

June 2022

An Analysis of Racial Disparities in Police Traffic Stops in Suffolk County, Massachusetts, from 2010 to 2019

Seleeke Flingai, Mona Sahaf, Nicole Battle, and Savannah Castaneda

Overview

The murder of George Floyd in May 2020 spurred a national reckoning around how Black people are viewed and treated by law enforcement and the criminal legal system. Some elected officials, prosecutors, and police have acknowledged their moral responsibility to pursue racial justice by examining racial disparities and inequities.¹ This report addresses one such practice—non-traffic-safety stops. These occur when police stop and detain people for minor traffic violations (such as driving a vehicle with window tints or driving with expired registration) that pose no identifiable risk of harm to people outside of the vehicle. Often, police use these stops as a pretext to search vehicles and people for evidence of more serious, unrelated crimes.

Nationally, these stops have proven to be dangerous, a cause of racial disparities and harm and, contrary to commonly held beliefs, an ineffective means of removing illegal firearms from the streets.² This report shows that Black drivers are disproportionately pulled over by law enforcement in Suffolk County, Massachusetts, particularly for non-traffic-safety offenses. The Vera Institute of Justice’s (Vera) Reshaping Prosecution program partnered with the Suffolk County District Attorney’s Office (SCDAO) from July 2020 to March 2022 to study racial disparities in the criminal legal system. Vera’s analysis revealed that non-traffic-safety stops in Suffolk County are worsening racial disparities in traffic enforcement. This report shares findings from Vera’s analysis of 10 years of traffic stop and criminal case data from Suffolk County, along with proposed solutions from across the nation that prohibit or deter such stops.

Summary of Findings

- **Police disproportionately stop Black drivers in Suffolk County, especially for non-traffic-safety reasons.** Police pull over Black drivers at 2.3 times the rate of white drivers for non-traffic-safety violations, such as improperly displayed license plates or a single broken taillight. In some parts of Suffolk County—such as Boston and Winthrop—police officers stopped Black drivers for non-traffic-safety reasons at rates closer to 3.8 and 8.9 times the rate of white drivers, respectively. Racial disparities were greatest for this kind of traffic stop, signifying that where police enjoy the most discretion to pull someone over—when enforcing equipment and regulatory violations that pose no immediate harms—they are more likely to target Black drivers.
- **Fifteen non-traffic-safety violations are responsible for 46 percent of the racial disparity in Suffolk County non-traffic-safety stops.** Vera researchers measured the Black–white racial disparities of each of the 150 unique non-traffic-safety violations. If police did not stop drivers for the 15 non-traffic-safety violations with the greatest Black–white disparity, nearly half of the Black–white disparity in non-traffic-safety stops would be erased.

It is important to note that the dataset used in this analysis does not include motor vehicle stops that end only in a *verbal* warning. Thus, while this report gives a picture of racial disparities in recorded traffic stops, the available data is likely a significant underreporting of the total number of traffic stops that take place in Suffolk County.

Summary of policy recommendations

Vera’s findings support the following policy recommendations to prevent or discourage law enforcement from conducting non-traffic-safety stops.

- City councils should pass local ordinances preventing police from initiating a traffic stop for non-traffic-safety violations. Councilors should also write ordinances to prevent police from pulling drivers over to arrest them on warrants for low-level offenses, such as failing to pay fines and fees or missing court dates for certain misdemeanor offenses. They could also prohibit police from seeking permission to search a person or their vehicle where the officer otherwise lacks probable cause to perform the search, also known as “consent searches.”
- Police departments should adopt policies declining to stop drivers for non-traffic-safety violations. Police can then concentrate on stopping drivers for conduct that puts others at risk—such as for driving under the influence or running a stop sign—and investigating and solving serious crimes.
- The district attorney should introduce policies that create a presumption not to charge criminal cases that stem from non-traffic-safety stops or from consent searches when police lacked probable cause to conduct the search.
- Legislators should introduce laws building non-police first responder teams whose mission is traffic and road safety—not criminal law enforcement—and removing police authority to enforce non-traffic-safety violations.

Background: The prevalence and harms of non-traffic-safety stops

In the United States, police pull over more than 50,000 drivers a day—or 20 million drivers every year—making traffic stops the most common police–civilian interaction in the United States.³ Although some of these stops address issues of traffic safety, such as reckless driving or running a red light, police often pull people over for minor, non-traffic-safety violations that pose no identifiable risk of harm to people outside the vehicle—infractions such as driving a vehicle with tinted windows, expired registration, improperly placed license plates, or objects hanging from a rearview mirror. Because traffic laws include so many violations and regulations—in Massachusetts, they number in the hundreds—police can effectively make traffic stops whenever they want to search people and their vehicles for evidence of more serious, unrelated crimes. These stops are often referred to as pretextual stops.⁴

Many young Black and Latinx men report the indignity of being repeatedly stopped by police for minor violations and searched.⁵ A large body of evidence tells us that, in addition to Black and Latinx drivers being stopped more often than white drivers, they are also searched during traffic stops at higher rates than white drivers, even though they are not more likely to possess contraband.⁶ Families share fears of relatives being pulled over and arrested—or possibly killed—during a low-level traffic stop and describe “the talk” they must have to prepare youth for such encounters.⁷ Weathering such chronic discrimination is linked to negative health impacts, furthering harm to communities of color.⁸ Racially disparate traffic enforcement also

contributes to the distrust many communities have in government institutions—especially communities that have suffered from overinvestment in policing and underinvestment in social and community services.⁹ This distrust can often hinder the government’s ability to depend on cooperation from these communities to solve violent crimes and address public safety.¹⁰

Additionally, non-traffic-safety stops create unnecessary opportunities for motorists to be physically assaulted by police or lose their lives.¹¹ The high-profile and tragic deaths of Patrick Lyoya, Philando Castile, Samuel DuBose, Daunte Wright, and others as a result of non-traffic-safety stops have drawn renewed and urgent attention to these unjustified and harmful practices that exacerbate racial disparities and disproportionately impact Black drivers and other drivers of color.¹²

Indeed, because non-traffic-safety stop enforcement falls to police, even traffic stops that do not result in immediate arrest can pull people into the criminal legal system and cause other harmful downstream effects. Drivers who are criminally cited and/or civilly fined for these violations and cannot afford to pay or attend a court date may find themselves criminally charged, arrested, or convicted. They further risk losing their licenses, jobs, and even housing while held in pretrial detention, jail, or prison.¹³ In other words, a traffic stop for a dangling air freshener can lead to tremendous loss.¹⁴

Beyond exacerbating racial disparities and inflicting physical and psychological harm, non-traffic-safety stops are a poor use of police resources, which should be focused on addressing serious crimes. Despite deeply held beliefs to the contrary, the vast majority of traffic stops do not result in the recovery of contraband such as firearms. For example, the ACLU of the District of Columbia found that only 1 percent of pedestrian and traffic stops *combined* led to the recovery of a gun in 2020 (in 2019, the recovery rate was 0.6 percent of all such stops).¹⁵ Furthermore, a 2018 study from researchers at NYU and Stanford University found that *less than one-tenth of one percent* (0.8 out of every 1,000) of nonmoving violation traffic stops in Nashville, Tennessee, also included a weapons charge.¹⁶

Vera’s analysis of Suffolk County traffic stops

The following analysis is the result of a partnership between Vera’s Reshaping Prosecution program and the SCDAO under the leadership of then-District Attorney Rachael Rollins, from July 2020 to March 2022. Suffolk County contains four municipalities: Boston, Chelsea, Revere, and Winthrop. Vera researchers analyzed 10 years’ worth of traffic stop and criminal case data from Suffolk County to better understand how traffic stops contributed to racial disparities. Two clear findings emerged: non-traffic-safety stops are driving racial disparities in Suffolk County, and eliminating traffic stops for 15 non-traffic-safety violations could cut the Black–white non-traffic-safety stop disparity nearly in half.

Data and methods

The data: Vera analyzed a dataset from the Massachusetts Department of Transportation (MassDOT) that contains information on all traffic stops with written warnings, civil or criminal citations, or arrests within Suffolk County from January 1, 2002, to February 4, 2021. The dataset contains offense-level data for traffic stops, including the driver’s race/ethnicity and gender (based on officer perception), the traffic offense(s) associated with the stop, the outcome of the stop (written warning, civil violation, criminal violation, or arrest), the law enforcement

agency responsible for the stop, and the time and location of the stop (at the municipal or, for stops occurring in Boston, neighborhood level).¹⁷

To identify traffic stops for passenger vehicles specifically—the focus of this study—Vera referenced each traffic offense in the MassDOT dataset to its corresponding entry in the Massachusetts General Laws or Code of Massachusetts Regulations to determine which violations only applied to commercial trucks, bicycles, or other non-passenger motor vehicles. The researchers then excluded any traffic stop that included violations specific to these non-passenger vehicles. After excluding non-passenger vehicle traffic stops, the dataset consisted of 1,210,905 passenger vehicle traffic stops (made up of 1,649,962 traffic offenses) from 2002 to 2021.¹⁸

To estimate racial disparities in traffic stops, Vera aligned the MassDOT traffic stop data with annual U.S. Census county- and municipal-level residential population data collected via the American Community Survey (ACS), stratified by race and ethnicity.¹⁹ Vera restricted its analysis to the 10-year period ending in 2019—the most recent year for which population data was available from the ACS at the time of study completion.

As the purpose of this study was to analyze any racial disparities in traffic stops, Vera only used passenger stop data in which the motorist’s race/ethnicity was known and clearly defined; this resulted in a dataset inclusive of drivers listed as “White,” “Black,” “Asian,” “Indigenous,” and “Hispanic/Latinx” (see the Appendix for more on the race/ethnicity categorization).²⁰ Vera’s final sample therefore contained 493,181 passenger vehicle stops from January 1, 2010, to December 31, 2019.

The analysis: To calculate racial disparities in traffic stops, Vera followed a two-step process. First, the researchers calculated the traffic stop rate for each racial/ethnic group. They did this by dividing the number of traffic stops for a given racial/ethnic group in a given year by the resident population of that racial/ethnic group in that year. For example, the non-Hispanic Black traffic stop rate is equal to the number of traffic stops involving non-Hispanic Black drivers divided by the total non-Hispanic Black population in Suffolk County.²¹

Second, to calculate the racial disparity, Vera compared the rates of traffic stops across racial/ethnic groups. The researchers did this by calculating the traffic stop disparity as the ratio of the traffic stop rate for a given racial/ethnic group compared to the rate for another racial/ethnic group. For example, to measure the Black–white traffic stop disparity, Vera divided the non-Hispanic Black traffic stop rate by the non-Hispanic white traffic stop rate.

Vera researchers calculated traffic stop rates and racial disparities for all stops in the sample and then separately calculated rates for traffic-safety stops and non-traffic-safety stops in the dataset. The MassDOT dataset contains the statute number and description of each traffic offense cited for a given stop. Vera reviewed each statute to classify the violation as either a “traffic safety” or a “non-traffic-safety” offense. Vera defined a traffic safety offense as one that may pose an identifiable risk of harm to people outside the vehicle. Examples include obstructing a vehicle, failing to stop/yield, running a red light, speeding, and texting while operating a motor vehicle. In contrast, non-traffic-safety offenses include number plate violations, vehicle registration/licensing issues, evading tolls, and more. While some offense types may straddle the line between traffic safety and non-traffic-safety, Vera also considered which offenses are regularly described in the research literature, policy conversations, and/or news media as minor traffic violations that often serve as pretext to search for evidence of another, unrelated crime (such as illegal firearms or drug possession). In total, Vera categorized

254 unique passenger vehicle traffic offense types as either “traffic-safety” (n = 104) or “non-traffic-safety” (n = 150) violations. (Vera labeled 69 traffic offense types as “uncategorized” for being too vague to categorize or for not being motor vehicle violations.) These 254 traffic offense types made up 95.1 percent of all offenses observed in the 10-year dataset. Last, Vera defined a stop as a traffic-safety stop if *any* of the violations cited for the stop was a traffic-safety offense, while a non-traffic-safety stop was defined as a stop in which *none* of the violations was a traffic-safety offense and at least one of the offenses was a non-traffic-safety offense.

Additional details on the study’s data and methods, including the complete list of offense types, can be found in the Appendix.

Finding 1: Police disproportionately stop Black drivers in Suffolk County, especially for non-traffic-safety reasons

Black drivers are disproportionately pulled over by police across all traffic stops in Suffolk County

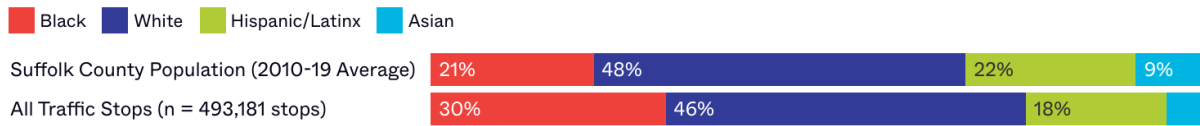
Racial disparities between Black and white drivers are prevalent across all traffic stops in Suffolk County. Black people make up 21 percent of the total county population, but they account for 30 percent of all traffic stops. (See Figure 1.) This disproportionality holds across each of the county’s four municipalities. (See Figure 2.) Ultimately, Vera’s analysis finds that Black drivers in Suffolk County are stopped by law enforcement, on average, at 1.6 times the rate of white drivers from 2010 to 2019.²² (See Figure 3.) Vera consistently found that Black drivers in Suffolk County were the only racial/ethnic group overrepresented in traffic stops. As such, this report’s findings will focus on the racial disparities faced by Black motorists.²³

At the municipal level, the Winthrop Police Department produces the greatest Black–white traffic stop disparity of the four municipalities in Suffolk County, with its officers stopping Black drivers at a rate more than eight times that of their white counterparts. Both Boston and Revere police departments stop Black drivers at a rate roughly 2.5 times the rate of white drivers in their jurisdictions.

In Chelsea, Vera found that both Black and white drivers are pulled over at disparate rates. White drivers make up 25 percent of the population but 51 percent of the traffic stops, and Black drivers 6 percent of the population but 12 percent of the traffic stops. Because police pull over both Black and white drivers at disproportionately high rates—i.e., at twice their population rate—there is no discernible disparity between Black and white drivers in this jurisdiction.²⁴

Figure 1

Demographics of all traffic stops, Suffolk County, 2010–2019, by race/ethnicity



Note: Indigenous population and traffic stop percentages are absent due to small demographic share (less than 1%).

Source: U.S. Census Bureau, Massachusetts Department of Transportation (MassDOT)

Figure 2

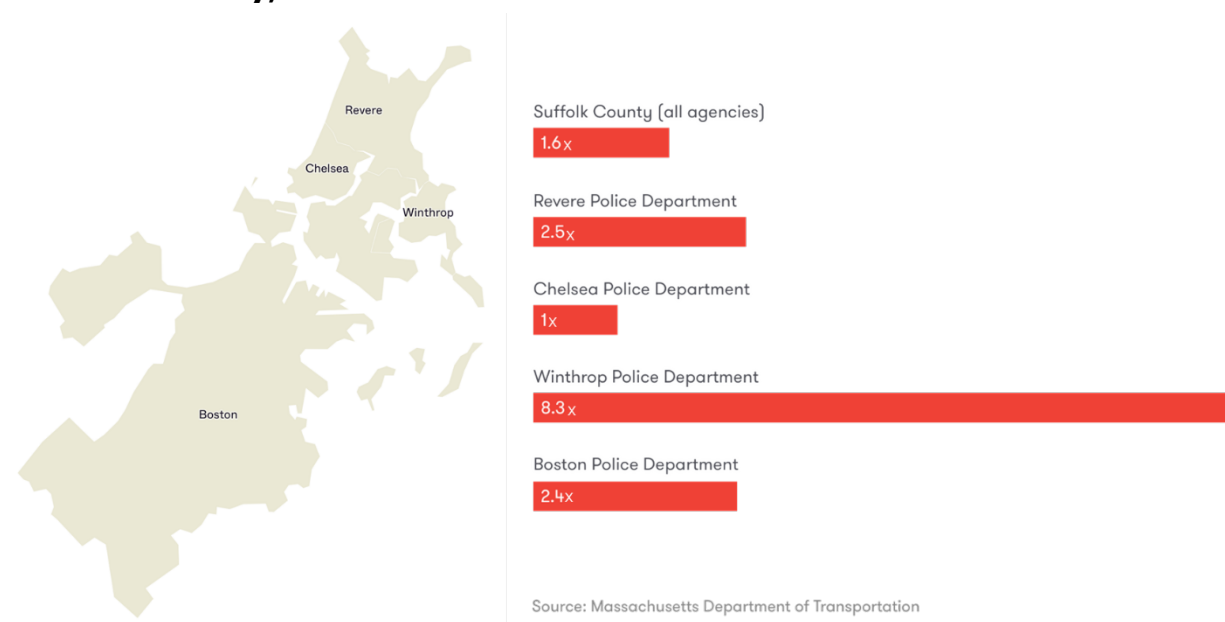
Share of all traffic stops involving Black motorists, Suffolk County municipalities, 2010–2019

Municipality	Percent of population that is Black (2010–19 average)	Percent of traffic stops (all) that involve a Black motorist
Boston	24%	34% (139,085 of 404,499 stops)
Chelsea	6%	12% (5,316 of 44,124 stops)
Revere	4%	12% (4,672 of 39,920 stops)
Winthrop	1%	6% (295 of 4,638 stops)

Source: U.S. Census Bureau, Massachusetts Department of Transportation (MassDOT)

Figure 3

Black–white traffic stop rate disparities, by law enforcement agency, Suffolk County, 2010–2019



Non-traffic-safety stops are a major cause of racial disparities in Suffolk County traffic enforcement

Police agencies in Suffolk County spend significant time and resources on non-traffic-safety stops. From 2010 to 2019, Vera found that 155,210 traffic stops—31 percent of the county’s 493,181 total stops during the study period—were non-traffic-safety stops. (See Figure 4.) In other words, nearly one in three police stops in Suffolk County focus on low-level, non-traffic-safety violations. Vera further found that a disproportionate share of these stops involved Black motorists.

Figure 5 displays the demographics of those stopped for traffic safety or non-traffic-safety reasons. Although Black people were 21 percent of Suffolk County’s population during the study period, they made up 27 percent of those stopped by the police for traffic safety violations and 37 percent of those stopped for non-traffic-safety violations—more than one-third of all non-traffic-safety stops. Using the traffic stop rate disparity measure, Vera found that Black people are 2.3 times more likely to be stopped by police for non-traffic-safety reasons than white drivers. (See Figure 6.) The significance of this finding cannot be overstated: where police have the most discretion whether to pull someone over—non-traffic-safety stops that pose no threat to people outside the vehicle—we see the greatest disparity.

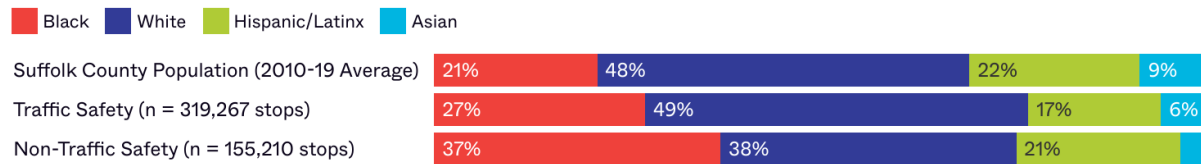
Interestingly, the Black–white disparity in Boston Police Department–initiated non-traffic-safety stops (with Black people 3.9 times more likely to be stopped by police than white people) is double the disparity of the department’s traffic-safety stops (1.9 times). There are more

modest differences in non-traffic-safety versus traffic safety stop disparities in the other three municipalities. Nonetheless, in all municipalities except for Chelsea (where Vera found no disparity), Vera’s analysis shows that the Black–white disparities in traffic stops are greater for non-traffic-safety stops than they are for traffic-safety stops.

The Boston Police Department stopped Black drivers for non-traffic-safety reasons at exceedingly high rates in certain police districts. Figure 7 displays four police districts—roughly covering the Back Bay, Fenway, and the South End (Police District D-4); West Roxbury (Police District E-5); Mattapan (Police District B-3); and Hyde Park (Police District E-18) neighborhoods—where a substantial share of the traffic stops of Black drivers are for non-traffic-safety reasons. For example, in Police District B-3 (Mattapan), 47 percent of stops against Black drivers are for non-traffic-safety reasons—the highest share across Boston’s police districts—compared to only 30 percent of stops of white drivers. This provides further evidence of a consistent pattern in which Black drivers are stopped far more often than white drivers for low-level violations that do not pose consistent safety risks to other drivers or pedestrians.

Figure 4

Traffic safety vs. non-traffic-safety stops, Suffolk County, 2010–2019

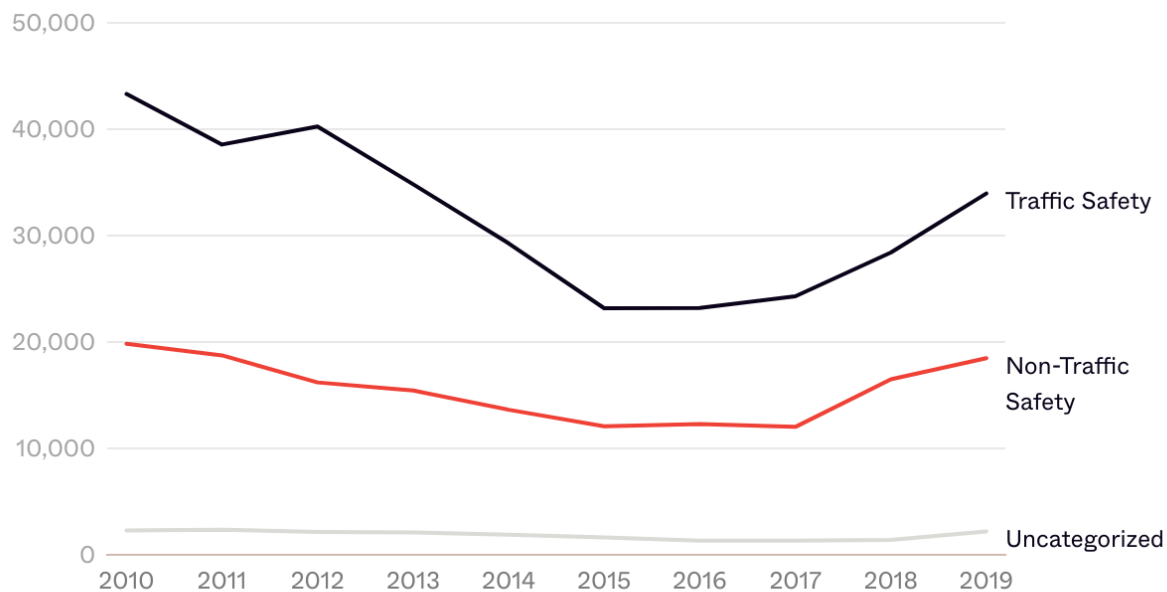


Note: Indigenous population and traffic stop percentages are absent due to small demographic share (less than 1%).

Source: US Census Bureau, Massachusetts Department of Transportation (MassDOT)

Figure 5

Demographics of traffic stops, by reason, Suffolk County, 2010–2019



Source: Massachusetts Department of Transportation (MassDOT)

Figure 6

Black–white traffic stop rate disparities, by reason and law enforcement agency, Suffolk County, 2010–2019

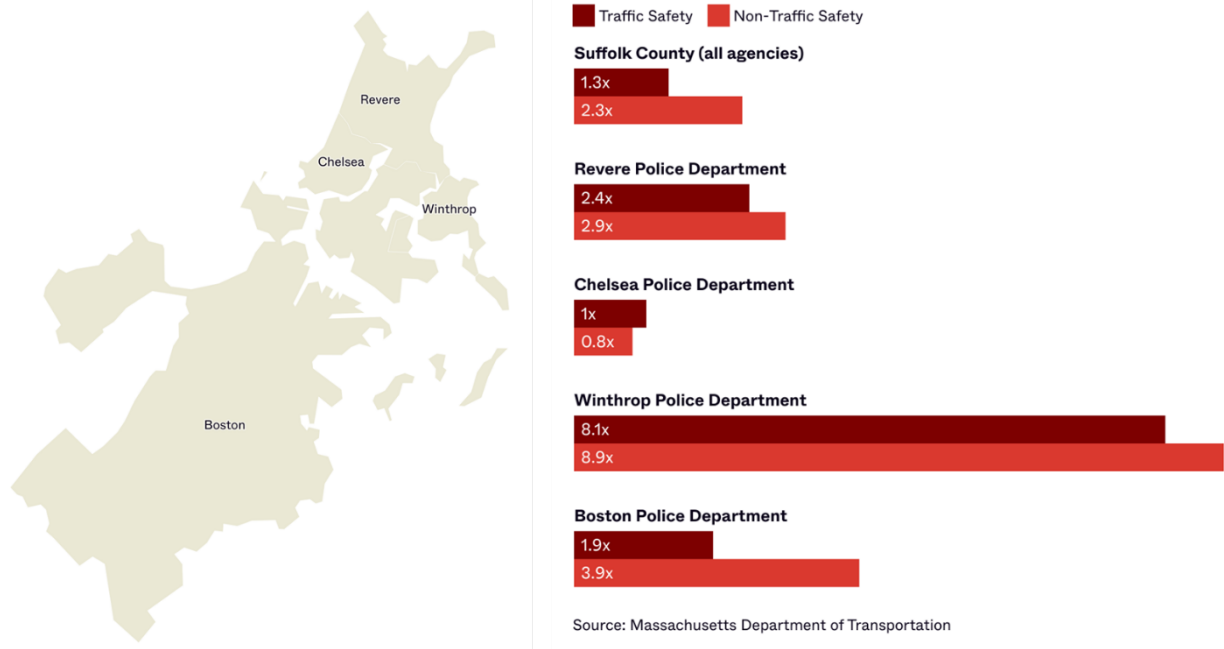
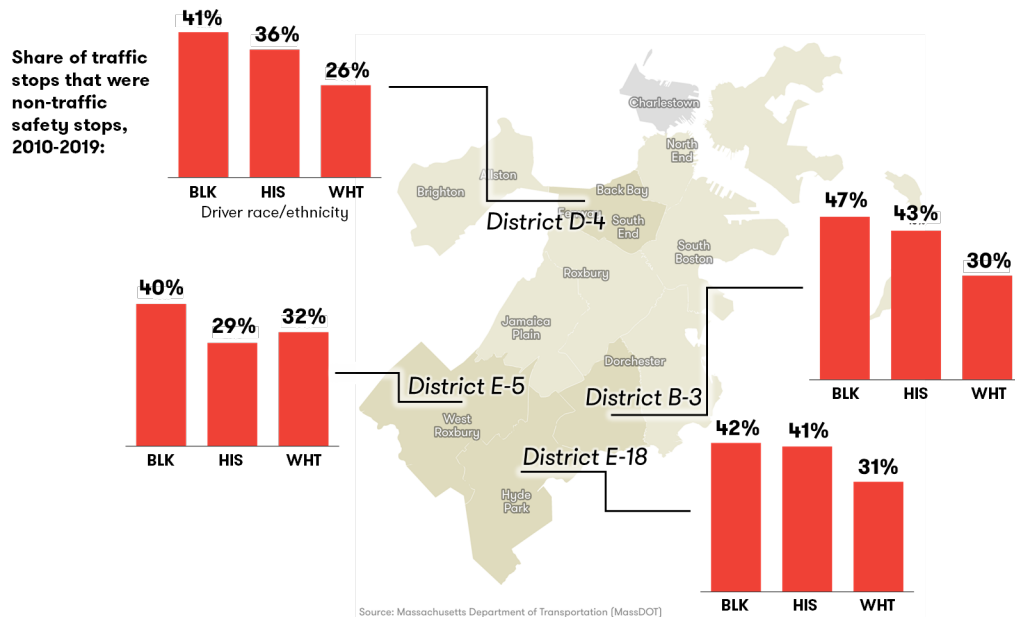


Figure 7

Boston police districts where more than 40 percent of Black drivers' stops were non-traffic-safety reasons, 2010–2019



Finding 2: Fifteen violations are responsible for 46 percent of the racial disparity in Suffolk County's non-traffic-safety stops

To further understand which non-traffic-safety violations were driving racial disparities, Vera measured the Black–white racial disparities of each of the 150 unique non-traffic-safety violations. Vera then ranked them to identify the violations that were associated with the greatest racial disparities in enforcement. (See Figure 8.) Vera found that the 15 violations associated with the most racially disparate stops accounted for 68 percent (105,208) of all non-traffic-safety stops.

If police ended the practice of stopping drivers for these 15 non-traffic-safety violations alone, Black drivers would experience 41,186 fewer non-traffic-safety stops (out of 57,332 total non-traffic-safety stops). The impact of these violations on racial disparities is substantial: the Black–white non-traffic-safety stop disparity would be cut nearly in half—a 46 percent decrease—if police did not make stops for these 15 violations.²⁵ (See Figure 9.)

Figure 8

Most racially disparate non-traffic-safety offenses, Suffolk County non-traffic-safety stops, 2010–2019

	Traffic offense	Average number of offense citations per year, Black drivers, 2010-2019	Average Black-white traffic offense disparity ratio, 2010-2019
1	USE MV WITHOUT AUTHORITY c90 §24(2)(a)	66	6.0
2	WINDOW OBSTRUCTED/NONTRANSPARENT * c90 §9D	241	5.1
3	NUMBER PLATE VIOLATION TO CONCEAL ID c90 §23	144	3.9
4	LICENSE REVOKED AS HTO, OPERATE MV WITH c90 §23	108	3.1
5	LICENSE SUSPENDED, OP MV WITH c90 §23	655	3.1
6	REGISTRATION SUSPENDED, OP MV WITH c90 §23	436	3.1
7	UNINSURED MOTOR VEHICLE c90 §34J	577	3.0
8	LIGHTS VIOLATION, MV * c90 §7	271	2.9
9	EQUIPMENT VIOLATION, MISCELLANEOUS MV * c90 §7	445	2.6
10	INSPECTION/STICKER, NO * c90 §20	1,875	2.6
11	NUMBER PLATE VIOLATION * c90 §6	322	2.6
12	UNLICENSED/SUSPENDED OPERATION OF MV, PERMIT c90 §12(b)	150	2.6
13	LICENSE NOT IN POSSESSION * c90 §11	129	2.3
14	SEAT BELT, FAIL WEAR * c90 §13A	670	2.2
15	UNLICENSED OPERATION OF MV c90 §10	338	2.1

Limited to non-traffic safety offenses that were enforced at least 50 times a year on average for Black motorists and for which the Black-white traffic offense disparity ratio was greater than or equal to 2.

Source: Massachusetts Department of Transportation (MassDOT)

Figure 9

Reductions in stops for certain non-traffic-safety offenses can greatly reduce non-traffic-safety racial disparities in Suffolk County²⁶

If police did not stop these NTSS violations between 2010-2019...	Number of NTSS prevented (out of 155,210 total NTSS)	Percent decrease in NTSS	Black-white NTSS racial disparity change (1x = no disparity)	Percent decrease in Black-white NTSS racial disparity
Top 10 most common	114,667	74%	2.3x → 2.2x	-8%
Top 15 most common	131,829	85%	2.3x → 1.8x	-38%
Top 20 most common	140,172	90%	2.3x → 2.1x	-15%
Most racially disparate (15 violations)	105,208	68%	2.3x → 1.7x	-46%

Source: Massachusetts Department of Transportation (MassDOT)

Conclusions and data limitations

Through its analysis of MassDOT data, Vera found substantial evidence that police disproportionately levy traffic stops against Black drivers in Suffolk County. This is especially true for violations that pose no threat to public safety and that grant officers the greatest discretion in enforcement—non-traffic-safety stops. Furthermore, several police districts in Boston pulled over Black drivers for non-traffic-safety reasons at alarming rates. In Police District B-3 (Mattapan), for example, half of all stops that officers made of Black drivers were for non-traffic-safety reasons. There are limitations with using residential population data to estimate the demographics of the “at-risk” population for traffic stops in each jurisdiction. Residential population data is readily available from the U.S. Census, but it may not reflect the population of people that are driving into and out of—and therefore subject to policing within—a given geography. Here, transit population numbers may be more accurate. However, these estimates are less readily available and, when they are available, they often are not disaggregated by race and ethnicity. Ultimately, Vera used residential population numbers stratified by race and ethnicity from the annual U.S. Census Bureau American Community Survey to calculate traffic stop rates.

Because the MassDOT data does not include information on traffic stops that ended in verbal warnings, Vera could not investigate the full universe of police traffic stops in Suffolk County. Despite this limitation, Vera researchers located no evidence suggesting that the inclusion of unrecorded traffic stops would alter Vera’s findings on the disproportionality of traffic stops against Black drivers. The Boston Police Department’s Field Interrogation and

Observation (FIO) dataset—perhaps the only other source of available public data on police interactions with pedestrians and drivers in the Boston area—provides some useful insight into police stop activity in Suffolk County. Two studies of FIO data (assessing 2007–2010 and 2011–2015) found that FIO stops were disproportionately carried out in Black and Hispanic neighborhoods, and Black people were significantly more likely to be surveilled, stopped, frisked, searched, or arrested than white people, even after controlling for crime, prior criminal activity, or purported gang affiliation.²⁷ Therefore, while better data on the full universe of traffic stops is needed in Suffolk County, the evidence suggests that Black people are disproportionately impacted by police stops across a number of scenarios.

In a recent report commissioned by the Massachusetts Executive Office of Public Safety and Security, researchers applied a veil-of-darkness analysis to measure racial disparities in traffic stops occurring across Massachusetts from February to December 2020.²⁸ A veil-of-darkness test seeks to measure officer bias by comparing traffic stops made during the day to those made at night, based on the assumption that police are less able to determine a driver’s race or ethnicity after dark than during the day. Although officer bias and explicit racial profiling are important considerations, Vera’s analysis centers on disparate *impacts*, regardless of whether an individual officer is engaging in measurable bias. Disproportionate stops for Black drivers mean disproportionate contact between Black people and the police. And this disparate contact can lead to, among other negative outcomes, entanglement in the criminal legal system: for example, the aforementioned Executive Office of Public Safety and Security report found that Black and Latinx drivers were subject to searches, criminal citations, and arrests more often than white drivers across the state in 2020.²⁹

Policy Recommendations

Vera’s findings lead to the following policy recommendations. If implemented, these would prevent or discourage law enforcement in Suffolk County from conducting non-traffic-safety stops. They would reduce the attendant harms—which are experienced disproportionately by Black people—reduce racial disparities, and improve relationships between law enforcement and the communities they serve.

- City councils in Suffolk County should pass local ordinances to prevent police from pulling drivers over for minor, non-traffic-safety traffic violations, as Pittsburgh and Philadelphia have done.³⁰ In 2021, both cities amended their laws to bar police from pulling over drivers for a number of non-traffic-safety violations, such as driving without a clearly displayed registration plate, with a single broken taillight, or without an inspection or emissions sticker. Such ordinances can similarly prevent police from pulling drivers over to arrest them on warrants for low-level offenses (such as failing to pay fines and fees or missing court dates for certain misdemeanor offenses). They can also prohibit police from making traffic stops and then searching people or their vehicles for evidence of unrelated crimes—based on the driver’s consent—when they lack probable cause to do so (also known as consent searches).³¹

- Police departments should adopt policies to enforce only traffic code violations that implicate traffic safety, as law enforcement agencies in Fayetteville, North Carolina; Lansing, Michigan; and Nashville, Tennessee, have done.³² In North Carolina, doing so was followed by a 50 percent drop in searches of Black drivers and reductions in injuries to citizens and police, traffic fatalities, police use of force, and complaints against police.³³ A stronger policing focus on preventing traffic fatalities is especially crucial considering the staggering increase in the risk of traffic fatalities in 2020 and 2021.³⁴
- Suffolk County’s District Attorney’s Office should decide not to charge contraband cases that result from non-traffic-safety stops, as prosecutors in Chittenden County, Vermont; Ingham County, Michigan; and Ramsey County, Minnesota, have done.³⁵ The district attorney should also adopt policies requiring heightened scrutiny of all traffic stops to ensure that traffic-safety stops are not being used as an excuse or pretext to stop drivers and search for evidence of other unrelated crimes (when they would not otherwise have probable cause to do so). Suffolk County prosecutors should also refuse to charge contraband cases based on searches that police conduct when they lack probable cause to suspect criminal activity but still sought and obtained consent to search a driver, passenger, or their vehicle during a traffic stop. These measures would encourage police to reconsider the utility of such stops. Fewer stops can prevent racial disparities from traffic stops from flowing into criminal cases charged in Suffolk County.
- Suffolk County should build non-police first responder teams whose mission is traffic and road safety, not criminal law enforcement, like the City of Berkeley, California, has opted to do.³⁶ Unarmed, civilian traffic response units, housed in a city department of transportation or public works, would respond to traffic collisions and enforce non-traffic-safety violations. Although they would have the authority to stop cars, they would not be able to use force, and their mission would be traffic safety rather than criminal law enforcement. By divorcing armed police from traffic enforcement, cities can remove the perverse incentives that police have to conduct mundane non-traffic-safety stops in order to seek evidence of other crimes that they can charge.³⁷
- Finally, as noted throughout the report, the available MassDOT dataset does not track traffic stops that end only in verbal warnings. Suffolk County policymakers should mandate better data tracking so that the complete universe of motor vehicle stops—and their impact on communities—may be fully assessed.

Appendix

Race and ethnicity data

The MassDOT data contained information on the driver's race/ethnicity for a given stop. However, the race/ethnicity data was on occasion inconsistent, misspelled, or contained multiple descriptive names for what might be better grouped into a single racial/ethnic category. As such, Vera cleaned the dataset by first identifying the existing racial/ethnic categories and then mapping them onto a more cleanly defined set of racial/ethnic categories. For example, the raw MassDOT data has categories including "AFRICA," "black," and "BLACK"—Vera categorized these simply as "Black." Vera cleaned up other racial/ethnic categories accordingly, resulting in the following categories: "Black," "Asian/Pacific Islander," "White," "Hispanic," "Indigenous," "Other," and "Unknown." Vera created the category "Other" to include those originally categorized as "CAPVER" (n = 6 between 2002 and 2021) and "MIDEST" (n = 40,394 between 2002 and 2021). Vera categorized "MIDEST" (Middle Eastern) as "Other" due to the lack of census numbers for Middle Eastern populations that could be used to calculate traffic stop rates.

Transit vs. residential population

What is the appropriate population to use for calculating rates of traffic stops across racial/ethnic groups? Residential population data is readily available from the U.S. Census, but it may not reflect the population of people that are driving in and out of—and therefore subject to policing within—a given geography. Here, transit population numbers may be more accurate. However, these estimates are less readily available and, when they are available, they often are not disaggregated by race and ethnicity. In this study, Vera used residential population numbers from annual U.S. Census Bureau American Community Survey estimates at the county and municipal levels to assess rates of traffic stops.

Transit or "daytime" populations based on an influx of workers from outside of Suffolk County were not accounted for in the population totals Vera used to assess traffic stop rate disparities. Suffolk County is a more diverse residential population than the surrounding Greater Boston suburbs. Therefore, it is likely that the transit/daytime population is whiter than Suffolk County's residential population. This means that Vera's residential population-based estimate of traffic stop rates for non-Hispanic whites might *underestimate* how many non-Hispanic white people are "at risk" of a traffic stop within Suffolk County. Vera researchers hypothesize that inclusion of those transit/daytime populations may actually result in a lower traffic stop rate for white drivers owing to more white drivers from surrounding communities entering Suffolk County than drivers of color. This would lead to *greater* traffic stop rate disparities for other racial/ethnic groups compared to white drivers.

To illustrate this, Figure 10 compares the demographics of Suffolk County to those of the Metropolitan Area Planning Council (MAPC) region, which includes the 101 cities and towns surrounding (and inclusive of) Boston. As the figure shows, Vera found that the residential populations of communities surrounding Suffolk County (i.e., MAPC Region minus Suffolk County) are significantly whiter than that of Suffolk County. This may suggest that the driving

population entering Suffolk County from surrounding communities is likely to lead to a greater number of white drivers “at risk” of a traffic stop compared to drivers of color.

Figure 10

Share of population that is non-Hispanic white in Suffolk County and surrounding Greater Boston communities, 2013–2017

Geography	Non-Hispanic white population (ACS 2013–2017)	Total population (ACS 2013–2017)	Share of total population that is non-Hispanic white
Suffolk County	355,132	780,685	46%
MAPC Region	2,295,005	3,327,142	69%
MAPC Region <i>minus</i> Suffolk County*	1,939,873	2,546,457	76%

*MAPC region surrounding, but not including, Suffolk County

Figure 11

Top 20 most common non-traffic-safety offenses in non-traffic-safety stops, Suffolk County, 2010–2019

	Traffic offense	Number of times offense is cited during non-traffic safety stop, 2010-2019	Average Black-white traffic offense disparity ratio, 2010-2019
1	INSPECTION/STICKER, NO * c90 §20	43,817	2.6
2	UNREGISTERED MOTOR VEHICLE * c90 §9	28,264	1.8
3	SEAT BELT, FAIL WEAR * c90 §13A	18,534	2.2
4	LICENSE SUSPENDED, OP MV WITH c90 §23	15,020	3.1
5	UNINSURED MOTOR VEHICLE c90 §34J	13,230	3.0
6	EQUIPMENT VIOLATION, MISCELLANEOUS MV * c90 §7	12,344	2.6
7	UNLICENSED OPERATION OF MV c90 §10	12,141	2.1
8	REGISTRATION SUSPENDED, OP MV WITH c90 §23	9,828	3.1
9	NUMBER PLATE VIOLATION * c90 §6	8,744	2.6
10	LIGHTS VIOLATION, MV * c90 §7	6,805	2.9
11	WINDOW OBSTRUCTED/NONTRANSPARENT * c90 §9D	5,449	5.1
12	UNLICENSED/SUSPENDED OPERATION OF MV, PERMIT c90 §12(b)	4,377	2.6
13	LICENSE NOT IN POSSESSION * c90 §11	3,548	2.3
14	NUMBER PLATE VIOLATION TO CONCEAL ID c90 §23	3,122	3.9
15	REGISTRATION NOT IN POSSESSION * c90 §11	3,077	1.9
16	LICENSE REVOKED AS HTO, OPERATE MV WITH c90 §23	2,398	3.1
17	LEAVE SCENE OF PROPERTY DAMAGE c90 §24(2)(a)	2,390	1.3
18	REGISTRATION STICKER MISSING * 540 CMR §2.05(6)(a)	1,489	1.2
19	CHILD 8-12 OR OVER 57 INCHES WITHOUT SEAT BELT * c90 §7AA	1,447	2.6
20	RIGHT LANE, FAIL DRIVE IN * c89 §4B	1,348	0.7

Source: Massachusetts Department of Transportation (MassDOT)

Figure 12

List of offense types in MassDOT dataset, by traffic safety category, Suffolk County, 2010–2019

Offense description	Offense type	Number of times offense is cited across all stop types, 2010–2019
STOP/YIELD, FAIL TO * c89 §9	Traffic Safety	108,136
INSPECTION/STICKER, NO * c90 §20	Non-Traffic Safety	61,382
SPEEDING * c90 §17	Traffic Safety	57,410
SEAT BELT, FAIL WEAR * c90 §13A	Non-Traffic Safety	45,995
UNREGISTERED MOTOR VEHICLE * c90 §9	Non-Traffic Safety	35,543
MARKED LANES VIOLATION * c89 §4A	Traffic Safety	33,847
LICENSE SUSPENDED, OP MV WITH c90 §23	Non-Traffic Safety	25,185
TURN, IMPROPER * c90 §14	Traffic Safety	24,978
SPEEDING IN VIOL SPECIAL REGULATION * c90 §18	Traffic Safety	24,970
UNLICENSED OPERATION OF MV c90 §10	Non-Traffic Safety	22,912
EQUIPMENT VIOLATION, MISCELLANEOUS MV * c90 §7	Non-Traffic Safety	17,916
OPERATION OF MOTOR VEHICLE, IMPROPER * c90 §16	Traffic Safety	17,578
SLOW, FAIL TO * c90 §14	Traffic Safety	16,748
UNINSURED MOTOR VEHICLE c90 §34J	Non-Traffic Safety	15,728
SPEEDING RATE OF SPEED EXCEEDING POSTED LIMIT c90 §17	Traffic Safety	15,195
CROSSWALK VIOLATION * c89 §11	Traffic Safety	13,819
NUMBER PLATE VIOLATION * c90 §6	Non-Traffic Safety	12,246
REGISTRATION SUSPENDED, OP MV WITH c90 §23	Non-Traffic Safety	11,692
LICENSE NOT IN POSSESSION * c90 §11	Non-Traffic Safety	11,429
MISCELLANEOUS MUNIC MOTOR VEHICLE ORDINANCE/BYLAWS VIOL	Uncategorized	11,293
REGISTRATION NOT IN POSSESSION * c90 §11	Non-Traffic Safety	11,005
LIGHTS VIOLATION, MV * c90 §7	Non-Traffic Safety	10,110
YIELD AT INTERSECTION, FAIL * c89 §8	Traffic Safety	8,289
OUI-LIQUOR OR .08% c90 §24(1)(a)(1)	Traffic Safety	7,570
WINDOW OBSTRUCTED/NONTRANSPARENT * c90 §9D	Non-Traffic Safety	7,418
SIGNAL, FAIL TO * c90 §14B	Traffic Safety	7,393
STATE HWAY-TRAFFIC VIOLATION * 720 CMR §9.06	Uncategorized	5,670
UNLICENSED/SUSPENDED OPERATION OF MV, PERMIT c90 §12(b)	Non-Traffic Safety	5,251
UNSAFE OPERATION OF MV * c90 §13	Traffic Safety	4,582
LEAVE SCENE OF PROPERTY DAMAGE c90 §24(2)(a)	Non-Traffic Safety	4,491
PASSING VIOLATION * c89 §2	Traffic Safety	4,441

Offense description	Offense type	Number of times offense is cited across all stop types, 2010–2019
ELECTRONIC MESSAGE, OPERATOR SEND/READ * c9	Traffic Safety	4,352
LICENSE REVOKED AS HTO, OPERATE MV WITH c90 §23	Non-Traffic Safety	4,345
RECKLESS OPERATION OF MOTOR VEHICLE c90 §24(2)(a)	Traffic Safety	3,986
STOP FOR POLICE, FAIL c90 §25	Traffic Safety	3,864
NUMBER PLATE VIOLATION TO CONCEAL ID c90 §23	Non-Traffic Safety	3,809
KEEP RIGHT ON HILL/OBSTRUCTED VIEW, FL * c89 §4	Traffic Safety	3,781
MASS PIKE - SIGN, FAIL OBEY * 700 CMR §7.09(1)(a)	Traffic Safety	3,776
MASS PIKE - SPEEDING * 700 CMR §7.09(6)(a)	Traffic Safety	3,189
ALCOHOL IN MV, POSSESS OPEN CONTAINER OF * c90 §24I	Uncategorized	2,837
CHILD 8-12 OR OVER 57 INCHES WITHOUT SEAT BELT * c90 §7AA	Non-Traffic Safety	2,574
SAFETY STANDARDS, MV NOT MEETING RMV * c90 §7A & §20	Traffic Safety	2,538
NEGLIGENT OPERATION OF MOTOR VEHICLE c90 §24(2)(a)	Traffic Safety	2,439
REGISTRATION STICKER MISSING * 540 CMR §2.05(6)(a)	Non-Traffic Safety	2,352
EMERGENCY VEHICLE, OBSTRUCT * c89 §7A	Traffic Safety	2,347
DRUG, POSSESS TO DISTRIB CLASS B c94C §32A(a)	Uncategorized	2,311
STATE HWAY--SIGNAL/SIGN/MARKINGS VIOL * 720 CMR §9.06	Traffic Safety	2,173
RIGHT LANE, FAIL DRIVE IN * c89 §4B	Non-Traffic Safety	2,100
DRUG, POSSESS CLASS B c94C §34	Uncategorized	2,095
USE MV WITHOUT AUTHORITY c90 §24(2)(a)	Non-Traffic Safety	1,849
MDC WAY--\$200 VIOLATION * 350 CMR §4.01	Uncategorized	1,721
EMERGENCY VEHICLE, OBSTRUCT STATIONARY * c89 §7C	Traffic Safety	1,503
MDC WAY--\$25 VIOLATION * 350 CMR §4.01	Non-Traffic Safety	1,369
MOBILE PHONE, OPERATOR USE IMPROPERLY * c90 §13	Traffic Safety	1,326
DRUG, POSSESS TO DISTRIB CLASS D c94C §32C(a)	Uncategorized	1,244
LOGAN--SPEEDING OVER POSTED LIMIT * 740 CMR §21.51	Traffic Safety	1,211
DRUG, POSSESS TO DISTRIB CLASS A c94C §32(a)	Uncategorized	1,202
DRUG, POSSESS CLASS A c94C §34	Uncategorized	1,176
STATE HWAY--TRAFFIC VIOLATION * 720 CMR §9.07	Uncategorized	1,141
MASS PIKE - MARKED LANES VIOLATION * 700 CMR §7.09(8)	Non-Traffic Safety	1,053

Offense description	Offense type	Number of times offense is cited across all stop types, 2010–2019
KEEP RIGHT FOR ONCOMING MV, FAIL TO * c89 §1	Traffic Safety	1,024
MASS PIKE - TOO CLOSE * 700 CMR §7.09(15)	Non-Traffic Safety	1,020
NAME/ADDRESS CHANGE, FL NOTIFY RMV OF * c90 §26A	Non-Traffic Safety	1,001
STATE HWAY--WRONG WAY * 720 CMR §9.05	Traffic Safety	976
LEAVE SCENE OF PERSONAL INJURY c90 §24(2)(a½)(1)	Non-Traffic Safety	965
OUI-DRUGS c90 §24(1)(a)(1)	Traffic Safety	917
MOTOR VEH THIEF, CONCEAL c266 §28(b)	Non-Traffic Safety	886
LOAD UNSECURED/UNCOVERED * c85 §36	Traffic Safety	857
MASS PIKE - INSPECTION STICKER, NO * 700 CMR §7.09(26)	Non-Traffic Safety	850
DRUG VIOLATION NEAR SCHOOL/PARK c94C §32J	Uncategorized	843
MASS PIKE--ETC TOLL, AVOID * 730 CMR §7.04(3)	Non-Traffic Safety	833
CHILD UNDER 8 YEARS & UNDER 58 INCHES WITHOUT CARSEAT * c90 §7AA	Non-Traffic Safety	795
MDC WAY/RESERV--ENTRY/EXIT, IMPROPER MV * 350 CMR §2.01(2)	Non-Traffic Safety	782
MASS PIKE - SPEEDING OVER POSTED LIMIT * 700 CMR §7.09(6)(c)	Traffic Safety	716
MDC WAY--\$50 VIOLATION * 350 CMR §4.01	Uncategorized	703
SPEEDING RATE OF SPEED GREATER THAN WAS REASONABLE AND PROPER c90 §17	Traffic Safety	703
RULES/REG VIOLATION	Uncategorized	694
RMV DOCUMENT, POSSESS/USE FALSE/STOLEN c90 §24B	Non-Traffic Safety	673
MASS PIKE--TOLL, EVADE * 730 CMR §7.03(4)	Non-Traffic Safety	653
LOGAN--SIGNAL/SIGN/MARKINGS VIOLATION * 740 CMR §21.52	Traffic Safety	645
AFTERMARKET LIGHTING, NONCOMPLIANT * 540 CMR §22.07	Non-Traffic Safety	643
BRAKES VIOLATION, MV * c90 §7	Traffic Safety	590
LICENSE SUSPENDED, OP MV WITH, SUBSQ. OFF. c90 §23	Non-Traffic Safety	579
MDC WAY--\$100 VIOLATION * 350 CMR §4.01	Uncategorized	552
UNLICENSED OPERATOR, EMPLOY * c90 §12(a)	Non-Traffic Safety	542
ACCIDENT REPORT, FAIL FILE * c90 §26	Non-Traffic Safety	509
MOPED VIOLATION * c90 §1B	Uncategorized	489
BREAKDOWN LANE VIOLATION * c89 §4B	Non-Traffic Safety	488
HEIGHT, OPERATE MV WITH MODIFIED * c90 §7P	Non-Traffic Safety	482
DRUG, POSSESS CLASS E, SUBSQ. OFF. c94C §34	Uncategorized	467

Offense description	Offense type	Number of times offense is cited across all stop types, 2010–2019
LICENSE SUSPENDED FOR OUI, OPER MV WITH c90 §23	Traffic Safety	444
MASS PIKE - FUEL, INADEQUATE * 700 CMR §7.09(23)	Non-Traffic Safety	443
HANDICAP PARKING PLATE/PLACARD MISUSE * c90 §2	Non-Traffic Safety	420
RED/BLUE LIGHT VIOLATION, MV * c90 §7E	Non-Traffic Safety	414
DRUG, POSSESS CLASS C c94C §34	Uncategorized	412
MASS PIKE--TOLL BOOTH, FAIL STOP AT * 730 CMR §7.03(2)	Non-Traffic Safety	383
HEADLIGHTS, FAIL DIM * 540 CMR §22.05(2)	Non-Traffic Safety	349
MOTORCYCLE EQUIPMENT VIOLATION * c90 §7	Non-Traffic Safety	344
DRUG, POSSESS TO DISTRIB CLASS C c94C §32B(a)	Uncategorized	340
MASS PIKE - STOP/BACK/U-TURN * 700 CMR §7.09(17)(a)&(b)	Traffic Safety	337
DRUG, POSSESS CLASS D c94C §34	Uncategorized	323
MASS PIKE - EQUIPMENT VIOLATON * 700 CMR §7.09(27)	Non-Traffic Safety	322
LIGHTS VIOLATION * c85 §15	Non-Traffic Safety	316
OUI-LIQUOR OR .08%, 2ND OFFENSE c90 §24(1)(a)(1)	Traffic Safety	303
TIRE TREAD DEPTH VIOLATION * c90 §7Q	Non-Traffic Safety	299
MASS PIKE - NEGLIGENT OPERATION * 700 CMR §7.09(5)(a)	Traffic Safety	292
SPEEDING IN CONSTRUCTION ZONE * c90 §17	Traffic Safety	274
IDENTIFY SELF, MV OPERATOR REFUSE c90 §25	Non-Traffic Safety	267
DRUG, POSSESS TO DISTRIB CLASS E c94C §32D(a)	Uncategorized	265
CONSPIRACY TO VIOLATE DRUG LAW c94C §40	Uncategorized	264
MASS PIKE - STOP/TURN, FAIL SIGNAL * 700 CMR §7.09(17)(c)	Non-Traffic Safety	259
TRESPASS WITH MOTOR VEHICLE * c266 §121A	Non-Traffic Safety	245
TOBIN BRIDGE - SPEEDING OVER POSTED LIMIT * 700 CMR §11.05(11)	Traffic Safety	241
REGISTER MV IMPROPERLY TO AVOID TAXES/PREMIUMS * c90 §3½(c)(¶2)	Non-Traffic Safety	239
OPEN CONTAINER MARIJUANA IN VEHICLE c94G §13(d)	Uncategorized	226
NUMBER PLATE MISSING * c90 §9	Non-Traffic Safety	223
MASS PIKE - CROSS-OVER VIOLATION * 700 CMR §7.09(10)(b)	Traffic Safety	220
MASS PIKE - RESTRICTED AREA VIOLATION * 700 CMR §7.09(11)(a)	Uncategorized	219
LEARNERS PERMIT VIOLATION * c90 §8B	Non-Traffic Safety	213
TRASH, LITTER FROM MV c270 §16	Non-Traffic Safety	211

Offense description	Offense type	Number of times offense is cited across all stop types, 2010–2019
RACING MOTOR VEHICLE c90 §17B	Traffic Safety	206
IDLE ENGINE OF STOPPED MV OVER 5 MINUTES * c90 §16A	Non-Traffic Safety	200
LICENSE SUSPENDED, OP MV WITH (CRIMINAL SUBSQ.OFF.) c90 §23	Non-Traffic Safety	185
MOTOR VEH IN AREA CLOSED TO TRAVEL * c90 §18	Non-Traffic Safety	185
MASS PIKE - TOLL BOOTH, FAIL STOP AT * 700 CMR §7.03(2)	Non-Traffic Safety	178
MASS PIKE - BREAKDOWN LANE VIOLATION * 700 CMR §7.09(9)	Non-Traffic Safety	171
TIRE OUTSIDE FENDER c90 §19	Non-Traffic Safety	171
MDC WAY--SPEEDING * 350 CMR §4.01	Traffic Safety	156
MASS PIKE - POLICE ORDERS, FAIL OBEY * 700 CMR §7.09(1)(b)	Traffic Safety	131
DRUG, POSSESS TO DISTRIB CLASS B, SUBSQ. c94C §32A(b)	Uncategorized	128
COCAINE, TRAFFICKING IN c94C §32E(b)	Uncategorized	110
DRUG, POSSESS TO DISTRIB CLASS D, SUBSQ. c94C §32C(b)	Uncategorized	109
LICENSE, EXHIBIT ANOTHERS c90 §23	Non-Traffic Safety	104
LOGAN--TRAFFIC VIOLATION * 740 CMR §21.51	Uncategorized	103
COCAINE, POSSESS TO DISTRIBUTE c94C §32A(c)	Uncategorized	98
NUMBER PLATE, MISUSE OFFICIAL * c90 §2	Non-Traffic Safety	97
RAILROAD CROSSING VIOLATION * c90 §15	Traffic Safety	96
REGISTER MV OPERATED +30 DAYS YEAR, FL * c90 §3	Non-Traffic Safety	96
LICENSE REVOKED AS HTO, OPERATE MV WITH (CRIMINAL) c90 §23	Non-Traffic Safety	89
MASS PIKE - TOLL, EVADE * 700 CMR §7.03(3)	Non-Traffic Safety	89
HEROIN/MORPHINE/OPIUM, TRAFFICKING IN 18 GRAMS OR MORE, LESS THAN 36 GRAMS c94C §32E(c)	Uncategorized	88
MOTOR VEH, MALICIOUS DAMAGE TO c266 §28(a)	Non-Traffic Safety	87
MASS PIKE - WINDOW OBSTRUCTED * 700 CMR §7.06(4)(c)	Non-Traffic Safety	86
HEROIN, BEING PRESENT WHERE KEPT c94C §35	Uncategorized	85
MOTOR VEH, RECEIVE STOLEN c266 §28(a)	Non-Traffic Safety	81
DRUG, POSSESS TO DISTRIB CLASS A, SUBSQ. c94C §32(b)	Uncategorized	80
COCAINE, TRAFFICKING IN 18 GRAMS OR MORE, LESS THAN 36 GRAMS c94C §32E(b)	Uncategorized	79
MASS PIKE - PASSING VIOLATION * 700 CMR §7.09(14)	Traffic Safety	79

Offense description	Offense type	Number of times offense is cited across all stop types, 2010–2019
MASS PIKE - TRAFFIC LIGHT, FAIL OBEY * 700 CMR §7.09(2)	Traffic Safety	78
OUI-LIQUOR OR .08% & SERIOUS INJURY c90 §24L(2)	Traffic Safety	78
MASS PIKE - SPEEDING TO ENDANGER * 700 CMR §7.09(6)(b)	Traffic Safety	73
VANDALIZE PROPERTY c266 §126A	Non-Traffic Safety	73
MASS PIKE - WRONG WAY * 700 CMR §7.06(1)	Traffic Safety	72
LIQUOR, PERSON UNDER 21 POSSESS c138 §34C	Uncategorized	70
MASS PIKE--ETC SYSTEM/LANE, UNAUTH USE * 730 CMR §7.04(1)	Non-Traffic Safety	69
CHILD ENDANGERMENT WHILE OUI c90 §24V	Traffic Safety	61
REGISTRATION SUSPENDED, OP MV, SUBSQ. OFF c90 §23	Non-Traffic Safety	60
JUNIOR OPERATOR WITH PASSENGER UNDER 18 * c90 §8	Non-Traffic Safety	59
MASS PIKE - ETC TOLL, AVOID * 700 CMR §7.04(3)	Non-Traffic Safety	58
RMV DOCUMENT, FORGE/MISUSE c90 §24B	Non-Traffic Safety	55
LICENSE RESTRICTION, OPERATE MV IN VIOL	Non-Traffic Safety	52
DOT WAY - SIGN/SIGNAL VIOL * 700 CMR §5.401(1), (6)-(7)	Traffic Safety	51
MASS PIKE - ENTER/EXIT, UNAUTHORIZED * 700 CMR §7.06(3)	Uncategorized	49
EMERGENCY VEHICLE, WILFULLY OBSTRUCT c89 §7	Traffic Safety	48
MASS PIKE - WINDOW OBSTRUCTED * 700 CMR §7.05(4)(c)	Non-Traffic Safety	46
PUPIL TRANSPORT VEHICLE VIOLATION * c90 §7D	Uncategorized	46
DRUG, OBTAIN BY FRAUD c94C §33(b)	Uncategorized	45
HEADLIGHTS, ALTERNATING FLASHING * 540 CMR §22.05(2)	Non-Traffic Safety	44
LIGHTS VIOLATION *, WINDSHIELD WIPERS ON c85 §15	Non-Traffic Safety	43
MASS PIKE - SPEEDING IN CONSTRUCTION ZONE * 700 CMR §7.09(12)(a)	Traffic Safety	43
MOTOR VEH BY-LAW VIOLATION * c85 §10	Uncategorized	43
ABANDON MV c90 §22B(a)	Non-Traffic Safety	42
MOTOR VEH DOOR, NEGLIGENTLY OPEN c90 §14	Traffic Safety	42
BLIND PEDESTRIAN, FAIL STOP FOR * c90 §14A	Traffic Safety	41
NUMBER PLATE, TAKE c266 §139	Non-Traffic Safety	41
NUMBER PLATE, MISUSE DEALER/REPAIR 540 CMR §18.04(2)	Non-Traffic Safety	40

Offense description	Offense type	Number of times offense is cited across all stop types, 2010–2019
TOBIN BRIDGE - TRAFFIC VIOLATION * 700 CMR §11.05	Uncategorized	39
LICENSE SUSPENDED FOR OUI, OUI WHILE c90 §23	Traffic Safety	37
MASS PIKE--TOLL, FAIL PAY * 730 CMR §7.03(3)	Non-Traffic Safety	37
OUI-LIQUOR OR .08%, 3RD OFFENSE c90 §24(1)(a)(1)	Traffic Safety	37
MASS PIKE - ETC SYSTEM/LANE, UNAUTH USE * 700 CMR §7.04(1)	Non-Traffic Safety	36
SAFETY GLASS VIOLATION * c90 §9A	Non-Traffic Safety	36
MOBILE PHONE, OPERATOR UNDER 18 USE * c90 §8M	Traffic Safety	35
HORN VIOLATION, MV * c90 §7	Non-Traffic Safety	33
MASS PIKE - ENTER/EXIT IMPROPERLY * 700 CMR §7.09(7)	Traffic Safety	33
STATE HWAY--CLOSED TO TRAVEL, MV WHERE * c85 §2E	Non-Traffic Safety	33
DOT WAY-ENTRY/EXIT, IMPROPER MV * 700 CMR §5.201(2)(a)	Traffic Safety	31
MASS PIKE--ENTER/EXIT, UNAUTHORIZED * 730 CMR §7.05(3)	Non-Traffic Safety	31
MASS PIKE - HEADLIGHT HIGH BEAM VIOLATION * 700 CMR §7.09(22)	Non-Traffic Safety	31
PUPILS, TRANSPORT WITHOUT LICENSE * c90 §8A½	Non-Traffic Safety	30
MASS PIKE--WRONG WAY * 730 CMR §7.05(1)	Traffic Safety	29
NUMBER PLATE STICKER NOT DISPLAYED 540 C	Non-Traffic Safety	29
DOT WAY - FAIL SIGNAL TURN * 700 CMR §5.401(4)	Traffic Safety	28
MASS PIKE - WRONG WAY * 700 CMR §7.05(1)	Traffic Safety	27
LEAVE SCENE OF PERSONAL INJURY & DEATH c90 §24(2)(a½)(2)	Non-Traffic Safety	26
LICENSE/REGIS/PLATES, REFUSE PRODUCE c90 §25	Non-Traffic Safety	26
FUNERAL PROCESSION, DISTURB c272 §42	Non-Traffic Safety	25
OUI-DRUGS, 2ND OFFENSE c90 §24(1)(a)(1)	Traffic Safety	25
LICENSE CLASS, OPERATE MV IN VIOLATION c90 §10	Non-Traffic Safety	24
REGISTRATION LEFT IN TRANSFERRED MV * c90 §2B	Non-Traffic Safety	23
TAGGING PROPERTY c266 §126B	Non-Traffic Safety	23
MOTOR VEH HOMICIDE BY NEGLIGENT OP c90 §24G(b)	Traffic Safety	22
REGISTER MV IMPROPERLY TO AVOID TAXES/PREMIUMS c90 §3½(c)	Non-Traffic Safety	21
STATE HWAY--PARKING * 720 CMR §9.03	Non-Traffic Safety	21
MDC WAY--SPEEDING OVER POSTED LIMIT * 350 CMR §4.01	Traffic Safety	20

Offense description	Offense type	Number of times offense is cited across all stop types, 2010–2019
MOTOR VEH INSPECTION STATION VIOLATION 540 CMR §4.00	Non-Traffic Safety	20
STATE HWAY--RAMP, BACK ON/OFF * 720 CMR §9.08	Traffic Safety	20
DOT WAY - SPEEDING OVER POSTED LIMIT * 700 CMR §5.401(2)	Traffic Safety	19
MASS PIKE - EXCLUDED AREA IN CONSTRUCTION ZONE * 700 CMR §7.09(12)(b)	Traffic Safety	19
MASS PIKE SPEEDING 730 CMR §5.04	Traffic Safety	19
MASS PIKE - ENTER/EXIT, UNAUTHORIZED * 700 CMR §7.05(3)	Non-Traffic Safety	18
MASSPORT--SPEEDING OVER POSTED LIMIT * 740 CMR §3.03	Traffic Safety	18
STUDENT MOTOR VEH REGISTRATION VIOL * c90 §3	Non-Traffic Safety	18
LEASE MV LESSEE ALLOW UNAUTH PERSON OP c90 §32E	Non-Traffic Safety	17
MASS PIKE--WINDOW OBSTRUCTED * 730 CMR §7.05(5)(c)	Non-Traffic Safety	17
LICENSE, ALLOW ANOTHER TO USE c90 §24(2)(a)	Non-Traffic Safety	16
MASS PIKE - FALLING DEBRIS * 700 CMR §7.05(4)(f)	Traffic Safety	15
MASS PIKE - MEDIAN/EXCLUDED AREA VIOLATION * 700 CMR §7.09(10)(a)	Traffic Safety	15
MOTOR VEH VIN, REMOVE/ALTER c266 §139(a)	Non-Traffic Safety	15
IGNITION INTERLOCK, OPERATE WITHOUT c90 §24S(a)	Non-Traffic Safety	14
OUI-LIQUOR OR .08%, 4th OR GREATER OFFENSE c90 §24(1)(a)(1)	Traffic Safety	14
COCAINE, POSSESS TO DISTRIBUTE, SUBSQ. c94C §32A(d)	Uncategorized	13
DRUG, POSSESS CLASS E c94C §34	Uncategorized	13
HEIGHT, MODIFY MV c90 §7P	Non-Traffic Safety	13
MOTOR VEH, LARCENY OF c266 §28(a)	Non-Traffic Safety	13
CIGARETTE/MATCH, DROP ON FOREST/FIELD c148 §54	Non-Traffic Safety	12
COUNTERFEIT DRUG, POSSESS TO DISTRIBUTE c94C §32G	Uncategorized	12
JUNIOR OPERATOR OP 12-5 AM W/O PARENT c90 §§8 & 10	Non-Traffic Safety	12
MASS PIKE - MINIMUM SPEED VIOLATION * 700 CMR §7.09(6)(c)	Traffic Safety	12
TRESPASS c266 §120	Non-Traffic Safety	12
UNLICENSED/SUSPENDED OPERATION OF MV, PERMIT, SUBSQ. OFF. c90 §12(b)	Non-Traffic Safety	12
JUNIOR OPERATOR OP 12:30-5 AM W/O PARENT c90 §10	Non-Traffic Safety	11

Offense description	Offense type	Number of times offense is cited across all stop types, 2010–2019
MASSPORT--TRAFFIC VIOLATION * 740 CMR §3.03	Uncategorized	11
VEHICLE ID NUMBER NOT DISPLAYED * c90 §7R	Non-Traffic Safety	11
DOT WAY-CROSSWALK VIOLATION * 700 CMR §5.401(8)	Traffic Safety	10
LOW-SPEED VEHICLE VIOLATION * c90 §1F	Non-Traffic Safety	10
OUI-DRUGS, 4TH OFFENSE c90 §24(1)(a)(1)	Traffic Safety	10
MASS PIKE--FALLING DEBRIS * 730 CMR §7.05(5)(f)	Traffic Safety	9
MASS PIKE - LOADING, NEGLIGENT * 700 CMR §7.09(5)(b)	Traffic Safety	9
MASS PIKE - NEGLIGENT OP IN CONSTRUCTION ZONE * 700 CMR §7.09(12)(c)	Traffic Safety	9
OUI-DRUGS, 3RD OFFENSE c90 §24(1)(a)(1)	Traffic Safety	9
OUI-LIQUOR OR .08% & SERIOUS INJURY & NEGLIGENT c90 §24L(1)	Traffic Safety	9
DRUG, POSSESS CLASS B, SUBSQ.OFF. c94C §34	Uncategorized	8
EMERGENCY VEHICLE, WILFULLY OBSTRUCT, 3D c89 §7	Traffic Safety	8
LICENSE, FALSE APPLICATION FOR MV c90 §24B	Non-Traffic Safety	8
MANSLAUGHTER WHILE OUI c265 §13½	Traffic Safety	8
MASS PIKE - MUFFLER CUTOFF * 700 CMR §7.09(20)	Non-Traffic Safety	8
MASS PIKE - WRONG WAY IN CALLAHAN/SUMNER TUNNEL * 700 CMR §7.06(2)	Traffic Safety	8
MOTOR VEH HOMICIDE BY RECKLESS OP c90 §24G(b)	Traffic Safety	8
MOTOR VEH HOMICIDE OUI-LIQUOR OR .08% & NEGLIGENT c90 §24G(a)	Traffic Safety	8
MOTORCYCLE PASSENGER VIOLATION * c90 §7	Non-Traffic Safety	8
REGISTRATION, FL SURRENDER ON TRANSFER * c90 §2	Non-Traffic Safety	8
TIRE WIDTH BY-LAW VIOLATION * c40 §21(9)	Non-Traffic Safety	8
TOBIN BRIDGE - LOAD UNSECURED/UNCOVERED * 700 CMR §11.05(5)(g)	Traffic Safety	8
DRUG, DISTRIBUTE CLASS D c94C §32C(a)	Uncategorized	7
DRUG, POSSESS TO DISTRIB CLASS E, SUBSQ. c94C §32D(b)	Uncategorized	7
MOTOR VEH HOMICIDE OUI-LIQUOR OR .08% c90 §24G(b)	Traffic Safety	7
NUMBER PLATE, FAIL RETURN REPOSSESSED MV c90 §6C	Non-Traffic Safety	7
UNLICENSED OPERATOR, EMPLOY, SUBSQ. OFF. c90 §12(a)	Non-Traffic Safety	7
DOT WAY - SPEEDING * 700 CMR §5.401(2)	Non-Traffic Safety	6

Offense description	Offense type	Number of times offense is cited across all stop types, 2010–2019
MASS PIKE--WRONG WAY IN CALLAHAN/SUMNER TUNNEL * 730 CMR §7.05(2)	Non-Traffic Safety	6
MASS PIKE - NOISE VIOLATION * 700 CMR §7.09(21)	Non-Traffic Safety	6
DRUG, DISTRIBUTE CLASS B c94C §32A(a)	Uncategorized	5
DRUG, POSSESS TO DISTRIB CLASS C, SUBSQ. c94C §32B(b)	Uncategorized	5
MARIHUANA, TRAFFICKING IN 50 POUNDS OR MORE BUT LESS THAN 100 POUNDS c94C §32E(a)	Uncategorized	5
DRUG, DISTRIBUTE CLASS A c94C §32(a)	Uncategorized	4
FENTANYL, TRAFFICKING IN MORE THAN 10 GRAMS c.94C, §32E(c½)	Uncategorized	4
HEROIN, POSSESS c94C §34	Uncategorized	4
HEROIN/MORPHINE/OPIUM, TRAFFICKING IN 36 GRAMS OR MORE, LESS THAN 100 GRAMS c94C §32E(c)	Uncategorized	4
MASS PIKE - WRONG WAY IN CALLAHAN/SUMNER TUNNEL * 700 CMR §7.05(2)	Traffic Safety	4
OUI-LIQUOR OR .08%, 5TH OFFENSE c90 §24(1)(a)(1)	Traffic Safety	4
RACING MOTOR VEHICLE c90 §24(2)(a)	Non-Traffic Safety	4
TOBIN BRIDGE - EQUIPMENT VIOL * 700 CMR §11.05(4)(b)	Non-Traffic Safety	4
DRUG PARAPHERNALIA, DISTRIBUTE c94C §32I(a)	Uncategorized	3
MOTOR VEH HOMICIDE OUI-DRUGS & NEGLIG c90 §24G(a)	Traffic Safety	3
MOTOR VEH HOMICIDE OUI-LIQUOR OR .08% & RECKLESS c90 §24G(a)	Traffic Safety	3
OUI--LIQUOR OR .08%, 9TH OFFENSE c90 §24(1)(a)(1)	Traffic Safety	3
COCAINE, DISTRIBUTE c94C §32A(c)	Uncategorized	2
DRUG, DISTRIBUTE CLASS B, SUBSQ.OFF. c94C §32A(b)	Uncategorized	2
DRUG, DISTRIBUTE CLASS D, SUBSQ.OFF. c94C §32C(b)	Uncategorized	2
IDLE ENGINE OF STOPPED MV ON SCHOOL PROPERTY * c90 §16B(b)	Non-Traffic Safety	2
OUI-DRUGS & SERIOUS INJURY & RECKLESS c90 §24L(1)	Traffic Safety	2
RACING MOTOR VEHICLE BY JR OPERATOR/LEARNER, SUBSQ. OFF. * c90 §17B	Non-Traffic Safety	2
SUMNR/CALHN TUNL—SPEEDING 730 CMR §3.05	Non-Traffic Safety	2
TOBIN BRIDGE—SPEEDING OVER POSTED LIMIT	Non-Traffic Safety	2
COCAINE, TRAFFICKING IN 28 GRAMS OR MORE, LESS THAN 100 GRAMS c94C §32E(b)	Uncategorized	1

Offense description	Offense type	Number of times offense is cited across all stop types, 2010–2019
COCAINE, TRAFFICKING IN, 100 GRAMS OR MORE, LESS THAN 200 GRAMS c94C §32E(b)	Uncategorized	1
DRIVING INSTRUCTOR, UNLICENSED c90 §32G	Non-Traffic Safety	1
DRUG FUNDS, CAUSE MINOR TO POSSESS c94C §32K	Uncategorized	1
DRUG, DISTRIBUTE CLASS E c94C §32D(a)	Uncategorized	1
DRUG, POSSESS CLASS A, SUBSQ.OFF. c94C §34	Uncategorized	1
DRUG, POSSESS CLASS D, SUBSQ.OFF. c94C §34	Uncategorized	1
HANDICAP PARKING PLATE/PLACARD FAIL TO RETURN * c90 §2	Non-Traffic Safety	1
HEROIN/MORPHINE/OPIUM, TRAFFICKING IN c94C §32E(c)	Uncategorized	1
LIGHTS, FAIL DIM 540 CMR §2.12	Non-Traffic Safety	1
MARIHUANA +1 OZ, POSSESS c94C §34	Uncategorized	1
MARIJUANA +2 OZ, POSSESS OUTSIDE RESIDENCE c94C §34	Uncategorized	1
METHAMPHETAMINE, DISTRIBUTE c94C §32A(c)	Uncategorized	1
OUI--DRUGS, 5TH OFFENSE c90 §24(1)(a)(1)	Traffic Safety	1
OUI-DRUGS & SERIOUS INJURY & NEGLIGENT c90 §24L(1)	Traffic Safety	1
OUI-DRUGS & SERIOUS INJURY c90 §24L(2)	Traffic Safety	1
OUI-LIQUOR OR .08% & SERIOUS INJURY & RECKLESS c90 §24L(1)	Traffic Safety	1
PHENCYCLIDINE, POSSESS TO DISTRIB c94C §32A(d)	Uncategorized	1
RACING MOTOR VEHICLE BY JR OPERATOR/LEARNER * c90 §17B	Non-Traffic Safety	1
REGISTRATION, FALSE STATEMNT IN APPL FOR c90 §24(2)(a)	Non-Traffic Safety	1

Acknowledgments

The authors would like to thank the ACLU of Massachusetts for providing the Massachusetts Department of Transportation (MassDOT) dataset analyzed in this report; the Suffolk County District Attorney's Office for providing its internal DAMION case management dataset; and the many Massachusetts community organizations that provided valuable review, feedback, and local insight for this report: LivableStreets Alliance, Boston Cyclists Union, Muslim Justice League, and the Metropolitan Area Planning Council.

The authors would like to thank our colleagues Marta Nelson and Jim Parsons for their thoughtful reviews and feedback; Léon Digard and Cindy Reed for editing the report; Tammy Ackerson for cite checking; and Ariel Goldberg and EpsteinWords for editorial support.

Endnotes

1 Philadelphia, PA, Bill 210636-A (enacted October 27, 2021), <https://perma.cc/T5FD-BNLE>; Pittsburgh, PA, Legislative Details (with Text): Ordinance amending and supplementing the Pittsburgh Code of Ordinances, Title Five: Traffic, Article One: Administration, Chapter 503: Enforcement and Control, by adding a new section, Section 503.17: "Equitable and Fair Enforcement of Motor Vehicle Laws.", File #: 2021-2174 (enacted December 28, 2021), <https://perma.cc/5PLA-HYFR>; Ken Palmer, "New Guidelines: Lansing Police Won't Stop Drivers Solely for Minor Violations," *Lansing State Journal*, July 1, 2021, <https://perma.cc/HQ8H-JPU6>; Ahmed Jallow, "Taking Cops out of Traffic Stops: Would It Make a Difference? North Carolina Examples Offer a Clue," *Times-News*, March 22, 2021, <https://perma.cc/6T7T-CDED>; Samantha Max, "Nashville Police Report Major Drop In Traffic Stops Following Accusations of Racial Bias," WPLN News, March 25, 2021, <https://perma.cc/WNK3-FCTX>; Richard Luscombe, "'Unjust Practices': US Prosecutor Takes Stand Against Minor Police Traffic Stops," *The Guardian*, September 9, 2021, <https://www.theguardian.com/us-news/2021/sep/09/minnesota-prosecutor-philando-castile-cases-minor-traffic-violations>; and Kara Berg, "Ingham County Prosecutor: Office Won't Issue Charges from Non-Safety-Related Traffic Stops," *Lansing State Journal*, July 27, 2021, <https://perma.cc/JMZ5-TFC9>.

2 See for example notes 3, 6, 11, and 13.

3 Marsha Mercer, "Police 'Pretext' Traffic Stops Need to End, Some Lawmakers Say," Stateline, September 3, 2020, <https://perma.cc/5FYM-7G6N>; and Emma Pierson, Camelia Simoiu, Jan Overgoor, et al., "A Large-Scale Analysis of Racial Disparities in Police Stops across the United States," *Nature Human Behavior* 4 (2020), 736-745, 736, <https://perma.cc/WRJ8-LNCU>.

4 Mercer, "Police 'Pretext' Traffic Stops," 2020; and James Forman Jr., *Locking Up Our Own: Crime and Punishment in Black America* (New York: Farrar, Straus and Giroux, 2017), 198. "[I]f a car draws suspicion from the police, they can almost invariably find a way to stop it legally, especially if they follow it long enough."

5 Mercer, "Police 'Pretext' Traffic Stops," 2020, notes, "But Black motorists, especially young men, have long noted how often they get stopped for petty traffic or equipment violations—failure to signal, broken license plate light, tinted windows and the like," 198; Caron Butler, "I've Been Targeted by Police. True Public Safety Means Ending Unnecessary Police Stops," Vera Institute of Justice, September 10, 2021, <https://perma.cc/BC4H-F69Z>; and Michelle Alexander, *The New Jim Crow, Mass Incarceration in the Age of Colorblindness* (New York: The New Press, 2020), 84-87, 101-102. For the purpose of this report, researchers relied on the race and ethnicity categorization in the administrative data reviewed. Because police departments often record racial and ethnic identities from a limited set of officially recognized categories, the terminology used to describe the information from the dataset does not always align with Vera's current style or community preferences.

6 Pierson, Simoiu, Overgoor, et al., "Large-Scale Analysis of Racial Disparities," 2020, 740; Alexander, *The New Jim Crow*, 2020, 166-170 (describing studies of traffic stop data in Illinois, Maryland, and New Jersey indicating that white people were more likely to have contraband in their vehicles than people of color).

7 Rheana Murray, "The Conversation Black Parents Have with Their Kids About Cops," ABC News, December 8, 2014, <https://perma.cc/J7ZZ-HVAW>.

- 8 Gene Demby, "Making the Case That Discrimination Is Bad For Your Health," NPR, January 14, 2018, <https://perma.cc/S4UL-FWDP>; Isabel Wilkerson, *Caste: the Origin of Our Discontents* (New York: Random House, 2020), 302-308.
- 9 American Civil Liberties Union (ACLU), "Picking Up the Pieces: A Minneapolis Case Study," April 15, 2015, <https://perma.cc/F4GP-342P>; and Simone Weichselbaum, Emily R. Siegel, and Andrew Blankstein, "Police Face a 'Crisis of Trust' with Black Motorists. One State's Surprising Policy May Help," NBC News, October 7, 2021, <https://perma.cc/T2FX-WW4H>.
- 10 ACLU, "Picking Up the Pieces," 2015; and Weichselbaum, Siegel, and Blankstein, "Police Face a 'Crisis of Trust,'" 2021.
- 11 Traffic stops are unsafe for police too. According to research by the U.S. Department of Justice, the most common proactive policing activity preceding a fatality is an officer-initiated traffic stop. See Nick Breul and Desiree Luongo, *Making it Safer: A Study of Law Enforcement Fatalities Between 2010-2016* (Washington, DC: U.S. Department of Justice, Community Oriented Policing Services, 2017), 39, <https://perma.cc/LB8V-Y2X7>.
- 12 Josiah Bates, "What We Know So Far About the Police Shooting in Grand Rapids, Mich.," *Time*, April 14, 2022, <https://time.com/6167116/patrick-lyoya-grand-rapids-police-shooting/>; Sharon LaFraniere and Mitch Smith, "Philando Castile Was Pulled Over 49 Times in 13 Years, Often for Minor Infractions," *New York Times*, July 16, 2016, <https://www.nytimes.com/2016/07/17/us/before-philando-castiles-fatal-encounter-a-costly-trail-of-minor-traffic-stops.html>; German Lopez, "Samuel DuBose: What We Know about the University of Cincinnati Police Shooting," *Vox*, July 30, 2015, <https://www.vox.com/2015/7/23/9020963/samuel-dubose-police-shooting-video>; Diane Sandberg, "Who was Daunte Wright?," *KARE 11*, April 13, 2021, <https://www.kare11.com/article/news/local/daunte-wright-brooklyn-center-police-shooting/89-a43d6628-f621-47c4-a81e-25176e02636c>; and Frank Edwards, Hedwig Lee, and Michael Esposito, "Risk of Being Killed by Police Use of Force in the U.S. by Age, Race-Ethnicity, and Sex," *Proceedings of the National Academy of Sciences* 116, no. 34 (2019), <https://www.pnas.org/doi/full/10.1073/pnas.1821204116>.
- 13 Traffic stops can lead to citations imposing fines and fees that are unaffordable for many, leading to criminal charges, bail, and jail time. See German Lopez, "The Tyranny of a Traffic Ticket: How Small Crimes Turn Fatal for Poor, Minority Americans," *Vox*, August 10, 2016, <https://perma.cc/K6E5-3BGU>; and Pierre Thomas, Yun Choi, Jasmine Brown, and Pete Madden, "Driving while Black: ABC News Analysis of Traffic Stops Reveals Racial Disparities in Several US Cities," ABC News, September 9, 2020, <https://abcnews.go.com/US/driving-black-abc-news-analysis-traffic-stops-reveals/story?id=72891419>.
- 14 Charles R. Epp, Steven Maynard-Moody, and Donald P. Haider-Markel, *Pulled Over: How Police Stops Define Race and Citizenship* (University of Chicago Press, 2014), 9; and the Policing Project at New York University School of Law, *An Assessment of Traffic Stops and Policing Strategies in Nashville* (New York: New York University School of Law, 2018), 9-10, <https://perma.cc/YFD2-7RJL>.
- 15 ACLU-DC and ACLU Analytics, "Racial Disparities in Stops by the D.C. Metropolitan Police Department: Review of Five Months of Data," June 16, 2020, 8-9, <https://perma.cc/N4B8-AA86>; and ACLU Analytics and ACLU-DC, *Racial Disparities in Stops by the D.C. Metropolitan Police Department: 2020 Data Update* (Washington, DC: ACLU Analytics and ACLU-DC, 2021), 5.

16 The Policing Project, *An Assessment of Traffic Stops*, 7. Calculating the number of traffic stops that resulted in gun possession charges in Suffolk County is difficult; neither MassDOT nor Suffolk County District Attorney (SCDAO) data consistently contains information on whether firearms were found during a traffic stop. Vera therefore attempted to estimate the share of non-traffic-safety stops that may have resulted in gun possession charges by comparing the number of traffic stops made against the number of firearm possession cases charged during the study period. To do so, it is necessary to know the total number of stops made—both recorded and unrecorded. However, MassDOT data only includes traffic stops that ended in written warnings, citations, and arrests and excludes traffic stops that ended in verbal warnings. To estimate the total universe of non-traffic-safety stops, Vera combined the recorded non-traffic-safety stop total from the MassDOT data (155,210 stops) with a rough estimate of unrecorded stops. The researchers based this estimate on testimony from an officer from the Boston Police Department’s Youth Violence Strike Force in the Massachusetts Supreme Judicial Court’s landmark ruling *Commonwealth v. Long*. The officer testified that, out of roughly 1,000 stops he typically conducts in a year, only about five result in written citations. If one extrapolates this estimate of 995 traffic stops without a citation across the 30-officer Youth Violence Strike Force, there would be as many as 29,850 stops per year, or 298,500 additional stops over the 10-year study period from this one unit alone.

To estimate gun possession charges, Vera used DAMION case management system data from the SCDAO. Vera found 7,577 firearm possession cases charged from 2010 to 2019 in the DAMION data. In reality, many of these cases would likely have resulted from pedestrian stops, home searches, and other means unrelated to vehicular traffic stops. For the sake of calculating an upper limit, however, Vera *assumed that all such cases were the result of traffic stops*.

Using these estimates, Vera’s analysis suggests that traffic stops are, at best, a highly ineffective practice for finding firearms. If all 7,577 firearm possession charges were tied to non-traffic-safety stops, this would represent only 1.7 percent of the estimated non-traffic-safety stops conducted in Suffolk County from 2010 to 2019 (453,710 stops). The true percentage is likely much lower: Vera’s estimates did not include nonrecorded stops made by all police units and Vera made the expansive assumption that all firearm possession cases charged in Suffolk County during the study period arose from non-traffic-safety stops. However, this demonstrates that an overwhelming majority of those stops did not result in guns being found.

17 Additional information on the race/ethnicity data in the MassDOT dataset can be found in the Appendix.

18 A single traffic stop may result in multiple offenses being charged. For example, police may stop a driver for window tint, learn during the stop that the vehicle lacks an inspection sticker, and issue citations for both offenses. Therefore, as was the case in Vera’s data set, the total number of traffic *offenses* charged during a period of time can exceed the total number of traffic stops conducted during that same period.

19 There is much scholarly debate about which reference group to use for the population “at risk” of traffic enforcement. Vera researchers address their decision making on this topic in the “Conclusions and data limitations” and Appendix sections.

20 In total, there were 554,110 passenger vehicle stops from 2010 to 2019, of which 60,929 stops (11 percent) had unknown or undefined race/ethnicity data. These 60,929 stops were excluded from the final dataset, resulting in the final analytical dataset of 493,191 passenger vehicle stops. Of the 60,929 excluded passenger vehicle stops, 78

percent (47,292) involved drivers whose race/ethnicity was listed as “Unknown,” while the remaining 13,637 stops involved drivers whose race/ethnicity was listed as “Other,” a category that is further described in the Appendix.

21 Vera notes that car ownership and driving rates may differ by racial/ethnic group and state, so it used population data as a plausible estimate.

22 The Black–white disparity ratio was calculated by averaging each individual year's Black–white disparity ratio from 2010 to 2019.

23 Since Vera does not have data on search rates after a traffic stop, it was not possible to determine whether drivers of a given race/ethnicity are disproportionately searched. However, recent evidence from Massachusetts suggests that Black and Latinx drivers are searched more often than white drivers, and national evidence suggests this is the case even when white drivers are just as likely as Black drivers (and more likely than Latinx drivers) to be found with contraband upon a police search. (See notes 3 and 26.)

24 There are a few hypotheses that may explain Chelsea as an outlier. White drivers may indeed be more likely to be stopped in Chelsea than their residential population share would predict. Alternatively, this may be the result of underrepresentation of the Hispanic/Latinx population in traffic stop data due to issues in Hispanic/Latinx data documentation—a well-studied issue in criminal justice databases. See Colin Hernandez, “We Need More Data to Understand the Impact of Mass Incarceration on Latinx Communities,” Vera Institute of Justice, October 14, 2019, <https://perma.cc/N7HM-6JZN>; and Urban Institute, “The Alarming Lack of Data on Latinos in the Criminal Justice System,” December 2016, <https://perma.cc/A6XL-QXDY>. Chelsea also has a significant undocumented immigrant population from Latin America, and as of the release of this report, Massachusetts does not allow undocumented immigrants to obtain a driver's license. (A bill that would address this issue passed the Massachusetts House of Representatives in early 2022; the bill still requires state Senate passage and gubernatorial approval.) See Marta Hill, “Here's Why Mayor Wu and Other Mayors Say Undocumented Immigrants Should Be Able to Get Driver's Licenses,” Boston.com, April 5, 2022, <https://perma.cc/32XL-TTXD>. The lack of immigrant protections may lead to fewer Latinx drivers compared to their residential population numbers, who are also severely undercounted for several reasons, including fear of deportation. These and/or other factors may explain the overrepresentation of white drivers in traffic stops from the Chelsea Police Department. See Fabián Torres-Ardila, Daniela Bravo, and Franklin Ortiz, “Increasing Latino Participation Rates in the 2020 Census in Chelsea, MA,” Gastón Institute Publications no. 247, (2020), 20-22, <https://perma.cc/62SW-UB23>.

25 Vera performed a similar analysis on the 10, 15, and 20 most common non-traffic-safety violations, the results of which can be found in Figure 9. The Appendix includes a figure with the 20 most common non-traffic-safety violations.

26 The Black–white racial disparities after removing the top 15 and 20 most common non-traffic-safety offenses may appear to be counterintuitive, but the reasoning is quite simple: The relative impact of the 11th to 15th most common non-traffic-safety offenses on the population rate is much greater for Black people than it is for white people, hence a greater decrease in the racial disparity between the top 10 and top 15 most common offenses. However, the 16th to 20th most common non-traffic-safety offenses, relative to the 11th to 15th, have more impact on white drivers, including an offense that happens more for white drivers than Black drivers (the 20th most common offense, “RIGHT LANE, FAIL DRIVE IN *

c89 4B"). As such, the disparity increases when accounting for the 16th to 20th most common non-traffic-safety offenses.

27 See Jeffrey Fagan, Anthony A. Braga, Rod K. Brunson, and April Pattavina, *Final Report: An Analysis of Race and Ethnicity Patterns in Boston Police Department Field Interrogation, Observation, Frisk, and/or Search Reports* (Boston: Boston Police Department and ACLU of Massachusetts, 2015), <https://perma.cc/4VL8-SUDU>; and Allison Manning, "Boston Police Data Shows Black Men Were Stopped Most Often," Boston.com, January 19, 2016, <https://perma.cc/G8DT-TYGR>. The heightened policing of Black neighborhoods and other neighborhoods of color, as evidenced by FIO data in Boston, suggests that prior criminal activity, crime, or gang affiliation are themselves contested areas in which racialized criminalization not only increases residents of color's exposure to and contact with police officers, but also leads to disproportionate inclusion on gang databases that expand surveillance, lack transparency, and have devastating consequences, including deportation. See Philip Marcelo, "Gang Database Made Up Mostly of Young Black, Latino Men," Associated Press, July 30, 2019, <https://apnews.com/article/massachusetts-immigration-us-news-ap-top-news-ri-state-wire-dd5643e358c3456dbe14c16ade03711d>.

28 Salem State University and Worcester State University, *2020 Massachusetts Uniform Citation Data Analysis Report* (Boston: Massachusetts Executive Office of Public Safety and Security, 2022), 19, 31-32, <https://perma.cc/9FV5-JD7V>.

29 Ibid, 33.

30 Philadelphia, PA, Bill 210636-A (enacted October 27, 2021); and Pittsburgh, PA, Legislative Details (with Text), File #: 2021-2174 (enacted October 27, 2021).

31 Policing Project, New York University School of Law, "Ending Traffic Stops for Minor Violations," <https://perma.cc/TJG9-X3G4>; and Policing Project, New York University School of Law, "An Act to Curtail Pretextual Traffic Stops," <https://perma.cc/VE8W-F2GT>.

32 Palmer, "New Guidelines," 2021; Jallow, "Taking Cops out of Traffic Stops," 2021; and Max, "Nashville Police," 2021.

33 Jallow, "Taking Cops Out of Traffic Stops," 2021.

34 National Highway Traffic Safety Administration, "2020 Fatality Data Show Increased Traffic Fatalities During Pandemic," June 3, 2021, <https://perma.cc/U8RH-4PEW>; and National Highway Traffic Safety Administration, "NHTSA Data Estimates Indicate Traffic Fatalities Continued to Rise at Record Pace in First Nine Months of 2021," February 1, 2022, <https://perma.cc/CHD8-J7EB>.

35 Jack Lyons, "Chittenden Prosecutor Won't Try Charges Resulting from 'Non-Public Safety Traffic Stops,'" VTDigger, January 12, 2022, <https://perma.cc/5DKG-7527>; Berg, "Ingham County Prosecutor," 2021; and Luscombe, "Unjust Practices," 2021.

36 Janie Har, "Berkeley Moves Toward Removing Police from Traffic Stops," Associated Press, July 15, 2020, <https://apnews.com/article/ap-top-news-us-news-police-california-race-and-ethnicity-1fddb1955d5ce8b7e60a6d4619dd214e>.

37 For further policy solutions around removing law enforcement from traffic enforcement in Massachusetts, see Louisa Gag, Catherine Gleason, and Stacy Thompson, *Dismantling Law Enforcement's Role in Traffic Safety: A Roadmap for Massachusetts* (Cambridge, MA: LivableStreets Alliance, 2022), <https://perma.cc/W9DB-NFLC>.

Credits

© Vera Institute of Justice 2022. All rights reserved.

The Vera Institute of Justice is powered by hundreds of advocates, researchers, and policy experts working to transform the criminal legal and immigration systems until they're fair for all. Founded in 1961 to advocate for alternatives to money bail in New York City, Vera is now a national organization that partners with impacted communities and government leaders for change. We develop just, antiracist solutions so that money doesn't determine freedom; fewer people are in jails, prisons, and immigration detention; and everyone is treated with dignity. Vera's headquarters is in Brooklyn, New York, with offices in Washington, DC, New Orleans, and Los Angeles. For more information, visit www.vera.org.

For more information about this report, contact Mona Sahaf, associate director, Reshaping Prosecution, at msahaf@vera.org.