. The mismatch between changing victimization and stop rates between different perceived racial / ethnic groups is another indicator of economic inequities across our nation and region. Individuals from low-income households had less behavior change with the implementation of shelter in place orders, with economic factors theorized as a key contributing factor⁴⁸. Black workers are more likely to hold "front-line" jobs than workers of other races⁴⁹, requiring more trips outside the home. These factors, if replicated locally,

⁴³ $p < .73$, $r^2 = .05$

⁴⁴ $p < .23$, $r^2 = .43$

⁴⁵ $p < .18$, $r^2 = .50$

⁴⁶ $\chi^2 = 32.652$, $p < .001$, $df = 10$

⁴⁷ $\chi^2 = 33.635$, $p < .002$, $df = 12$

⁴⁸ Lou, J., Shen, X., & Niemeier, D. (2020). Are stay-at-home orders more difficult to follow for low-income groups?. *Journal of Transport Geography*, 89. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7832451/>.

⁴⁹ Gould, E. & Wilson, V. (2020). *Black workers face two of the most lethal preexisting conditions for coronavirus—racism and economic inequality*. Economic Police Institute. <https://www.epi.org/publication/black-workers-covid/>

likely contributed to the elevated number of Black / African American stops through the latter-parts of 2020.

Driver Stop Reasons

Differential stop patterns based on the intersection between the driver's perceived race and the severity of the alleged infraction can highlight biased police behavior; specifically, non-White drivers being stopped at a higher rate for more minor infractions can be an indicator of biased policing. A key action of Vision Zero centers on curbing dangerous behaviors that contribute to fatal and serious injury crashes (including speed, impairment, and other dangerous behaviors) through traffic enforcement. Since driving behaviors associated with Major and Minor Moving Violations⁵⁰ can contribute to fatal and serious injury crashes, Non-Moving Violations represent a greater portion of an officer's discretionary judgement on whether to initiate a traffic stop⁵¹.

The overwhelming majority of 2020 driver stops (78.3%) initiated by Portland Police Bureau officers are for Moving Violations on Portland roadways. However, the stated reason for the stop varies significantly⁵² between the two operational divisions of PPB, with Traffic Officers significantly more likely to stop a driver for a Major Moving Violation and Non-Traffic Officers significantly more likely to stop a driver for Minor Moving Violations, Non-Moving Violations, and Non-Traffic

Offenses. Stop reasons have also significantly changed over the past five years for personnel from both divisions. Traffic Officers have significantly increased their stop rate for Major Moving Violations⁵³ (43.9% in 2016 vs. 69.4% in 2020) while significantly decreasing the stop rate for Minor Moving

Table 7. Black / African American drivers are significantly more likely to be stopped for Non-Moving Violations than other groups of drivers.

	Race/Ethnicity	Moving Violations				Non-Moving Violations		Non-Traffic Offenses	
		Minor		Major					
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	American Indian/Alaskan	9	27.3%	21	63.6%	2	6.1%	1	3.0%
	Asian	149	22.0%	504	74.3%	25	3.7%	0	0.0%
	Black/African American	427	24.8%	1,164	67.7%	127	7.4%	2	0.1%
	Hispanic or Latino	304	20.0%	1,126	74.0%	92	6.0%	0	0.0%
	Middle Eastern	26	18.6%	110	78.6%	4	2.9%	0	0.0%
	Native Hawaiian	16	20.8%	57	74.0%	4	5.2%	0	0.0%
	White	2,423	25.6%	6,490	68.5%	546	5.8%	11	0.1%
	Total	3,354	24.6%	9,472	69.4%	800	5.9%	14	0.1%
	Race/Ethnicity	Moving Violations				Non-Moving Violations		Non-Traffic Offenses	
		Minor		Major					
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
Non-Traffic	American Indian/Alaskan	10	16.7%	23	38.3%	25	41.7%	2	3.3%
	Asian	130	27.5%	210	44.5%	128	27.1%	4	0.8%
	Black/African American	669	26.3%	776	30.5%	1,070	42.0%	33	1.3%
	Hispanic or Latino	298	26.4%	422	37.3%	392	34.7%	18	1.6%
	Middle Eastern	34	21.9%	79	51.0%	41	26.5%	1	0.6%
	Native Hawaiian	30	28.8%	33	31.7%	39	37.5%	2	1.9%
	White	1,759	25.6%	2,276	33.1%	2,708	39.3%	139	2.0%
	Total	2,930	25.8%	3,819	33.6%	4,403	38.8%	199	1.8%

⁵⁰ Minor Moving Violations involve all Class C or D violations. Major Moving Violations include all traffic-related crimes (felony or misdemeanor) and Class A or B violations. Most moving violations are outlined in ORS 811.005 – 811.812.

⁵¹ Since June 27, 2018, officers are required to cite the exact statutory reason for the stop, by ORS, Portland City Code, Federal Statute, or other ordinance. Future analyses may include more detailed analyses for stop reasons.

⁵² $\chi^2 = 4920.299, p < .001, df = 3$

⁵³ $p < .001, r^2 = .99$

(footnote continued)

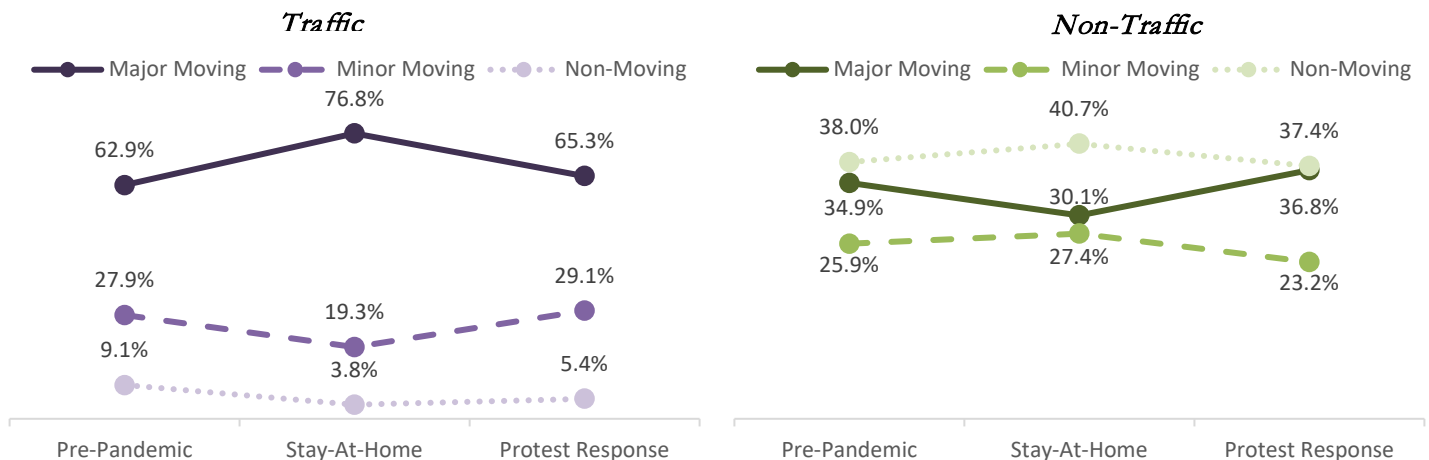
Violations⁵⁴ (49.4% in 2016 vs. 24.6% in 2020). Non-Traffic Officers have significantly increased their stop rates for Major Moving Violations⁵⁵ (27.1% in 2016 vs. 33.6% in 2020) and Non-Moving Violations⁵⁶ (27.7% in 2016 vs. 38.8% in 2020). The top stop reason for Non-Traffic Officers in 2020 were for violations related to expired license plates – specifically ORS 803.560⁵⁷ – even though the Oregon Department of Transportation requested a voluntary moratorium on expired registration enforcement on March 20, 2020⁵⁸ with the State mandating a statewide moratorium beginning on July 20, 2020⁵⁹. The moratorium only applied to registrations that expired during the pandemic, after March 20, 2020 – any licenses that were expired prior to the start of the pandemic were eligible for a citation.

Table 8. Specific reasons for stop substantially varied between the two operational divisions.

Traffic		
	Count	Percent
Speeding	8,037	58.9%
Distracted Driving	1,868	13.7%
Safety Belt Violations	1,039	7.6%
Failure to Obey Traffic Control Devices	892	6.5%
Missing or Expired License Plates	564	4.1%

Non-Traffic		
	Count	Percent
Missing or Expired License Plates	3,201	28.2%
Failure to Obey Traffic Control Devices	1,698	15.0%
Speeding	1,489	13.1%
Turning Violations	1,469	12.9%
Equipment Violations	1,292	11.4%

Figure 5. Stop reasons for Traffic and Non-Traffic Officers varied depending on the period in 2020.



The two operational divisions also varied significantly across 2020, with Traffic Officers⁶⁰ more focused on Major Moving Violations during the Stay-At-Home Period (76.8% vs. 62.9% in the Pre-Pandemic and 65.3% in the Enhanced Protest Response Period) and more focused on Non-Moving Violations during the Pre-Pandemic Period (9.1% vs. 3.8% in the Stay-At-Home and 5.4% in the Enhanced Protest Response Periods). The shift to focusing more on Major Moving Violations – and especially speeding – matches anecdotal reports from across the Metro area of an increase in drivers

⁵⁴ $p < .001$, $r^2 = .98$

⁵⁵ $p < .03$, $r^2 = .86$

⁵⁶ $p < .02$, $r^2 = .89$

⁵⁷ This statute is a sub-category of the “Missing or Expired License Plates” total presented in Table 11.

⁵⁸ Oregon Department of Transportation. (2020, March 20). *DMV partners with law enforcement to keep Oregonians at home* [Press release]. Retrieved from <https://www.oregondot.org/dmv-partners-with-law-enforcement-to-keep-oregonians-at-home/>.

⁵⁹ S.B. 1601, Oregon Legislature 1st Special Session of 2020. (2020).

⁶⁰ $\chi^2 = 311.865$, $p < .001$, $df = 6$

(footnote continued)

excessively violating the speed limit as traffic decreased on roadways across the Metro area⁶¹. The Non-Traffic operational group also saw significant changes throughout 2020⁶²; however, the primary change was the opposite of what was observed in Traffic Officer behavior. Non-Traffic Officers significantly increased the proportion of stops made for Non-Moving Violations during the Stay-At-Home Period (40.7% vs. 38.0% in the Pre-Pandemic and 37.4% in the Enhanced Protest Response Periods) while significantly decreasing the number of stops made for Major Moving Violations (30.1% vs. 34.9% in the Pre-Pandemic and 36.8% in the Enhanced Protest Response Periods). The growing differences in Stop Reasons exhibited by the two primary operation divisions of the PPB highlight growing divergences in the overall mission of the two operational groups, with Traffic Officers increasingly focused on curbing dangerous driving behavior and Non-Traffic Officers increasingly focused on utilizing traffic stops as a pretext to investigate other criminal behavior. These divergent missions also likely contribute to overall differences in the stop rates of drivers of different perceived racial / ethnic groupings between the two divisions.

Both organizational groups displayed differential stop patterns based on the perceived race of the driver⁶³. Drivers perceived to be Black / African American were significantly more likely to be stopped for Non-Moving Violations by both divisions. Non-Traffic officers were also significantly more likely to stop White drivers for Non-Traffic Offenses and Asian, Hispanic / Latino, and Middle Eastern drivers for Major Moving Violations. Traffic officers were significantly more likely to stop White drivers for Minor Moving Violations and Asian or Hispanic / Latino drivers for Major Moving Violations. The practice of stopping Black / African American drivers for minor Non-Moving Violations – especially under the guise of “investigatory” or “pretext” practices⁶⁴ – has been routinely defined as a form of systemic or institutional racism⁶⁵.

The stop patterns of Bureau personnel in 2020 mirror those national inequities and indicate specific actions should be taken to make policing more equitable in the City of Portland. In June 2020, the Bureau provided guidance that personnel should focus traffic enforcement efforts on moving violations directly tied to behaviors that results in serious or fatal crashes. Stops for Non-Moving Violations or other lower-level infractions are still allowed; however, they should only be performed when there is a community-safety concern or there is an actionable investigative element involved, such as specific suspect information. The results from this change will be evaluated, and, if needed, additional adjustments will be made until these inequities are meaningfully addressed.

Search Rates

A common measure for examining bias policing is to examine racial disparities in searches. Police can exercise their discretion in one of two ways during a search—low discretion or high discretion search. In low discretion searches, policy or training dictates the likelihood of a search occurring. For example, if police stop an individual and take custody of them to administer a breathalyzer test, policy would require that the subject be searched for weapons prior to being transported. In high

⁶¹ Reaume, G. (2020, April 10). Dangerous uptick in speeding in Portland area. *KATU*. <https://katu.com/>

⁶² $\chi^2 = 60.546, p < .001, df = 6$

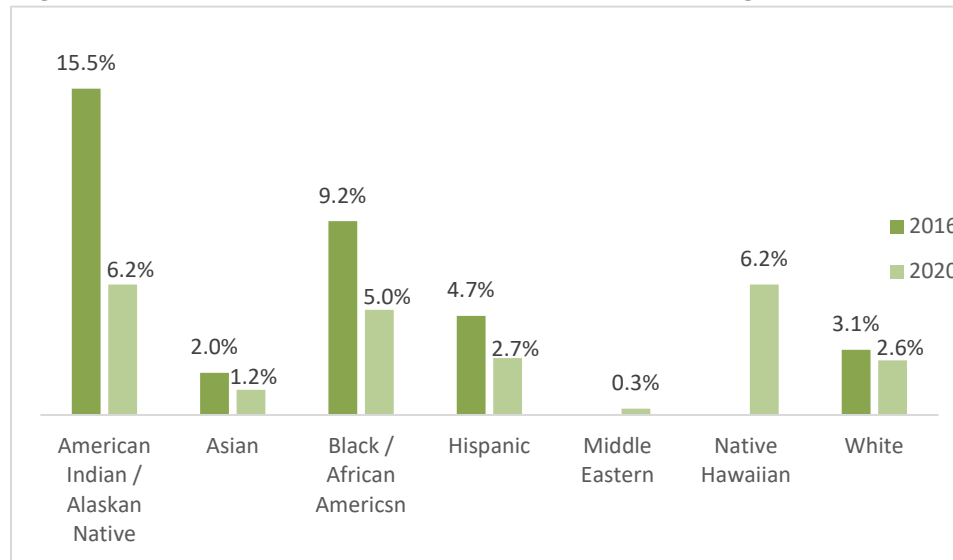
⁶³ Traffic: $\chi^2 = 47.031, p < .001, df = 12$; Non-Traffic: $\chi^2 = 93.271, p < .001, df = 18$

⁶⁴ Epp, C.R., Maynard-Moody, S., & Haider-Markel, D.P. (2014). *Pulled over: How police stops define race and citizenship*. University of Chicago Press.

⁶⁵ Baumgartner, F.R., Epp, D.A., & Shoub, K. (2018). *Suspect citizens: What 20 million traffic stops tells us about policing and race*. Cambridge University Press.
(footnote continued)

discretion searches, such as consent searches, police officers exercise more judgment in their decision to search. Racial profiling experts maintain that if police overuse high discretion searches on people of color, especially when combined with a lower rate of recovering contraband, it could suggest that police are engaged in bias policing⁶⁶.

Figure 6. Search rates have remained stable for most racial groups since 2016.



In 2020, approximately 1 out of every 33 stops (3.0% of all stops) performed by Portland Police Bureau on drivers included a discretionary search. Non-Traffic officers perform the bulk of searches associated with driver stops in the Bureau, accounting for about 91 percent of all searches conducted

since 2016. The 2020 search rate is the lowest on record for the Portland Police Bureau, primarily due to the large – but not-significant – decline in overall searches conducted by Non-Traffic officers⁶⁷. The number of searches conducted by Traffic officers have remained nearly stable over the past five years⁶⁸. There were not significant differences in the rate of searches conducted across the different periods of 2020⁶⁹, with all three periods having nearly the same exact search rate. Drivers stopped in East Precinct (4.5% search rate) are significantly more likely⁷⁰ to be searched than the other two precincts, with drivers stopped in Central Precinct (1.5% search rate) significantly less likely to be searched than those from East and North Precincts (2.6% search rate).

⁶⁶ Knowles, J., Persico, N., & Todd, P. (2001). Racial bias in motor vehicle searches: Theory and evidence. *Journal of Political Economy*, 109.

⁶⁷ $p < .24$, $r^2 = .42$

⁶⁸ $p < .99$, $r^2 = .00$

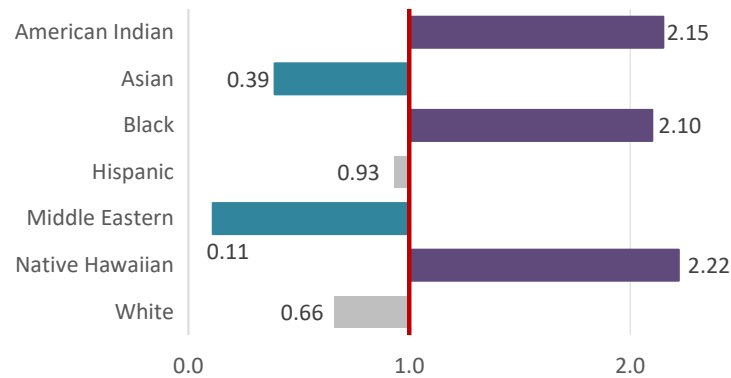
⁶⁹ $\chi^2 = 0.562$, $p < .76$, $df = 2$

⁷⁰ $\chi^2 = 114.498$, $p < .001$, $df = 2$

(footnote continued)

The searches of drivers stopped in 2020 by the Portland Police Bureau displayed disparate rates and significant differences⁷¹ by driver race/ethnicity. For the fourth time in the last five years, drivers perceived to be Black / African American were searched at a higher-than-expected rate when compared to their overall stop rates. The long-term nature of these disparate search rates indicates they are unlikely to change unless the Bureau actively works to reduce these search disparities through adjustments to policy and practice. Drivers perceived to be American Indian or Alaskan Native or Native Hawaiian or Other Pacific Islander were also searched at higher-than-expected rates when compared to their 2020 stops rates; however, both groups represent less than 1 percent of all stops and less than 2 percent of all searches. With such a small number of observations, the results are particularly sensitive to small changes and these results should be approached with caution. No other perceived racial / ethnic group from either operational division was searched at significantly disparate rates.

Figure 7. Black / African American drivers have been searched at a disparate rate for four out of the last five years.



In 2020, two percent of drivers were asked to consent to a voluntary search; however, not all racial / ethnic groups were asked at the same frequency⁷². Drivers perceived to be either Black / African American were asked to consent to search significantly more than almost all other perceived racial groups. Different perceived racial / ethnic groups also displayed significantly different patterns⁷³ of refusing to consent to a search, with White drivers the most likely group to refuse a search. These findings are similar to results reported in the 2018 and 2019 Annual Stops Reports.

Table 9. Significant differences exist in consent search request and refusal rates across different perceived racial / ethnic groups.

Race/Ethnicity	Consent Search			
	Requests	Rate	Refusals	Rate
American Indian/Alaskan	4	4.3%	0	0.0%
Asian	11	1.0%	3	27.3%
Black/African American	151	3.5%	23	15.2%
Hispanic or Latino	49	1.8%	4	8.2%
Middle Eastern	3	1.0%	2	66.7%
Native Hawaiian	7	3.9%	1	14.3%
White	256	1.6%	64	25.0%
Total	481	1.9%	97	20.2%

The lower consent search denial rate from people of color, especially when compared to the denial rate from White drivers, points to two prominent areas of concern. Hispanic or Latino drivers denied a consent search only 8.2% of the time. A primary reason for this could be a language barrier, as drivers that are perceived to be Hispanic or Latino may not speak English as their primary language. This is especially relevant as researchers⁷⁴ have noted that the language around consent searches is one rooted in context, as “requests” can be misunderstood as “commands” given tone,

⁷¹ $\chi^2 = 121.865, p < .001, df = 6$

⁷² $\chi^2 = 83.501, p < .001, df = 6$

⁷³ $\chi^2 = 10.744, p < .02, df = 3$

⁷⁴ Nadler, J. & Trout, J.D. (2012). Chapter 23: The language of consent in police encounters. *The Oxford Handbook of Language and Law* (P.M. Tiersma & L.M. Solan, Eds.). Oxford University Press.

language, and power differential between the two people communicating. It is not unreasonable to assume that these cultural nuances do not cleanly translate between English and Spanish without concerted care and effort to communicate the truly voluntary nature of consent searches. To reduce this inequity, Bureau personnel may need to ensure stopped drivers receive detailed descriptions of their rights to refuse in their native language. The second area of concern points to the larger issues of systemic and institutional racism embedded in the criminal justice system and law enforcement. In multiple jurisdictions across the country⁷⁵, individuals that are identified as either Hispanic / Latino or Black / African American are asked to consent to searches at a higher rate than their White counterparts. These search requests are often not viewed as “voluntary” because of the power differential between law enforcement officials and search subjects, and therefore the entire doctrine of consent search skews in favor of criminal justice systems at the expense of community members⁷⁶. This is especially true for Black / African American individuals who receive advice at a young age⁷⁷ to comply with officer requests to avoid negative interactions with police⁷⁸. Given the deep-seated and long-standing issues around systemic and institutional racism in our country, the Portland Police Bureau recognizes that the disparities exhibited in the data are unlikely to improve without direct and concerted actions. The PPB is implementing changes to the consent search protocol, as well as providing guidance to members to focus traffic enforcement efforts on moving violations directly tied to community safety. The results from these changes will be evaluated, and, if needed, additional adjustments will be made until these inequities are meaningfully addressed.

Search type⁷⁹ trends have been consistent over the past five years of data collection practices⁸⁰. Probable Cause (46.7% of 2020 searches)⁸¹ and Weapons Patdowns (5.1% of 2020 searches)⁸² have both increased over the last five years, but at non-significant rates. Consent search has been the most commonly utilized search type across the Bureau for the last five years (51.1% of all searches and 1.5% of all driver stops in 2020); however, the percentage of searches where consent was used dropped in 2020 for the first time. This is likely due to the 2019 Oregon Supreme Court ruling⁸³ that limited the ability of law enforcement personnel to conduct consent searches during legal stops – unless it was directly related to the reason for the stop or additional information was uncovered during the course of the stop. Bureau personnel received additional training on the updates to case law and were advised to end the formal stop interaction – and therefore, allowing the subject to leave if they wish – prior to requesting a consent search. Despite that guidance, consent searches were still the most utilized search type across the Bureau for the entire year. There is also the question whether stopped subjects are accurately perceiving the consent search request – if it occurs

⁷⁵ Bandes, S. A. (2018). Police Accountability and the Problem of Regulating Consent Searches. *University of Illinois Law Review*, 1759.

⁷⁶ Sommers, R. & Bohns, V.K. (2018). The voluntariness of voluntary consent: Consent searches and the psychology of compliance. *Yale Law Journal*, 128.

⁷⁷ Diaquoi, R. (2018). Symbols in the strange fruit seed: What “The Talk” Black parents have with their sons tells us about racism. *Harvard Educational Review*, 87.

⁷⁸ Harris, A. & Amutah-Onukagha, N. (2019). Under the radar: Strategies used by Black mothers to prepare their sons for potential police interactions. *Journal of Black Psychology*, 45.

⁷⁹ For a description of search types utilized by Portland Police Bureau officers, refer to Appendix B.

⁸⁰ Beginning on June 27, 2018, officers could select more than one search type per search. Over the long term, this is likely to increase frequencies for all search types as officers often have multiple criteria present for legally conducting a search.

⁸¹ $p < .21$, $r^2 = .46$

⁸² $p < .12$, $r^2 = .62$

⁸³ *Oregon v. Arreola-Botello*. 64 Or. 695 (2019).

Table 10. White drivers are more significantly more likely to be searched with probable cause when being searched by Non-Traffic officers.

^a Warrant and Warrant Exception search types were added to the Stops system on December 21, 2020. Percentages only include searches conducted after that date.

Contraband Hit Rates

Officers from the Traffic Division have a significantly⁹⁰ higher hit rate (69.8%) than Non-Traffic officers (58.5%); however, both divisions have been gradually improving hit rates at a non-

Search Type	Total Searches	Found Contraband	
	Count	Count	Percent
Consent	384	193	50.3%
Probable Cause	345	250	72.5%
Reasonable Suspicion	27	21	77.8%
Weapon Pat	38	21	55.3%
Warrant	1	1	100.0%
Warrant Exception	7	7	100.0%

PAGE 21

significant rate over the past five years⁹¹. Reasonable Suspicion and Probable Cause searches are the most likely to discover contraband, while consent searches and Weapon Pat Down are the least likely to be successful⁹².

Table 12. Drugs are the most commonly uncovered item during driver searches.

Race/Ethnicity	Total Searches	Found Contraband		Alcohol		Drugs		Weapons		Stolen Property		Other	
	Count	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
American Indian/Alaskan	6	3	50.0%	1	16.7%	1	16.7%	0	0.0%	0	0.0%	1	16.7%
Asian	14	6	42.9%	2	14.3%	2	14.3%	1	7.1%	2	14.3%	1	7.1%
Black/African American	227	124	54.6%	24	10.6%	68	30.0%	41	18.1%	11	4.8%	30	13.2%
Hispanic or Latino	75	43	57.3%	8	10.7%	22	29.3%	9	12.0%	4	5.3%	11	14.7%
Middle Eastern	1	1	100.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%
Native Hawaiian	12	10	83.3%	5	41.7%	2	16.7%	2	16.7%	1	8.3%	2	16.7%
White	417	264	63.3%	32	7.7%	154	36.9%	48	11.5%	26	6.2%	59	14.1%
Total	752	451	60.0%	72	9.6%	250	33.2%	101	13.4%	44	5.9%	104	13.8%

The overall hit rates for each perceived racial group has been stable over the last five years, with no individual group showing a statistical increase or decrease in hit rates. The perceived race of the driver is not a significant predictor whether or not contraband will be found as there were no significant differences between the different groups for contraband hit rates⁹³. There are also little differences in the found contraband between different perceived race / ethnic groups, with drugs the most commonly recovered item across nearly all groups.

Stop Outcomes

Stop disposition, or the outcome of the stop, is a common method to assess disparities among stops made by law enforcement personnel on different groups of people in a community. More locally, Portland community members have cited equitable stop outcomes as an important goal. In the 2009 plan to address racial profiling, community members raised concerns that traffic stops that result in no enforcement action can feel like harassment, especially to people of color. Large differences between racial and ethnic groups may imply an unequal impact on a particular race. Additionally, the progressive nature of a stop, and the multiple decision points within the interaction, make it difficult to discern what role, if any, implicit or explicit racial bias plays in stop disposition.

⁹¹ Non-Traffic: $p < .10$, $r^2 = .66$; Traffic: $p < .26$, $r^2 = .39$

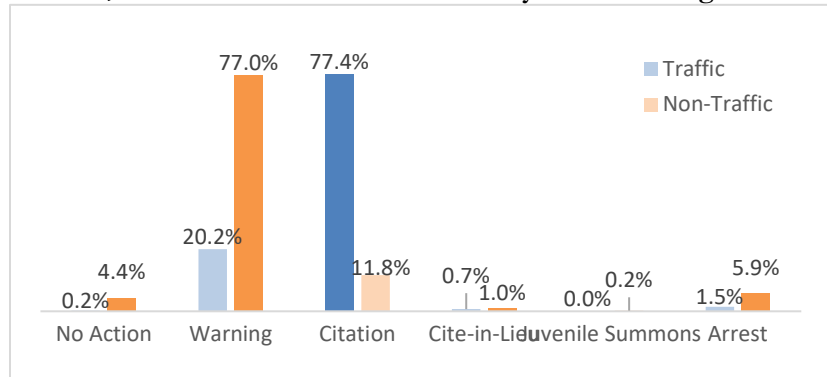
⁹² In prior years, statistical analyses were conducted to determine which search types were statistically significant in uncovering contraband. However, the search type field is now a multiple response variable, making it unsuitable for any statistical analysis between the different categories.

⁹³ $\chi^2 = 9.294$, $p < .06$, $df = 4$

(footnote continued)

The largest number of driver stops performed by PPB sworn personnel in 2020 (47.6%) resulted in a citation issued to the vehicle operator; however citation rates have been generally declining – at a non-significant rate⁹⁴ – for the past five years with warnings generally increasing in their place⁹⁵. The recorded stop disposition of the interaction varies significantly⁹⁶ based on operational division the PPB officer is operating under. Traffic officers are significantly more likely to issue a citation to drivers, whereas Non-Traffic officers are more likely to end a stop with any other disposition type. No individual stop disposition has seen a significant increase or decrease the past five years.

Figure 8. Traffic officers end most of their interactions with a citation, while Non-Traffic officers mainly issue warnings.



To best account for the multiple decision points that occur within a stop interaction, multiple binary logistic regressions were run on stop disposition to better understand how perceived race, stop reason, search results, and the interactions between those variables, can contribute to the officer's decision to cite or arrest an individual.

Table 13. Non-Traffic officers showed higher arrest and no enforcement rates for nearly all driver racial groups in the last year when compared to Traffic officers.

Traffic	Total Stops			Enforcement Action											
			None		Warning		Citation		Cite-in-Lieu		Juvenile Summons		Arrested		
	Race/Ethnicity	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent		
	American Indian/Alaskan	33	0.2%	0	0.0%	8	24.2%	20	60.6%	2	6.1%	0	0.0%	3	9.1%
	Asian	678	5.0%	2	0.3%	141	20.8%	523	77.1%	2	0.3%	0	0.0%	10	1.5%
Non-Traffic	Black/African American	1,720	12.6%	1	0.1%	351	20.4%	1,304	75.8%	17	1.0%	0	0.0%	47	2.7%
	Hispanic or Latino	1,522	11.2%	2	0.1%	217	14.3%	1,275	83.8%	13	0.9%	0	0.0%	15	1.0%
	Middle Eastern	140	1.0%	0	0.0%	24	17.1%	115	82.1%	1	0.7%	0	0.0%	0	0.0%
	Native Hawaiian	77	0.6%	0	0.0%	14	18.2%	58	75.3%	2	2.6%	0	0.0%	3	3.9%
	White	9,470	69.4%	23	0.2%	2,003	21.2%	7,262	76.7%	58	0.6%	0	0.0%	124	1.3%
	Total	13,640	100.0%	28	0.2%	2,758	20.2%	10,557	77.4%	95	0.7%	0	0.0%	202	1.5%
	Total Stops			Enforcement Action											
	Race/Ethnicity	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
American Indian/Alaskan	60	0.5%	3	5.0%	46	76.7%	3	5.0%	3	5.0%	0	0.0%	5	8.3%	
Asian	472	4.2%	12	2.5%	394	83.5%	48	10.2%	6	1.3%	0	0.0%	12	2.5%	
Black/African American	2,548	22.4%	67	2.6%	2,039	80.0%	241	9.5%	34	1.3%	0	0.0%	167	6.6%	
Hispanic or Latino	1,130	10.0%	35	3.1%	853	75.5%	166	14.7%	7	0.6%	0	0.0%	69	6.1%	
Middle Eastern	155	1.4%	8	5.2%	127	81.9%	19	12.3%	0	0.0%	0	0.0%	1	0.6%	
Native Hawaiian	104	0.9%	3	2.9%	80	76.9%	14	13.5%	1	1.0%	0	0.0%	6	5.8%	
White	6,882	60.6%	372	5.4%	5,199	75.5%	844	12.3%	61	0.9%	2	0.0%	404	5.9%	
Total	11,351	100.0%	500	4.4%	8,738	77.0%	1,335	11.8%	112	1.0%	2	0.0%	664	5.8%	

For subjects that were stopped but not searched by Non-Traffic Officers, no prediction model provided enough sensitivity to accurately predict if a driver was given a citation vs. a warning during the stop⁹⁷ or arrested⁹⁸ at the end of a stop. For subjects that were stopped and searched by Non-Traffic Officers, there was no significant model that predicted if a driver was given a citation vs. a

⁹⁴ Non-Traffic: $p < .06$, $r^2 = .76$; Traffic: $p < .08$, $r^2 = .70$

⁹⁵ Non-Traffic: $p < .07$, $r^2 = .74$; Traffic: $p < .09$, $r^2 = .68$

⁹⁶ $\chi^2 = 10812.804$, $p < .001$, $df = 4$

⁹⁷ Omnibus Test: $\chi^2 = 125.270$, $p < .001$, $df = 9$, $r^2 = .023$

⁹⁸ Omnibus Test: $\chi^2 = 90.405$, $p < .001$, $df = 9$, $r^2 = .029$

(footnote continued)

warning during the stop⁹⁹. A simple-effects logistic regression model determined that perceived race, the reason for stop, and the discovery of contraband were significant predictors if the officer decided to arrest¹⁰⁰ a driver at the end of the interaction. The reason for stop and the discovery of contraband were the most significant differentiator variables – drivers stopped for Non-Traffic Offenses¹⁰¹ and those found with contraband¹⁰² were both about three times as likely to be arrested at the end of the encounter. Drivers perceived as Black / African American were also significantly less likely to be arrested¹⁰³ when other factors are considered. These findings suggest that the arrest of a Black / African American driver depends on the nature and presence of contraband, while the arrest of subjects of other races / ethnicities – specifically White – may depend on the nature of their suspected offense. For instance, in 2020, about 41 percent of Black / African American drivers were issued a warning after the discovery of contraband, indicating that the found contraband may not have been serious enough to result in the arrest. Meanwhile, only 29 percent of White subjects found to be carrying contraband were released with a warning. These complicated findings indicate that PPB officers may be more successful in utilizing traffic stops to arrest White drivers suspected of more serious offenses whereas a wider net is being cast on Black drivers. Additional analyses, including the use of multiple years of data, are necessary to fully interpret these findings.

In 2020, Traffic Officers only performed searches on less than 1 percent of their stops, precluding the ability to include found contraband as a predictor in any disposition model. A binary logistic regression with citations at the outcome was significant but had low overall specificity¹⁰⁴, indicating the measured variables were not a good predictor of the outcome. A second model, utilizing arrest as the dependent variable, had the same problem of being a significant model with low specificity¹⁰⁵. These results indicate that no conclusive predictive model can be established for Traffic Officer dispositions and that additional factors that were not measured – including found contraband, driving history, officer characteristics, or some other unknown factor – could be strong contributors in discerning how a Traffic Officer ends a stop.

⁹⁹ Omnibus Test: $\chi^2 = 11.700, p < .31, df = 10, r^2 = .107$

¹⁰⁰ Omnibus Test: $\chi^2 = 86.476, p < .001, df = 10, r^2 = .165$

¹⁰¹ Wald = 12.777, B = 1.216, $p < .001$

¹⁰² Wald = 38.909, B = 1.074, $p < .001$

¹⁰³ Wald = 8.564, B = -0.554, $p < .004$

¹⁰⁴ Omnibus Test: $\chi^2 = 714.257, p < .001, df = 9, r^2 = .081$

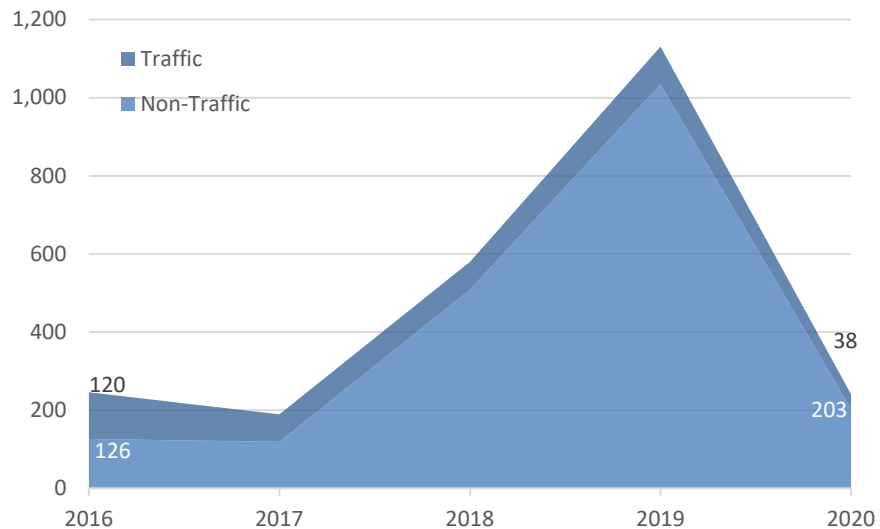
¹⁰⁵ Omnibus Test: $\chi^2 = 101.980, p < .001, df = 9, r^2 = .039$

BUREAU-WIDE STOPS OF PEDESTRIANS

In 2020, Portland Police Bureau officers reported stopping 241 pedestrians¹⁰⁶ - a 79 percent decrease over the prior year. After two consecutive years with increasing pedestrian stops, Bureau personnel reported a decrease in the number of pedestrian stops performed for the first time since 2017. Traffic and Non-Traffic officers both decreased the total number of pedestrian stops performed in 2020;

however, the decline from officers assigned patrol, investigative, and support units was more pronounced. The majority of stops (58.1%) occurred prior to the pandemic, with smaller amounts occurring during the Stay-At-Home (23.7%) and Enhanced Protest Response (18.3%) periods. In total, pedestrians accounted for about 1 percent of all stops in 2020.

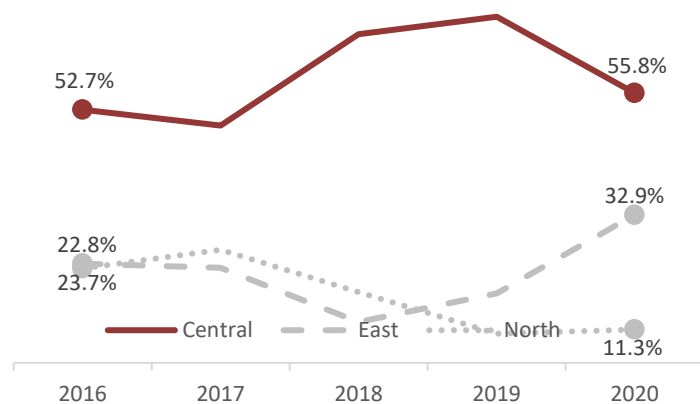
Figure 9. Pedestrian stops decreased by 79 percent in 2020.



Stop Locations

Central Precinct is the primary location for pedestrian stops completed by PPB officers in the City of Portland. For the past five years, the largest number of pedestrian stops occurred in the Precinct and it has accounted for a majority of the stops over the past four years. The precinct encompasses a number of highly-trafficked pedestrian-friendly areas, including Downtown, SE Hawthorne Blvd., and NW 23rd St., where sworn personnel are more likely to encounter people walking in the area.

Figure 10. Central Precinct has been the primary location for pedestrian stops over the past five years



¹⁰⁶ All “pedestrian” analyses also include stops of subjects on a bicycle.

Stopped Pedestrian Demographics

Portland Police Bureau officers contact pedestrians in support of the broad operational mission for their divisions, namely road safety for Traffic officers and crime response and prevention for Non-Traffic officers. However, it is more difficult to determine the appropriate benchmark for comparison to stop demographic statistics as there is no commonly utilized measure in academic literature. Population demographics from the decennial Census and associated products (such as the American Community Survey) do not account for visitors, commuters, and houseless individuals in the area, which can be especially problematic since people of color are more likely to utilize public transportation or walk to commute to work (see Appendix D). The Crime Victimization Benchmark, which was used in prior Stops Data Collection reports, also proves problematic as Traffic officers stop a high percentage of pedestrians, meaning officers were often likely to focus on traffic safety as opposed to crime prevention. The small number of pedestrian stops also proves problematic as the stopped individuals are not likely to be a random sampling across a city or precinct and be heavily weighted by officers that patrol more pedestrian-friendly districts. Due to these methodological challenges, no disparity analysis was conducted on pedestrian stops.

Table 14. Pedestrian stop rates for perceived racial / ethnic groups has remained steady over the last five years.

	Race/Ethnicity	2016		2017		2018		2019		2020	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	American Indian/Alaskan	0	0.0%	0	0.0%	2	2.8%	1	1.0%	0	0.0%
	Asian	2	1.7%	3	4.3%	4	5.6%	3	3.1%	2	5.3%
	Black/African American	9	7.5%	6	8.6%	7	9.9%	7	7.2%	9	23.7%
	Hispanic or Latino	6	5.0%	3	4.3%	1	1.4%	2	2.1%	2	5.3%
	Middle Eastern*	--	--	--	--	0	0.0%	2	2.1%	0	0.0%
	Native Hawaiian*	--	--	--	--	0	0.0%	0	0.0%	0	0.0%
	White	99	82.5%	55	78.6%	56	78.9%	82	84.5%	25	65.8%
	Unknown/Other^	4	3.3%	3	4.3%	1	1.4%	--	--	--	--
	Traffic Total	120	100%	70	100%	71	100%	97	100%	38	100%
	Race/Ethnicity	2016		2017		2018		2019		2020	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Non-Traffic	American Indian/Alaskan	0	0.0%	1	0.8%	13	2.6%	23	2.2%	4	2.0%
	Asian	4	3.2%	2	1.7%	8	1.6%	10	1.0%	1	0.5%
	Black/African American	25	19.8%	28	23.5%	89	17.5%	171	16.5%	37	18.2%
	Hispanic or Latino	9	7.1%	6	5.0%	29	5.7%	62	6.0%	12	5.9%
	Middle Eastern*	--	--	--	--	3	0.6%	0	0.0%	0	0.0%
	Native Hawaiian*	--	--	--	--	3	0.6%	4	0.4%	1	0.5%
	White	85	67.5%	80	67.2%	363	71.3%	764	73.9%	148	72.9%
	Unknown/Other^	3	2.4%	2	1.7%	1	0.2%	--	--	--	--
	Non-Traffic Total	126	100%	119	100%	509	100%	1,034	100%	203	100%

* Middle Eastern and Native Hawaiian options were added as an available option on June 27, 2018.

^ Unknown / Other options were removed as an available option on June 27, 2018.

Across all divisions, there have been virtually no changes in the stop demographics of pedestrians over the last five years. No perceived racial / ethnic group significantly increased, or decreased, over the time period. Pedestrians perceived to be White (71.8% in 2020) have consistently been the most stopped group, followed by Black / African Americans (19.1%) and Hispanic or Latino (5.8%) pedestrians. No other perceived group has represented more than 5 percent of all pedestrian stops

over the past five years. There are no significant differences in the stop patterns between the two organization divisions by perceived race / ethnicity of the pedestrian¹⁰⁷.

Pedestrian Stop Reasons

The identified reason for stopping a pedestrian is highly dependent on the stopping officers' assigned division and mission. Traffic officers are significantly more likely¹⁰⁸ to stop a pedestrian for a Moving Violation, highlighting the division's commitment to Vision Zero enforcement missions. The inverse is true for officers from patrol, investigations, and other support divisions, who are primarily concerned with crime reduction, and mainly stop pedestrians for Non-Traffic Offenses. There have been no significant changes for either division over the past five years, even with the overall decrease in total pedestrian stops. There were no significant differences in the reported stop reason based on the perceived race / ethnicity of the pedestrian¹⁰⁹.

Table 15. Traffic Officers are significantly more likely to stop pedestrians for Moving Violations.

	Race/Ethnicity	Moving Violations				Non-Moving Violations		Non-Traffic Offenses	
		Minor		Major					
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	American Indian/Alaskan	--	--	--	--	--	--	--	--
	Asian	1	50.0%	1	50.0%	0	0.0%	0	0.0%
	Black/African American	5	55.6%	1	11.1%	3	33.3%	0	0.0%
	Hispanic or Latino	2	100.0%	0	0.0%	0	0.0%	0	0.0%
	Middle Eastern	--	--	--	--	--	--	--	--
	Native Hawaiian	--	--	--	--	--	--	--	--
	White	15	60.0%	6	24.0%	2	8.0%	2	8.0%
	Total	23	60.5%	8	21.1%	5	13.2%	2	5.3%
	Race/Ethnicity	Moving Violations				Non-Moving Violations		Non-Traffic Offenses	
		Minor		Major					
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
Non-Traffic	American Indian/Alaskan	2	50.0%	0	0.0%	0	0.0%	2	50.0%
	Asian	0	0.0%	0	0.0%	1	100.0%	0	0.0%
	Black/African American	9	24.3%	6	16.2%	5	13.5%	17	45.9%
	Hispanic or Latino	3	25.0%	0	0.0%	3	25.0%	6	50.0%
	Middle Eastern	--	--	--	--	--	--	--	--
	Native Hawaiian	1	100.0%	0	0.0%	0	0.0%	0	0.0%
	White	51	34.5%	22	14.9%	18	12.2%	57	38.5%
	Total	66	32.5%	28	13.8%	27	13.3%	82	40.4%

¹⁰⁷ $\chi^2 = 0.743, p < .70, df = 2$

¹⁰⁸ $\chi^2 = 19.266, p < .001, df = 3$

¹⁰⁹ $\chi^2 = 4.855, p < .57, df = 6$

Search Rates

Pedestrians stopped by PPB officers are significantly more likely¹¹⁰ to be searched than their driver counterparts, as 12 percent of all pedestrian stops ended in a search in 2020. Total pedestrian searches have decreased, but non-significantly, since 2016¹¹¹ when 17 percent of all stops ended in a search. A reduced sample size of pedestrian stops from Traffic Officers prevented a statistical analysis to determine differences between the two operation groups; however, Non-Traffic officers (12.8%) searched more pedestrians than Traffic officers (7.9%) did in 2020. No perceived race / ethnic group were searched at a disparate rate in 2020.

Figure 11. Pedestrians were searched similar to 2020 stop rates

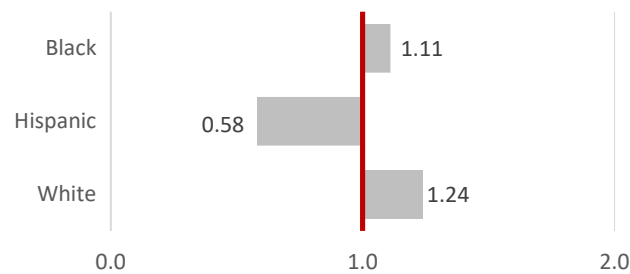


Table 16. Probable Cause searches are the most likely search to be conducted on pedestrians.

Traffic	Total Subjects Searched			Consent		Probable Cause^		Reasonable Suspicion^		Weapon Patdown^		Warrant*		Warrant Exception*	
	Race/Ethnicity	Searches	Rate	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
	American Indian/Alaskan	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Asian	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	--
	Black/African American	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	--
	Hispanic or Latino	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	--
	Middle Eastern	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Native Hawaiian	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	White	3	12.0%	2	66.7%	2	66.7%	0	0.0%	1	33.3%	--	--	--	--
	Total	3	7.9%	2	66.7%	2	66.7%	0	0.0%	1	33.3%	--	--	--	--
Total Subjects Searched			Consent		Probable Cause^		Reasonable Suspicion^		Weapon Patdown^		Warrant*		Warrant Exception*		
Race/Ethnicity	Searches	Rate	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	
American Indian/Alaskan	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	--	
Asian	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	--	
Black/African American	6	16.2%	3	50.0%	3	50.0%	1	16.7%	1	16.7%	--	--	--	--	
Hispanic or Latino	1	8.3%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	--	--	--	--	
Middle Eastern	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Native Hawaiian	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	--	
White	19	12.8%	7	36.8%	11	57.9%	0	0.0%	1	5.3%	--	--	--	--	
Total	26	12.8%	10	38.5%	15	57.7%	1	3.8%	2	7.7%	--	--	--	--	
Non-Traffic	Total Subjects Searched			Consent		Probable Cause^		Reasonable Suspicion^		Weapon Patdown^		Warrant*		Warrant Exception*	
	Race/Ethnicity	Searches	Rate	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
	American Indian/Alaskan	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	--
	Asian	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	--
	Black/African American	6	16.2%	3	50.0%	3	50.0%	1	16.7%	1	16.7%	--	--	--	--
	Hispanic or Latino	1	8.3%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	--	--	--	--
	Middle Eastern	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Native Hawaiian	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	--
	White	19	12.8%	7	36.8%	11	57.9%	0	0.0%	1	5.3%	--	--	--	--
	Total	26	12.8%	10	38.5%	15	57.7%	1	3.8%	2	7.7%	--	--	--	--

* Warrant and Warrant Exception search types were added to the Stops system on December 21, 2020. Percentages only include searches conducted after that date.

[^] Probable Cause, Reasonable Suspicion, and Weapon Patdown search types were removed as available options on December 21, 2020. Percentages only include searches conducted prior to that date.

For the past five years, the majority of searches conducted by Portland Police personnel on pedestrians were due to probable cause. This is a reversal from driver stops where consent searches are the dominant search type; however, differences in search type utilization were non-significant¹¹². Only 6 percent of all pedestrians were asked to consent to a voluntary search, with 83 percent assenting. There were too few pedestrian stops and searches conducted in 2020 for any statistical analyses to discern if any differences exist between the perceived race / ethnicity groups and search types in conducted – or requested – searches.

Table 17. Six percent of all pedestrians were asked to consent to a search.

Race/Ethnicity	Consent Search			
	Requests	Rate	Refusal	Rate
American Indian/Alaskan	0	0.0%	--	--
Asian	0	0.0%	--	--
Black/African American	3	6.5%	0	0.0%
Hispanic or Latino	0	0.0%	--	--
Middle Eastern	--	--	--	--
Native Hawaiian	0	0.0%	--	--
White	11	6.4%	2	18.2%
Total	14	5.8%	2	14.3%

¹¹⁰ $\chi^2 = 64.806, p < .001, df = 1$

¹¹¹ $p < .18, r^2 = .50$

¹¹² $\chi^2 = 1.578, p < .21, df = 1$

Contraband Hit Rates

Illegal contraband was found on a majority of pedestrians searched by PPB personnel in 2020. Successful search rates have changed slightly from year-to-year since 2015, varying between 40% and 64%. In 2020, Probable Cause searches were the most successful for the search types primarily used, followed by Consent. There were too few pedestrian stops and searches conducted in 2020 for any statistical analyses to discern if any differences exist between the perceived race / ethnicity groups and the contraband discovery rate.

Table 18. Probable Cause searches are the most successful at uncovering contraband.

Search Type	Total Searches	Found Contraband	
	Count	Count	Percent
Consent	12	6	50.0%
Probable Cause	17	12	70.6%
Reasonable Suspicion	1	1	100.0%
Weapon Pat	3	3	100.0%

Table 19. Drugs and weapons are the most commonly recovered contraband in pedestrian searches.

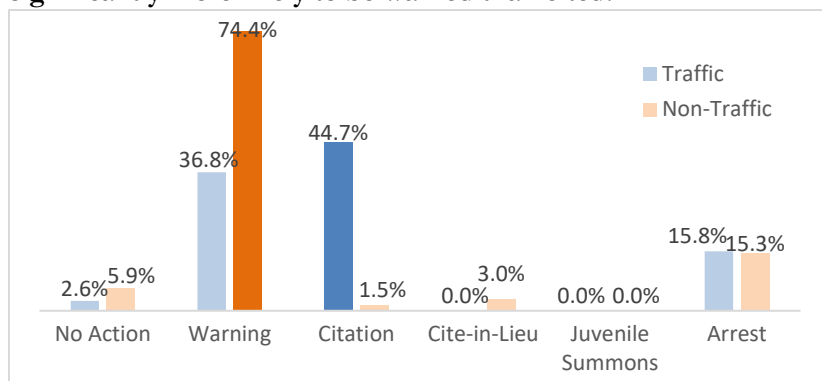
Race/Ethnicity	Total Searches	Found Contraband		Alcohol		Drugs		Weapons		Stolen Property		Other	
	Count	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
American Indian/Alaskan	0	--	--	--	--	--	--	--	--	--	--	--	--
Asian	0	--	--	--	--	--	--	--	--	--	--	--	--
Black/African American	6	4	66.7%	0	0.0%	1	16.7%	1	16.7%	1	16.7%	2	33.3%
Hispanic or Latino	1	1	100.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%
Middle Eastern	--	--	--	--	--	--	--	--	--	--	--	--	--
Native Hawaiian	0	--	--	--	--	--	--	--	--	--	--	--	--
White	22	13	59.1%	1	4.5%	4	18.2%	5	22.7%	3	13.6%	1	4.5%
Total	29	18	62.1%	1	3.4%	6	20.7%	6	20.7%	4	13.8%	3	10.3%

Stop Outcomes

Portland Police Bureau officers end pedestrian stops with significantly different outcomes¹¹³ than driver stops. Pedestrians are significantly less likely to receive a citation for their offenses while being significantly more likely to receive a warning, be cited-in-lieu of an arrest, arrested, or receive no enforcement action.

Warnings have significantly increased¹¹⁴ over the past five years, however, no other disposition type has significantly increased or decreased over the time period. The two organization groups display significant differences in their disposition outcomes¹¹⁵, with Traffic officers more likely to issue citations with officers from patrol, investigations, and other support divisions more likely to end the interaction with a warning.

Figure 12. Pedestrians stopped by Non-Traffic officers are significantly more likely to be warned than cited.



¹¹³ $\chi^2 = 218.128, p < .001, df = 4$

¹¹⁴ $p < .02, r^2 = .89$

¹¹⁵ $\chi^2 = 75.198, p < .001, df = 2$

Table 20. Bureau personnel are more likely to issue no enforcement action for Black / African American pedestrians when compared to their White counterparts.

Traffic	Total Stops			Enforcement Action											
	Race/Ethnicity			None		Warning		Citation		Cite-in-Lieu		Juvenile Summons		Arrested	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent		
	American Indian/Alaskan	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	
	Asian	2	5.3%	0	0.0%	1	50.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%
	Black/African American	9	23.7%	1	11.1%	3	33.3%	4	44.4%	0	0.0%	0	0.0%	1	11.1%
	Hispanic or Latino	2	5.3%	0	0.0%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Middle Eastern	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	
	Native Hawaiian	0	0.0%	--	--	--	--	--	--	--	--	--	--		
	White	25	65.8%	0	0.0%	8	32.0%	12	48.0%	0	0.0%	0	0.0%	5	20.0%
Total	38	100.0%	1	2.6%	14	36.8%	17	44.7%	0	0.0%	0	0.0%	6	15.8%	
Non-Traffic	Total Stops			Enforcement Action											
	Race/Ethnicity			None		Warning		Citation		Cite-in-Lieu		Juvenile Summons		Arrested	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent		
	American Indian/Alaskan	4	2.0%	0	0.0%	3	75.0%	0	0.0%	0	0.0%	0	0.0%	1	25.0%
	Asian	1	0.5%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Black/African American	37	18.2%	5	13.5%	27	73.0%	0	0.0%	1	2.7%	0	0.0%	4	10.8%
	Hispanic or Latino	12	5.9%	2	16.7%	8	66.7%	0	0.0%	1	8.3%	0	0.0%	1	8.3%
	Middle Eastern	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	
	Native Hawaiian	1	0.5%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	White	148	72.9%	5	3.4%	111	75.0%	3	2.0%	4	2.7%	0	0.0%	25	16.9%
Total	203	100.0%	12	5.9%	151	74.4%	3	1.5%	6	3.0%	0	0.0%	31	15.3%	

No analyses could be conducted on difference between the different operational groups and the perceived race of the stopped pedestrian due to small stop rates. However, across all Bureau personnel, pedestrians perceived to be Black / African American are significantly more likely to receive no enforcement action¹¹⁶ than their White counterparts. No other significant differences were present between the two perceived race / ethnic groups. No additional analyses – including a logistic regression or the inclusion of other perceived race / ethnic groups – could be conducted due to small pedestrian stop rates in 2020.

¹¹⁶ $\chi^2 = 8.472, p < .02, df = 2$

APPENDIX A: STOPS DATA COLLECTION MASK

The Stops Data Collection (SDC) system was in place from late 2011 through June 27, 2018.

TRAFFIC STOP DATA		
CITE NBR: <input type="text"/>		
CANCEL REASON : <input type="text"/>		
<input type="button" value="SUBMIT"/>		
1. DATA FOR : <input type="text"/>		
2. PERCEIVED RACE PRIOR TO STOP <input type="text" value="UNKNOWN"/>		
3. PERCEIVED GENDER PRIOR TO STOP <input type="text" value="UNKNOWN"/>		
4. PERCEIVED AGE PRIOR TO STOP <input type="text" value="UNKNOWN"/>		
5. PERCEIVED MENTAL HEALTH ISSUES PRIOR TO STOP <input type="text" value="UNKNOWN"/>		
6. PERCEIVED RACE AT STOP <input type="text"/>		
7. PERCEIVED GENDER AT STOP <input type="text"/>		
8. PERCEIVED AGE AT STOP <input type="text"/>		
9. PERCEIVED MENTAL HEALTH ISSUES AT STOP <input type="text"/>		
10. REASON FOR STOP (SELECT MOST SERIOUS) <input type="text"/>		
11. SEARCH TYPE (DISCRETIONARY) <input type="text"/>		
12. RESULTS OF SEARCH		
<input type="checkbox"/> DRUGS	<input type="checkbox"/> STOLEN PROPERTY	<input type="checkbox"/> NOTHING FOUND
<input type="checkbox"/> ALCOHOL	<input type="checkbox"/> WEAPON(S)	<input type="checkbox"/> OTHER
13. NUMBER OF PASSENGERS (EXCLUDING DRIVER) NOTE: Use N/A for Subject Stop <input type="text"/>		
14. ACTION TAKEN <input type="text"/>		
<input type="button" value="SUBMIT"/>		

APPENDIX B: STOPS APPLICATION

The STOPS data collection tool was launched on June 27, 2018. The tool was modified on December 21, 2020 to refine the questions related to reason for stop, search type categories, and whether an arrest was mandatory.

Event ID: * Required

Stop Date: 8/1/2020 12:00:00 AM
Location: 1111 SW 2ND AVE

Nature of Stop: * Required

☐ Driver

☐ Bicycle

☐ Pedestrian

☐ Passenger

Cancel Reason:

[Duplicate](#)
[Not a stop](#)

Perceived Race/Ethnicity: * Required

☐ American Indian or Alaskan Native

☐ Asian

☐ Black or African American

☐ Hispanic or Latino

☐ Middle Eastern

☐ Native Hawaiian or Other Pacific Islander

☐ White

Perceived Age: * Required

Perceived Sex: * Required

☐ F (Female)

☐ M (Male)

☐ X (Non-Binary)

Reason for Stop: * Required

- ☐ Probable Cause of a Traffic Crime or Violation
- ☐ Probable Cause of Other Crime
- ☐ Reasonable Suspicion of Other Crime

Probable Cause of a Traffic Crime or Violation: * Required

Probable Cause of Other Crime: * Required

Reasonable Suspicion of Other Crime: * Required

Consent search: * Required

- ☐ No consent search requested
- ☐ Consent search requested but denied
- ☐ Consent search completed

Other Search Criteria (select all that apply): * Required

- ☐ None
- ☐ Field Sobriety Test
- ☐ Search Warrant
- ☐ Warrant Exception: Emergency Aid Doctrine / Community Caretaking
- ☐ Warrant Exception: Exigent Circumstances / Automobile (Motor Vehicle) / Hot Pursuit
- ☐ Warrant Exception: Incident to Arrest
- ☐ Warrant Exception: Inevitable Discovery
- ☐ Warrant Exception: Inventory
- ☐ Warrant Exception: Open Fields / Abandoned or Lost Property

Search Findings (select all that apply): * Required

- ☐ Nothing Found
- ☐ Alcohol
- ☐ Drugs
- ☐ Stolen Property
- ☐ Other Evidence
- ☐ Weapon(s) - Firearm
- ☐ Weapon(s) - Other

Stop Disposition: * Required

- ☐ No Action Taken
- ☐ Warning (Verbal or Written)
- ☐ Citation
- ☐ Cite-in-Lieu
- ☐ Juvenile Summons
- ☐ Arrest

Was this a mandatory arrest related to a warrant, restraining order violation, or domestic violence incident?: * Required

- ☐ Yes
- ☐ No

Did the subject of the stop have a perceived mental health issue?: * Required

- ☐ Yes
- ☐ No
- ☐ Unknown

✓ Submit

Cancel

APPENDIX C: DATA AND METHODOLOGY

Data Collection History

During the 69th Legislative Assembly in 1997, the Oregon State Legislature passed HB 2433 which required all law enforcement agencies to adopt specific policies prohibiting stops and searches “motivated by the officer’s perception of race, color, sex, or national origin” and to collect data on the topic. The Traffic Stop Data Collection committee, of the Governor’s Public Safety Planning and Policy Council, formed the minimum standards for a voluntary data collection program for stopped subject demographics. The work of that committee, with input from community partners and law enforcement agencies around the state, led to the development and passage of SB 415 in 2001 which encouraged law enforcement to voluntarily create and launch a standardized stops data collection program and provide public reports on demographics and stop outcomes. Concurrently in the year 2000, a panel of community leaders and PPB representatives was convened to help reduce concerns regarding racial profiling in the City of Portland. The Blue Ribbon Panel recommended the Bureau create a data collection documenting the perceived demographics of the stopped subject and police actions during the stop, including search and outcome information.

Sworn personnel from the Portland Police Bureau first began reporting subject demographics, search patterns, and stop outcomes on all officer-initiated driver, pedestrian, and bicycle stops (initially termed “contacts”) in 2001. The data collection process went through minor revisions until February 2003 with the launch of the Stops Data Collection (SDC) system – the first Bureau-wide standardized system that was integrated and accessible with issued Mobile Digital Computers (MDCs). The Stops Data Collection operated untouched for the next 8 years until Late 2011 when the system was updated with an automated auditing and tracking tool to increase accountability and compliance with Bureau data collection policies. The new SDC (see Appendix A) also increased the number of data collection points to better reflect national best-practices.

In 2017, the 79th Legislative Assembly of the Oregon State Legislature passed HB 2355 (codified as ORS 131.930 through 131.945) which instituted the first mandatory data collection policy for all law enforcement agencies in the State beginning on June 1, 2018 for large agencies such as the Portland Police Bureau. The law mandated minor changes¹¹⁷ to PPB’s data collection to become compliant with the new State standards. The Bureau also took the opportunity to refine, modernize, and enhance the existing Stops Data Collection (SDC) system before launching the new Stops application (see Appendix B) on June 27, 2018. The application also submits a copy of all Stops records quarterly to the State of Oregon Criminal Justice Commission (CJC) for mandatory reporting and analysis.

On December 21, 2020, PPB modified the Stops Data Collection system to collect additional data points that provide additional clarity and detail on what happens during the interaction. The Bureau added multiple fields for the reason for Stop, specifically to allow officers to provide the exact statute when a Stop is made on the basis of probable cause or reasonable suspicion of a crime in addition to any traffic violations or crimes committed. The Bureau also added a question asking if the arrest was a mandatory arrest based on Oregon law, which could help explain differences in the arrest rates for Stops. Finally, the Bureau transitioned the search type categories to match the legal

¹¹⁷ About 85 percent of required data points were already being collected by the Bureau prior to HB 2355.

definitions for legal search reasons, including warrants, warrant exceptions, and consent searches. This change simplifies the training and understanding needed to complete the Stops mask and will lead to more accurate search data analysis.

Data Source

The Stops application, like the SDC before it, is an automated auditing and tracking tool that flags interactions that require a completed “mask”, or survey. Interactions are flagged for completion when (1) Traffic officers issue an electronic Warning or Citation through their handheld devices or (2) Non-Traffic officers notify dispatch they are making a formal stop of a driver or pedestrian (using the call codes of “TRASTP” or “77”, respectively) when probable cause has been established for a violation or criminal act. The flagged records appear on a list of to-do items for the officer to complete on their Bureau-issued computer and remain there until the officer completes the mask, ideally immediately following the conclusion of the stop or at the end of their shift for motorcycle- or bicycle-based officers. Supervisors throughout the Bureau receive a weekly email highlighting stops reports that are outstanding to ensure complete data collection.

Through the lifespan of the Stops Data Collection system from January 1, 2012 through June 26, 2018, law enforcement personnel completed 351,595 masks related to the contact of a community member. The majority of masks (85.7%) represented completed driver or pedestrian stops, with a smaller number of interactions that were flagged by the system as a formal stop when it was actually another type of interaction (13.6%), including a flag down, mere conversation, or welfare check. Completed stops flagged as passenger stops or stops initiated by officers from other law enforcement agencies were also excluded from all analyses.

Table 21. About 85 percent of flagged interactions are verified as legitimate stops in the SDC system.

	2012		2013		2014		2015		2016		2017		2018	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Completed Stops	68,968	89.4%	68,053	89.1%	53,190	83.7%	31,474	78.8%	32,737	82.3%	22,470	82.6%	14,729	82.8%
Passenger Stops	447	0.6%	361	0.5%	309	0.5%	242	0.6%	291	0.7%	195	0.7%	142	0.8%
Non-PPB Initiated Stops	23	0.0%	49	0.1%	63	0.1%	122	0.3%	18	0.0%	7	0.0%	0	0.0%
Canceled Stops	7,671	9.9%	7,946	10.4%	10,024	15.8%	8,123	20.3%	6,714	16.9%	4,518	16.6%	2,928	16.5%
Total	77,109	100%	76,409	100%	63,586	100%	39,961	100%	39,760	100%	27,190	100%	17,799	100%

In June 2015, PPB made upgrades to the SDC which inadvertently impacted the use of a desktop computer to complete the form. This created an incomplete set of stop records, mainly from Traffic Division officers, between July and December 2015. Therefore, two separate databases were used to extract data from 2015. The SDC system was used to retrieve data conducted by all Non-Traffic units for January 2015 through December 2015 and stops conducted by Traffic Officers from January 2015 through June 2015. The eCite system was used to retrieve missing data on stop location and stop demographics for the second-half of 2015; however, the eCite system does not capture data on stop reasons, searches, search outcomes, and stop disposition at all or in a way that can be translated to the SDC format. These stops were excluded from post-stop statistical analyses, including stop reasons, search rates, hit rates, and stop outcomes.

From the launch of the new Stops application on June 27, 2018, PPB personnel completed 16,687 masks related to the contact of a community

Table 22. About 90 percent of interactions in the new Stops app were analyzed as completed stops.

	2018		2019		2020	
	Count	Percent	Count	Percent	Count	Percent
Completed Stops	15,177	90.2%	34,166	90.8%	25,232	89.9%
Passenger Stops	81	0.5%	184	0.5%	130	0.5%
Non-PPB Initiated Stops	0	0.0%	0	0.0%	0	0.0%
Canceled Stops	1,561	9.3%	3,260	8.7%	2,719	9.7%
Total	16,819	100%	37,610	100%	28,081	100%

member. Prior to launch of the new Stops application, additional training was delivered to officers to reduce the number of interactions incorrectly classified as Stops. Additionally, the application was reconfigured to only trigger stops initiated by PPB personnel. To date, the number of masks representing a completed driver or pedestrian stop (90.4%) is higher than the SDC system, with fewer interactions classified as a canceled stop (9.1%).

Data Considerations

The race / ethnicity questions on the Stops mask are based on officer perceptions of the stopped individual. As with any perception-based field, there is an inherent amount of variance that is expected and creates a nominal degree of error among racial counts and proportions. Community members have also identified the potential for misclassification based on officer experience and perceptions, such as Native Americans / Alaskan Natives being misclassified as Hispanic or Asian. Finally, there is no uniformity of racial classification options between different PPB systems and databases, leading to potential confusion on the part of PPB officers on how to classify community members. These potential data inconsistencies may artificially inflate the proportion of some racial groups while underestimating for others. To date, the PPB has been unable to identify a way to confirm the race of the stopped individual without asking potentially invasive questions at the time of the stop.

State-mandated changes to stops data collection variables complicate comparisons to prior years. For perceived gender questions, Non-Binary (X) was added as an option while the Unknown category was removed. Two new race/ethnicity categories were also added: Middle Eastern and Native Hawaiian or Other Pacific Islander while the Other and Unknown categories were removed. The changes to the perceived race category add additional analysis complications as the Middle Eastern category does not align with existing U.S. Census definitions and the State provided no guidance on how officers should meaningfully distinguish between the different perceived categories. It is impossible to know how the addition and removal of categories affected the classification of subjects into the racial / ethnic groups and gender categories that didn't change. Due to these modifications, any analysis of year-to-year trends should be approached with caution until the new stops application has been in place for at least three full years.

Analysis Methodology

A variety of descriptive and inferential statistical analysis methodologies were used to investigate the changes of stops over time and potential racial and ethnic disparities throughout stop interactions. All omnibus or overall statistical analyses utilized a standard significance level of .05 to describe trends. The large number of stops initiated by PPB officers in the last five years, even though the overall trend is downward, makes any statistical analysis highly sensitive to even small differences or trends, potentially overinflating the meaningfulness of the change. The converse problem happens with pedestrian stops, as the small number of overall stops can obscure even meaningful trends. When appropriate, effect size measures are included for all analysis to aid in the interpretation of analyses. All coefficients and effect sizes are included in the footnotes of each page to enhance the transparency of conclusions and aid additional interpretations or analyses.

Simple linear regressions were utilized to describe overall changes over time in stop behaviors. In instances where there were no identified stops of a specified race / ethnicity or subcategory, the overall trend was not described.

Several different analyses were conducted to investigate differences in operational division behavior and to identify potential racial and ethnic disparities in stops. Initial differences were investigated with Chi-Square Tests for Independence. On tests utilizing race / ethnicity as a category, Unknown / Other individuals were excluded due to methodological, data collection, and interpretation concerns about the category. In cases where the expected count of most cells in a particular subcategory of classification was less than 5, the entire classification was removed to preserve the power of the analysis. This led to Native American / Alaskan Native, Native Hawaiian, and Middle Eastern entries to be excluded from most driver analyses and Asian, Hispanic, Native American / Alaskan Native, Native Hawaiian, and Middle Eastern entries to be excluded from most pedestrian analyses. In cases the omnibus test met overall significance, pairwise comparisons were examined with a Bonferroni correction to tease out specific differences. If the omnibus level was non-significant, additional analyses were not conducted.

The second analysis conducted to examine potential racial and ethnic disparities in stops and searches is an odds ratio, or Disparity Index. Stop rates for each racial / ethnic group were compared to their population benchmark (see Tables 2 and 3) to determine relative over- or under-representation in stop demographics. For search rates, stop rates for each racial group were used as the comparison benchmark. A Disparity Index value of greater than 1.0 indicates general over-representation while a value of less than 1.0 indicates general under-representation in the group; however, values between 0.75 and 1.5 are considered “benign” due to general error rates in data collection and analysis. Based on prior Bureau practices and research best practices, we focused on values above 2.0 as significant over-representation and values below 0.5 as significant under-representation. Disparity analyses were only conducted when the corresponding Chi-Square Test and pairwise comparisons revealed significant differences.

A series of binary logistic regressions were also performed to determine what factors, including perceived race / ethnicity, may significantly contribute to stop outcomes. Three separate simplified outcomes were analyzed: enforcement action (defined as receiving a warning, citation, or arrest) vs. no enforcement action, citation vs. warning, and arrest vs. non-arrest (warning or citation). The main effects of race, stop reason, and search results were the primary hypothesized predictors, however all possible two-way and three-way interaction effects were also included in the model as co-variables to increase the overall power of the analysis. Individual predictors for stop outcome were only considered when the overall model was statistically significant.

Results Limitations

All analyses and statistical tests were selected to help identify differences and disparities between racial and ethnic groups in driver and pedestrian stops; however, they should not be used as definitive proof of police bias, or lack thereof. The analyses do not account for all legitimate factors that may influence the reason for a stop, search, or disposition of the event, including the circumstances that led to the stop, the location of the stop, and severity of the offense. Additionally, data collection challenges could obscure the reality of interactions with community members and is not capturing all actions associated with a stop. The Portland Police Bureau is committed to improving our analysis and data collection methodologies to accurately assess and understand how bias may or may not affect stops.

APPENDIX D: BENCHMARKING DISCUSSION

A fundamental component of any analysis that seeks to determine the relationship between the perceived race and ethnicity of a driver and stopping and searching behavior by police is to understand how those stopped may or may not differ from those in the community. This comparison group, or “benchmark”, should reasonably describe the population that could be contacted, assuming no bias. A benchmark’s value depends on the extent to which it can help explain alternative reasons why stop rates might be different among different groups of people, including driving frequency, driving quality, and the location of driving¹¹⁸. Academic researchers have developed and utilized different types of benchmarks for use in various situations and jurisdictions, balancing the availability of data with the strengths and limitations of each method¹¹⁹. Subject matter experts emphasize that there is no perfect benchmark and recommend using a variety of methods to assess the role that bias may play in police-initiated stops¹²⁰.

Population counts and estimates from the United State Census Bureau are routinely used as benchmarks for police stops as the data is inexpensive, quick to obtain, and readily available¹²¹. However, Census data is not a research-supported best practice due to several known limitations that are difficult to overcome, including the age, accuracy, and relevancy of the data. These limitations are described in more detail below.

CENSUS LIMITATION #1: AGE AND ACCURACY OF DATA

Table 23. City of Portland Racial and Ethnic Demographics from the 2010 U.S. Census

Race/Ethnicity	Citywide		Central Precinct		East Precinct		North Precinct	
	N	%	N	%	N	%	N	%
American Indian/Alaskan	4,381	0.8%	1,062	0.6%	1,891	0.8%	1,428	0.8%
Asian	41,335	7.1%	9,435	5.2%	23,757	10.6%	8,140	4.6%
Black/African American	35,462	6.1%	3,995	2.2%	10,684	4.7%	20,777	11.7%
Hawaiian or Pacific Islander	2,978	0.5%	354	0.2%	1,409	0.6%	1,215	0.7%
Hispanic or Latino	54,840	9.4%	8,971	5.0%	26,613	11.8%	19,258	10.8%
White	421,773	72.2%	150,722	83.2%	151,980	67.5%	119,037	67.0%
Other	23,007	3.9%	6,616	3.5%	8,690	3.9%	7,699	4.4%
Total	583,776	100.0%	181,155	100.0%	225,024	100.0%	177,554	100.0%

The City of Portland has seen a dramatic increase in the number of residents since the last Census in 2010. Over the past 10 years, Portland’s overall population has increased by 12.6% to 664,675

¹¹⁸ Fridell, L.A. (2005). *Understanding race data from vehicle stops: A stakeholder’s guide*. Washington, DC: Police Executive Research Forum.

¹¹⁹ Renauer, B.C., Henning, K., & Covelli, E. (2009). *Benchmarking Portland Police Bureau traffic stop and search data: Technical assistance report*. Portland, Ore.: Criminal Justice Policy Research Institute.

¹²⁰ Engel, R.S. & Calnon, J.M. (2004). Comparing benchmark methodologies for police-citizen contacts: Traffic stop data collection for the Pennsylvania State Police. *Police Quarterly*, 7, 97 – 125.

¹²¹ Ridgeway, G. & MacDonald, J. (2010). Methods for assessing racially biased policing. In S. Rice & M. White (Eds.), *2010, Race, ethnicity, and policing: New and essential readings* (pp. 180-204). New York: New York University Press.

(footnote continued)

individuals¹²² – becoming the nation’s 26th most populous city in the process (up from 28th in 2010)¹²³. Most of Portland’s population growth of about 300 new residents per month can be attributed to migration from outside of the region – primarily 20- and 30- somethings¹²⁴ – as the overall number of births decline across the State¹²⁵. Migration trends are also increasing diversity within Multnomah

County¹²⁶, with 2019

estimates indicating Asian (34.7%), Native Hawaiian and Other Pacific Islander (30.5%), Two or More Races (26.5%), Hispanics (21.9 %), and Black or African Americans

(13.3%) all growing at a faster rate than White individuals (5.6%)¹²⁷.

Table 24. Multnomah County Population, 2010 - 2019

Race / Ethnicity	2010 Census		2019 Estimate		Growth Rate
	Count	Percent	Count	Percent	
American Indian and Alaska Native	5,576	0.8%	5,850	0.7%	+ 4.9%
Asian	47,844	6.5%	64,464	7.9%	+ 34.7%
Black or African American	40,167	5.5%	45,517	5.6%	+ 13.3%
Hispanic	80,138	10.9%	97,667	12.0%	+ 21.9%
Native Hawaiian and Other Pacific Islander	3,976	0.5%	5,188	0.6%	+ 30.5%
Two or More	25,711	3.5%	32,533	4.0%	+ 26.5%
White	531,922	72.3%	561,636	69.1%	+ 5.6%

Even though the U.S. Census Bureau produces annual estimates of the resident population, they should be taken with caution. Analyses indicate that the average error rate for the overall population for counties similar to Multnomah County (in size and growth) is $\pm 1.61\%$ - the best performing estimate for the Census Bureau¹²⁸. The American Community Survey – the only other Census product that produces race/ethnicity demographic estimates for local jurisdictions was rated as the least accurate, with overall margin of error ranging from $\pm 4.72\%$ for five-year estimates to $\pm 5.21\%$ for one-year estimates. A literature review did not yield any research on the estimation accuracy of county subpopulations, including race and ethnicity, for Census Bureau products; however, general statistical methodology dictates that higher margin of errors should exist for Hispanic, Black or African American, Asian or other non-White populations in the area due to their smaller frequency in the population. Additionally, those groups are also likely undercounted in all measures, as

¹²² Population Research Center. (2021). Certified Populations Estimate 2020. Population Research Center, Portland State University. Retrieved from <https://www.pdx.edu/population-research/population-estimate-reports>

¹²³ U.S. Census Bureau. (2019). Annual Estimates for Incorporated Places of 50,000 or More, Ranked by July 1, 2019 Populations: April 1, 2010 to July 1, 2019. U.S. Census Bureau, Population Division. Retrieved from <https://www2.census.gov/programs-surveys/popest/tables/2010-2019/cities/totals/SUB-IP-EST2019-ANNRNRK.xlsx>. *Note: 2020 estimates not available as of publication.*

¹²⁴ Lehner, J. (2019, July 11). Migration to Oregon, an update. Retrieved from <https://oregoneconomicanalysis.com/2019/07/11/migration-to-oregon-an-update/>

¹²⁵ Lehner, J. (2019, May 21). Oregon births and deaths, part 1. Retrieved from <https://oregoneconomicanalysis.com/2019/05/21/oregon-births-and-deaths-part-1/>

¹²⁶ County is the smallest geographic area in which the U.S. Census Bureau produces annual population estimates and is a good proxy for general population trends. The City of Portland represents about 79 percent of the County’s population and about 31 percent of the County’s land area. *Note: 2020 estimates not available as of publication.*

¹²⁷ U.S. Census Bureau. (2019). Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States, States, and Counties: April 1, 2010 to July 1, 2019. U.S. Census Bureau, Population Division. Retrieved from <https://www2.census.gov/programs-surveys/popest/datasets/2010-2019/counties/asrh/cc-est2019-alldata-41.csv>

¹²⁸ Yowell, T. & Devine, J. (2013). *Evaluating current and alternative methods to produce 2010 county population estimates*, (U.S. Census Bureau Working Paper No. 100). Washington, DC: U.S. Census Bureau Population Division.

(footnote continued)

Hispanics, Black or African Americans, and Asians have significantly worse response rates for the Census¹²⁹ and American Community Survey¹³⁰.

CENSUS LIMITATION #2: ONLY INCLUDES RESIDENT POPULATION

Census products, including the decennial census, population estimates, and the American Community Survey, are explicitly focused on the residential population in the observed jurisdictions. However, Portland residents are not the only population subjected to traffic stops, as the rules of the road apply equally to all road users, including visitors and commuters, regardless of their residency. As the economic center for the region, about 270,000 commuters enter Portland daily¹³¹, swelling the daily commuter-adjusted population estimate¹³² to about 915,000. Most commuters (71.5%) report operating a car or motorcycle to drive alone to work¹³³, adding 193,000 motor vehicles to the road per day (excluding carpoolers). In addition to commuters, the region is a vibrant tourist destination, as a total of 8.82 million people had an overnight trip in the area in 2019 and stayed an average of 4.2 nights¹³⁴, boosting the daily population by another 74,000 individuals. About 85 percent of visitors reported operating a motor vehicle – including a personal vehicle or rental car – during their visit, further increasing the number of individuals on Portland roadways¹³⁵.

Table 25. Racial and Ethnic Demographics of Neighboring Jurisdictions from the 2010 U.S. Census

Race / Ethnicity	Vancouver		Gresham		Beaverton		Tigard		Lake Oswego	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
American Indian and Alaska Native	1,252	0.8%	808	0.8%	387	0.4%	251	0.5%	127	0.3%
Asian	8,039	5.0%	4,446	4.2%	9,368	10.4%	3,416	7.1%	2,039	5.6%
Black or African American	4,525	2.8%	3,530	3.3%	2,219	2.5%	772	1.6%	252	0.7%
Hispanic	16,756	10.4%	19,984	18.9%	14,628	16.3%	6,106	12.7%	1,356	3.7%
Native Hawaiian and Other Pacific Islander	1,527	0.9%	698	0.7%	395	0.4%	411	0.9%	64	0.2%
White	123,347	76.2%	72,549	68.7%	59,559	66.3%	35,460	73.8%	31,815	86.9%
Other / Two or More	6,345	3.9%	3,579	3.4%	3,247	3.6%	1,619	3.4%	966	2.6%

¹²⁹ Mule, T. (2012). *Census coverage measurement estimation report: Summary of estimates of coverage for persons in the United States*, (DSSD 2010 Census Coverage Measurement Memorandum Series #2010-G-01). Washington, DC: U.S. Census Bureau, Decennial Statistical Studies Division.

¹³⁰ Griffin, D.H. (2002). *Measuring survey nonresponse by race and ethnicity*, (Working Paper). Washington, DC: U.S. Census Bureau.

¹³¹ U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics Data (2002 – 2018). U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program.

¹³² Total Resident Population + Total Workers Working In Area – Total Workers Living in Area. Equation retrieved from <https://www.census.gov/topics/employment/commuting/guidance/calculations.html>

¹³³ U.S. Census Bureau. (2020). 2015 – 2019 American Community Survey 5-Year Estimates. Table B08601: Means of Transportation to Work for Workplace Geography. U.S. Census Bureau, American Community Survey.

¹³⁴ Dean Runyan Associates. (2020). *Oregon Travel Impacts: Statewide Estimates, 1992 – 2019p*. Portland, Ore: Oregon Tourism Commission. Retrieved from <https://industry.traveloregon.com/resources/research/oregon-travel-impacts-1991-2018-dean-runyan-associates/>

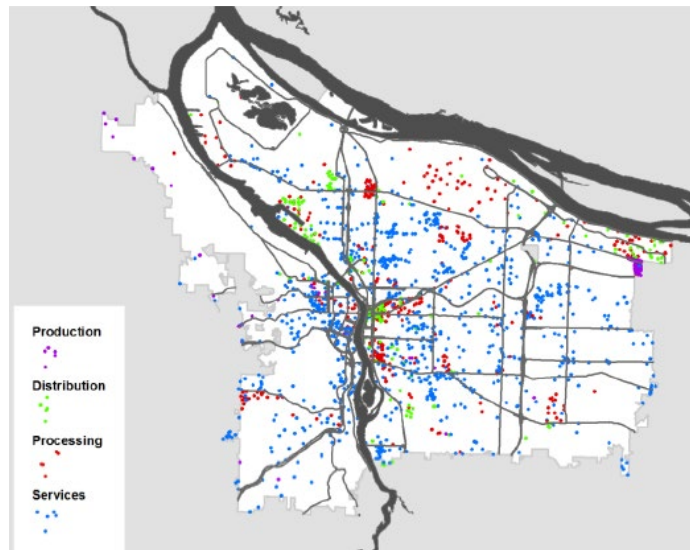
¹³⁵ Longwoods International (2018). *Oregon 2017 Regional Visitor Report: Portland Region*. <http://industry.traveloregon.com/research/archive/portland-region-overnight-travel-study-2017-longwoods-international/>
(footnote continued)

Commuters and tourists are not the only groups that add to Portland's population, as a vibrant entertainment scene invites temporary visitors from neighboring jurisdictions. The City of Portland has more food service employees per capita than any other city in the region with large numbers of restaurants in the Downtown core and along transportation routes¹³⁶. These food services, along with nightlife venues, festivals, and other entertainment options, are destinations for locals and non-locals alike, increasing the number of road users on nights and weekends. The demographics of neighboring municipalities closely resemble Portland's demographics, with White as the largest group (above 66%) in every jurisdiction¹³⁷.

Data from the 2010 U.S. Census indicates that most Portland suburbs have a higher Hispanic or Latino population and smaller Black or African-American population than Portland as a whole. Most transit usage occurs during the peak hours of 7 a.m. to 9 a.m. and 4 p.m. to 6 p.m. on weekdays¹³⁸, indicating that most people temporarily visiting Portland for entertainment purposes are likely driving or carpooling to the locale.

The dramatic changes in the city's population each day makes it especially difficult to understand the demographics of who may be utilizing the City's public roadways. Portland ranks in the bottom half of all large cities nationwide in Black or African American employment – but in the upper half for White, Hispanic, and Asian employment¹³⁹ – highlighting the racial disparities that exist in the City. Black or African American individuals that live in Portland have the lowest labor force participation rate for any racial group, whereas Hispanic or Latinos (of any race) have the highest in the City¹⁴⁰. Nationally, White individuals (16.9%) are more likely to be employed part-time than Black or African American individuals (15.5%)¹⁴¹, which means that group may be more likely to commute

Figure 13. Food employment density in the City of Portland (Green, Schrock, & Liu, 2012)



¹³⁶ Green, J., Schrock, G., & Liu, J. (2015). *Portland's Food Economy: Trends and Contributions*. Portland, Ore: City of Portland Bureau of Planning and Sustainability. Retrieved from <https://www.portlandoregon.gov/bps/article/548390>

¹³⁷ U.S. Census Bureau. (2010). 2010 Census. Table DP-1: Profile of General Population and Housing Characteristics: 2010. U.S. Census Bureau, Census.

¹³⁸ TriMet Code 19.05(A)(D)

¹³⁹ Ross, M. & Holmes, N. (2017, Feb. 27). Employment by race and place: Snapshots of America. Retrieved from <https://www.brookings.edu/blog/the-avenue/2017/02/27/employment-by-race-and-place-snapshots-of-america/>

¹⁴⁰ U.S. Census Bureau. (2020). 2015 – 2019 American Community Survey 5-Year Estimates. Table S2301: Employment Status. U.S. Census Bureau, American Community Survey.

¹⁴¹ Bureau of Labor Statistics, US Department of Labor (2020). Household data: Annual averages: 12. Employed persons by sex, occupation, class of worker, full- or part-time status, and race. Bureau of Labor Statistics, Current Population Survey. Retrieved from <https://www.bls.gov/cps/cpsaat12.htm>

(footnote continued)

outside of the traditional “rush hours”, further complicating any benchmark of who may be using the public roadways at any particular hour.

The differential commute patterns for individuals that either live, work, or visit Portland further complicate efforts to benchmark Stops data. White individuals that live (57.7%)¹⁴² or work (64.0%)¹⁴³ in Portland are more likely to drive alone to work than Black individuals that live (56.0%)¹⁴⁴ or work 57.4%)¹⁴⁵ in the City, with Black individuals more likely to utilize shared transportation methods such as mass transit (21.4%, 20.9%)^{144,145} than White individuals (11.7%, 11.4%)^{142,143}. These differences in commute methods, combined with the variation in employment levels, likely means there are more cars on the road operated by White individuals than Black individuals, especially during business hours. Racial and ethnic demographics also vary substantially for tourists and visitors – who primarily drive – to the area, as the majority of visitors identify themselves as White (83%) with only 3 percent self-identifying as African-American¹⁴⁶.

By only focusing on the resident population of Portland – which the U.S. Census does – it excludes a significant portion of people that could be using the City’s roadways. Employment and commute pattern demographics indicate that is reasonable to expect an increase in the number of White individuals on Portland roadways. However, much of this growth is primarily during the standard work week. Black or African American individuals are more likely to be unemployed or work part-time, making their roadway usage unpredictable by traditional measures. Available statistics also don’t highlight where certain demographics may be driving, as the purpose of your trip may influence where and when you use City roadways.

CENSUS LIMITATION #3: DOES NOT ACCOUNT FOR DIFFERENTIAL EXPOSURE

The readily available data from the U.S. Census fails to accurately identify the demographic breakdown of who might be using the City’s public roadways in 2019. However, even if it sufficiently described the entire driving population, it would still fail to account for the reality that not all drivers are equally likely to be stopped by police. As described by Tillyer, Engel, and Cherkauskas (2009)¹⁴⁷, the best benchmarks “reflect the drivers’ *risk* of being stopped, assuming no bias” on the part of police. There are numerous legitimate and legal reasons why an individual would

¹⁴² U.S. Census Bureau. (2020). 2015 – 2019 American Community Survey 5-Year Estimates. Table B08105H: Means of Transportation to Work (White Alone, Not Hispanic or Latino). U.S. Census Bureau, American Community Survey.

¹⁴³ U.S. Census Bureau. (2020). 2015 – 2019 American Community Survey 5-Year Estimates. Table B08505H: Means of Transportation to Work for Workplace Geography (White Alone, Not Hispanic or Latino). U.S. Census Bureau, American Community Survey.

¹⁴⁴ U.S. Census Bureau. (2019). 2014 – 2018 American Community Survey 5-Year Estimates. Table B08105B: Means of Transportation to Work (Black or African American Alone). U.S. Census Bureau, American Community Survey.

¹⁴⁵ U.S. Census Bureau. (2019). 2014 – 2018 American Community Survey 5-Year Estimates. Table B08505B: Means of Transportation to Work for Workplace Geography (Black or African American Alone). U.S. Census Bureau, American Community Survey.

¹⁴⁶ Longwoods International (2018). *Oregon 2017 Regional Visitor Report: Portland Region*.

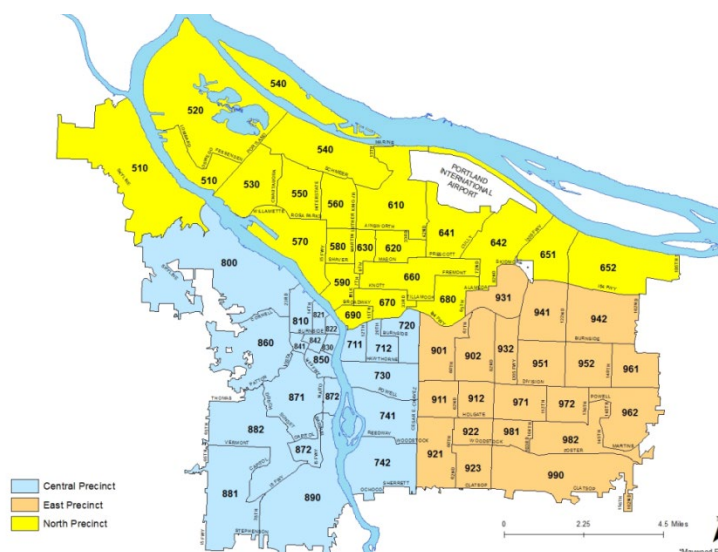
<http://industry.traveloregon.com/research/archive/portland-region-overnight-travel-study-2017-longwoods-international/>

¹⁴⁷ Tillyer, R., Engel, R.S., & Cherkauskas, J.C. (2009). Best practices in vehicle stop data collection and analysis. *Policing: An International Journal of Police Strategies & Management*, 33, 69 – 92.

have the potential for differential exposure to law enforcement officers, and the best benchmarks attempt to account for those.

The area in which the subject is driving is a significant factor in how likely an individual is to be contacted by police. The City of Portland is divided into 3 different administrative areas, called precincts, which form the basis of police patrol activity. Each precinct is further divided into 20 subunits, called patrol districts, that were sized and balanced in 2009 to account for variations in 9-1-1 calls and other calls for police service. The relative size of the district impacts whether a person is more or less likely to encounter an officer on patrol – for instance, driving in District 822 in the Old Town / Chinatown area of Portland (with 7.9 miles of roadways) a subject is more likely to encounter an officer on patrol than in District 882 in Southwest Portland (with 89.4 miles of roadways).

Figure 14. Portland Precincts and Patrol Districts



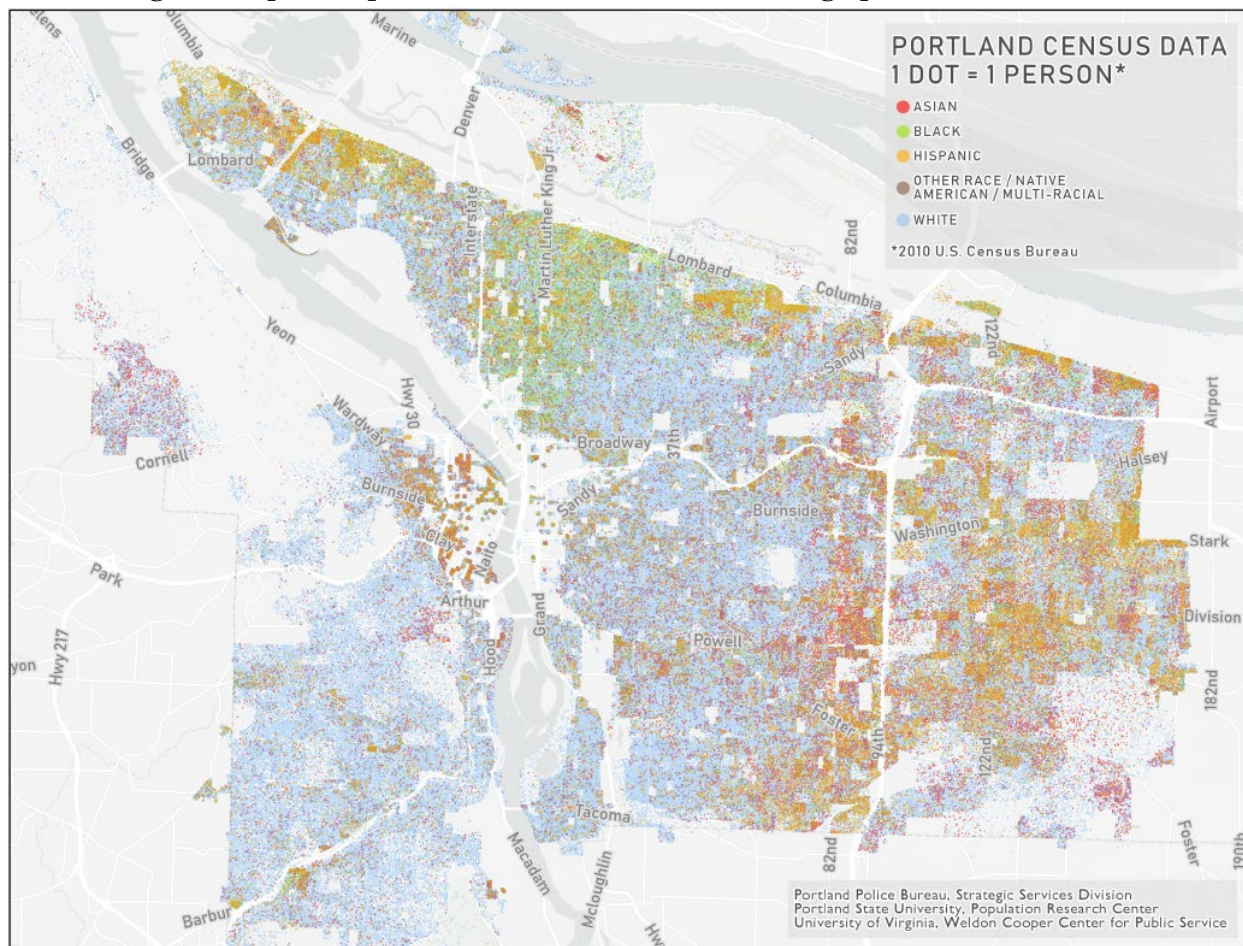
However, due to staffing shortages across the Bureau, not every precinct and district is staffed evenly; in 2020, not a single precinct had a staffing minimum of 20 officers for every shift¹⁴⁸ to ensure each patrol district had at least one officer assigned for all hours of the day. Multiple officers may also be assigned to the same unit, further reducing the overall coverage within a precinct. Without a full complement of officers available, staffing supervisors prioritize district assignment and special patrols based, in part, on reducing violent crime and responding to calls for service, including 9-1-1 calls, from community members. Where an officer patrols can also have significant impact on their policing strategy and discretionary activity, as officers are more likely to take reports and make arrests in areas that are perceived to be high crime, even for more minor offenses that may be handled less formally in other areas of the jurisdiction¹⁴⁹.

¹⁴⁸ Central and North Precincts had 3 shifts: A-Shift (Day) from 7 a.m. to 5 p.m.; C-Shift (Afternoon) from 4 p.m. to 2 a.m.; E-Shift (Night) from 10 p.m. to 8 a.m. Each had an additional shift, B-Shift, scheduled from 12 p.m. to 12 a.m.

¹⁴⁹ Lum, C. (2009). *Does the "race of places" influence police officer decision making?*, Final report, W.E.B. DuBois Fellowship (Award #2007-IF-CX-0032), National Institute of Justice. Washington, DC: U.S. National Institute of Justice. Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/grants/231931.pdf>

The intersection between the common patrol areas for Portland police officers and where a subject lives, works, visits, or transits through is a key component of understanding a subject's risk of being stopped when engaging in dangerous or illegal driving behavior. About 72 percent of Portland's population self-identified as "White" on the 2010 U.S. Census; however, this does not mean that ratio is true for every neighborhood in the City. Traditional measures of segregation show that Portland is relatively well-integrated, ranking in the top 25% for the largest metro areas¹⁵⁰ and cities¹⁵¹. However, this is partly due to methodological challenges, as the city's overall lack of racial diversity limits the usefulness of these measures for Portland. Graphical analyses of Portland racial demographics (see Figure 5) show that Black, Hispanic, and Asian populations cluster in distinct pockets around the City – but these are small enough that a Census tract-based analysis would have difficulty differentiating.

Figure 15. Spatial representation of Portland racial demographics, 2010 US Census



Comparing the residences of Portland's population with the top locations for 9-1-1 calls and violent crime helps explain the differential exposure to law enforcement in Portland across different racial

¹⁵⁰ Michigan Population Studies Center, Institute for Social Research, University of Michigan. (n.d.). New racial segregation measures for large metropolitan areas: Analysis of the 1990-2010 decennial censuses. Retrieved from <https://www.psc.isr.umich.edu/dis/census/segregation2010.html>

¹⁵¹ Silver, N. (2015, May 1). The most diverse cities are often the most segregated. Retrieved from <https://fivethirtyeight.com/features/the-most-diverse-cities-are-often-the-most-segregated/>

groups. East Precinct – especially along NE/SE 82nd Avenue, NE/SE 122nd Avenue, and E. Stark Street – receive large proportions of the calls for service and violent crime in the City. These areas also coincide with some of the least-White portions of Portland, increasing the likelihood that Hispanic- and Asian-identifying Portlanders encounter a law enforcement officer in the area. Inner Northeast and North Portland also see elevated levels of crime and activity, increasing the likelihood that Black-identifying Portlanders may be contacted by Portland police officers doing patrol work. Conversely, the neighborhoods with the highest proportion of White residents – namely Southwest Portland, the Sellwood-Westmoreland/Eastmoreland neighborhoods in Southeast, and Alameda/Beaumont-Wilshire neighborhoods in Northeast have some of the lowest activity in the City, decreasing the likelihood that residents of those areas would encounter a Portland police officer in their neighborhood.

The analysis also highlights the drawback of using U.S. Census residential data to benchmark traffic stops and police activity. Portland’s city center – namely Downtown, Old Town/Chinatown, the Pearl District, Central Eastside Industrial District, and the Lloyd District – are the most active spots in Portland for reported violent crimes and calls for service. However, large portions of these areas were reported to have no official residents as they are primarily places of commerce and business. These areas also have the largest population of houseless and unsheltered populations in the City, which are notoriously hard to locate and count for the decennial censuses¹⁵². This is especially relevant given that people that identified as American Indian or Alaskan Native, Native Hawaiian or Pacific Islander, and Black or African American are over-represented in City homelessness rates¹⁵³. Unsheltered people of color disproportionately reported sleeping in the Downtown area compared to other areas in town, further increasing their risk of being contacted by law enforcement officials in the busiest part of town.

The rapid growth and change in Portland’s neighborhoods is also likely increasing the risk certain communities face in encountering a police officer while driving. Portland has one of the highest rates of gentrification and displacement in the county¹⁵⁴ with the displacement most prominently affecting traditionally Black communities in North and Northeast Portland¹⁵⁵. Even though residents are being displaced, it does not necessarily mean their whole community has moved – displaced residents are still traveling to their former communities to shop, worship, work, and visit friends/family. Displaced residents are forced to move further from public transportation hubs¹⁵⁶,

¹⁵² U.S. Government Accountability Office. (2018, July). *2020 Census: Actions Needed to Address Challenges to Enumerating Hard-to-Count Groups*. (Publication No. GAO-18-599). Retrieved from <https://www.gao.gov/assets/700/693450.pdf>

¹⁵³ Joint Office of Homeless Services. (2019). *2019 Point-in-Time Count of Homelessness in Portland/Gresham/Multnomah County, Oregon*. Portland, Ore: Multnomah County. Retrieved from <https://multco.us/housing-and-homelessness/point-time-counts>

¹⁵⁴ Richardson, J., Mitchell, B., & Franco, J. (2019). *Shifting neighborhoods: Gentrification and cultural displacement in American cities*. Washington, DC: National Community Reinvestment Coalition. Retrieved from <https://ncrc.org/gentrification/>

¹⁵⁵ Bureau of Planning and Sustainability, City of Portland. (2018). *2018 gentrification and displacement neighborhood typology assessment: Key findings and methodology report*. Retrieved from <https://www.portlandoregon.gov/bps/62635>

¹⁵⁶ Soursourian, M. (2012). *Community development research brief: Suburbanization of poverty in the Bay Area*. San Francisco: Federal Reserve Bank of San Francisco. Retrieved from <https://www.frbsf.org/community-development/files/Suburbanization-of-Poverty-in-the-Bay-Area2.pdf>

(footnote continued)

which can increase the total number of miles based on land use policies and the transportation network¹⁵⁷. The increased travel time, and miles, that displaced residents of color face increases the likelihood they encounter a Portland police officer on patrol, especially as they commute through high police-activity areas on main arterials.

¹⁵⁷ Chatman, D.G., Xu, R., Park, J. & Spevack, A. (2017). Chapter 4: The effects on auto use of household displacement from rail station areas. In K. Chapple, P. Waddell, D. Chatman, A. Loukaitou-Sideris, & P. Ong. *Developing a new methodology for analyzing potential displacement* (pp. 156 – 180). Berkeley, Calif.: University of California, Berkeley.

APPENDIX E: TYPES OF SEARCHES

Police officers may initiate one of four types of discretionary searches on drivers or pedestrians. Beginning on June 27, 2018, officers can select more than one search type per stop.

Examples include:

- **Consent.** Subject to certain limitations, officers request consent from an individual before searching them as part of an investigation or contact. Although officers have probable cause or other legal reasons to search an individual in many cases, officers often ask for consent because it protects the search from being excluded in court.
- **Plain View.** A plain view search occurs when an officer observes contraband or other evidence prior to or during a stop without conducting an actual search. An example of this may include an officer who observes, from outside of the vehicle, a driver or passenger tucking a weapon underneath a seat in a car. *(Note: This search type was discontinued on June 27, 2018).*
- **Probable Cause.** A search conducted when there is substantial objective basis to believe that more likely than not 1) a criminal offense is being, or has been committed and 2) items of evidence pertaining to that criminal offense are in a specific place to be searched. An example of this might include searching a subject's pockets for narcotics after an officer observed them selling drugs. *(Note: This search type was discontinued on December 21, 2020).*
- **Reasonable Suspicion.** A search that is conducted based on an officer's belief that it is reasonable under the totality of the circumstances that exist at the time and place the officer conducts the search, that the officer will find contraband or evidence of a crime. *(Note: This search type was discontinued on December 21, 2020)*
- **Weapons Pat or Frisk.** The external patting of a person's outer clothing justified by an officer's objectively reasonable suspicion, under the totality of the circumstances and based on specific and articulable facts, that the defendant poses an immediate threat of serious physical injury to the officer or others. Generally this search consists of "patting" the pockets, waistband, and sleeves and legs of a subject, but prohibits reaching into pockets or searching for small items. *(Note: This search type was discontinued on December 21, 2020)*

APPENDIX F: PERCEIVED GENDER ANALYSIS

The Portland Police Bureau collects data on the officer's perception of the race, gender, and age of all stopped drivers and pedestrians. Male subjects were the most stopped group across all stop types, representing 70.3% of all stops. Non-Traffic officers were significantly more likely to stop non-binary and male drivers¹⁵⁸ and male pedestrians¹⁵⁹ when compared to Traffic officers. Non-Traffic officers has significantly increased the percentage of male drivers (70.2% in 2016 vs. 72.3% in 2020)¹⁶⁰ and pedestrians (73.8% in 2016 vs. 88.2% in 2020)¹⁶¹ over the past five years, while Traffic¹⁶² officers have shown little change over the time period.

Table 26. Non-Traffic officers stopped male and non-binary drivers at a significantly higher rate.

	Gender	2016		2017		2018		2019		2020	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	Female	6,361	33.5%	3,491	32.7%	4,231	32.3%	5,061	34.8%	4,288	31.4%
	Male	12,473	65.8%	7,177	67.2%	8,875	67.7%	9,461	65.1%	9,322	68.3%
	Non-Binary*	--	--	--	--	2	0.0%	10	0.1%	30	0.2%
	Unknown^	136	0.7%	6	0.1%	7	0.1%	--	--	--	--
	Traffic Total	18,970	100%	10,674	100%	13,115	100%	14,532	100%	13,640	100%
Non-Traffic	Female	3,874	28.7%	3,187	27.5%	4,552	28.1%	5,031	27.2%	3,080	27.1%
	Male	9,486	70.2%	8,283	71.4%	11,564	71.3%	13,426	72.6%	8,206	72.3%
	Non-Binary*	--	--	--	--	25	0.2%	46	0.2%	65	0.6%
	Unknown^	161	1.2%	137	1.2%	70	0.4%	--	--	--	--
	Non-Traffic Total	13,521	100%	11,607	100%	16,211	100%	18,503	100%	11,351	100%

* Non-Binary was added as an available option on June 27, 2018.

^ Unknown was removed as an available option on June 27, 2018.

Table 27. Male pedestrians were significantly more likely to be stopped by Non-Traffic officers.

	Gender	2016		2017		2018		2019		2020	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	Female	31	25.8%	18	25.7%	16	22.5%	23	23.7%	11	28.9%
	Male	88	73.3%	52	74.3%	54	76.1%	74	76.3%	27	71.1%
	Non-Binary*	--	--	--	--	1	1.4%	0	0.0%	0	0.0%
	Unknown^	1	0.8%	0	0.0%	0	0.0%	--	--	--	--
	Traffic Total	120	100%	70	100%	71	100%	97	100%	38	100%
Non-Traffic	Female	29	23.0%	29	24.4%	65	12.8%	166	16.1%	24	11.8%
	Male	93	73.8%	88	73.9%	441	86.6%	867	83.8%	179	88.2%
	Non-Binary*	--	--	--	--	2	0.4%	1	0.1%	0	0.0%
	Unknown^	4	3.2%	2	1.7%	1	0.2%	--	--	--	--
	Non-Traffic Total	126	100%	119	100%	509	100%	1,034	100%	203	100%

* Non-Binary was added as an available option on June 27, 2018.

^ Unknown was removed as an available option on June 27, 2018.

¹⁵⁸ $\chi^2 = 72.960, p < .001, df = 2$

¹⁵⁹ $\chi^2 = 7.561, p < .01, df = 1$

¹⁶⁰ $p < .04, r^2 = .83$

¹⁶¹ $p < .05, r^2 = .77$

¹⁶² Drivers: $p < .56, r^2 = .13$; Pedestrians: $p < .77, r^2 = .04$

(footnote continued)

When analyzing stops data for disparities by race, PPB utilizes two different benchmarks that are tailored to the differing mission of Traffic Division and the Non-Traffic divisions. The use of the Crime Victimization benchmark as a proxy for subjects that may be working, living, recreating, or transiting in an area is supported by the literature. However, the literature shows that no single measure explains potential gender differences by geographic location, with age and physical activity¹⁶³, economic factors¹⁶⁴, and sexual preference¹⁶⁵ all contributing to locale-based gender differences. Furthermore, women are also more likely to report being victims of violent crimes¹⁶⁶. Without comprehensive research on how these known and unknown factors contribute to geographic place-making in Portland, it is improper to use crime victimization as a proxy for potential police contact by gender.

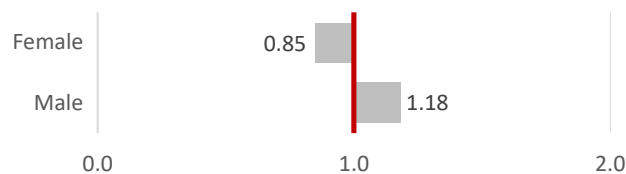
Table 28. 2020 Injury Collision Statistics, by Gender of Drivers

Gender	2020	
	Count	Percent
Female	365	33.2%
Male	734	66.8%
Total	1,099	100.0%

Instead, the reported gender¹⁶⁷ of drivers involved in injury collisions in 2020 was used as a benchmark for driver stops by all divisions. In the analysis of driver's race, this benchmark is used for stops by Traffic officers only.

Based on the reported gender of individuals involved in injury collisions, drivers are stopped similar to expected rates. No comparable benchmark exists for pedestrian stops, so no analysis was conducted.

Figure 16. Drivers are stopped at rates similar to the 2020 Injury Collision Benchmark



Stop Reasons

Non-Traffic officers – but not Traffic officers¹⁶⁸ – display significantly different stop patterns based on the perceived gender of the driver¹⁶⁹. Female drivers stopped by Non-Traffic personnel were more likely to commit a Major Moving Violation whereas male and non-binary drivers were more likely to be stopped for Non-Traffic Offenses. Too few female and non-binary pedestrians were stopped in 2020 to conduct robust statistical analyses.

¹⁶³ Pollard, T.M. & Wagnild, J.M. (2017). Gender differences in walking (for leisure, transport, and in total) across adult life: a systematic review. *BMC Public Health*, 17.

¹⁶⁴ Chetty, R., Hendren, N., Lin, F., Majerovitz, J., & Scuderi, B. (2016). *Childhood environment and gender gaps in adulthood (Working Paper No. 21936)*. Cambridge, MA: National Bureau of Economic Research.

¹⁶⁵ Diehm, J. (2018, June). Men are from Chelsea, Women are from Park Slope: How “gayborhoods” in 15 major American cities are divided by gender. Retrieved from <https://pudding.cool/2018/06/gayborhoods/>.

¹⁶⁶ Morgan, R.E., & Truman, J.L. (2018). *Criminal Victimization, 2017* (NCJ 252472). Washington, D.C.: Bureau of Justice Statistics, U.S. Department of Justice.

¹⁶⁷ The PPB's records management system, RegJIN, does not include “Non-Binary” as possible gender category so the group cannot be included in any benchmark analyses.

¹⁶⁸ $\chi^2 = 2.742, p < .44, df = 3$

¹⁶⁹ $\chi^2 = 30.686, p < .04, df = 2$

Table 29. Male and Non-Binary drivers stopped by Non-Traffic Officers were significantly more likely to be stopped for a Non-Traffic Offense than Females.

	Gender	Moving Violations				Non-Moving Violations		Non-Traffic Offenses	
		Minor		Major		Violations		Offenses	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	Female	1,069	24.9%	2,965	69.1%	247	5.8%	7	0.2%
	Male	2,275	24.4%	6,490	69.6%	550	5.9%	7	0.1%
	Non-Binary	10	33.3%	17	56.7%	3	10.0%	0	0.0%
	Total	3,354	24.6%	9,472	69.4%	800	5.9%	14	0.1%
Non-Traffic	Female	752	24.4%	1,106	35.9%	1,184	38.4%	38	1.2%
	Male	2,165	26.4%	2,695	32.8%	3,190	38.9%	156	1.9%
	Non-Binary	13	20.0%	18	27.7%	29	44.6%	5	7.7%
	Total	2,930	25.8%	3,819	33.6%	4,403	38.8%	199	1.8%

Table 30. Gender stop rates were similar for pedestrians in both organization groups.

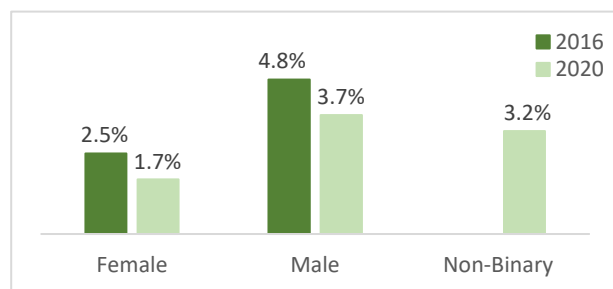
	Gender	Moving Violations				Non-Moving Violations		Non-Traffic Offenses	
		Minor		Major		Violations		Offenses	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	Female	8	72.7%	0	0.0%	3	27.3%	0	0.0%
	Male	15	55.6%	8	29.6%	2	7.4%	2	7.4%
	Non-Binary	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Total	23	60.5%	8	21.1%	5	13.2%	2	5.3%
Non-Traffic	Female	7	29.2%	3	12.5%	4	16.7%	10	41.7%
	Male	59	33.0%	25	14.0%	23	12.8%	72	40.2%
	Non-Binary	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Total	66	32.5%	28	13.8%	27	13.3%	82	40.4%

Search Rates by Gender

Search rates, based on perceived gender, have changed little over the last five years. Males and females were both searched less – although at a non-significant rate – than they were five years ago¹⁷⁰. There were no significant differences in the usage of probable cause¹⁷¹ or consent¹⁷² on male and female subjects in 2020.

All search types for each perceived gender have been statistically stable over the past five years.

Figure 17. Search rates have slightly declined for all gender groups since 2016.



¹⁷⁰ Female: $p < .46$, $r^2 = .19$; Male: $p < .57$, $r^2 = .13$

¹⁷¹ $\chi^2 = 7.388$, $p < .008$, $df = 1$

¹⁷² $\chi^2 = 1.689$, $p < .20$, $df = 2$

Table 31. Male subjects are significantly more likely to be searched than female subjects.

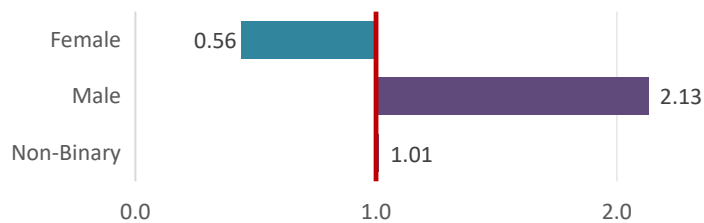
	Gender	Total Subjects Searched		Consent		Probable Cause [^]		Reasonable Suspicion [^]		Weapon Patdown [^]		Warrant*		Warrant Exception*	
		Searches	Rate	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	Female	18	0.4%	4	22.2%	12	70.6%	0	0.0%	1	5.9%	0	0.0%	1	100.0%
	Male	81	0.9%	20	24.7%	52	68.4%	2	2.6%	16	21.1%	1	20.0%	5	100.0%
	Non-Binary	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	--
	Total	99	0.7%	24	24.2%	64	68.8%	2	2.2%	17	18.3%	1	16.7%	6	100.0%
Non-Traffic	Female	109	3.5%	55	50.5%	56	51.4%	6	5.5%	3	2.8%	--	--	--	--
	Male	570	6.8%	315	55.3%	241	42.9%	20	3.6%	21	3.7%	0	0.0%	1	12.5%
	Non-Binary	3	4.0%	2	66.7%	1	33.3%	0	0.0%	0	0.0%	--	--	--	--
	Total	682	5.9%	372	54.5%	298	44.2%	26	3.9%	24	3.6%	0	0.0%	1	12.5%

* Warrant and Warrant Exception search types were added to the Stops system on December 21, 2020. Percentages only include searches conducted after that date.

[^] Probable Cause, Reasonable Suspicion, and Weapon Patdown search types were removed as available options on December 21, 2020. Percentages only include searches conducted prior to that date.

Portland Police officers displayed differential search patterns for stopped drivers based on the subject's perceived gender at a disparate rate in 2020. Male drivers were searched significantly more than their female counterparts¹⁷³ when compared to overall stop rates.

Figure 18. Subjects of different perceived genders were searched at disparate rates when compared to stop rates



Contraband Hit Rates

Despite being searched more by PPB officers, males were statistically just as likely¹⁷⁴ to be found with contraband as their female counterparts. In 2020, Males were found with contraband in 59.9% of searches, while Females were found with contraband in 60.6% of searches. Drugs were the most commonly found items for both groups, followed by Weapons, Other Contraband, Alcohol, and Stolen Property for Males and Other Contraband, Alcohol, Stolen Property, and Weapons for Females.

Table 32. Illicit drugs are the most commonly uncovered item during subject searches.

Gender	Total Searches	Found Contraband		Alcohol		Drugs		Weapons		Stolen Property		Other	
	Count	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Female	127	77	60.6%	13	10.2%	44	34.6%	10	7.9%	11	8.7%	19	15.0%
Male	651	390	59.9%	60	9.2%	211	32.4%	95	14.6%	37	5.7%	88	13.5%
Non-Binary	3	2	66.7%	0	0.0%	1	33.3%	2	66.7%	0	0.0%	0	0.0%
Total	781	469	60.1%	73	9.3%	256	32.8%	107	13.7%	48	6.1%	107	13.7%

Stop Outcomes

Male and Female subjects had significantly different stop dispositions when stopped by a Portland Police Bureau officer from either division¹⁷⁵. Male subjects were significantly more likely to be arrested than Female subjects from either division, while Male subjects stopped by Non-Traffic officers were significantly more likely to receive a cite-in-lieu of an arrest or no enforcement action and significantly less likely to be cited. Male subjects stopped by Traffic officers were significantly more likely to be cited or given a cite-in-lieu of an arrest and significantly less likely to receive a

¹⁷³ $\chi^2 = 66.582, p < .001, df = 1$

¹⁷⁴ $\chi^2 = 0.023, p < .88, df = 1$

¹⁷⁵ Traffic: $\chi^2 = 10.198, p < .04, df = 4$; Non-Traffic: $\chi^2 = 63.483, p < .001, df = 4$

warning. The progressive nature of a stop, and the multiple decision points within the interaction, make it difficult to discern what role, if any, gender bias plays in stop disposition.

Table 33. Male subjects were significantly more likely to be arrested – regardless of PPB division.

Traffic	Total Stops			Enforcement Action											
	Gender	Count	Percent	None		Warning		Citation		Cite-in-Lieu		Juvenile Summons		Arrested	
				Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent		
Female	4,299	31.4%	6	0.1%	949	22.1%	3,278	76.3%	16	0.4%	0	0.0%	50	1.2%	
Male	9,349	68.4%	22	0.2%	1,815	19.4%	7,275	77.8%	79	0.8%	0	0.0%	158	1.7%	
Non-Binary	30	0.2%	1	3.3%	8	26.7%	21	70.0%	0	0.0%	0	0.0%	0	0.0%	
Total	13,678	100.0%	29	0.2%	2,772	20.4%	10,574	77.8%	95	0.7%	0	0.0%	208	1.5%	

Non-Traffic	Total Stops			Enforcement Action											
	Gender	Count	Percent	None		Warning		Citation		Cite-in-Lieu		Juvenile Summons		Arrested	
				Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent		
Female	3,104	26.9%	100	3.2%	2,430	78.3%	408	13.1%	21	0.7%	1	0.0%	144	4.6%	
Male	8,385	72.6%	390	4.7%	6,423	76.6%	925	11.0%	97	1.2%	1	0.0%	549	6.5%	
Non-Binary	65	0.6%	22	33.8%	36	55.4%	5	7.7%	0	0.0%	0	0.0%	2	3.1%	
Total	11,554	100.0%	512	4.5%	8,889	77.7%	1,338	11.7%	118	1.0%	2	0.0%	695	6.1%	

APPENDIX G: PERCEIVED AGE ANALYSIS

Table 34. Adults aged 25 or Older are the most commonly stopped group of drivers.

	Age	2016		2017		2018		2019		2020	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	Under 16	6	0.0%	6	0.1%	4	0.0%	13	0.1%	18	0.1%
	16 to 24	3,510	18.5%	1,970	18.5%	2,397	18.3%	2,519	17.3%	2,692	19.7%
	25 or Over	15,234	80.3%	8,654	81.1%	10,701	81.6%	12,000	82.6%	10,930	80.1%
	Unknown^	220	1.2%	44	0.4%	13	0.1%	--	--	--	--
	Traffic Total	18,970	100%	10,674	100%	13,115	100%	14,532	100%	13,640	100%
	Age	2016		2017		2018		2019		2020	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Non-Traffic	Under 16	38	0.3%	16	0.1%	23	0.1%	28	0.2%	23	0.2%
	16 to 24	2,910	21.5%	2,495	21.5%	2,980	18.4%	2,810	15.2%	1,666	14.7%
	25 or Over	10,356	76.6%	8,928	76.9%	13,117	80.9%	15,665	84.7%	9,662	85.1%
	Unknown^	217	1.6%	168	1.4%	91	0.6%	--	--	--	--
	Non-Traffic Total	13,521	100%	11,607	100%	16,211	100%	18,503	100%	11,351	100%

^ Unknown was removed as an available option on June 27, 2018.

Table 35. Traffic and Non-Traffic officers stopped different ages of pedestrians at similar rates.

	Age	2016		2017		2018		2019		2020	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	Under 16	1	0.8%	0	0.0%	0	0.0%	0	0.0%	1	2.6%
	16 to 24	23	19.2%	10	14.3%	9	12.7%	11	11.3%	8	21.1%
	25 or Over	95	79.2%	60	85.7%	62	87.3%	86	88.7%	29	76.3%
	Unknown^	1	0.8%	0	0.0%	0	0.0%	--	--	--	--
	Traffic Total	120	100%	70	100%	71	100%	97	100%	38	100%
	Age	2016		2017		2018		2019		2020	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Non-Traffic	Under 16	1	0.8%	1	0.8%	4	0.8%	3	0.3%	1	0.5%
	16 to 24	25	19.8%	15	12.6%	48	9.4%	66	6.4%	13	6.4%
	25 or Over	96	76.2%	101	84.9%	457	89.8%	965	93.3%	189	93.1%
	Unknown^	4	3.2%	2	1.7%	0	0.0%	--	--	--	--
	Non-Traffic Total	126	100%	119	100%	509	100%	1,034	100%	203	100%

^ Unknown was removed as an available option on June 27, 2018.

After the completion of the stop, Portland Police Bureau officers indicate their perception of the stopped subject's perceived age¹⁷⁶. Like the prior four years, the 25 or Over group was the most stopped group in 2020 – representing 82.5 percent of all stops – followed by 16 to 24 (17.4%), and Under 16 (0.2%). The stop rates for drivers¹⁷⁷ and pedestrians¹⁷⁸ perceived to be over the age of 25 have significantly increased since 2016 with stop rates of those aged 16 to 24 has decreased – pedestrians at a significant rate¹⁷⁹ – over the same time frame.

¹⁷⁶ Prior to June 27, 2018, officers indicated the subject's perceived age in four broad categories: Under 16, 16 to 24, 25 or Over, and Unknown. After June 27, the officer enters an integer (i.e., 35) based on their perception or the subject's actual age from their state-issued identification. All integers were converted to categories to ease interpretation and comparison over time.

¹⁷⁷ $p < .05$, $r^2 = .78$

¹⁷⁸ $p < .05$, $r^2 = .77$

¹⁷⁹ Drivers: $p < .09$, $r^2 = .69$; Pedestrians: $p < .05$, $r^2 = .79$

The use of reporting by integer provides the opportunity to analyze stop patterns for additional age categories than originally collected. Research indicates that drivers aged 65 or Over – when controlling for miles driven – are about as likely to crash as drivers under the age of 25¹⁸⁰. Age also generally increases a person’s risk for injury in a collision¹⁸¹, with some of the highest fatality rates for subjects over the age of 65¹⁸². For all 2020 analyses, a new category was generated from the existing data to better understand how the perceived age of subjects over 65 affects stop rates along with other age groupings. The operational divisions display differential stop patterns for drivers¹⁸³, with Traffic officers stopping significantly more 65 or Older and 16 to 24 drivers, and significantly less 25 to 64 year olds drivers than Non-Traffic units. Non-Traffic officers stopped significantly more pedestrians¹⁸⁴ aged 25 to 64 and significantly less 16 to 24 year olds when compared to Traffic officers.

Table 36. Traffic Officers stopped significantly more 16 to 24 and 65 or Older drivers.

	Age	Drivers		Pedestrians	
		2020		2020	
		Count	Percent	Count	Percent
Traffic	Under 16	18	0.1%	1	2.6%
	16 to 24	2,692	19.7%	8	21.1%
	25 to 64	10,451	76.6%	28	73.7%
	65 or Older	479	3.5%	1	2.6%
	Traffic Total	13,640	100%	38	100%
Non-Traffic	Under 16	23	0.2%	1	0.5%
	16 to 24	1,666	14.7%	13	6.4%
	25 to 64	9,422	83.0%	186	91.6%
	65 or Older	240	2.1%	3	1.5%
	Non-Traffic Total	11,351	100%	203	100%

Similar to gender analyses, there are no research-supported benchmarks assessing whether officers potentially display bias when choosing to stop a driver based on their perceived age. It’s further complicated by the fact that age is not a protected class when it comes to insurance risk analyses¹⁸⁵, with the State explicitly allowing differential premiums¹⁸⁶ for drivers under the age of 25 and over the age of 55 (without an authorized prevention course) due to their risk of being involved in a motor vehicle collision. If officers are making stops based on dangerous driving behaviors, there is a likelihood that a greater number of young drivers (and those 55 or over) would be stopped when compared to their population rate. Nationally, there are also significant differences when it comes to crime victimization based on the victim’s age, making any victimization benchmark problematic¹⁸⁷.

Table 37. 2020 Injury Collision Statistics, by Age of Drivers

Age	2020	
	Count	Percent
Under 16	1	0.1%
16 to 24	160	14.6%
25 to 64	847	77.1%
65 or Over	90	8.2%
Total	1,098	100.0%

¹⁸⁰ National Highway Traffic Safety Administration. (1993). *Addressing the Safety Issues Related to Younger and Older Drivers: A Report to Congress January 19, 1993 on the Research Agenda of the National Highway Traffic Safety Administration*. Washington, DC: Department of Transportation.

¹⁸¹ Kahane, C. J. (2013). *Injury vulnerability and effectiveness of occupant protection technologies for older occupants and women*. (Report No. DOT HS 811 766). Washington, DC: National Highway Traffic Safety Administration.

¹⁸² Chang, D. (2008). *Comparison of Crash Fatalities by Sex and Age Group*. (Report No. DOT HS 810 853). Washington DC: National Highway Traffic Safety Administration.

¹⁸³ $\chi^2 = 166.627, p < .001, df = 3$

¹⁸⁴ $\chi^2 = 9.222, p < .003, df = 1$

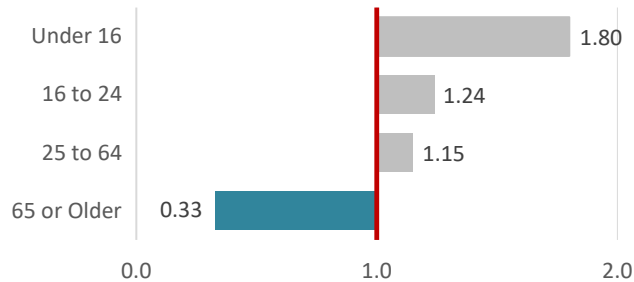
¹⁸⁵ OAR 836-080-0055

¹⁸⁶ ORS 742.490

¹⁸⁷ Morgan, R.E., & Truman, J.L. (2018). *Criminal Victimization, 2017* (NCJ 252472). Washington, D.C.: Bureau of Justice Statistics, U.S. Department of Justice.

Accounting for the factors discussed above, the Injury Collision Benchmark (based on the age of involved drivers) was used for all operational groups of the Bureau. Based on the reported perceived age of stopped drivers involved in injury collisions, older drivers (65 or Older) are stopped less than expected when compared to injury collision rates. All other age groups were stopped at expected rates. No comparable benchmark exists for pedestrian stops, so no analysis was conducted.

Figure 19. Officers stopped fewer drivers aged 16 or Under or 65 or Older than expected compared to injury collision rates.



Stop Reasons

Table 38. Non-Traffic officers displayed differential stop patterns based on the age of the driver.

	Age	Moving Violations				Non-Moving Violations		Non-Traffic Offenses	
		Minor		Major		Violations		Offenses	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	Under 16	3	16.7%	15	83.3%	0	0.0%	0	0.0%
	16 to 24	471	17.5%	2,087	77.5%	132	4.9%	2	0.1%
	25 to 64	2,721	26.0%	7,079	67.7%	640	6.1%	11	0.1%
	65 or Older	159	33.2%	291	60.8%	28	5.8%	1	0.2%
	Total	3,354	24.6%	9,472	69.4%	800	5.9%	14	0.1%
Non-Traffic	Under 16	4	17.4%	8	34.8%	9	39.1%	2	8.7%
	16 to 24	443	26.6%	626	37.6%	582	34.9%	15	0.9%
	25 to 64	2,434	25.8%	3,062	32.5%	3,749	39.8%	177	1.9%
	65 or Older	49	20.4%	123	51.3%	63	26.3%	5	2.1%
	Total	2,930	25.8%	3,819	33.6%	4,403	38.8%	199	1.8%

Table 39. Most pedestrians were stopped for Minor Moving Violations by Traffic officers or Non-Traffic offenses by Non-Traffic personnel.

	Age	Moving Violations				Non-Moving Violations		Non-Traffic Offenses	
		Minor		Major		Violations		Offenses	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	Under 16	1	100.0%	0	0.0%	0	0.0%	0	0.0%
	16 to 24	5	62.5%	1	12.5%	1	12.5%	1	12.5%
	25 to 64	17	60.7%	7	25.0%	3	10.7%	1	3.6%
	65 or Older	0	0.0%	0	0.0%	1	100.0%	0	0.0%
	Total	23	60.5%	8	21.1%	5	13.2%	2	5.3%
Non-Traffic	Under 16	1	100.0%	0	0.0%	0	0.0%	0	0.0%
	16 to 24	2	15.4%	2	15.4%	0	0.0%	9	69.2%
	25 to 64	62	33.3%	26	14.0%	27	14.5%	71	38.2%
	65 or Older	1	33.3%	0	0.0%	0	0.0%	2	66.7%
	Total	66	32.5%	28	13.8%	27	13.3%	82	40.4%

Non-Traffic and Traffic display significantly different stop patterns based on the perceived age of the driver. Non-Traffic¹⁸⁸ officers are significantly more likely to stop drivers aged 25 to 64 for Non-Moving Violations and Non-Traffic Offenses than drivers of other age groups. Traffic¹⁸⁹ officers are significantly more likely to stop drivers aged 16 to 24 for Major Moving Violations than other groups. No pedestrian analyses were conducted due to small sample size for both divisions.

Search Rates by Age Group

PPB officers have not significantly¹⁹⁰ changed their search patterns for stopped subjects over the past five years. Non-Traffic officers are significantly less likely¹⁹¹ to search 65 or Older drivers compared to their younger counterparts. Traffic Officers displayed no significant differences¹⁹² in search rates by perceived age. Almost all groups were searched most often by consent in 2020, followed by Probable Cause; however, subjects aged 65 or Over were most commonly search with Probable Cause. There were no significant differences¹⁹³ in search type by the perceived age of the driver when searched by Non-Traffic officers.

Figure 20. Search rates have remained statistically stable for all age groups since 2016.

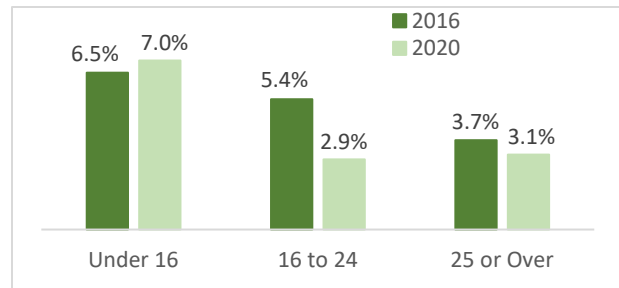


Table 40. Consent searches were the primary search type across most age groups.

	Age	Total Subjects Searched		Consent		Probable Cause [^]		Reasonable Suspicion [^]		Weapon Patdown [^]		Warrant [*]		Warrant Exception [*]	
		Searches	Rate	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	Under 16	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	--
	16 to 24	16	0.6%	3	18.8%	10	62.5%	1	6.3%	3	18.8%	--	--	--	--
	25 to 64	80	0.8%	21	26.3%	52	69.3%	1	1.3%	14	18.7%	1	20.0%	5	100.0%
	65 or Older	3	0.6%	0	0.0%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%
	Total	99	0.7%	24	24.2%	64	68.8%	2	2.2%	17	18.3%	1	16.7%	6	100.0%
Non-Traffic	Under 16	3	12.5%	2	66.7%	1	33.3%	0	0.0%	0	0.0%	--	--	--	--
	16 to 24	113	6.7%	65	57.5%	43	38.4%	7	6.3%	7	6.3%	0	0.0%	1	100.0%
	25 to 64	563	5.9%	303	53.8%	253	45.5%	19	3.4%	17	3.1%	0	0.0%	0	0.0%
	65 or Older	3	1.2%	2	66.7%	1	33.3%	0	0.0%	0	0.0%	--	--	--	--
	Total	682	5.9%	372	54.5%	298	44.2%	26	3.9%	24	3.6%	0	0.0%	1	12.5%

^{*} Warrant and Warrant Exception search types were added to the Stops system on December 21, 2020. Percentages only include searches conducted after that date.

[^] Probable Cause, Reasonable Suspicion, and Weapon Patdown search types were removed as available options on December 21, 2020. Percentages only include searches conducted prior to that date.

¹⁸⁸ $\chi^2 = 63.038, p < .001, df = 6$

¹⁸⁹ $\chi^2 = 118.724, p < .001, df = 4$

¹⁹⁰ Under 16: $p < .65, r^2 = .08$; 16 to 24: $p < .24, r^2 = .42$; 25 or Over: $p < .68, r^2 = .07$

¹⁹¹ $\chi^2 = 15.793, p < .002, df = 3$

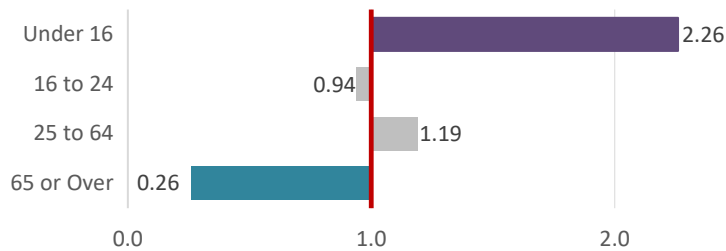
¹⁹² $\chi^2 = 0.940, p < .63, df = 2$

¹⁹³ Consent: $\chi^2 = 3.087, p < .22, df = 2$; Probable Cause: $\chi^2 = 5.142, p < .08, df = 2$

(footnote continued)

Portland Police officers displayed disparate search patterns based on the perceived age of the subject. Stopped subjects aged 65 or Over were searched less than expected compared to overall search rates. Subjects under the age of 16 were searched substantially more than expected.

Figure 21. Subjects perceived to be Under 16 were searched substantially more than expected compared to overall stop



Contraband Hit Rates

Subjects across multiple age groups that were stopped and searched by Portland Police Bureau officers were nearly statistically equal¹⁹⁴ in their found contraband hit rates. Subjects perceived to be under the age of 16 were least likely to have been discovered with contraband (33.3% in 2020) whereas subjects over the age of 65 were the most likely (66.7% in 2020); however, very few searches were conducted on these groups. Drugs were the most found contraband for most groups.

Table 41. Contraband hit rates are similar for all perceived age groups.

Age	Total Searches	Found Contraband		Alcohol		Drugs		Weapons		Stolen Property		Other	
	Count	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Under 16	3	1	33.3%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	1	33.3%
16 to 24	129	70	54.3%	16	12.4%	31	24.0%	23	17.8%	10	7.8%	19	14.7%
25 to 64	643	394	61.3%	56	8.7%	223	34.7%	83	12.9%	38	5.9%	85	13.2%
65 or Over	6	4	66.7%	1	16.7%	1	16.7%	1	16.7%	0	0.0%	2	33.3%
Total	781	469	60.1%	73	9.3%	256	32.8%	107	13.7%	48	6.1%	107	13.7%

Stop Outcomes

Table 42. Subjects over the age of 65 received significantly different outcomes from both divisions.

Traffic	Total Stops		Enforcement Action												
	Age	Count	Percent	None		Warning		Citation		Cite-in-Lieu		Juvenile Summons		Arrested	
				Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Under 16	19	0.1%	1	5.3%	3	15.8%	15	78.9%	0	0.0%	0	0.0%	0	0.0%	
16 to 24	2,700	19.7%	3	0.1%	324	12.0%	2,328	86.2%	9	0.3%	0	0.0%	36	1.3%	
25 to 64	10,479	76.6%	24	0.2%	2,277	21.7%	7,925	75.6%	86	0.8%	0	0.0%	167	1.6%	
65 or Over	480	3.5%	1	0.2%	168	35.0%	306	63.8%	0	0.0%	0	0.0%	5	1.0%	
Traffic Total	13,678	100.0%	29	0.2%	2,772	20.4%	10,574	77.8%	95	0.7%	0	0.0%	208	1.5%	

Non-Traffic	Total Stops		Enforcement Action												
	Age	Count	Percent	None		Warning		Citation		Cite-in-Lieu		Juvenile Summons		Arrested	
				Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Under 16	24	0.2%	2	8.3%	18	75.0%	3	12.5%	0	0.0%	0	0.0%	1	4.2%	
16 to 24	1,679	14.5%	63	3.8%	1,300	77.4%	221	13.2%	7	0.4%	2	0.1%	86	5.1%	
25 to 64	9,608	83.2%	431	4.5%	7,376	76.8%	1,088	11.3%	109	1.1%	0	0.0%	604	6.3%	
65 or Over	243	2.1%	16	6.6%	195	80.2%	26	10.7%	2	0.8%	0	0.0%	4	1.6%	
Non-Traffic Total	11,554	100.0%	512	4.5%	8,889	77.7%	1,338	11.7%	118	1.0%	2	0.0%	695	6.1%	

Stop dispositions reported by PPB Traffic¹⁹⁵ and Non-Traffic¹⁹⁶ officers varied significantly by the perceived age of the stopped subject. Subjects 65 or Over were significantly more likely to just receive a Warning instead of a Citation from Traffic officers while being significantly less likely to be arrested from Non-Traffic officers. The progressive nature of a stop, and the multiple decision points within the interaction, make it difficult to discern what role, if any, age plays in stop disposition.

¹⁹⁴ $\chi^2 = 2.729, p < .10, df = 1$

¹⁹⁵ $\chi^2 = 197.110, p < .001, df = 4$

¹⁹⁶ $\chi^2 = 27.535, p < .002, df = 8$

APPENDIX H: PERCEIVED MENTAL HEALTH STATUS ANALYSIS

The Portland Police Bureau began collecting officers' perceptions on the stopped subject's mental health status on October 1, 2014¹⁹⁷ as a component of the City's settlement agreement with the United States Department of Justice¹⁹⁸. Officers are mandated to indicate whether they perceive if the subject has a mental health issue by using one of three options: Yes, No, or Unknown. Since 2016, significantly¹⁹⁹ fewer subjects are being classified as Unknown (11.5% in 2016 vs. 1.2% in 2020) with a significant increase²⁰⁰ in the percentage of subjects that were perceived to not have a mental health issue (88.1% in 2016 vs. 98.4% in 2020). Subjects with a perceived mental health issued has remained stable²⁰¹ over the last five years (0.4% in 2016 vs 0.4% in 2020).

Table 43. Non-Traffic Officers were significantly more likely to identify subjects as experiencing a mental health issue.

	Mental Health Status	2016		2017		2018		2019		2020	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	No Perceived Mental Health Issue	16,385	86.5%	9,411	88.2%	12,515	95.4%	14,408	99.1%	13,563	99.4%
	Perceived Mental Health Issue	48	0.3%	19	0.2%	34	0.3%	45	0.3%	53	0.4%
	Unknown Mental Health Issue	2,504	13.2%	1,244	11.7%	566	4.3%	79	0.5%	24	0.2%
	Traffic Total	18,937	100%	10,674	100%	13,115	100%	14,532	100%	13,640	100%
Non-Traffic											
	Mental Health Status	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
	No Perceived Mental Health Issue	12,220	90.4%	10,594	91.3%	15,477	95.5%	18,151	98.1%	11,042	97.3%
	Perceived Mental Health Issue	84	0.6%	57	0.5%	64	0.4%	41	0.2%	35	0.3%
	Unknown Mental Health Issue	1,217	9.0%	956	8.2%	670	4.1%	311	1.7%	274	2.4%
	Non-Traffic Total	13,521	100%	11,607	100%	16,211	100%	18,503	100%	11,351	100%

Table 44. Pedestrians were more likely to be perceived to be having a mental health issue.

	Mental Health Status	2016		2017		2018		2019		2020	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	No Perceived Mental Health Issue	107	89.2%	64	91.4%	62	87.3%	92	94.8%	37	97.4%
	Perceived Mental Health Issue	2	1.7%	2	2.9%	3	4.2%	5	5.2%	1	2.6%
	Unknown Mental Health Issue	11	9.2%	4	5.7%	6	8.5%	0	0.0%	0	0.0%
	Traffic Total	120	100%	70	100%	71	100%	97	100%	38	100%
Non-Traffic											
	Mental Health Status	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
	No Perceived Mental Health Issue	104	82.5%	108	90.8%	460	90.4%	941	91.0%	181	89.2%
	Perceived Mental Health Issue	5	4.0%	4	3.4%	23	4.5%	56	5.4%	14	6.9%
	Unknown Mental Health Issue	17	13.5%	7	5.9%	26	5.1%	37	3.6%	8	3.9%
	Non-Traffic Total	126	100%	119	100%	509	100%	1,034	100%	203	100%

¹⁹⁷ The reports of the perceived mental health status of stopped subjects is lower than the reported number of stops due to two separate technical errors. The first, from June 2015 through December 2015, prevented officers from the Traffic Division from accessing the Stops Data Collection system, and led to under-reporting on several demographic categories, including mental health status for 9,750 driver and pedestrian stops (for more information, see Appendix A.) An additional 188 records from 2014 through 2017 were missing the mental health status due to old computer hardware.

¹⁹⁸ United States of America v. City of Portland, No. 3:12-cv-02265-SI (D. Ore. 2012).

¹⁹⁹ $p < .02$, $r^2 = .92$

²⁰⁰ $p < .02$, $r^2 = .92$

²⁰¹ $p < .76$, $r^2 = .04$

(footnote continued)

In 2020, Non-Traffic Officers were significantly more likely²⁰² to indicate that the subject's status was unknown. Pedestrians are also significantly more likely²⁰³ to be identified as experiencing a mental health issue or having an unknown mental health status. The PPB does not collect the perceived mental health status for individuals involved in injury collision accidents, so there is no research-supported benchmark to compare to for disparity analyses.

Stop Reasons

The small expected counts of subjects perceived to have a mental health issue prohibit utilizing multiple differences to determine what differences exist, if any, within and between the different operation divisions of the Portland Police Bureau or drivers vs. pedestrians. Only a single statistical omnibus test was run to discern overall differences in stop reasons between the different perceived mental health categories²⁰⁴. Subjects with a perceived mental health issue or unknown mental health issue were stopped significantly more for Non-Traffic Offenses than their peers without a mental health issue. Unknown subjects were also stopped significantly more for Non-Moving Violations.

Table 45. Subjects with a perceived mental health issue or unknown mental health issue were significantly more likely to be stopped for Non-Traffic Offenses.

	Mental Health Status	Moving Violations				Non-Moving Violations		Non-Traffic Offenses	
		Minor		Major		Violations		Offenses	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	No Perceived Mental Health Issue	3,326	24.5%	9,430	69.5%	793	5.8%	14	0.1%
	Perceived Mental Health Issue	24	45.3%	25	47.2%	4	7.5%	0	0.0%
	Unknown Mental Health Issue	4	16.7%	17	70.8%	3	12.5%	0	0.0%
	Total	3,354	24.6%	9,472	69.4%	800	5.9%	14	0.1%
Non-Traffic	Mental Health Status	Moving Violations				Non-Moving Violations		Non-Traffic Offenses	
		Minor		Major		Violations		Offenses	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
Non-Traffic	No Perceived Mental Health Issue	2,873	26.0%	3,708	33.6%	4,273	38.7%	188	1.7%
	Perceived Mental Health Issue	5	14.3%	13	37.1%	16	45.7%	1	2.9%
	Unknown Mental Health Issue	52	19.0%	98	35.8%	114	41.6%	10	3.6%
	Total	2,930	25.8%	3,819	33.6%	4,403	38.8%	199	1.8%

Table 46. The majority of pedestrians stopped with a perceived mental health issue or unknown mental health issue were stopped for a Non-Traffic Offense.

	Mental Health Status	Moving Violations				Non-Moving Violations		Non-Traffic Offenses	
		Minor		Major		Violations		Offenses	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
Traffic	No Perceived Mental Health Issue	22	44.9%	8	16.3%	5	10.2%	14	28.6%
	Perceived Mental Health Issue	1	100.0%	0	0.0%	0	0.0%	0	0.0%
	Unknown Mental Health Issue	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Total	23	46.0%	8	16.0%	5	10.0%	14	28.0%
Non-Traffic	Mental Health Status	Moving Violations				Non-Moving Violations		Non-Traffic Offenses	
		Minor		Major		Violations		Offenses	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
Non-Traffic	No Perceived Mental Health Issue	60	33.1%	27	14.9%	27	14.9%	67	37.0%
	Perceived Mental Health Issue	3	21.4%	1	7.1%	0	0.0%	10	71.4%
	Unknown Mental Health Issue	3	37.5%	0	0.0%	0	0.0%	5	62.5%
	Total	66	32.5%	28	13.8%	27	13.3%	82	40.4%

²⁰² $\chi^2 = 268.496, p < .001, df = 2$

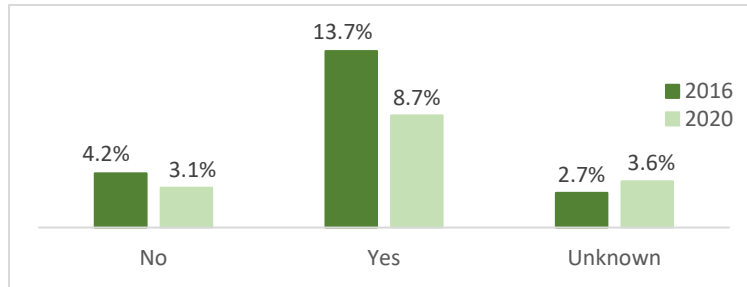
²⁰³ $\chi^2 = 212.074, p < .001, df = 2$

²⁰⁴ $\chi^2 = 186.669, p < .001, df = 6$

Search Rates by Perceived Mental Health Status

Individuals with a perceived mental health issue are significantly more likely²⁰⁵ to be searched than those with no known mental health issues; however, only nine total subjects were searched in 2020.

Figure 22. Search rates for subjects perceived to be experiencing a mental health issue have declined since 2016.



Subjects with a perceived mental health issue have always been searched at a higher rate than other groups, even though search rates for the group have been declining at a non-significant²⁰⁶ rate over the past five years. Small overall search rates of people perceived to be experiencing a mental health issue preclude any in-depth analyses on search types used.

Table 47. Subjects with a perceived mental health issue were not searched significantly more.

Traffic	Total Subjects														
	Searched			Consent		Probable Cause^		Reasonable Suspicion^		Weapon Patdown^		Warrant*		Warrant Exception*	
	Searches	Rate		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
	No Perceived Mental Health Issue	99	0.7%	24	24.2%	64	68.8%	2	2.2%	17	18.3%	1	16.7%	1	100.0%
	Perceived Mental Health Issue	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	--
	Unknown Mental Health Issue	0	0.0%	--	--	--	--	--	--	--	--	--	--	--	--
	Total	99	0.7%	24	24.2%	64	68.8%	2	2.2%	17	18.3%	1	16.7%	1	100.0%
Non-Traffic	Total Subjects														
	Searched			Consent		Probable Cause^		Reasonable Suspicion^		Weapon Patdown^		Warrant*		Warrant Exception*	
	Searches	Rate		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
	No Perceived Mental Health Issue	662	5.9%	365	55.1%	286	43.7%	25	3.8%	23	3.5%	0	0.0%	1	12.5%
	Perceived Mental Health Issue	9	18.4%	4	44.4%	5	55.6%	0	0.0%	0	0.0%	--	--	--	--
	Unknown Mental Health Issue	11	3.9%	3	27.3%	7	63.6%	1	9.1%	1	9.1%	--	--	--	--
	Total	682	5.9%	372	54.5%	298	44.2%	26	3.9%	24	3.6%	0	0.0%	1	12.5%

^{*} Warrant and Warrant Exception search types were added to the Stops system on December 21, 2020. Percentages only include searches conducted after that date.

[^] Probable Cause, Reasonable Suspicion, and Weapon Patdown search types were removed as available options on December 21, 2020. Percentages only include searches conducted prior to that date.

Contraband Hit Rates

Subjects with an unknown or perceived mental health issue actually had lower hit rates than the group without any perceived mental health issues, despite garnering a higher search rate from PPB. Drugs (22.2%) and Other Contraband (22.2%) were the most commonly found contraband for people with a perceived mental health issue, whereas Drugs (36.4%) and Other Contraband (18.2%) were the most commonly found items for individuals with an unknown mental health issue. No statistical analyses could be conducted due to small search rates for subjects with an unknown or perceived mental health issue.

Table 48. Subjects with a perceived or unknown mental health issue were discovered with contraband less often than others despite having a higher overall search rate.

Mental Health Status	Total Searches	Found Contraband		Alcohol		Drugs		Weapons		Stolen Property		Other	
	Count	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
No Perceived Mental Health Issue	761	458	60.2%	72	9.5%	250	32.9%	104	13.7%	48	6.3%	103	13.5%
Perceived Mental Health Issue	9	4	44.4%	1	11.1%	2	22.2%	0	0.0%	0	0.0%	2	22.2%
Unknown Mental Health Issue	11	7	63.6%	0	0.0%	4	36.4%	3	27.3%	0	0.0%	2	18.2%
Total	781	469	60.1%	73	9.3%	256	32.8%	107	13.7%	48	6.1%	107	13.7%

²⁰⁵ $\chi^2 = 11.260, p < .005, df = 2$

²⁰⁶ $p < .68, r^2 = .07$

Stop Outcomes

Subjects with a perceived mental health issue were given a cite-in-lieu of an arrest or arrested at a higher rate than subjects with no known mental health issue in 2020; however, small sample sizes prohibit any statistical analyses to determine if this result was significant for the year. Subjects with an unknown mental health issue were more likely to be arrested or released with no enforcement action. The progressive nature of a stop, and the multiple decision points within the interaction, make it difficult to discern what role, if any, mental health status plays in stop disposition.

Table 49. Subjects perceived to have a mental health issue or those with an unknown mental health issue were arrested at a higher rate than subjects with no known mental health issue.

Traffic	Total Stops		Enforcement Action												
	Mental Health Status	Count	Percent	None		Warning		Citation		Cite-in-Lieu		Juvenile Summons		Arrested	
				Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
No Perceived Mental Health Issue	13,600	99.4%	26	0.2%	2,755	20.3%	10,522	77.4%	93	0.7%	0	0.0%	204	1.5%	
Perceived Mental Health Issue	54	0.4%	0	0.0%	10	18.5%	40	74.1%	2	3.7%	0	0.0%	2	3.7%	
Unknown Mental Health Issue	24	0.2%	3	12.5%	7	29.2%	12	50.0%	0	0.0%	0	0.0%	2	8.3%	
Traffic Total	13,678	100.0%	29	0.2%	2,772	20.4%	10,574	77.8%	95	0.7%	0	0.0%	208	1.5%	
Non-Traffic	Total Stops		Enforcement Action												
	Mental Health Status	Count	Percent	None		Warning		Citation		Cite-in-Lieu		Juvenile Summons		Arrested	
				Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
No Perceived Mental Health Issue	11,223	97.1%	467	4.2%	8,658	77.1%	1,310	11.7%	115	1.0%	2	0.0%	671	6.0%	
Perceived Mental Health Issue	49	0.4%	2	4.1%	36	73.5%	7	14.3%	1	2.0%	0	0.0%	3	6.1%	
Unknown Mental Health Issue	282	2.4%	43	15.2%	195	69.1%	21	7.4%	2	0.7%	0	0.0%	21	7.4%	
Non-Traffic Total	11,554	100.0%	512	4.5%	8,889	77.7%	1,338	11.7%	118	1.0%	2	0.0%	695	6.1%	

*In prior analysis years, "Cite-in-Lieu" was combined with "Arrest."