
Racial Disparities in the Massachusetts Criminal System

A Report by The Criminal Justice Policy Program, Harvard Law School
Submitted to Chief Justice Ralph D. Gants, Supreme Judicial Court of Massachusetts

Elizabeth Tsai Bishop, Brook Hopkins, Chijindu Obiofuma, Felix Owusu

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For more information or permissions please contact Felix Owusu at owusu@g.harvard.edu.

Table of Contents

Executive Summary.....	1
Introduction	3
Data Sources.....	4
Trial Court	5
DCJIS	6
Other Data	6
Data Requested and Not Received and Unusable Data	7
Data Limitations	8
Defendant Demographics & Case Characteristics.....	11
Defendant Demographics.....	13
Charges Filed	18
Pretrial, Adjudication, & Disposition	22
Pretrial Phase.....	22
Adjudication & Disposition	26
Sentencing	28
Racial Disparities in Sentencing.....	30
Regression Results	33
Decision Points – Incarceration Disparities	38
District Court vs. Superior Court Jurisdiction.....	38
Charge Type	42
Mandatory and Statutory Minimums in Superior Court	52
Murder Cases	60
Charge Reductions	61
Conclusion.....	64
Appendices	65

Executive Summary

People of color are drastically overrepresented in Massachusetts state prisons. According to the Massachusetts Sentencing Commission's analysis of 2014 data, the Commonwealth significantly outpaced national race and ethnicity disparity rates in incarceration, imprisoning Black people at a rate 7.9 times that of White people and Latinx people at 4.9 times that of White people.¹

This report explores the factors that lead to persistent racial disparities in the Massachusetts criminal system by leveraging detailed administrative data from several agencies, including the Massachusetts Trial Court, the Department of Criminal Justice Information Services, and the Department of Correction. These data provide a useful, if incomplete, window into several different stages of the criminal system from charging and bail to adjudication and sentencing.

In this report, we focus particularly on understanding the factors that contribute to the large disparities in incarceration rates that motivated this work. Through our analysis, we found that Black and Latinx people are overrepresented in the criminal caseload compared to their population in the state. White people make up roughly 74% of the Massachusetts population while accounting for 58.7% of cases in our data. Meanwhile, Black people make up just 6.5% of the Massachusetts population and account for 17.1% of cases. Latinx people are similarly overrepresented, making up 8.7% of the Massachusetts population but 18.3% of the cases in the sample.

In addition to being overrepresented relative to their share of the state population, Black and Latinx people are less likely than White people to have their cases resolved through less severe dispositions such as pretrial probation or continuances without finding (CWOs). Among those sentenced to incarceration, Black and Latinx people sentenced to incarceration receive longer sentences than their White counterparts, with Black people receiving sentences that are an average of 168 days longer and Latinx people receiving sentences that are an average of 148 days longer.

We use regression analysis to consider several factors that may contribute to or explain the substantial disparities we document, including the defendants' criminal history and demographics, initial charge severity, court jurisdiction, and neighborhood characteristics. The regression analysis indicates that even after accounting for these characteristics, Black and Latinx people are still sentenced to 31 and 25 days longer than their similarly situated White counterparts, suggesting that racial disparities in sentence length cannot solely be explained by the contextual factors that we consider and permeate the entire criminal justice process.

¹ MASSACHUSETTS SENTENCING COMMISSION, SELECTED RACE STATISTICS 2 (Sept. 27, 2016), <https://www.mass.gov/files/documents/2016/09/tu/selected-race-statistics.pdf>.

Our analysis shows that one factor—racial and ethnic differences in the type and severity of initial charge—accounts for over 70 percent of the disparities in sentence length.

We explore several mechanisms by which racial disparities in initial charging decisions lead to the substantial average disparities we document. We find that:

- Black and Latinx people are more likely to have their cases resolved in Superior Court where the available sentences are longer, both because they are more likely to receive charges for which the Superior Court exercises exclusive jurisdiction and because prosecutors are more likely to exercise their discretion to bring their cases in Superior Court instead of District Court when there is concurrent jurisdiction.
- Black and Latinx people charged with drug offenses and weapons offenses are more likely to be incarcerated and receive longer incarceration sentences than White people charged with similar offenses. This difference persists after controlling for charge severity and additional factors.
- Black and Latinx people charged with offenses carrying mandatory minimum sentences are substantially more likely to be incarcerated and receive longer sentences than White people facing charges carrying mandatory minimum incarceration sentences.

Our data do not allow us to determine conclusively the extent to which aggregate differences in initial type and charge severity across racial groups reflect police and prosecutor discretion versus differences in criminal conduct. We note, however, that among the subset of cases where the person was sentenced to incarceration in a state prison (i.e. cases involving charges that carry the longest potential sentences and where the racial disparity is largest), Black and Latinx people are convicted of charges roughly equal in seriousness to their White counterparts despite facing more serious initial charges. Black people in particular who are sentenced to incarceration in a state prison are convicted of *less* severe crimes on average than White people despite facing more serious initial charges and receiving longer sentences.

The fact that the level of seriousness of the final conviction offense is similar across race is an indication that the underlying conduct in these cases may be similar across race. However, we do not observe the underlying circumstances of the case in the administrative data, so we cannot determine this conclusively. Still, the disparity in initial charge level appears to play an important role in determining sentencing outcomes, and this is not surprising given the role that initial charges play in the plea bargaining process from which the vast majority of convictions result. Our results highlight the central role that initial charging decisions play in sentencing. It appears that the adjudication and plea bargaining processes attenuate disparities in charge severity, but initial differences continue to influence sentencing even if defendants of color are not convicted of the more serious offenses with which they are initially charged.

It is also worth noting that the available administrative data presented significant obstacles to our analysis, some of which we were able to overcome through time-consuming

workarounds, and some of which limited the scope of our analysis. Certain obstacles we encountered have since been corrected through upgrades to data systems, but others persist. These include:

- Inadequate linking of records across agencies
- Unavailability of statewide police data in usable electronic format
- Unavailability of district attorney data
- Inadequate or inconsistent electronic tracking of key data including
 - o Identity of presiding judge
 - o Identity of prosecutor
 - o Length of pretrial detention
 - o Outcomes of key pretrial motions
 - o District Court/Boston Municipal Court cases that are subsequently indicted in Superior Court
 - o Use of diversion programs

In Appendix 2 we detail these data challenges and suggest policy reforms to improve the quality of the data so that it may be used for future research to increase our understanding of racial disparities in the Massachusetts criminal system.

Introduction

This report is the culmination of a research project undertaken by researchers at Harvard Law School at the request of Massachusetts Supreme Judicial Court Chief Justice Ralph Gants. In his October 2016 State of the Judiciary address, Chief Justice Gants cited data gathered by the Massachusetts Sentencing Commission showing “great disparity in the rates of imprisonment among Whites, African-Americans, and Hispanics in this Commonwealth.”² He expressed the need to take “a hard look at how we can better fulfill our promise to provide equal justice for every litigant”³ and announced a collaborative study with Harvard Law School to examine racial and ethnic disparities in the Massachusetts criminal system.⁴ Using data collected from the Massachusetts Trial Court, the Department of Criminal Justice Information Services, the Department of Correction, the Massachusetts Probation Service, and other agencies, this report analyzes racial and ethnic disparities throughout the criminal process.

According to the Sentencing Commission’s analysis of 2014 data, the Commonwealth significantly outpaced national race and ethnicity disparity rates in incarceration,

² Chief Justice Ralph D. Gants, Massachusetts Supreme Judicial Court, Annual Address: State of the Judiciary 5 (Oct. 20, 2016), https://www.mass.gov/files/documents/2017/10/10/state-of-judiciary-speech-sjc-chief-justice-gants-2016_o.pdf.

³ *Id.*

⁴ *Id.* at 5-6.

imprisoning Black people at a rate 7.9 times that of White people and Latinx⁵ people at 4.9 times that of White people.⁶ By comparison, according to the Sentencing Commission's analysis, the national average rate of imprisonment for Black people was 5.8 times that of White people, and for Latinx people, it was 1.3 times that of White people.⁷ A 2016 report from The Sentencing Project comparing racial and ethnic disparities in incarceration rates across all 50 states ranked Massachusetts the highest in disparities for Latinx people and the 13th highest for Black people.⁸

This study examines the Massachusetts criminal process from charging to sentencing. It identifies points in the process where racial disparities exist, with a focus on the decisions that appear to contribute to the racial disparities in incarceration rates in the Commonwealth. The data analyzed below do not allow us to conclusively isolate the impact of unconscious bias, prejudice, and racism in generating the disparities we document. We supplement our data analysis with additional research from across the country where relevant and a review of the history of racial disparities in criminal justice more broadly (see Appendix 1) to provide context and insight into possible explanations for the disparities we document.

Data Sources

The majority of our analysis relies on data from two sources: the Massachusetts Trial Court and the Massachusetts Department of Criminal Justice Information Services (DCJIS). We also analyze data from other sources such as the Department of Corrections (DOC). There are several types of data that we requested but did not receive, and data that we received but were unable to analyze for various reasons. The data that we did receive contained substantial problems in quality and consistency that hampered our analysis in certain ways. We were given unprecedented access to Massachusetts criminal data and our experience collecting, cleaning, and analyzing this data makes clear that, at the time of our study, data collection practices in Massachusetts presented a significant barrier to understanding racial disparities at all stages of the criminal justice system.

⁵ Latinx is a gender inclusive term that refers to people of Latin descent, replacing the more limited designation of Hispanic, which generally refers to Spanish or Spanish-speaking people. See GENIAL, IS IT HISPANIC, CHICANO/CHICANA, LATINO/LATINA, OR LATINX? (2017), https://www.exploratorium.edu/sites/default/files/Genial_2017_Terms_of_Usage.pdf; see also Cristobal Salinas Jr. & Adele Lozano, *Mapping and Recontextualizing the Evolution of the Term Latinx: An Environmental Scanning in Higher Education*, *Journal of Latinos and Education*, 18 J. LATINOS AND EDUC. 302, 303 (2019) ("The term Latino refers to people from the Caribbean, as well as Mexico, and the countries that comprise Central and South America, even those countries that are not Spanish-speaking (Belize, Brazil, French Guiana, Guyana, and Suriname).").

⁶ MASSACHUSETTS SENTENCING COMMISSION, SELECTED RACE STATISTICS 2 (Sept. 27, 2016), <https://www.mass.gov/files/documents/2016/09/tu/selected-race-statistics.pdf>.

⁷ *Id.*

⁸ ASHLEY NELLIS, THE SENTENCING PROJECT, THE COLOR OF JUSTICE: RACIAL AND ETHNIC DISPARITY IN STATE PRISONS 17 (2016), <https://www.sentencingproject.org/publications/color-of-justice-racial-and-ethnic-disparity-in-state-prisons/>.

Trial Court

The Trial Court provided us with records from their case management system, MassCourts, for every Boston Municipal Court (“BMC”) and District Court criminal case with at least one charge filed and disposed between the start of 2014 and the end of 2016. The Trial Court also provided us with all Superior Court cases that had at least one charge disposition between the start of 2014 and the end of 2016 regardless of when the case was filed. Because cases can take much longer in Superior Court, many of the cases in our Superior Court data set were filed before 2014, indeed one case was filed as early as 1970. Some people appear in our data set more than once if they had multiple cases filed against them and/or disposed within our time period. Some of the cases in our data set involve both civil and criminal charges, but we excluded all data about civil charges from our analysis.

Table 1: Trial Court Data

Unit	After Filtering Count
Individuals	333,051
Cases	553,801
Criminal Charges	1,164,041

For each case, we received information about the initial charges, the dispositions, sentencing information, and a record of court events associated with each case. We also received information about the defendants, including race, ethnicity, age, and home address. The race information we received is recorded by court personnel and is obtained through self-reporting, observation, and/or documents such as the complaint. For more information on how race is recorded in the data we received from the Trial Court, see Appendix 5.

The records we received from the Trial Court came from the MassCourts database. MassCourts is an electronic case management system, not the official docketing system. Accordingly, while the official paper docket file of each case is complete, the information recorded in MassCourts varied depending on the practices of the individual clerks across the Commonwealth. The system has been expanded in recent years and we are told that a comparable data set pulled today would include the full docket. However, in the data that was available at the time of our request, there are some fields that rarely contain data, and we do not know whether the data is missing because there were no relevant events in the case or because the clerk simply did not record that event in the database. The only way to answer that question would be to look at the official docket, which is a paper file. One example of an electronic field that was rarely completed in our data was the charge

amendment field.⁹ As a result, we were unable to determine the final charges of conviction for most of the cases in our data set, particularly cases involving less severe charges and those that did not result in prison sentences. We describe more fully this and other challenges we encountered with the MassCourts data in the Data Limitations section below and in Appendix 2.

DCJIS

The Department of Criminal Justice Information Services (DCJIS) is a department within the executive branch of the Commonwealth of Massachusetts under the Executive Office of Public Safety and Security that oversees Criminal Offender Record Information (CORI) records and criminal history data.¹⁰ DCJIS provided us with Court Activity Record Information (CARI) records for all individuals who have at least one case in the data we received from the Trial Court and an assigned Probation Central File (PCF) number in the Trial Court data.¹¹ These CARI records contain information about all offenses that a person had been charged with as of 2017 when the data was pulled. This includes charges outside the time period of our data set. For every charge, we received information about the nature of the offense, how it was disposed, and whether and what type of sentence was imposed.

Other Data

We received data from the Massachusetts Department of Corrections (DOC) for individuals in our Trial Court data set who were sentenced to serve time in a DOC institution. Of the 4,255 relevant cases from the Trial Court data, we received DOC data for 4,154 of them.¹² Data from the DOC includes information about the individual's race, ethnicity, final conviction offenses, sentence term, and earliest possible release date.

We supplement our administrative data on the Massachusetts criminal system with data from the American Community Survey. The American Community Survey is conducted every year and collects information about education, housing, jobs, and other social and economic measures.¹³ We used data from the 2015 five-year data profile, which provides data collected between 2011 and 2015. We used each defendant's home address to access information at the zip code level about their neighborhoods including gender ratios, racial ratios, poverty rates, high school and college graduation rates, rates of single parent households,

⁹ Court personnel informed us that most clerks in BMC and District Courts did not have access to a charge amendment field at the time our data was recorded. That feature was added in 2018 so more recent court data would contain this information.

¹⁰ The definition of CORI has expanded over time. Its precise definition and regulations regarding its use and accessibility can be found at 803 CMR 2.00.

¹¹ A small number of defendants in the Trial Court data (7.2%) do not have a PCF number. This made it impossible for us to request criminal history information from DCJIS for those people.

¹² There were 101 people who, according to the Trial Court data, received a prison sentence, but for whom the DOC had no data. We were unable to detect a pattern in those cases or account for the missing data.

¹³ <https://www.census.gov/programs-surveys/acs/about/acs-and-census.html>.

unemployment rates, and median income estimates. We use state-wide estimates for individuals for whom no valid zip code was available.

We also consulted legal and administrative sources such as the Massachusetts Code and publications from the Massachusetts Sentencing Commission. Those sources are cited in footnotes throughout the report.

Data Requested and Not Received and Unusable Data

We requested arrest data from every local police department we could identify in Massachusetts. Although a few departments provided us with data in a usable form, many did not respond or provided data in a format that could not be readily aggregated and analyzed, such as pdfs or printed arrest reports. For this reason, we were unable to provide an analysis of arrest data in this report.

We also requested prosecutor data through the Massachusetts District Attorney Association, but we did not receive data from them. One District Attorney provided us with data but we were unable to use it because there was too much missing data. Another District Attorney offered to provide data, but due to the limitations of their data system, it would have taken too long for them to provide us with aggregated data.

We requested data from the Office of the Commissioner of Probation (OCP). The OCP worked with the Trial Court to identify probation data that corresponded with the cases contained in our data set. Although our Trial Court and DCJIS data indicated that more than 91,000 individuals in our data set received a probation sentence, the OCP was only able to identify around 42,000 records that were linked to a Trial Court case in our data set. Court personnel explained that Trial Court data is organized by case, but OCP data is organized by defendant. A person's OCP file contains data related to each of their probation terms but it is not separated by case. The only way to filter that data by case is if it is linked to the Trial Court record. When a case comes to the OCP after sentencing, it is best practice for OCP personnel to create a copy of the Trial Court record. This copy serves to link any probation data associated with that case to the Trial Court record. When that link is not created, there is no way to sort probation data by case. Because the link was apparently missing in over 75% of cases, we were unable to use OCP data to measure imposition of probation sentences and probation sentence length. Instead, we had to use Trial Court and DCJIS sentencing data.

Although we received (and used) data from the Trial Court, there was a small amount of data that we requested and did not receive. We requested information about judges from the Trial Court, but we were told that data on judges is not always entered electronically, and when it is, the session judge, not the presiding judge is recorded. For this reason, the Trial Court did not provide that data. Similarly, the Trial Court did not provide us data about show cause hearings because such data was not collected and aggregated electronically.

We were given data about fee and fine payment but it was linked by case not by charge and did not include imposition data so we were unable to use the data to analyze fine sentencing. In addition, court personnel advised us that the bail docket data could not be used to calculate the length of pretrial detention because the electronic record was not sufficient to determine pretrial release.

Data Limitations

It is important to emphasize that our data measures only contact with the criminal system and not crimes actually committed. Law enforcement resources are deployed in certain areas and populations more than others, and this can influence whether unlawful conduct results in contact with the formal criminal justice system. This report analyzes only what happens to cases once they are initiated. It does not address or explain disparities in the pipeline that leads to contact with the criminal system.

Having been granted unprecedented access to agency data, we nevertheless encountered obstacles in tracking cases through the criminal process. For example, it is challenging to track cases that move from BMC/District Court to Superior Court. If a case starts in a BMC or District Court and is later indicted in Superior Court, which is common, it could appear in our data twice. Both cases pertain to the same underlying conduct, but they would have distinct case identifiers and they would not be linked in any way in the MassCourts system.

Additionally, certain dispositions, including when District Court/BMC cases are dismissed after indictment by a grand jury in Superior Court, are not recorded consistently in MassCourts and may not be apparent to clerks depending on the procedural practices of the district attorney. Because there is no link between cases that are dismissed in District Court and subsequently indicted in Superior Court, it is difficult to accurately measure these case outcomes. This means that our estimates of conviction rates include some measurement error, as some cases that are listed as dismissed from District Courts are marked as such because the defendant was eventually indicted and not because the charges were actually dismissed, although we did take steps to minimize this error (See Appendix 11).

In addition to difficulty with tracking cases, we encountered some problems with missing race and ethnicity data. Our measure of ‘race’ combines information from various data sources that was provided under the label not only of ‘race’ but also ‘ethnicity.’ This is because individual data sources had large gaps in race and ethnicity data and appeared to use race and ethnicity interchangeably in practice. Specifically, the Trial Court uses separate categories to denote race and ethnicity. The racial categories from the Trial Court include “American Indian/Alaska,” “Asian,” “Black/African American,” “Native Hawaiian/Pacific,” “Other Race/Multi-Race,” “White,” and “Not known/Not reported.” The ethnicities are “Hispanic or Latino,” “Non Hispanic or Latino,” and “Unknown/Not reported.” The Department of Criminal Justice Information Services uses a single category to describe race and ethnicity jointly. The categories included in the DCJS data are “Asian,” “Black, non

Hispanic,” “Cape Verdean,” “Hispanic,” “Native American,” “Unknown,” and “White, non Hispanic.” Appendix 5 provides a full account of how we processed and combined data on race and ethnicity to generate the measure we use throughout the rest of this report. After combining data from both sources, we were still missing information on race and/or ethnicity in approximately 5% of cases.

Our data was also missing information on final conviction offenses for most cases. The data from the Trial Court does not contain a field for final conviction offense and does not consistently indicate when charges are reduced and amended, which is common in the course of plea negotiations. According to court personnel, the field for describing amended charges is not consistently used and thus the data undercounts the extent to which initial charges are amended. Likewise, lesser-included charges were not recorded in an electronic format that can be compiled. As a result, we are able to reliably observe initial charges from the Trial Court data, but cannot reliably observe the offenses for which a defendant is eventually convicted in most cases. Court personnel indicated to us that as a result of missing charge amendment data, the number of conviction charges classified as felonies is overstated, especially in the BMC/District Courts.

We were able to find a workaround for the missing final conviction data for a subset of the most serious cases. The Department of Corrections (“DOC”) provided us with data about final conviction offenses for defendants in our dataset who were sentenced to a term of incarceration in a DOC prison. These data do not include any cases from the BMC/District Courts, which sentence only to Houses of Correction, which are overseen by local sheriffs, nor do they include cases that were disposed in Superior Court but did not result in a sentence of incarceration in a DOC prison. We requested data from two large sheriff’s offices, but did not receive that data.

We are also missing information about some cases and some defendants. We are missing zip codes and/or American Community Survey data for defendants in about 7.51% of cases. We are also missing PCF numbers, and therefore criminal history records, for about 7.2% of cases. We did not request data for juvenile cases. Table 2 summarizes key data fields and their sources:

Table 2: Data Fields and Sources

Data Point	Source	Inferences Made
Defendant Race	Trial Court, DCJIS ¹⁴	See Appendix 5.
Defendant Age	Trial Court	None, values are directly from Trial Court data.
Defendant Gender	Trial Court	None, values are directly from Trial Court data.

¹⁴ DCJIS data link to Trial Court data on case Docket number when available, and on arraignment date and PCF number when a case Docket number is unavailable

Defendant Address	Trial Court	See Appendix 12.
Defendant Neighborhood characteristics	American Community Survey, 2015 ¹⁵	We use neighborhood characteristic estimates from the American Community Survey for the 2011-2015 five-year time period.
Defendant Criminal History Score	DCJIS	See Appendix 8.
Initial Charges	Trial Court	None.
Initial Governing Offense	Trial Court	See Appendix 6.
Court Division	Trial Court	None.
Offense Type	Trial Court	See Appendix 7.
Bail Imposition, Bail Payment, and Pretrial Detention	Trial Court	We assume that for cases where we do not see bail information, the person was released on their own recognizance.
Indictment in Superior Court	Trial Court	We assume that a case was indicted if it had any charge that was disposed as “Defendant Indicted” or if we find a Superior Court case that has the same defendant and the same offense date.
Disposition	Trial Court	We group disposition codes into 6 categories: Guilty, Nolle Prosequi, Continuance without a Finding, Not Guilty, Dismissed, and other. For definitions, see Appendix 13.
Conviction Offenses (District Court)	n/a	The Trial Court does not consistently record charge reductions electronically or in a format that is retrievable so we cannot determine final conviction offenses for District Court cases.
Conviction Offenses (Superior Court)	Department of Correction (DOC)	We have data for only those people who were sentenced to a term of incarceration in state prison.
Charge Reductions (District Court)	n/a	The Trial Court does not reliably record charge reductions.
Charge Reductions (Superior Court)	Trial Court, DOC ¹⁶	We take initial charges from the Trial Court and final charges from the DOC (only those people sentenced to a term of incarceration in a state prison).

¹⁵ ACS data link to Trial Court data on defendant home zip code. For more information on defendant address processing, please see Appendix 12.

¹⁶ Department of Corrections data link with Trial Court data on case Docket number.

Incarceration Outcome	Trial Court, DCJIS	See Appendix 10.
Incarceration Length	Trial Court, DCJIS, DOC	See Appendix 10.
Probation Outcome	Trial Court, DCJIS	See Appendix 9.
Probation Length	Trial Court, DCJIS	See Appendix 9.

Defendant Demographics & Case Characteristics

In the following sections we outline and present summary data on many decision points in the criminal process.

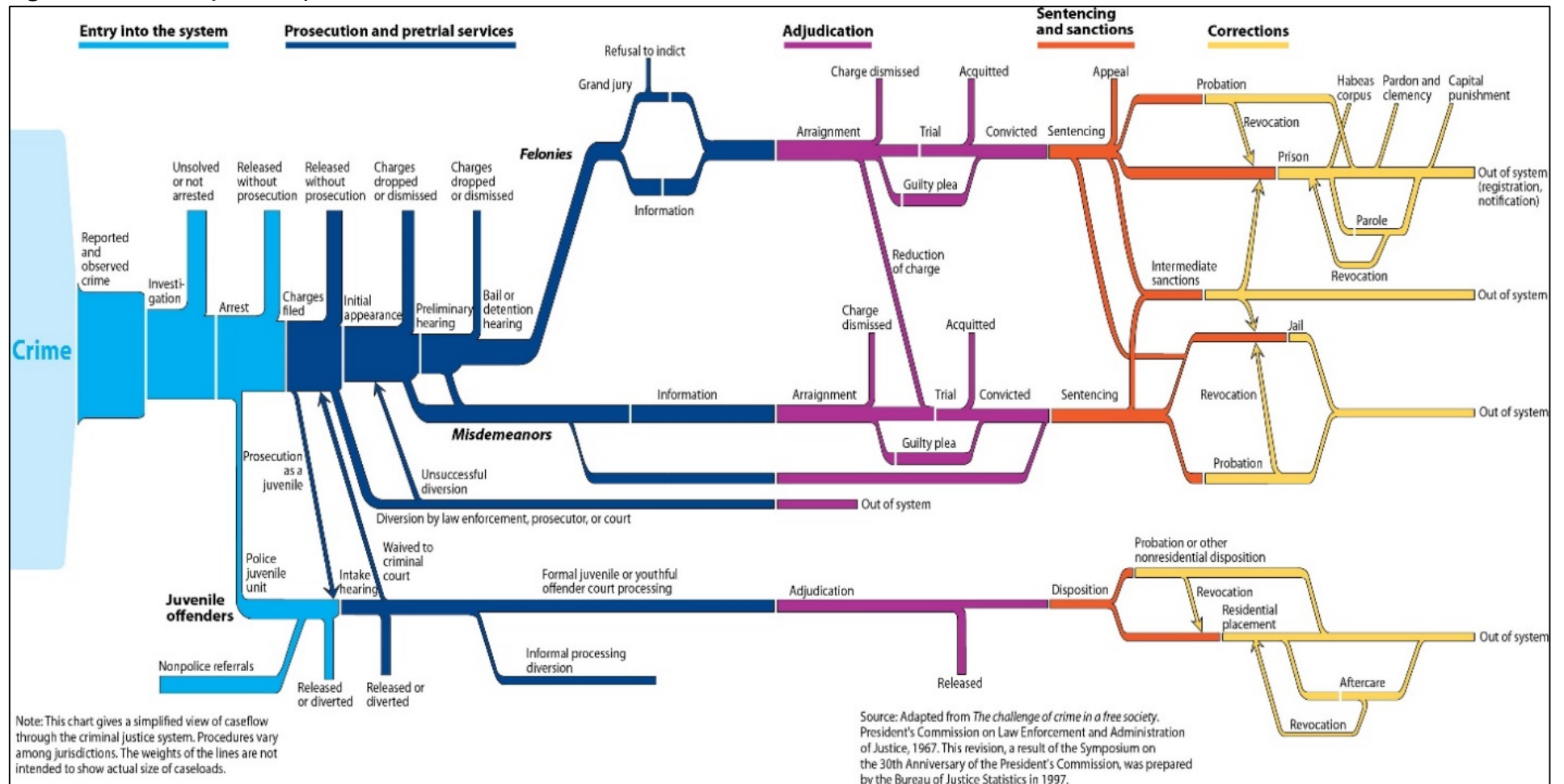
Figure 1 provides a general overview of the common components of the criminal process in a typical state.¹⁷ Our data starts at the box labeled “Charges filed” and ends at “Sentencing and sanctions.” We do not have data about juvenile cases, and for that reason the part of the criminal pipeline labeled “Juvenile offenders” will not be analyzed in this paper.

As is shown in this figure, there are many steps to resolving a criminal case. In keeping with the data we received, this report will focus on four phases—charges filed, pretrial, adjudication, and sentencing.

Certain cases were filtered out from the analysis that follows due to missing data fields. The method of filtering is described in Appendix 11. After filtering, there are 553,801 cases in the data set.

¹⁷ Although the Massachusetts system differs in some ways from this chart, we include the chart here to give readers a general sense of how a criminal case proceeds.

Figure 1: Criminal System Pipeline¹⁸



¹⁸ <https://www.bjs.gov/content/largechart.cfm>.

Defendant Demographics

Table 3: Case Distribution by Race

Total Cases	White Defendant	Black Defendant	Latinx Defendant	Other Race Defendant	Race Unknown
553,801	325,240	94,793	101,230	9,164	23,374

“Other Race” includes cases that have defendants who are Native American, Pacific Islander, Alaskan Native, Asian American, Mixed Race and “Other” race (i.e. the defendant is not White, Black, Latinx, Asian American, Native American, etc.). We decided to group these individuals together because there is a very limited number of cases with defendants of these races. Though we recognize that these groups are not all racialized in the same way, we decided to group them together because they represent a racial category outside of White, Black, and Latinx. Table 4 shows a breakdown of the distribution of cases within the “Other Race Defendant” category. We include individuals with unknown race in the “Other Race” category in all regression analyses, however.

Table 4: Case Distribution of “Other Race Defendant”

Other Race Total Count	“Asian”	“Cape Verdean”	“Native Hawaiian/ Pacific”	“American Indian /Alaska”	“Other Race / Multi Race”
9,164	7,074	1,037	442	380	231

The data we received from the Trial Court are grouped on the case or docket level. Each case has exactly one defendant but may have multiple charges. For example, a single case in our data may contain a charge for Operating with a Suspended License and a charge for Possession of Cocaine. All cases in our data set have at least one criminal charge.

Figure 2 examines how cases are distributed in our data by race and how this compares to the populations of different racial groups in Massachusetts. Black and Latinx people are overrepresented in the caseload compared to their population in the state. White people make up 74.3% of the Massachusetts population¹⁹ and the defendant is White in 58.7% of cases in our data set. Black people make up 6.5% of the Massachusetts population and a Black person is the defendant in 17.1% of cases. Latinx people make up 8.7% of the Massachusetts population and a Latinx person is the defendant in 18.3% of the cases in our data set. People of a race other than White, Black, or Latinx make up 10.6% of the population of Massachusetts and are the defendant in 1.7% of cases. In 4.2% of cases, the defendant’s race is unknown.

¹⁹ U.S. CENSUS BUREAU, 2011-2015 AMERICAN COMMUNITY SURVEY 5-YEAR DATA PROFILE, <https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/2015/>.

In Figure 2, the combination of the “Percent of All Cases – Felony” bar and the “Percent of All Cases – Misdemeanor” bar show the share of cases in our data where the defendant is of that race. “Percent of All Cases – Felony” means the percent of cases where the governing offense²⁰ is a felony and the race of the defendant charged is the race on the x-axis. “Percent of All Cases—Misdemeanor” means the percent of cases where the governing offense is a misdemeanor and the race is the race on the x-axis. The sum of the five “Percent of Population” bars is 1 and the sum of the five stacked combination “Percent of All Cases – Felony” and “Percent of All Cases – Misdemeanor” bars is 1.

Figure 2: Cases by Population (by Race)²¹

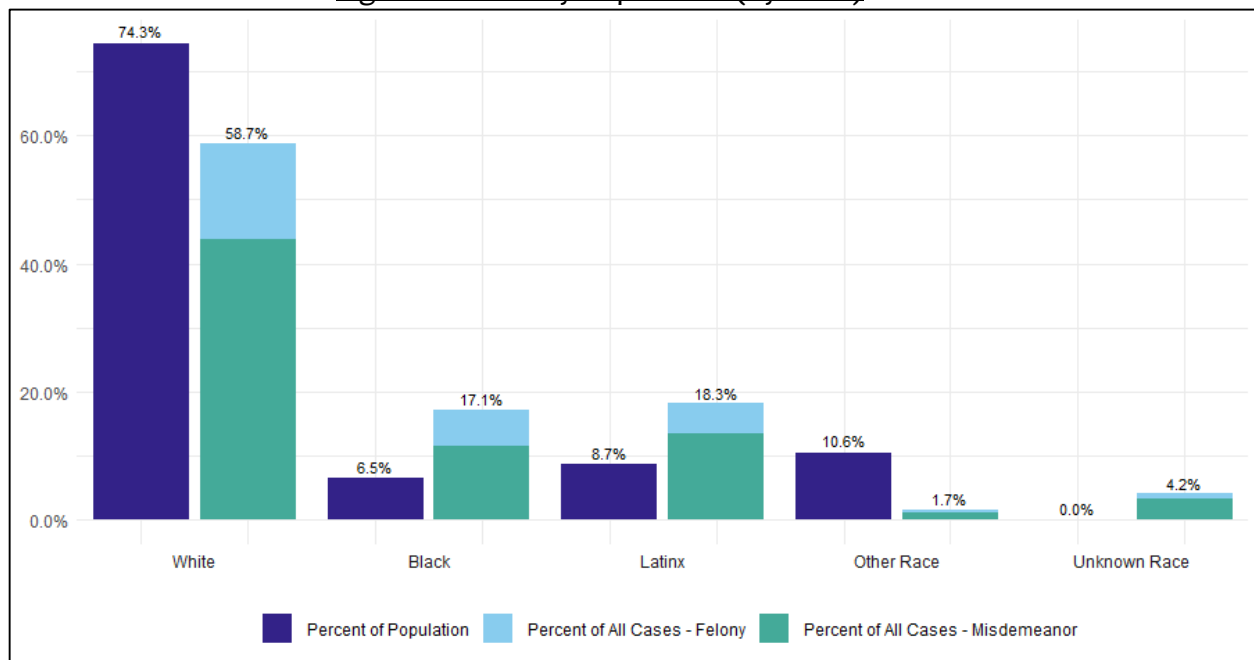


Figure 3 shows the gender distribution in the data we received. It shows that, across racial groups, male defendants make up a larger share of cases than female defendants. Of White defendants, 71% are male, of Black defendants, 78.7% are male, of Latinx defendants, 81.3% are male, and of defendants of another race, 76.8% are male.

In Figure 3, the bars do not add up to exactly 100% because we are missing gender data for some of the people in our sample. The only gender categories that are recorded in our data set are “Male” and “Female.”

²⁰ Governing offense assignment is described in Appendix 6.

²¹ Populations determined by U.S. CENSUS BUREAU, 2011-2015 AMERICAN COMMUNITY SURVEY 5-YEAR DATA PROFILE, <https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/2015/>.

Figures 3: Cases by Defendant Gender (by Race)

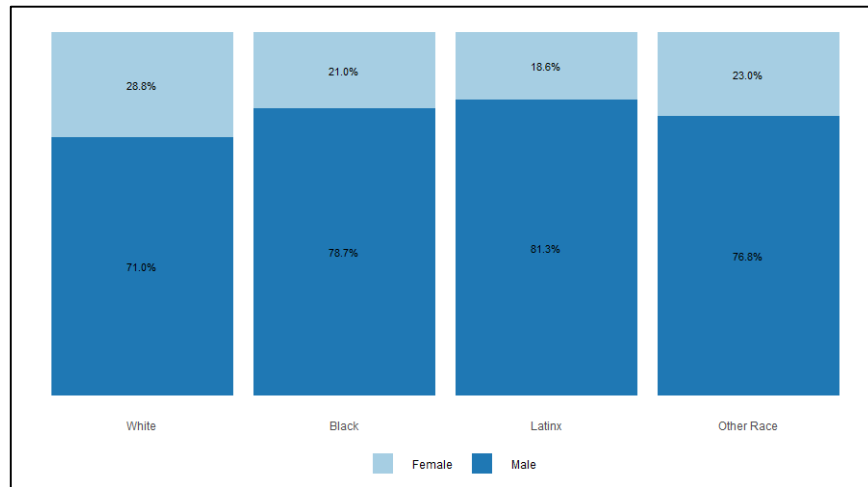


Figure 4 shows how cases are distributed by age and race.

Figure 4: Cases by Defendant Age (by Race)

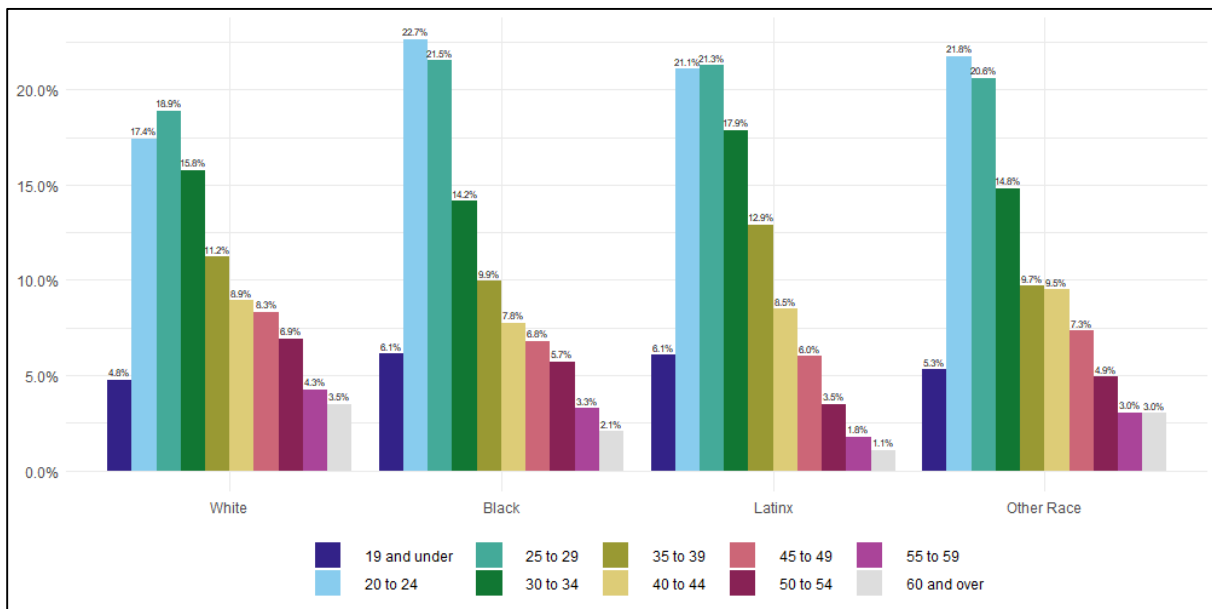


Figure 5 depicts geographic patterns in cases using Massachusetts Zip Code Tabulation Areas. Our method for processing addresses is described in Appendix 12.

The three zip codes with populations greater than 1,000 with the highest per capita case count are 01901 (Lynn), 01608 (Worcester), 01105 (Springfield). These are three zip codes with a significantly higher than average percentage of Black and Latinx residents than other zip codes in Massachusetts. Figure 6 and Figure 7 show the zip codes where there are high

concentrations of Black and Latinx people, respectively. In those figures, “percent” means the percent of the population of that zip code that is of the relevant race.

Zip Code Tabulation Areas are shaded according to the percent of cases in our data set for which the defendant’s home address was in that zip code. We are missing zip code information for about 10% of defendants, so those cases are excluded from the figure. All of the graphs have discrete scales. Every color level contains 1/9 of the zip code tabulation areas.

Figure 5: Cases Per Capita by Zip Code

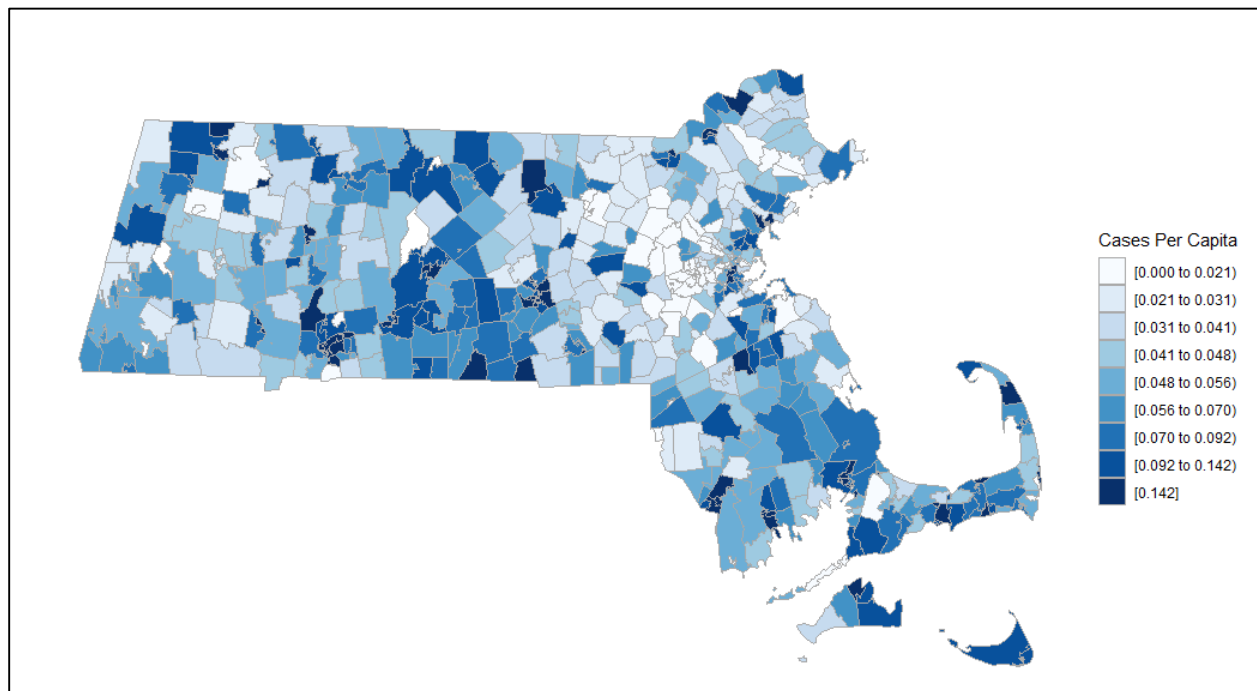


Figure 6: Percent Black by Zip Code

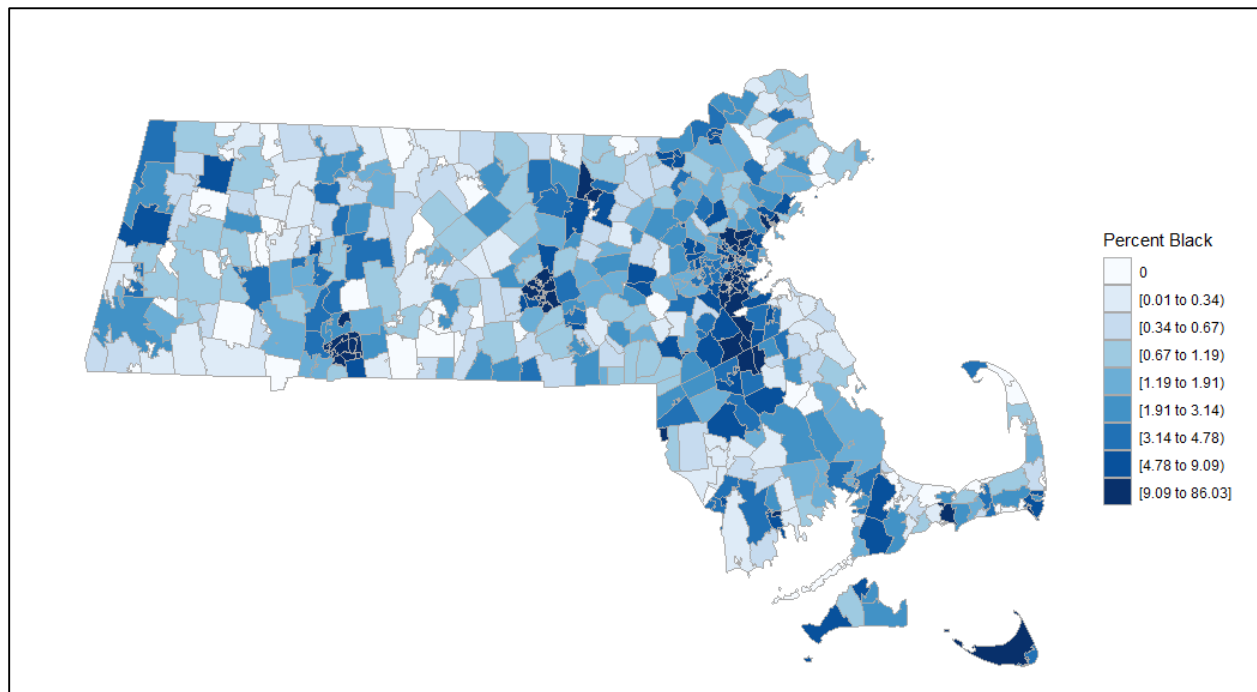
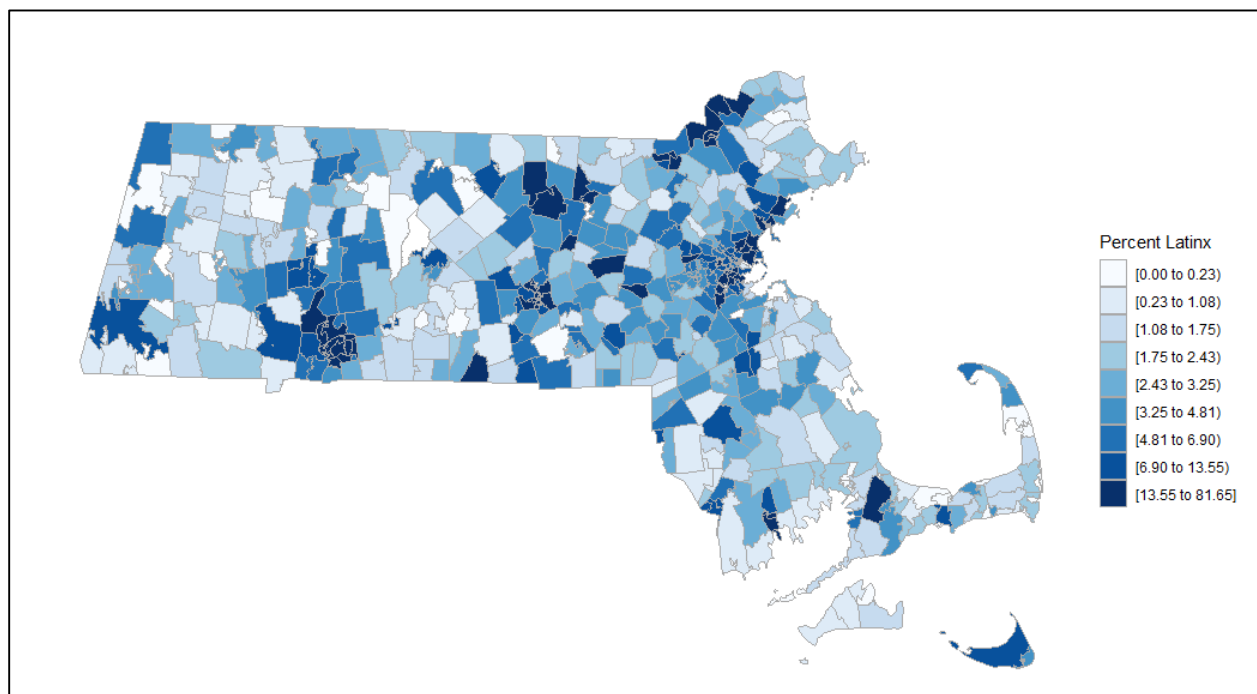


Figure 7: Percent Latinx by Zip Code



Charges Filed

Criminal cases are usually initiated by criminal complaint after an arrest or show cause hearing. As described above, we did not receive arrest data or show cause hearing data so we were unable to observe or measure any racial disparities that may exist in arrest practices, police charging practices, or show cause hearings.

Nevertheless, other studies across the country have documented significant disparities in police stop, search, and arrest practices. Research shows that police officers stop, search, and arrest more Black and Brown people than White people.²² One nationwide study of nearly 100 million traffic stops found that police stop Black drivers more frequently than White drivers.²³ That study also found that the disparity substantially decreases after dark, which makes explanations other than racial bias, such as differences in driving conduct, unlikely.²⁴ In Massachusetts, a report on the Boston Police Department's civilian encounters between 2007 and 2010 showed that despite making up only 24% of Boston's population, Black people were subject to 63% of reported encounters where Boston police officers interrogated, stopped, frisked, or searched a civilian. Latinx people, despite making up only 12% of Boston's population, were subject to approximately 18% of such encounters.²⁵ Another study of the Boston Police Department's traffic stops found that Black and Hispanic drivers were more than twice as likely as White drivers to have their car searched as part of a

²² See REBECCA C. HETLEY ET AL., STANFORD UNIVERSITY SPARQ, DATA FOR CHANGE: A STATISTICAL ANALYSIS OF POLICE STOPS, SEARCHES, HANDCUFFING, AND ARRESTS IN OAKLAND BETWEEN 2013-2014 15 (2016), <https://stanford.app.box.com/v/Data-for-Change>; Kate L. Antonovics and Brian G. Knight, *A New Look at Racial Profiling: Evidence from the Boston Police Department*, 91 REV. OF ECON. AND STATS. 163 (2009); Pierson, E., Simoiu, C., Overgoor, J. et al., *A large-scale analysis of racial disparities in police stops across the United States*, NATURE HUM. BEHAV. (2020), <https://doi.org/10.1038/s41562-020-0858-1>; Coviello, D. & Persico, N., *An Economic Analysis of Black-White Disparities in NYPD's Stop and Frisk Program*, 44 J. LEGAL STUD. 315 (2015); see also AMERICAN CIVIL LIBERTIES UNION FOUNDATION OF MASSACHUSETTS, BLACK, BROWN AND TARGETED: A REPORT ON BOSTON POLICE DEPARTMENT STREET ENCOUNTERS FROM 2007-2010 1, 6 (2014), <https://www.aclum.org/sites/default/files/wp-content/uploads/2015/06/reports-black-brown-and-targeted.pdf>; WASHINGTON LAWYERS' COMMITTEE FOR CIVIL RIGHTS AND URBAN AFFAIRS, RACIAL DISPARITIES IN ARRESTS IN THE DISTRICT OF COLUMBIA, 2009-2011: IMPLICATIONS FOR CIVIL RIGHTS AND CRIMINAL JUSTICE IN THE NATION'S CAPITAL 2-3 (2013), http://www.washlaw.org/pdf/wlc_report_racial_disparities.PDF; IAN AYRES AND JONATHAN BOROWSKY, ACLU OF SOUTHERN CALIFORNIA, A STUDY OF RACIALLY DISPARATE OUTCOMES IN THE LOS ANGELES POLICE DEPARTMENT 5-7 (2008), <https://www.aclusocal.org/sites/default/files/wp-content/uploads/2015/09/11837125-LAPD-Racial-Profiling-Report-ACLU.pdf>.

²³ Pierson, E., Simoiu, C., Overgoor, J. et al., *A large-scale analysis of racial disparities in police stops across the United States*, NATURE HUM. BEHAV. (2020), <https://doi.org/10.1038/s41562-020-0858-1>.

²⁴ *Id.*

²⁵ AMERICAN CIVIL LIBERTIES UNION FOUNDATION OF MASSACHUSETTS, BLACK, BROWN AND TARGETED: A REPORT ON BOSTON POLICE DEPARTMENT STREET ENCOUNTERS FROM 2007-2010 4 (2014), <https://www.aclum.org/sites/default/files/wp-content/uploads/2015/06/reports-black-brown-and-targeted.pdf>. Another study of racial disparities in arrests in Washington, D.C. revealed that more than eight out of ten arrests between 2011 and 2013 were of Black people. WASHINGTON LAWYERS' COMMITTEE FOR CIVIL RIGHTS AND URBAN AFFAIRS, RACIAL DISPARITIES IN ARRESTS IN THE DISTRICT OF COLUMBIA, 2009-2011: IMPLICATIONS FOR CIVIL RIGHTS AND CRIMINAL JUSTICE IN THE NATION'S CAPITAL 2 (2013), http://www.washlaw.org/pdf/wlc_report_racial_disparities.PDF.

traffic stop.²⁶ The study's modeling suggested that the disparity in searches was more consistent with racial bias than with differences in criminal conduct.²⁷ A forthcoming study exploring racial bias in traffic stops in Florida finds that Highway Patrol officers are more likely to give White drivers discounts on their speeding tickets that allow them to avoid more serious fines and other consequences.²⁸ Thus, both national and Massachusetts-specific studies find substantial racial disparities in policing practices, suggesting that our results based on available data following the filing of charges may underestimate the true magnitude of racial disparities in the Massachusetts criminal justice system.

The first point of the criminal process for which we received data was the filing of charges in court. The charging data that we use in our analysis comes from the clerk's entry of charges into the MassCourts database. The initial charges entered into this database can be different from the charges recommended by the police and from the final charges that are disposed. But because we do not have reliable data about police charges or, for cases in the District Court/BMC, final charges, our view of charging decisions is limited. For most cases, we cannot observe or measure the exercise of discretion involved in the evolution of charges from arrest through disposition.

Every case, or docket, in the Trial Court data set contains one or more charges. Charges can either be felonies, misdemeanors, or civil charges. Our analysis considers all cases with at least one criminal charge, both felonies and misdemeanors. A felony is any offense punishable by imprisonment in state prison, misdemeanors are all other offenses. We exclude civil charges from our analysis.

There are approximately 1,800 distinct offenses in the data we received from the Trial Court. Table 5 lists the charges that appear most frequently as the governing offenses in the Trial Court dataset. Governing offenses are determined using the method described in Appendix 6.

²⁶ Kate L. Antonovics and Brian G. Knight, *A New Look at Racial Profiling: Evidence from the Boston Police Department*, 91 REV. OF ECON. AND STATS. 163, 164 (2009).

²⁷ *Id.* at 177.

²⁸ Felipe Goncalves & Steven Mello, *A Few Bad Apples? Racial Bias in Policing* (June 15, 2020) (unpublished manuscript available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3627809).

Table 5: Most Common Governing Offense

Rank	Governing Offense	Statute	Count	Percent White	Percent Black	Percent Latinx	Percent Other Race	Percent Unknown Race
1	LICENSE SUSPENDED, OP MV WITH	M.G.L. c.90 s.23	67,794	54.9%	18.8%	20.9%	2.0%	3.3%
2	UNLICENSED OPERATION OF MV	M.G.L. c.90 s.10	46,320	39.9%	11.5%	37.1%	1.2%	10.3%
3	A&B	M.G.L. c.265 s.13A(a)	24,353	60.7%	18.8%	14.7%	1.8%	4.0%
4	OUI-LIQUOR OR .08%	M.G.L. c.90 s.24(1)(a)(1)	23,194	76.9%	7.2%	9.8%	2.2%	3.9%
5	REGISTRATION SUSPENDED, OP MV WITH	M.G.L. c.90 s.23	22,830	60.6%	17.6%	13.3%	2.7%	5.9%
6	A&B ON FAMILY / HOUSEHOLD MEMBER	M.G.L. c.265 s.13M(a)	19,300	58.5%	18.5%	16.9%	2.3%	3.8%
7	LARCENY OVER \$250	M.G.L. c.266 s.30(1)	16,727	64.8%	18.2%	12.8%	1.7%	2.5%
8	A&B WITH DANGEROUS WEAPON	M.G.L. c.265 s.15A(b)	13,753	54.1%	22.7%	17.3%	2.1%	3.8%
9	ABUSE PREVENTION ORDER, VIOLATE	M.G.L. c.209A s.7	12,068	63.9%	16.6%	15.5%	1.0%	3.0%
10	LEAVE SCENE OF PROPERTY DAMAGE	M.G.L. c.90 s.24(2)(a)	11,272	69.1%	10.1%	13.6%	1.6%	5.5%

Using guidelines from the Massachusetts Sentencing Commission, we assigned all of the offenses in our data set a severity level between 0 and 9, where 0 is a low level offense and 9 is murder. Using the categories from the Massachusetts Criminal Code, we further delineate charges into the following types: motor vehicle offenses, drug offenses, offenses against property, offenses against people, weapons offenses, sex offenses, and offenses that fall into another category. For further discussion of our categorization methodology, please see Appendices 6 and 7.

Figure 8 shows the distribution of offense level of the governing offense by race. It does not include every charge in the case. It includes only the governing offense, which is the most serious charge. For example, in 63% of the cases brought against White defendants, the

most serious charge is of one of the three lowest offense levels and in .8% of the cases it is of one of the three highest offense levels. Whereas in 55% of the cases brought against Black defendants, the most serious charge is of one of the three lowest offense levels and in 1.8% of cases it is one of the three highest offense levels. Figure 8 shows that overall, Black and Latinx defendants are more likely to be charged with higher severity offenses.

Figure 8: Offense Seriousness by Governing Offense (by Race)

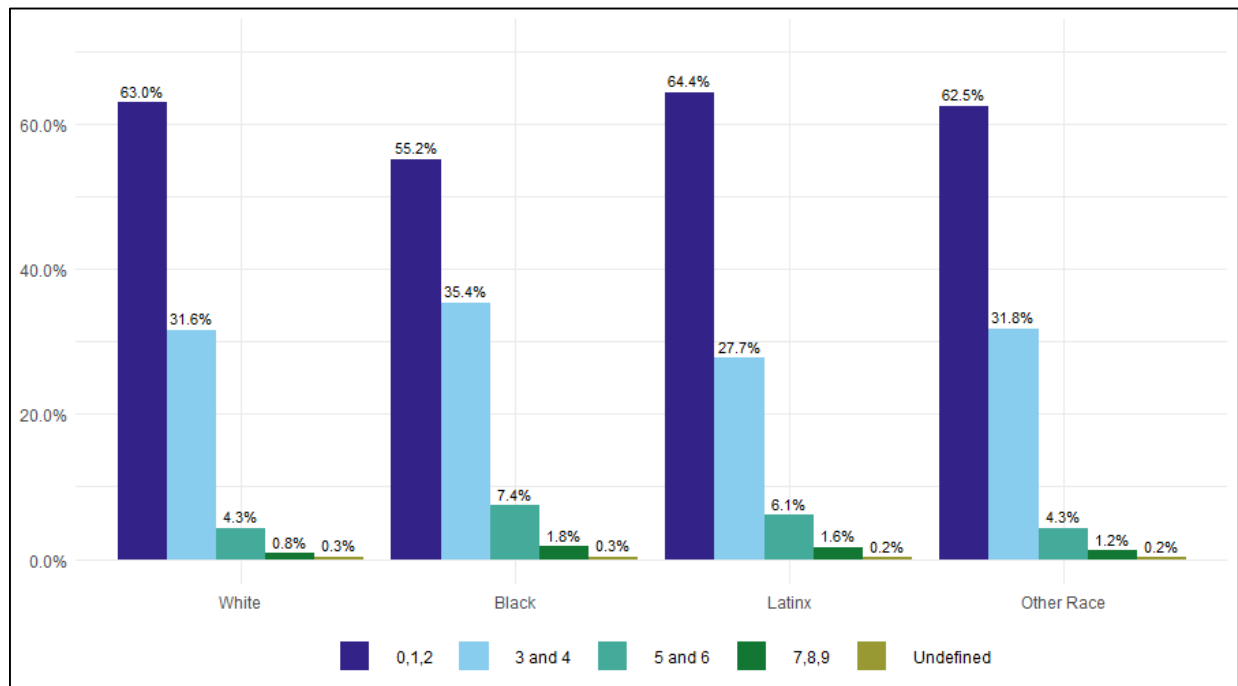
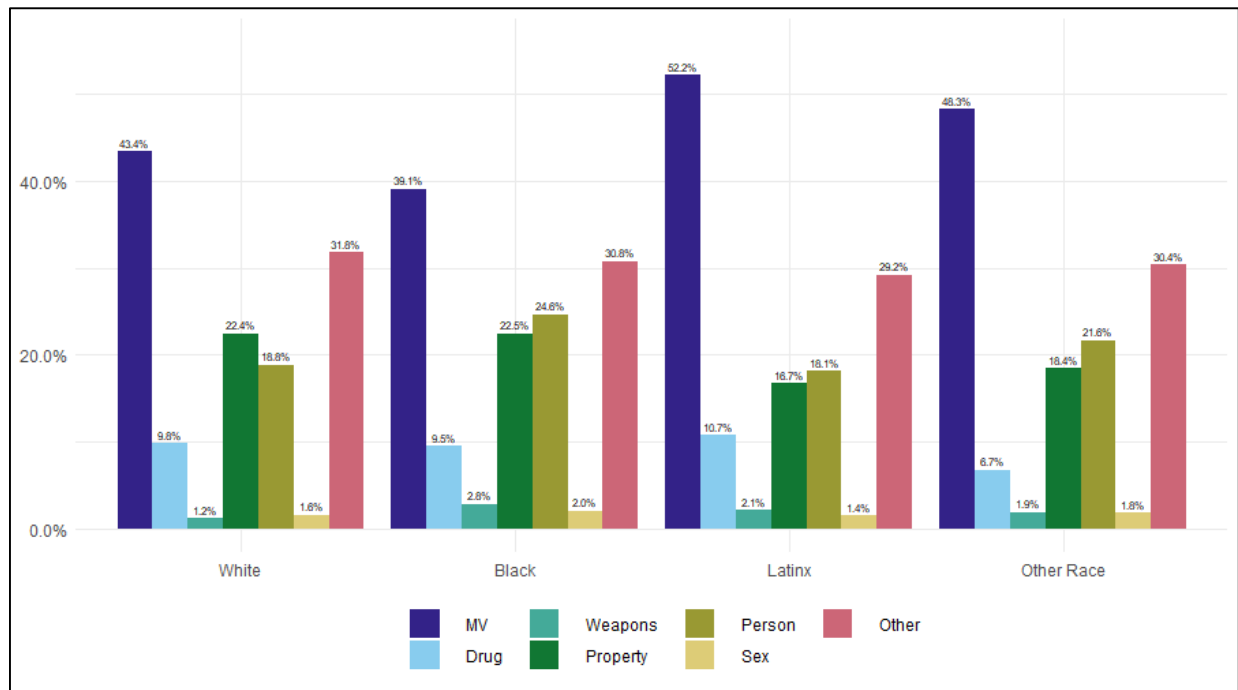


Figure 9 shows the distribution of offense type by race. It includes all charges in the case, not just the governing offense, and some cases include charges of more than one offense type. For this reason, the percentages within each race add up to more than 100.

Figure 9: Offense Type – Case Level (by Race)



Pretrial, Adjudication, & Disposition

Pretrial Phase

In this section, we focus on the pretrial phase of the criminal process. After charges are filed, an arraignment hearing is held.²⁹ The purpose of an arraignment hearing is to inform the person of the charges against them, enter their plea, facilitate the appointment of counsel, and adjudicate pretrial release.³⁰ At this hearing, a judge sets the person's court date and determines whether they will be detained prior to trial, released with or without conditions, or released on bail.³¹ In Massachusetts, people awaiting trial are required to be released on their own recognizance unless "such... release will not reasonably assure the appearance of the person before the court."³² To make this determination, courts assess certain statutory factors including the nature of the offense, communal and family ties, employment status and history, financial resources, and prior involvement with the criminal system.³³ The prosecutor may also move to detain the person based on a determination of dangerousness.³⁴ A person may be detained for dangerousness only if they are charged with

²⁹ Mass. R. Crim. P. 7.

³⁰ *Id.*

³¹ *Id.*

³² *Id.*

³³ *Id.*

³⁴ Mass. Gen. Laws Ann. c. 276, § 58A.

an offense that involved the use or threat of interpersonal harm and if the judge makes a finding “by clear and convincing evidence that no conditions of release will reasonably assure the safety of any other person or the community.”³⁵

When bail is set, people who pay the bail immediately are able to leave the court with a promise to return for their court date.³⁶ Those who decline or are unable to pay are detained in local jails until they can pay, until the bail decision is revised by the Superior Court on review, or until their case is resolved.³⁷ Anyone released pretrial, either on their own recognizance or after paying bail, can still be detained pretrial at a later date³⁸ if, for example, they violate a condition of release or are charged with a subsequent crime.³⁹

Figure 10 details outcomes for arraignment hearings. This figure shows that across all races, the majority of people are released on their own recognizance after arraignment. Bail is set in a slightly higher percentage of cases involving Black and Latinx defendants as compared to White defendants. Additionally, a slightly higher percentage of Black and Latinx defendants are detained without bail as compared to White defendants.

Figure 10: Arraignment Hearing Outcomes (by Race)

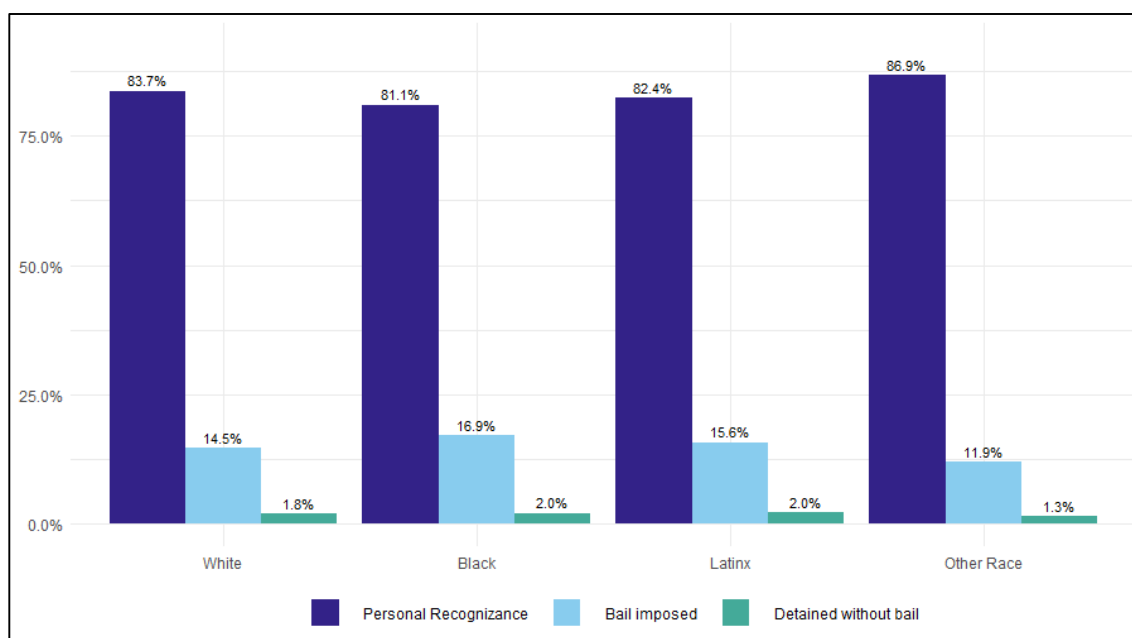


Figure 11 depicts when bail is first paid for cases in which bail is imposed. White defendants are slightly more likely than Black and Latinx defendants to pay bail at arraignment, thus

³⁵ *Id.*

³⁶ See COMMONWEALTH OF MASSACHUSETTS, PRETRIAL HEARING PROCESS in THE BAIL PROCESS (May 24, 2018), <https://www.mass.gov/info-details/the-bail-process-pretrial-hearing-process#asking-for-bail->

³⁷ See *id.*

³⁸ See COMMONWEALTH OF MASSACHUSETTS, CONDITIONS OF BAIL in THE BAIL PROCESS (May 24, 2018), <https://www.mass.gov/info-details/conditions-of-bail#release-with-conditions->

³⁹ See *id.*

limiting their time in jail. Black and Latinx defendants are slightly more likely than White defendants to be unable to pay bail for the duration of the case, thus maximizing their time in jail.

Figure 11: Bail Payment

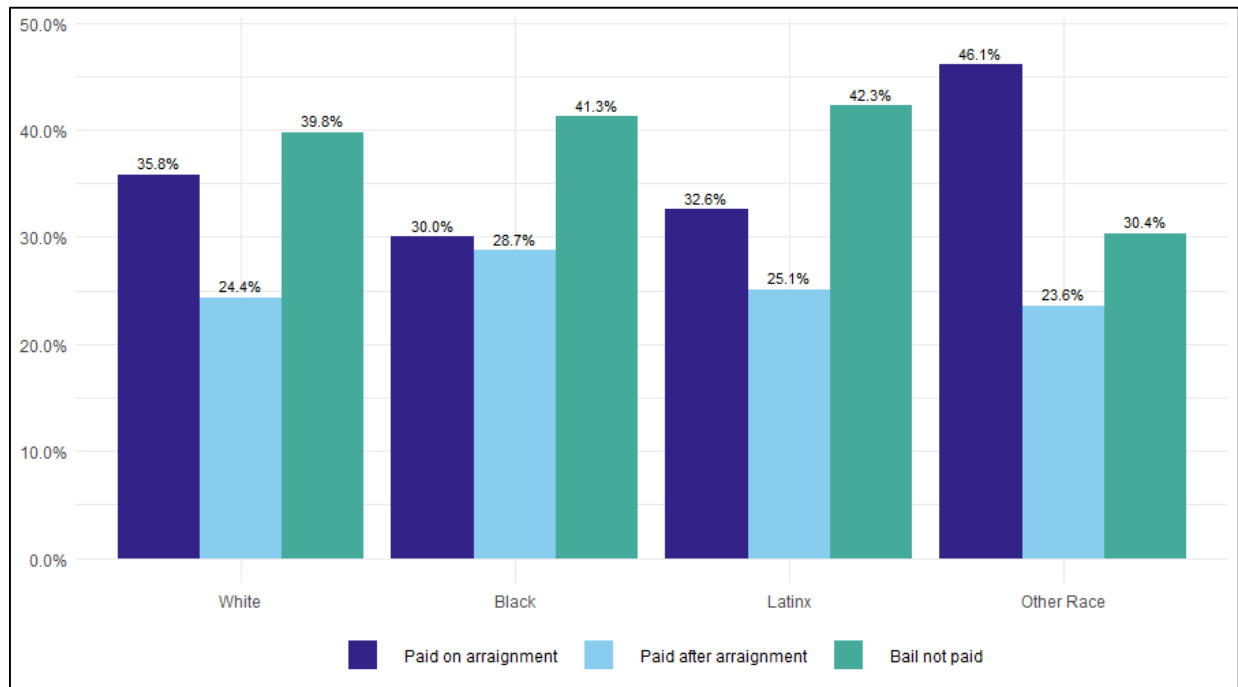
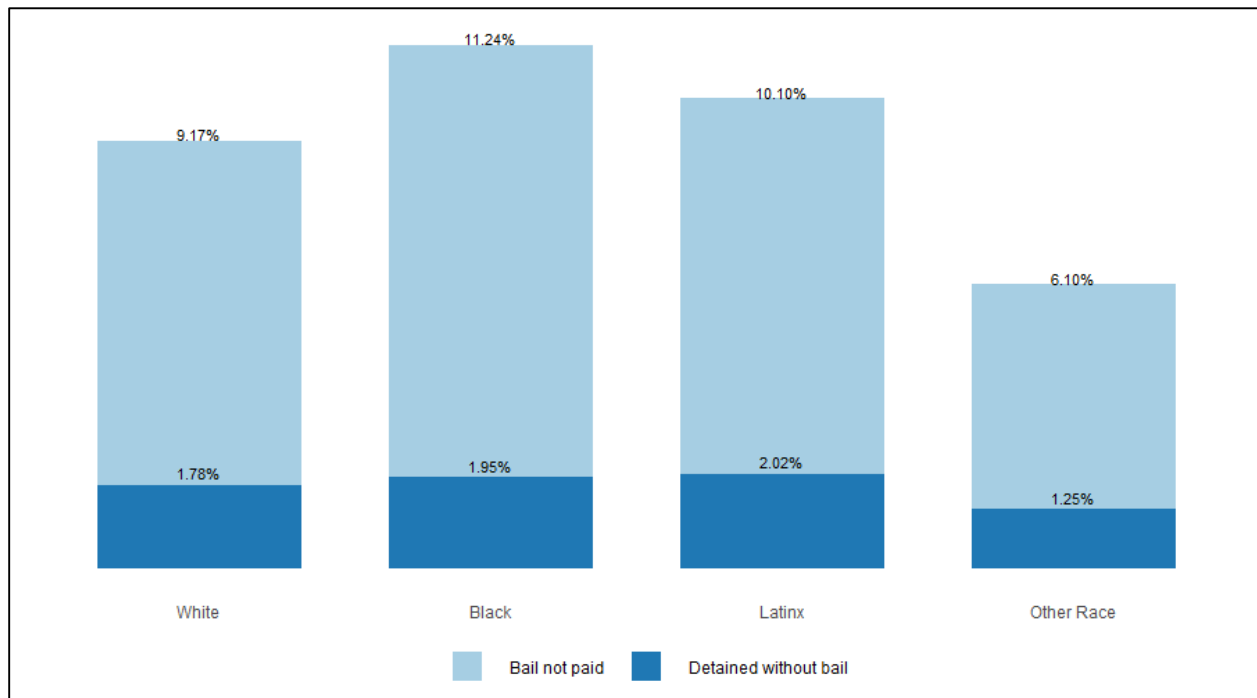


Figure 12 shows cases in which a defendant is detained pretrial for the duration of their case. The total height of the stacked bar represents the percent of defendants within that racial group who were detained pretrial and not released for the duration of their case. The bar is divided into cases where the person was detained because they could not pay bail and cases where the person was detained without bail. Figure 12 shows that Black and Latinx are slightly more likely than White defendants to be detained for the duration of their case.

Figure 12: Pretrial Detention



Our findings at the pretrial stage are consistent with other studies, which find that Black people are more likely than White people to face unfavorable pretrial outcomes. Other researchers find that Black people are more likely than White people to be detained pretrial,⁴⁰ to be detained on secured bond,⁴¹ and to receive higher set bail amounts.⁴² A

⁴⁰ Frank McIntyre & Shima Baradaran, *Race, Prediction, and Pretrial Detention*, 10 J. EMPIRICAL LEGAL STUD. 741, 742 (2013) (calculating that black felony state court defendants were 9 percentage points more likely to be detained pretrial than white felony defendants in the sample); Wendy Sawyer, Prison Policy Initiative, *How Race Impacts Who is Detained Pretrial* (Oct. 9, 2019), https://www.prisonpolicy.org/blog/2019/10/09/pretrial_race/ (“In large urban areas, Black felony defendants are over 25% more likely than [W]hite defendants to be held pretrial.”).

⁴¹ Wendy Sawyer, Prison Policy Initiative, *How Race Impacts Who is Detained Pretrial* (Oct. 9, 2019), https://www.prisonpolicy.org/blog/2019/10/09/pretrial_race/ (“Across the country, Black and [B]rown defendants are at least 10-25% more likely than [W]hite defendants to be detained pretrial or to have to pay money bail.”).

⁴² See John M. MacDonald and Ellen A. Donnelly, *The Downstream Effects of Bail and Pretrial Detention on Racial Disparities in Incarceration*, 108 J. CRIM. L. & CRIMINOLOGY 775, 801 (2018), <https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=7641&context=jclc>; Wendy Sawyer, Prison Policy Initiative, *How Race Impacts Who is Detained Pretrial*, (Oct. 9, 2019), https://www.prisonpolicy.org/blog/2019/10/09/pretrial_race/ (“Black and [B]rown defendants receive bail amounts that are twice as high as bail set for [W]hite defendants – and they are less likely to be able to afford it.”); PRISON POLICY INITIATIVE, SUMMARY OF RESEARCH STUDIES RELATED TO RACIAL DISPARITIES IN PRETRIAL DETENTION (last updated Oct. 2019), https://www.prisonpolicy.org/reports/pretrial_racial_disparities_sources.html (compiling summaries of additional studies assessing the extent of racial disparities in pretrial proceedings).

study of the racial disparities in Delaware’s criminal system, for example, found that between 2012 and 2014, 38% of Black people were detained pretrial compared to 33% of White people and that bail amounts were set at an average of \$5,000 higher for Black people than for White people.⁴³ Another study examined bail decisions in Miami and Philadelphia and found that Black defendants were more likely to receive monetary bond and that their bail amounts were higher.⁴⁴ The study concluded that the disparity was the result of the judges’ racial bias, stemming from anti-black stereotypes about dangerousness.⁴⁵ Additional research finds that pretrial detention significantly increases the probability that defendants are convicted, is associated with longer jail and prison sentences, and decreases formal employment despite having no net effect on future crime, and so disparities at this stage can have long-lasting consequences both in and out of the criminal justice system.⁴⁶

Adjudication & Disposition

Next, we focus on how the charges in the cases in our sample are disposed. Charges are disposed individually, and when all the charges in a case are disposed, then the case is considered disposed. Charges can be disposed in a variety of methods that are described in Appendix 13.

Convictions or guilty findings come as the result of a plea or trial. Guilty pleas are often made through plea bargaining, where a defendant agrees to plead guilty without a trial, often because the prosecutor offers a bargain that would allow them a shorter sentence than might otherwise be available.⁴⁷ This bargain might include an opportunity to plead to a lesser charge. This is often called a charge reduction. Charge reductions are not reliably recorded in the Trial Court data and we were unable to get final conviction offense data for District Court/BMC cases so we could not analyze racial disparities in plea bargaining outcomes in the District Court/BMC.

“Continuance without a Finding” and “Pretrial Probation as a Disposition” are two dispositions that are distinct from both dismissal and conviction and are more serious than a dismissal but less serious than a conviction. They are both described in Appendix 13.

⁴³ John M. MacDonald and Ellen A. Donnelly, *The Downstream Effects of Bail and Pretrial Detention on Racial Disparities in Incarceration*, 108 J. CRIM. L. & CRIMINOLOGY 775, 801 (2018).

⁴⁴ David Arnold, Will Dobbie & Crystal S. Yang, *Racial Bias in Bail Decisions*, 133 Q. J. OF ECON. 1885, 1886 (2018).

⁴⁵ *Id.*

⁴⁶ See Will Dobbie, Jacob Goldin & Crystal S. Yang, *The Effects of Pretrial Detention on Conviction, Future Crime, and Employment: Evidence from Randomly Assigned Judges*, 108 AM. ECON. REV. 201 (2018); CHRISTOPHER T. LOWENKAMP ET AL., INVESTIGATING THE IMPACT OF PRETRIAL DETENTION ON SENTENCING OUTCOMES (2013), https://craftmediabucket.s3.amazonaws.com/uploads/PDFs/LJAF_Report_state-sentencing_FNL.pdf.

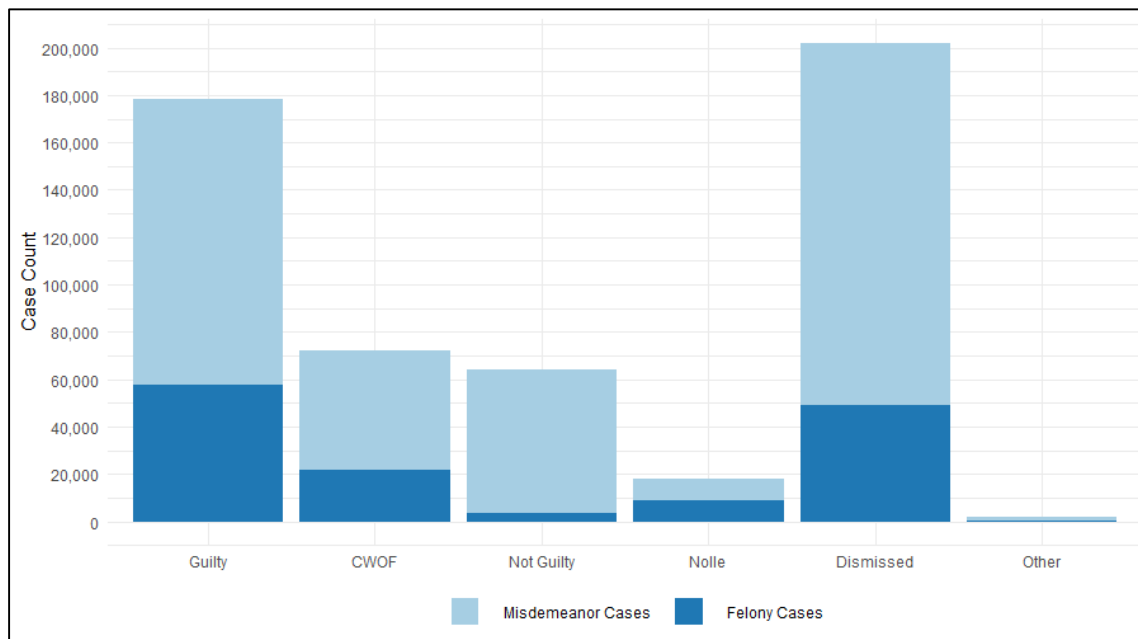
⁴⁷ U.S. DEP’T OF JUSTICE, JUSTICE 101: PLEA BARGAINING, <https://www.justice.gov/usao/justice-101/pleabargaining>.

Figure 13 shows the most serious charge disposition in every case we received from the Trial Court. Outcomes are grouped into categories and ranked from most serious to least serious from right to left. “Guilty” is the most serious disposition and “Dismissed” is the least serious disposition. Any disposition that does not fall into one of our categories is labeled as “Other.” In this figure, if there are three charges in a case, and one is disposed as “Guilty” and the other two are dismissed, that case would fall into the “Guilty” column. Definitions of disposition types can be found in Appendix 13.

Figure 13 also groups cases into “Misdemeanor Cases” and “Felony Cases.” “Felony Cases” are cases where at least one initial charge was a felony and “Misdemeanor Cases” are cases where zero initial charges were felonies and at least one charge was a misdemeanor. If a case is a “Felony Case” in the “Guilty” column, this does not necessarily mean that the defendant was convicted of a felony. It simply means that at least one initial charge in the case was a felony and at least one charge in the case resulted in a “Guilty” disposition.

In this table, if the most serious disposition in a case was a CWOFF and it was dismissed before October 2017, we count it as a dismissal because that was the final outcome of the disposition.

Figure 13: Outcomes at Disposition



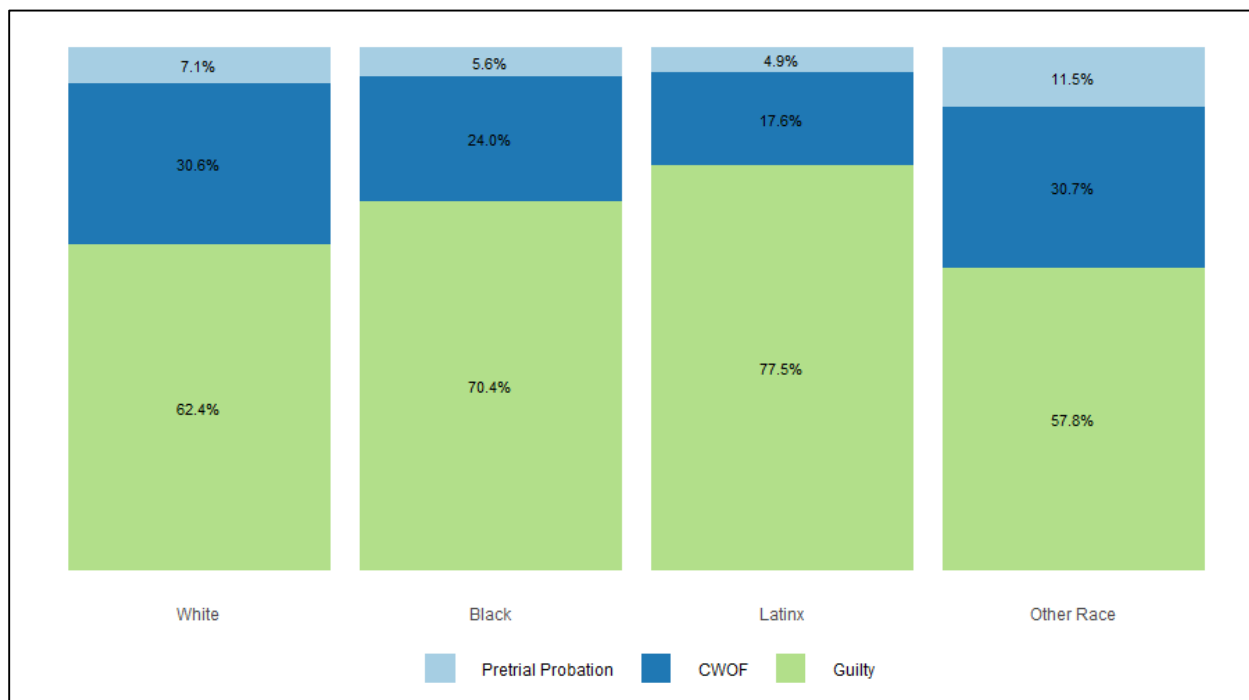
Note: In this figure, “Nolle” means “Nolle Prosequi” and “CWOFF” means “Continuance without a Finding”

Figure 14 more closely examines cases that ended with dispositions other than “Not Guilty,” “Nolle Prosequi,” and “Dismissed.” In cases where at least one charge is not dismissed or otherwise discarded, the most serious disposition is “Guilty” 62.4% of the time when the

defendant is White, 70.4% of the time when the defendant is Black, 77.5% of the time when the defendant is Latinx, and 57.8% of the time when the defendant is of another race.

Some charge dispositions will later be disposed as “Dismissed after Continuance Without a Finding” or “Dismissed after Pretrial Probation.” These charges that are ultimately dismissed are nevertheless counted as “CWO” or “Pretrial Probation” for the purposes of Figure 14.

Figure 14: Outcome of Charges that Were Not Dismissed



Note: “CWO” stands for “Continuance Without a Finding”

Sentencing

After a charge results in conviction, a judge issues a sentence. Among the sentencing options available to a judge are a fine, a term of probation, and a term of incarceration in a House of Correction (up to 2.5 years) or a state prison (over 2.5 years). The Massachusetts Sentencing Commission issues advisory sentencing guidelines, including a grid that depicts the recommended sentencing ranges for offenses by level of seriousness. That grid is included in Appendix 6.

In Massachusetts some offenses carry mandatory incarceration sentences that require people to serve a minimum term of incarceration prior to becoming eligible for probation, parole, work release, or a sentence reduction.⁴⁸ Offenses with mandatory sentences are not

⁴⁸ THE BOSTON MUNICIPAL COURT AND DISTRICT COURT SENTENCING BENCH BOOK 27 (March 28, 2016), <https://www.mass.gov/files/documents/2016/08/sl/dc-bmc-sentencing-bench-book.pdf>.

eligible for a filing of the case⁴⁹ or a continuance without a finding.⁵⁰ Mandatory minimum sentences are particularly prevalent in cases involving offenses that must be tried in Superior Court.

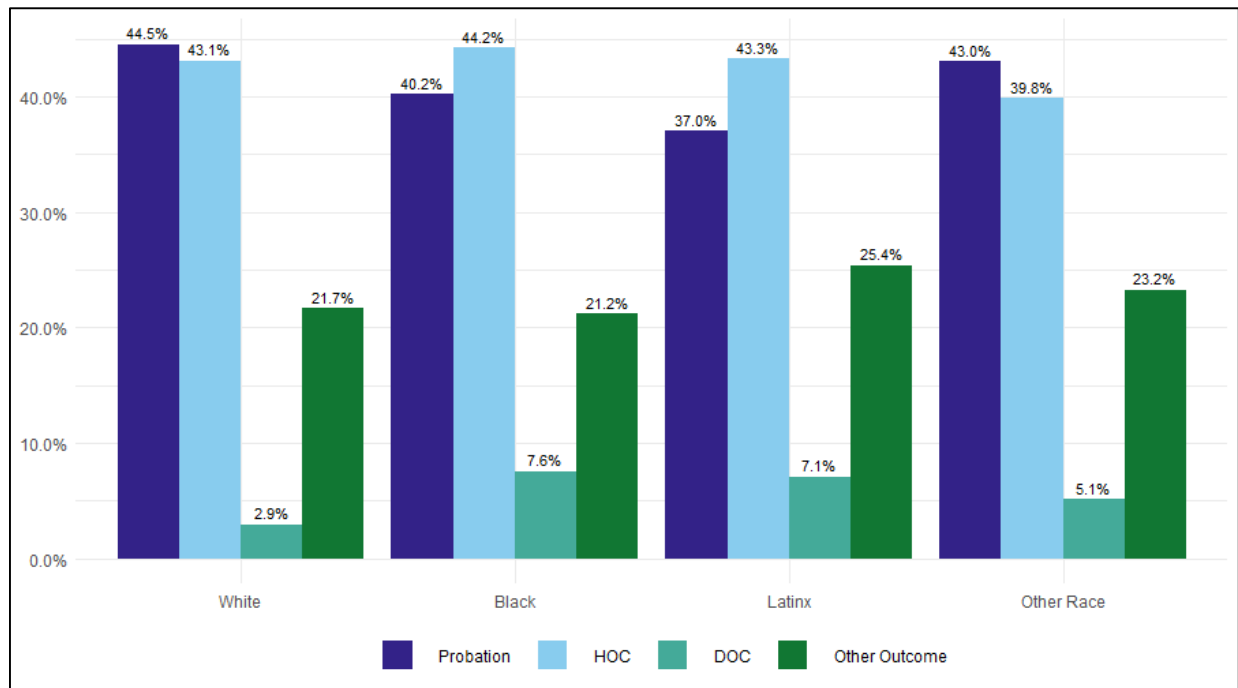
Figure 15 depicts the most serious type of punishment imposed in cases that include conviction on at least one charge. This figure shows that in cases with at least one conviction, there is a sentence to a House of Correction (HOC) institution in 43.1% of cases where the defendant is White, 44.2% of cases when the defendant is Black, 40.7% of cases when the defendant is Latinx, and 47.4% of cases when the defendant is of another race. This figure shows that, in cases with at least one conviction, there is a sentence to a Department of Correction (DOC) institution in 2.9% of cases where the defendant is White, 7.6% of cases when the defendant is Black, 7.1% of cases when the defendant is Latinx, and 5.1% of cases when the defendant is of another race.

In Figure 15, only the charge with the most serious sanction in each case is counted. For example, if a case resulted in a sentence to a DOC institution and a from and after probation sentence, that case would be counted only as a DOC sentence. The probation category includes suspended sentences. The “Other Outcome” category includes all cases for which we have no sentencing data. We suspect that people who are convicted and are not sentenced to probation or incarceration are sentenced to fines, time served, or receive a guilty file. It is also possible that these cases were not fully disposed by the time we received data. This “Other Outcome” bar might also capture cases that resulted in probation or incarceration but the sentence was not recorded properly.

⁴⁹ Mass. R. Crim. P. 28 (“The court may file a case after a guilty verdict or finding without imposing a sentence if the defendant and the Commonwealth both consent.”). The court may suspend the sentence while keeping the charges on file for an agreed upon period providing defendant complies with proscribed terms such as avoiding the commission of a new criminal offense for the duration of that period. *Id.*

⁵⁰ J.W. Carney Jr. & Wendy J. Kaplan, *Dispositions and Sentencing Advocacy in MASSACHUSETTS CRIMINAL PRACTICE* 44 (Eric Blumenson ed., 4th ed., 2012), https://www.suffolk.edu/-/media/suffolk/documents/law/faculty/mcp/ch39sentencing_pdftxt.pdf?la=en&hash=49E8933EC20078F64FE3CA4B0590AD3CEE0BAFC2; see also Commonwealth of Massachusetts, *Court Glossary Terms: C* in GLOSSARY OF COURT TERMS (April 5, 2018), <https://www.mass.gov/info-details/court-glossary-terms-c>.

Figure 15: Type of Punishment after Conviction



Racial Disparities in Sentencing

In this section we further explore racial disparities in sentencing by estimating the odds that people of color receive incarceration sentences and by examining the length of those sentences relative to White people. Disparities in sentencing may reflect differences in the characteristics of defendants' cases, defendants' criminal histories, or other contextual factors, and we use multivariate regressions to examine these factors as well. Including additional factors in the analysis allows us to estimate differences in people's odds of being sentenced to incarceration and the length of those sentences relative to people of other races who are similar along the dimensions we are able to measure.

While our rich administrative data from multiple agencies allows us to incorporate a broad range of defendant and contextual factors into the analysis, there are undoubtedly many factors that we do not observe that influence sentencing outcomes. To the extent that such factors are correlated with race, our estimates will reflect the combined impact of race and those unobserved factors on sentencing outcomes.

It is also important to note that observing raw disparities diminish (or increase) after including additional factors in the model does not necessarily imply that the disparity is justified and/or not driven by race or racism. This is because many of the additional factors we control for in the analysis may themselves be affected by prior racially disparate

treatment or even racial disparities elsewhere in the legal system. For example, one factor we include in the analysis is the defendant's neighborhood, but neighborhood segregation by race can be traced to racially discriminatory policies and behaviors.⁵¹ Likewise, we use the seriousness of the charged offense as a factor in the sentencing analysis, but those charges may be the result of racially disparate policing and prosecution practices. In short, disentangling the role of race from the host of other factors that influence sentencing outcomes is necessarily imprecise. Given the major role that race plays in essentially every major U.S. institution, defining the boundaries of (much less measuring) a truly rigorous "race effect" on criminal system outcomes is a challenge.

The analysis presented below is primarily descriptive and is meant to provide a detailed look into racial disparities in sentencing outcomes with a focus on identifying decision points where disparities are largest. Exploring how race interacts with other factors to produce sentencing outcomes can help highlight mechanisms by which racial disparities arise and specific stages in the criminal system where they accumulate.

Our main outcomes of interest are whether or not defendants are sentenced to incarceration and the length of those sentences.

The main specification regresses defendant outcomes on race and several controls:

$$y_{ijc} = \alpha + \beta_1 * \text{Black}_j + \beta_2 * \text{Hispanic}_j + \beta_3 * \text{Other}_j + \gamma X_{ijc} + e_{ijc} \quad (1)$$

Where y_{ijc} is the outcome of case i for defendant j in court c ; Black_j , Hispanic_j , and Other_j are mutually exclusive race indicators for defendant j ; X_{ijc} is the additional contextual factors, and e_{ijc} is the error term. White defendants are the baseline category in this specification, and so no indicator for White defendants is included.

⁵¹ Teron McGrew, *The History of Residential Segregation in the United States, Title VIII, and the Homeownership Remedy*, 77 AM. J. OF ECON. AND SOC. 1013, 1013 (2018) ("Residential segregation was practiced by federal, state, and local governments as an instrument of racial domination in the United States throughout much of the 20th century... Zoning, redlining, and blockbusting created the division of our urban landscape along the color line: black and white."); see also Danyelle Solomon, Abril Castro & Connor Maxwell Center for American Progress, *Systemic Inequality: Displacement, Exclusion, and Segregation* (2019), <https://www.americanprogress.org/issues/race/reports/2019/08/07/472617/systemic-inequality-displacement-exclusion-segregation/> (Single-family zoning "prevented the construction of apartment buildings and multifamily units in certain neighborhoods, ensuring that only those who could afford single-family homes could live there... [and] produced racially segregated neighborhoods without explicit race-based ordinances"); THE BOSTON FOUNDATION, GREATER BOSTON HOUSING REPORT CARD 2019: SUPPLY, DEMAND AND THE CHALLENGE OF LOCAL CONTROL 66 (2019), <https://www.tbf.org/-/media/tbf/reports-and-covers/2019/gbhrc2019.pdf?la=en&hash=6F5C3FoB829962BoF19680D8B9B4794158D6B4E9> ("Massachusetts, like many places throughout the United States, has a long history of overt segregation in housing policies..., as well as less deliberate drivers of structural inequality that have led to high levels of racial, ethnic, and economic segregation between neighborhoods and between urban areas and more affluent suburban communities.").

We estimate each outcome using several models that each include a different set of contextual factors. Including these factors allows us to estimate differences in defendants' odds of being sentenced to incarceration and the length of those sentences relative to others who are similarly situated with respect to the additional factors we include.

First, we account for differences in sentencing driven by the severity of defendants' initial charges by controlling for the offense severity level of the highest charge. Next, we include fixed effects for each District Attorney jurisdiction to account for potential differences in sentencing behavior across court jurisdictions. District Attorney jurisdictions roughly correspond to counties, with a few exceptions.⁵² We also include several measures of socio-economic conditions in the defendant's home zip code. We include measures of neighborhood demographics (age, gender, race), poverty, the share of the population without a high school diploma and with a Bachelor's degree, single parent households, the unemployment rate, and median income from the American Community Survey. Information on defendants' characteristics include their prior criminal history at the time of sentencing (using a severity index calculated as described in Appendix 8), age at the time of the alleged offense, and gender. Table 6 includes summary statistics for many of the outcomes and control variables we consider below.

⁵² The Cape & Islands District Attorney covers Barnstable, Dukes, and Nantucket counties. The Northwestern District Attorney covers Franklin and Hampshire counties and the town of Athol. Mass. Gen. Laws Ann. 12, § 13.

Table 6: Regression Data Summary Statistics

	All Cases	White	Hispanic	Black	Other
Defendant Characteristics					
Male	73.96%	71.01%	81.29%	78.74%	67.56%
Average Age	38.22	39.13	35.97	36.90	39.85
Average Criminal History Score	2.56	2.55	2.55	2.75	2.24
Case & Charge Details					
Superior Court	2.83%	1.95%	4.07%	4.58%	2.80%
Average Charge Level	4.98	4.99	4.87	5.19	4.70
Includes Mand. or Stat. Min	17.86%	18.74%	16.22%	17.81%	14.61%
Includes Mandatory Minimum	4.27%	3.92%	5.19%	4.94%	3.06%
Charge Category					
<i>Drug Charge</i>	8.11%	8.00%	9.56%	8.23%	4.68%
<i>Weapon Charge</i>	0.94%	0.70%	1.15%	1.62%	0.74%
<i>Person Charge</i>	17.09%	16.53%	15.36%	21.20%	16.22%
<i>Property Charge</i>	17.63%	19.24%	13.52%	18.11%	13.35%
<i>Sex Charge</i>	1.03%	1.01%	0.96%	1.16%	1.10%
<i>MV Charge</i>	41.70%	40.41%	48.42%	35.70%	50.27%
Sentencing Outcomes					
Percent Convicted	23.03%	24.14%	23.28%	23.17%	11.86%
Percent Incarcerated	10.76%	10.86%	11.47%	11.77%	5.16%
Average Incarceration Length	40.74	33.87	52.74	56.57	27.68
Number of Cases	553,622	323,979	100,285	93,915	35,443

Regression Results

Table 7 shows coefficients from a regression model estimating the impact of race on incarceration length. The model is estimated using all cases, and incarceration length is measured in days. The coefficients shown are for the race parameters in equation (1), and estimates for other parameters are omitted from the figure for clarity.

Table 7: Incarceration Length

	(1)	(2)	(3)	(4)	(5)	(6)
Black	22.71*** (0.92)	3.35*** (0.83)	23.15*** (0.96)	10.85*** (0.92)	21.82*** (1.01)	1.43 (0.91)
Latinx	18.87*** (0.90)	7.97*** (0.81)	18.05*** (0.93)	14.69*** (0.90)	17.05*** (0.99)	6.76*** (0.89)
Other	-6.19*** (1.40)	-5.58*** (1.25)	-5.32*** (1.40)	5.40*** (1.41)	-6.61*** (1.41)	4.37*** (1.27)
Sample	All Cases	All Cases	All Cases	All Cases	All Cases	All Cases
Severity	No	Yes	No	No	No	Yes
Jurisdiction	No	No	Yes	No	No	Yes
Defendant	No	No	No	Yes	No	Yes
Neighborhood	No	No	No	No	Yes	Yes
N	553,622	553,622	553,622	553,622	553,622	553,622
Adjusted R ²	0.002	0.21	0.003	0.03	0.005	0.23

Notes:

Standard errors are shown in parenthesis

White defendants are the baseline group in this model, and each coefficient provides an estimate of the additional (or reduced, if negative) days of incarceration that a defendant of the designated race would expect to face after accounting for the additional factors included in the model. For example, if we focus on Model 1, which includes no controls, the first row indicates that, on average, Black defendants tend to receive sentences that are roughly 23 days longer than White defendants. Note that this corresponds to the difference in average incarceration lengths for Black and White defendants as detailed in Table 6. Latinx defendants face sentences that are about 19 days longer. These differences are both statistically significant and practically meaningful.

Model 2 includes controls for case severity. Including information on the severity of defendants' initial charges increases the model's explanatory power drastically, increasing the adjusted R² from 0.01 to over .2. Black and Latinx defendants receive longer sentences after accounting for differences in initial charge severity, but the magnitudes of the coefficients on the race variables are reduced substantially. Controlling for jurisdiction and neighborhood have minimal impact on the estimated racial disparity. Including information

on criminal history, age, and gender explains some of the racial disparity as well, particularly for Black defendants. In Model 6, which includes all of the additional factors we consider, the estimate for Black defendants is positive but no longer statistically significant. We reiterate, however, that the additional factors we include are by no means exhaustive and may themselves reflect unjustified racial disparities elsewhere in the criminal system or in society more broadly. This finding indicates that racial differences in the additional factors we consider (and charge severity in particular) are central to understanding racial disparities in incarceration.

Table 8: Incarceration Length

	(1)	(2)	(3)	(4)	(5)	(6)
Black	168.71*** (7.27)	42.67*** (5.70)	156.85*** (7.51)	151.50*** (7.31)	151.48*** (7.77)	31.21*** (6.15)
Latinx	147.90*** (7.16)	26.06*** (5.62)	150.37*** (7.48)	132.23*** (7.20)	142.98*** (7.83)	24.93*** (6.21)
Other	224.12*** (15.98)	88.57*** (12.44)	208.88*** (15.97)	187.30*** (16.31)	215.01*** (15.96)	73.49*** (12.68)
Sample	Incarcerated	Incarcerated	Incarcerated	Incarcerated	Incarcerated	Incarcerated
Severity	No	Yes	No	No	No	Yes
Jurisdiction	No	No	Yes	No	No	Yes
Defendant	No	No	No	Yes	No	Yes
Neighborhood	No	No	No	No	Yes	Yes
N	59,565	59,565	59,565	59,565	59,565	59,565
Adjusted R ²	0.01	0.41	0.02	0.03	0.03	0.42

Notes:

Standard errors are shown in parenthesis

Table 8 shows the estimates from the same model as Table 7 with the sample limited to just those individuals who received incarceration sentences. The raw disparity when no contextual factors are included is substantially larger among those who are sentenced to some incarceration, with Black people receiving sentences that are 168 days longer than their White counterparts. Even with the full set of controls in Model 6, Black people on average receive sentences that are 31 days longer than their similar White counterparts, a difference that is both statistically significant and practically meaningful. This indicates that

much of the disparity in incarceration sentences results from racial differences in the length of incarceration sentences given rather than the overall rate at which defendants are convicted or incarcerated.

This can be inferred from the similar incarceration and conviction rates among racial groups indicated in the summary statistics in Table 6 and is confirmed in Tables 9 and 10, which show estimates from regression models where the outcome is a binary indicator for whether a given defendant was incarcerated at all and convicted at all respectively. The included contextual variables are the same as in Tables 7 and 8, and positive coefficient estimates can be interpreted as the increased (or reduced, if negative) probability that defendants of a given race would be sentenced to incarceration or convicted of a crime respectively. The disparity in conviction and incarceration rates across race is relatively small and often negative depending on which contextual factors are included.⁵³ These results should be interpreted in conjunction with the fact that people of color are overrepresented in the court caseload compared to their prevalence in the population as detailed in Figure 2. People of color in Massachusetts are substantially more likely to be arrested and charged with a crime at all, and thus are more likely to be convicted and incarcerated on average even though conviction and incarceration rates are similar across race once charged.

Table 9: Probability of Incarceration

	(1)	(2)	(3)	(4)	(5)	(6)
Black	0.009*** (0.001)	-0.004*** (0.001)	0.013*** (0.001)	-0.020*** (0.001)	0.009*** (0.001)	-0.014*** (0.001)
Latinx	0.006*** (0.001)	0.010*** (0.001)	0.004*** (0.001)	-0.003** (0.001)	0.0002 (0.001)	0.0004 (0.001)
Other	-0.057*** (0.002)	-0.042*** (0.002)	-0.052*** (0.002)	-0.020*** (0.002)	-0.057*** (0.002)	-0.008*** (0.002)
Sample	All Cases	All Cases	All Cases	All Cases	All Cases	All Cases
Severity	No	Yes	No	No	No	Yes

⁵³ A study by the Vera Institute for Justice of charge dismissals in Manhattan similarly found that Black and Latinx people were more likely to have certain charges dismissed than white people. BESIKI KUTATELADZE, WHITNEY TYMAS, & MARY CROWLEY, VERA INSTITUTE OF JUSTICE, RACE AND PROSECUTION IN MANHATTAN, 5 (2014). That report noted that this finding is subject to two interpretations. It could be “an indicator of leniency” or “simply serve as a mechanism for declining to prosecute cases whose viability is in doubt or could have been rejected at screening.” *Id.*

Jurisdiction	No	No	Yes	No	No	Yes
Defendant	No	No	No	Yes	No	Yes
Neighborhood	No	No	No	No	Yes	Yes
<i>N</i>	553,622	553,622	553,622	553,622	553,622	553,622
Adjusted R ²	0.002	0.090	0.006	0.123	0.006	0.184

Notes:

Standard errors are shown in parenthesis

Table 10: Probability of Conviction

	(1)	(2)	(3)	(4)	(5)	(6)
Black	-0.01*** (0.002)	-0.02*** (0.001)	-0.002 (0.002)	-0.05*** (0.001)	-0.01*** (0.002)	-0.03*** (0.002)
Latinx	-0.01*** (0.002)	0.005*** (0.001)	-0.01*** (0.002)	-0.02*** (0.001)	-0.02*** (0.002)	-0.01*** (0.002)
Other	-0.12*** (0.002)	-0.10*** (0.002)	-0.12*** (0.002)	-0.07*** (0.002)	-0.12*** (0.002)	-0.04*** (0.002)
Sample	All Cases	All Cases	All Cases	All Cases	All Cases	All Cases
Severity	No	Yes	No	No	No	Yes
Jurisdiction	No	No	Yes	No	No	Yes
Defendant	No	No	No	Yes	No	Yes
Neighborhood	No	No	No	No	Yes	Yes
<i>N</i>	553,622	553,622	553,622	553,622	553,622	553,622
Adjusted R ²	0.005	0.09	0.01	0.15	0.01	0.21

Notes:

Standard errors are shown in parenthesis

Decision Points – Incarceration Disparities

The analysis above indicates that much of the racial disparity in incarceration sentences is driven by differences in initial charges across race. In the sections below, we further disaggregate the core results and explore several different factors related to charging decisions that might explain the disparities identified above. We examine the indictment process, variation across charge categories, charges that carry mandatory and statutory minimum incarceration sentences, charge reductions that occur as part of the plea-bargaining process, and differences across court jurisdictions. We also explore murder cases in detail, because they tend to carry particularly long sentences that could contribute to the sentence length disparities identified above.

District Court vs. Superior Court Jurisdiction

Massachusetts has a tiered trial court system in which the most serious cases are heard in Superior Court and the less serious cases are heard in District Court or the Boston Municipal Court (BMC). The Superior Courts have jurisdiction over all criminal offenses, misdemeanor and felony.⁵⁴ The Superior Courts share jurisdiction with the District Court and BMC over all misdemeanor offenses (except libel), certain enumerated offenses, and all felony offenses punishable by imprisonment in state prison for not more than five years⁵⁵ or in a House of Correction for not more than two-and-a-half years.⁵⁶ Although District Courts and BMC may adjudicate criminal offenses that are punishable by terms in state prison, they may not impose state prison sentences.⁵⁷ District Courts and BMC may sentence a person only to a House of Correction and for no more than two-and-a-half years. Thus, a person charged with the same crime could face up to 5 years in state prison if the case is in Superior Court but no more than two-and-a-half years in a House of Correction if the case is in District Court or BMC.

Although District Courts and BMC lack jurisdiction to fully dispose of cases involving the most serious felonies, many people who are charged with such offenses are initially arraigned in District Court or BMC before eventually being indicted in Superior Court. If a case starts in District Court or BMC and is later indicted in Superior Court, it might appear in our data twice—once for when it was in the BMC/District Court and once for when it was in

⁵⁴ M.G.L. c. 212, § 6.

⁵⁵ M.G.L. c. 218, § 26.

⁵⁶ *Commonwealth v. Calvaire*, 476 Mass. 242, 244, n.6 (Mass. 2017). The District Court and BMC also have jurisdiction over certain felony offenses designated by M.G.L. c. 218, § 26, some of which carry maximum state prison sentences of over five years.

⁵⁷ M.G.L. c. 218, § 27.

Superior Court. When both cases appear in our data set, they have two separate identifiers and they are not linked within the database. Thus, the only way we can tell if a District Court case and a Superior Court case concern the same underlying incident is by comparing certain fields such as the defendant's identity and the date of the offense. Sometimes, one of the cases does not appear in our original data set because it falls outside our data parameters. Take, for example a serious felony that was arraigned in District Court in 2015, indicted in Superior Court shortly thereafter, dismissed from District Court after indictment, and ultimately resolved after a trial in Superior Court in 2017. The District Court arraignment and dismissal would be in our data, but the Superior Court case would not be there because it was not resolved between 2014 and 2016. To solve this problem, we requested additional Superior Court data so we could determine which cases in our District Court/BMC data were ultimately resolved in Superior Court.

Figure 16 shows the percent of District Court/BMC cases that were ultimately indicted in Superior Court by race. This figure includes both charges over which the Superior Court has exclusive jurisdiction, and those for which the courts share concurrent jurisdiction. Black and Latinx defendants are over twice as likely to be indicted in Superior Court than White defendants. This disparity persists (although to a lesser degree) when we limit the sample to include only those cases in which all charges are subject to concurrent jurisdiction between BMC/District Courts and Superior Courts as is shown in Figure 17. In these cases, prosecutors have discretion over which court the case will be in. Recall that District Courts/BMC are permitted to sentence only up to 2.5 years in a House of Correction so a person must be tried in Superior Court to receive a longer prison sentence. Thus, Figures 16 and 17 show that Black and Latinx defendants are more likely to be exposed to longer incarceration sentences both because they are more likely to receive charges that must be tried in Superior Court and because prosecutors are more likely to exercise their discretion to bring charges in Superior Court instead of District Court when there is concurrent jurisdiction.

Figure 16: Percent of All BMC/District Court Cases Indicted (by Race)

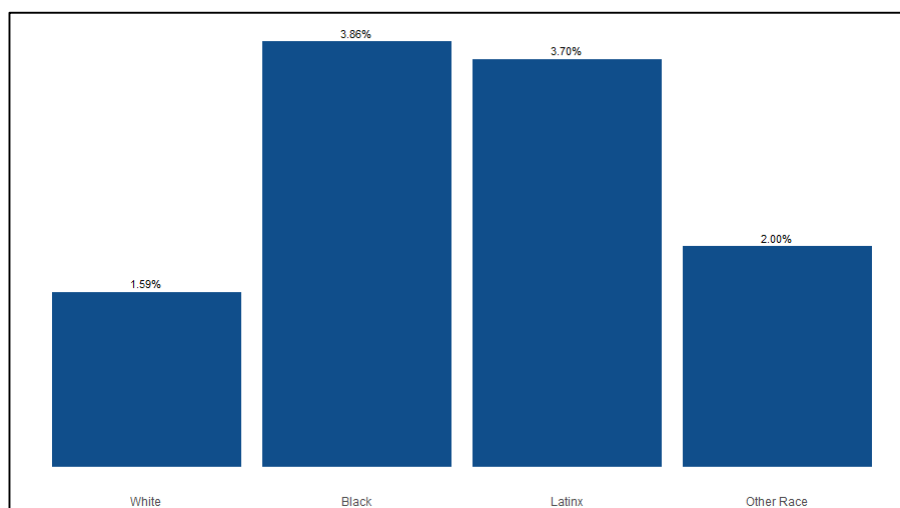


Figure 17: Percent of BMC/District Court Concurrent Jurisdiction Cases Indicted by Race

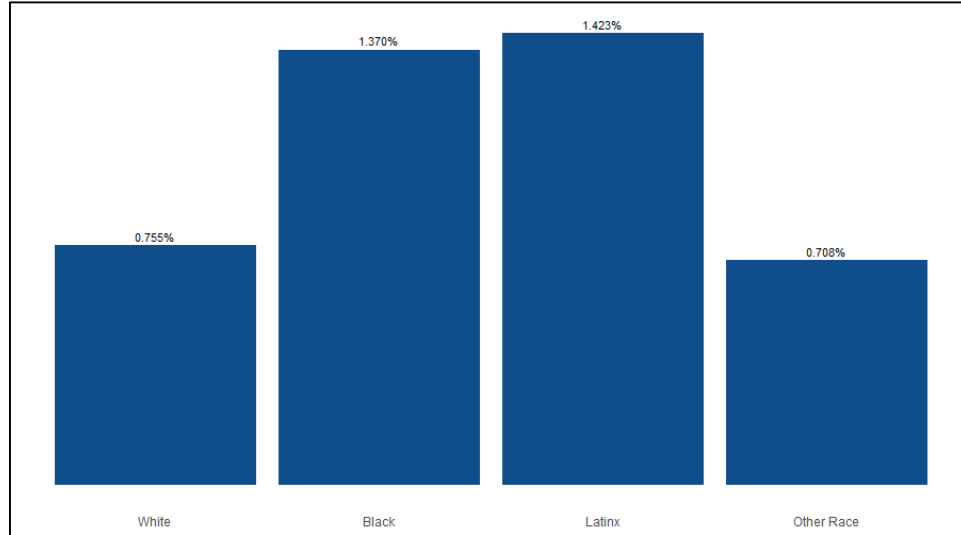
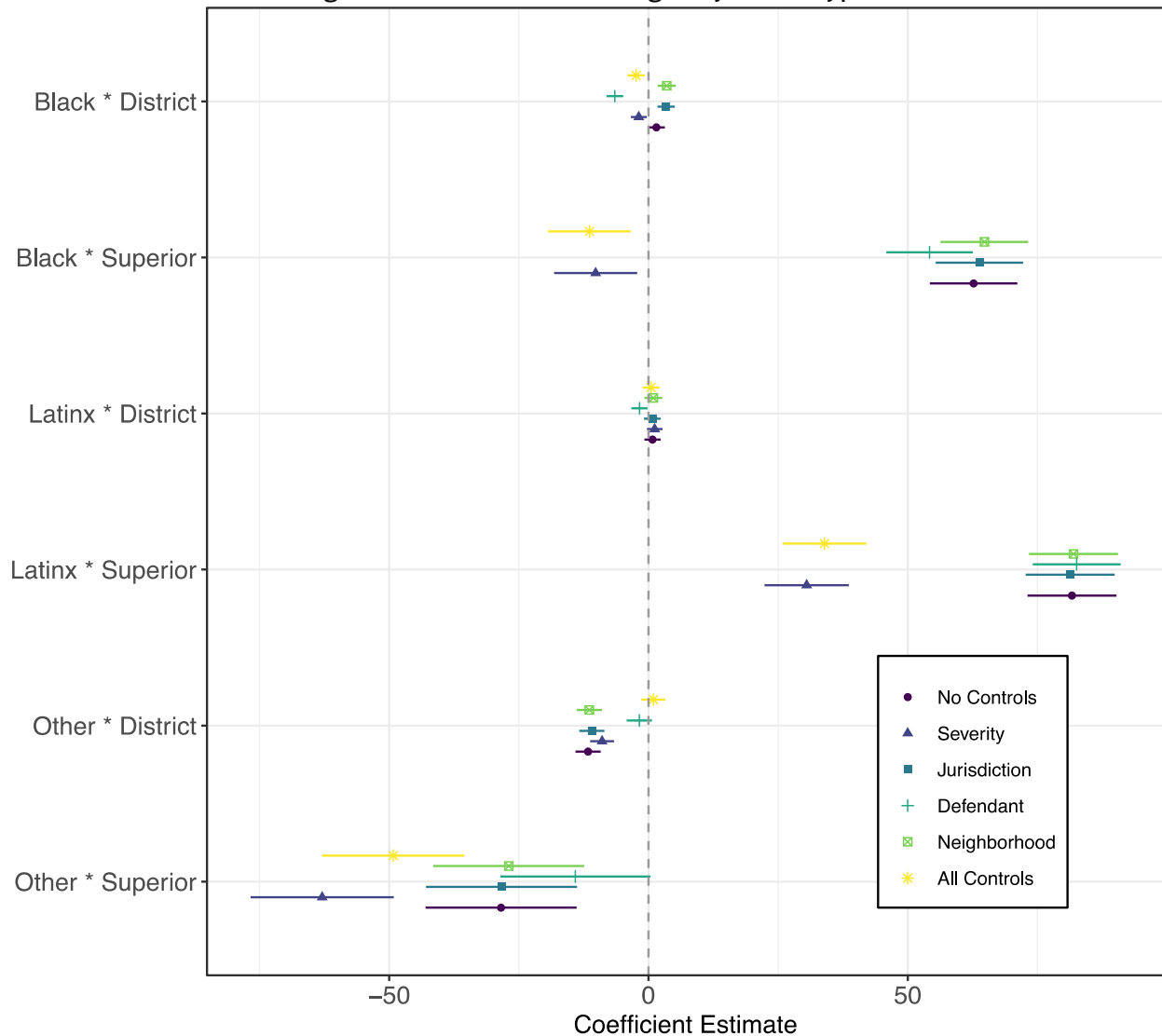


Figure 18 includes the results from a regression model that predicts incarceration length based on defendants' race and ethnicity and the same additional contextual factors used in Tables 7 and 8, but in this case the race coefficient is estimated separately for cases disposed of in District and Superior Courts. The first coefficient shows the additional days of incarceration. The specification is as follows:

$$y_{ijc} = \alpha + \beta_1 * Black_j + \beta_2 * Hispanic_j + \beta_3 * Other_j + \beta_4 * Superior_i + \delta_1 * (Black_j * Superior_i) + \delta_2 * (Hispanic_j * Superior_i) + \delta_3 * (Other_j * Superior_i) + \gamma X_{ijc} + e_{ijc} \quad (2)$$

where $Superior_i$ is an indicator for whether case i was adjudicated in Superior Court or not and all other values are as in equation (1). The estimates in the first row of Figure 20 correspond to estimates of β_4 , the additional days of incarceration for cases adjudicated in Superior Court. The additional coefficients shown are estimates of β_1 , β_2 , β_3 and δ_1 , δ_2 , δ_3 (the other variables are excluded for clarity).

Figure 18: Incarceration Length by Court Type



Super Court cases are more serious in general, but Superior Court cases involving Black and Latinx defendants tend to result in longer incarceration sentences than Superior Court cases involving their White counterparts. Cases against Black and Latinx defendants result in incarceration sentences that are more than two months longer than cases involving their White counterparts who are also indicted. Notably, there is very little racial disparity in average incarceration sentence length among cases adjudicated in District Courts for Black and Latinx defendants, indicating that the substantial overall disparity in average sentence length is driven by cases adjudicated in Superior Court. In the next section, we focus on charge type to explore whether particular substantive categories of offenses drive the results we see here.

Charge Type

Table 11 lists the governing offenses for which Black and Latinx people make up the greatest share of defendants. All of the ten governing offenses with the greatest share of Black and Latinx defendants are drug or weapons crimes. Further, nine of the ten governing offenses with the greatest share of Black and Latinx defendants carry lengthy mandatory minimum sentences. Those charges are underlined.⁵⁸ We discuss differences across offense categories below and will discuss mandatory minimum sentences further in the next section.

Table 11: Governing Offenses with Highest Share of Black and Latinx Defendants

Rank	Governing Offense	Statute	Count	Percent White	Percent Black	Percent Latinx	Percent Other Race	Percent Unknown Race
1	<u>FIREARM, CARRY WITHOUT LICENSE, 2ND OFF.</u>	M.G.L. c.269 s.10(a) & (d)	189	6.3%	77.2%	12.7%	1.6%	2.1%
2	<u>DRUG, DISTRIBUTE CLASS B, SUBSQ.OFF.</u>	M.G.L. c.94C s.32A(b)	462	14.7%	65.8%	18.2%	0.2%	1.1%
3	<u>COCAINE, DISTRIBUTE, SUBSQ.OFF.</u>	M.G.L. c.94C s.32A(d)	301	14.3%	57.8%	25.9%	0.3%	1.7%
4	<u>DRUG, DISTRIBUTE CLASS A, SUBSQ.OFF.</u>	M.G.L. c.94C s.32(b)	648	20.1%	25.3%	53.4%	0.2%	1.1%
5	<u>HEROIN/MORPHINE/OPIUM, TRAFFICKING IN 200 GRAMS OR MORE</u>	M.G.L. c.94C s.32E(C)	108	16.7%	6.5%	70.4%	0.9%	5.6%
6	<u>COCAINE, TRAFFICKING IN, 200 GRAMS OR MORE</u>	M.G.L. c.94C s.32E(b)	169	23.7%	13.6%	59.8%	0.6%	2.4%
7	FIREARM UNATTENDED	M.G.L. c.269 s.10(h)(2)	50	18.0%	40.0%	32.0%	6.0%	4.0%

⁵⁸ To determine whether a charge was mandatory, we used the Master Crime List attached to the Massachusetts Sentencing Commission's 2017 Advisory Sentencing Guidelines. MASSACHUSETTS SENTENCING COMMISSION, ADVISORY SENTENCING GUIDELINES 147-491 (2017) <https://www.mass.gov/files/documents/2019/04/26/jud-final-advisory-sentencing-guidelines.pdf>. Although some mandatory minimum sentences have been repealed in recent years, this Table reflects the governing law at the time our data was collected.

8	<u>COCAINE, TRAFFICKING IN, 100 GRAMS OR MORE, LESS THAN 200 GRAMS</u>	M.G.L. c.94C s.32E(b)	85	21.2%	20.0%	51.8%	1.2%	5.9%
9	<u>DRUG, POSSESS TO DISTRIB CLASS B, SUBSQ.</u>	M.G.L. c.94C s.32A(b)	419	25.8%	49.6%	21.7%	1.0%	1.9%
10	<u>FIREARM VIOL WITH 1 PRIOR VIOLENT/DRUG CRIME</u>	M.G.L. c.269 s.10(c)	159	24.5%	47.2%	23.9%	1.9%	2.5%

Figures 19, 20, and 21 present results from models analogous to those presented in Figure 18, but with the race variables interacted with variables describing the category of the most serious offense charged in the case. Each coefficient estimate can be interpreted as the additional days of incarceration a defendant of the specified race whose most serious charge is in the specified category is sentenced to on average. So for example, the estimates in Figure 19 indicate that a Black defendant whose most serious charge is a weapon offense is sentenced to roughly 175 additional days of incarceration than a White defendant whose most serious charge is a weapon offense. This disparity decreases to roughly 125 days after accounting for case severity, jurisdiction, defendant demographics other than race, and neighborhood characteristics. While there is no distinct pattern for many of the categories, two offense categories stand out in particular—weapons and drugs.

Black and Latinx defendants receive substantially longer sentences than their White counterparts for cases involving weapons and drug charges. For example, Black and Latinx defendants charged with weapons crimes receive sentences that are over 100 days longer than their White counterparts. As in our baseline regression models, differences in charge severity explain a substantial proportion of the raw disparity, but disparities by charge type persist and remain large after controlling for severity and other factors. These results indicate that disparities in cases involving weapon and drug crimes specifically are likely driving the large overall disparities in sentence length that we observe in Tables 7 and 8.

Figure 20 shows estimates from a model that is analogous to that in Figure 19, but with the probability of a person receiving an incarceration sentence as the outcome rather than incarceration length. This Figure shows that Black and Latinx defendants charged with drug and weapons offenses are much more likely to be incarcerated than their White counterparts. The disparity observed in these categories is a departure from the general trend observed in Table 9 of similar incarceration rates for defendants of all races when the sample is considered as a whole. Figure 21 models the probability that defendants are convicted of any charges in their case. This outcome follows a similar pattern, with Black and

Latinx defendants charged with drug and weapons crimes being more likely to be convicted than White defendants charged with drug and weapons crimes.

Even after accounting for case severity and a host of other factors, Black and Latinx defendants charged with drug and weapons crimes are more likely to be convicted and sentenced to incarceration and they also receive substantially longer incarceration sentences than similarly situated White defendants. Taken together, these results indicate that disparities in cases that involve serious drug and weapons crimes drive the overall disparities in incarceration in the Massachusetts criminal system.

Figure 19: Incarceration Length in the Total Caseload by Category of Governing Charge

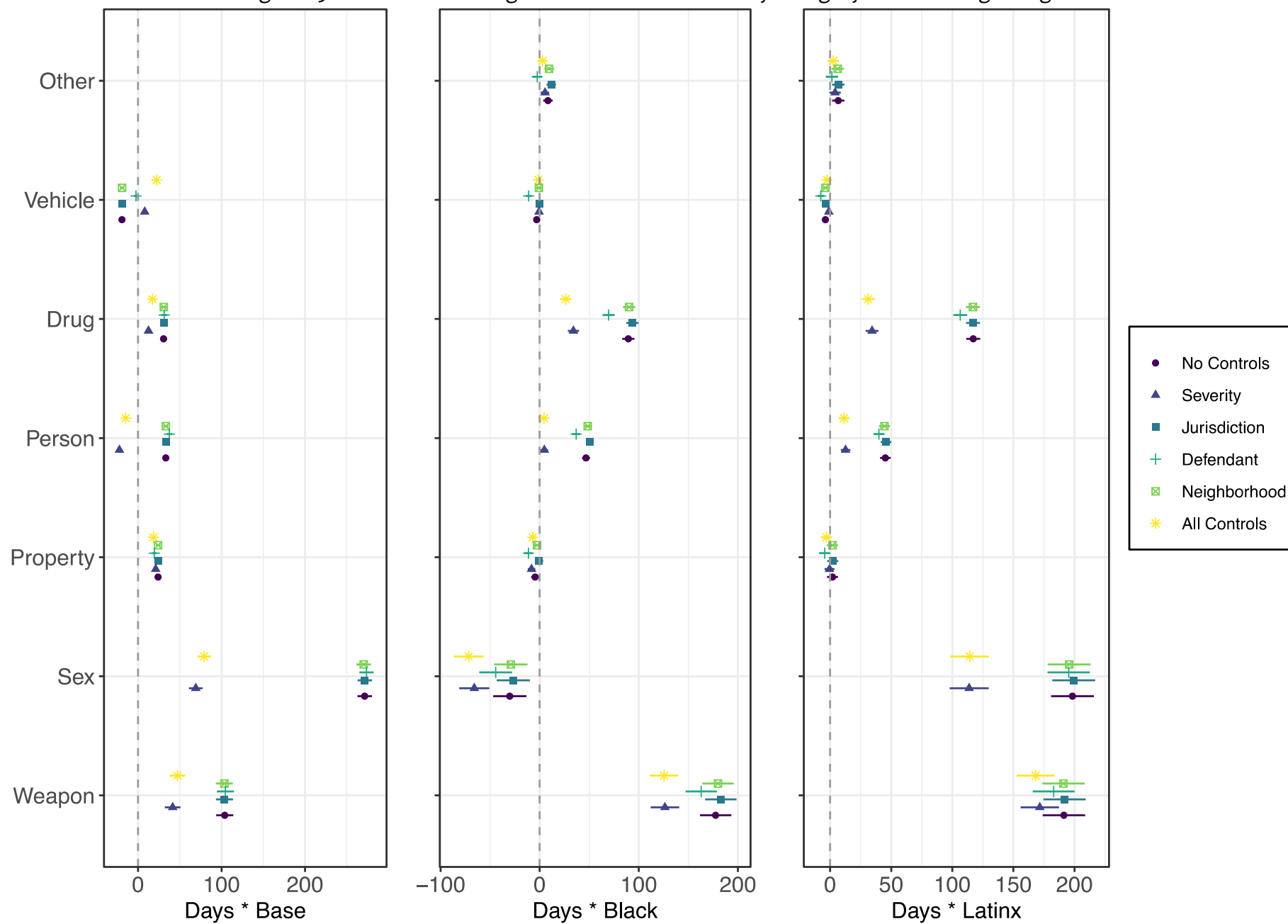


Figure 20: Incarceration Probability in the Total Caseload by Category of Governing Charge

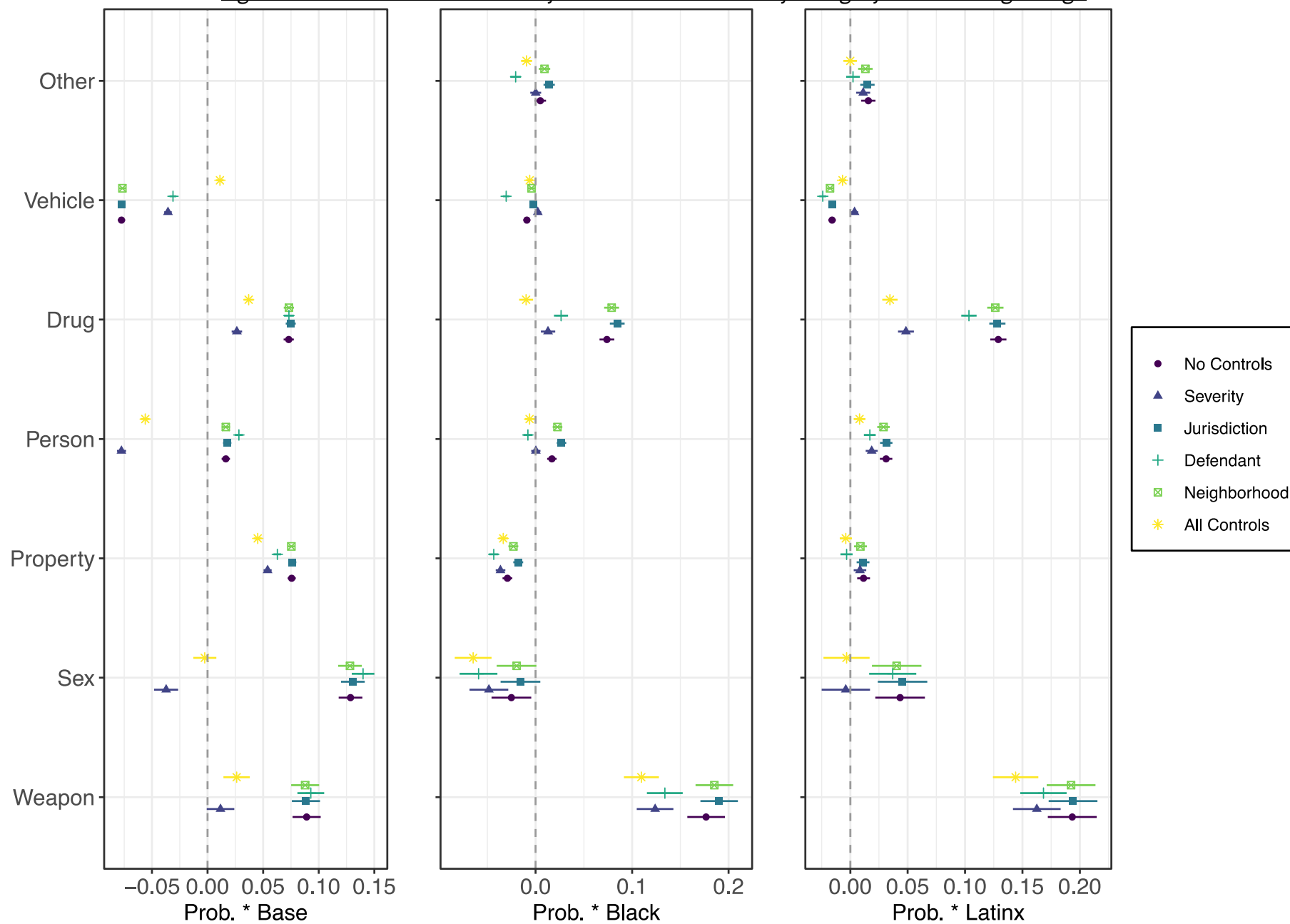
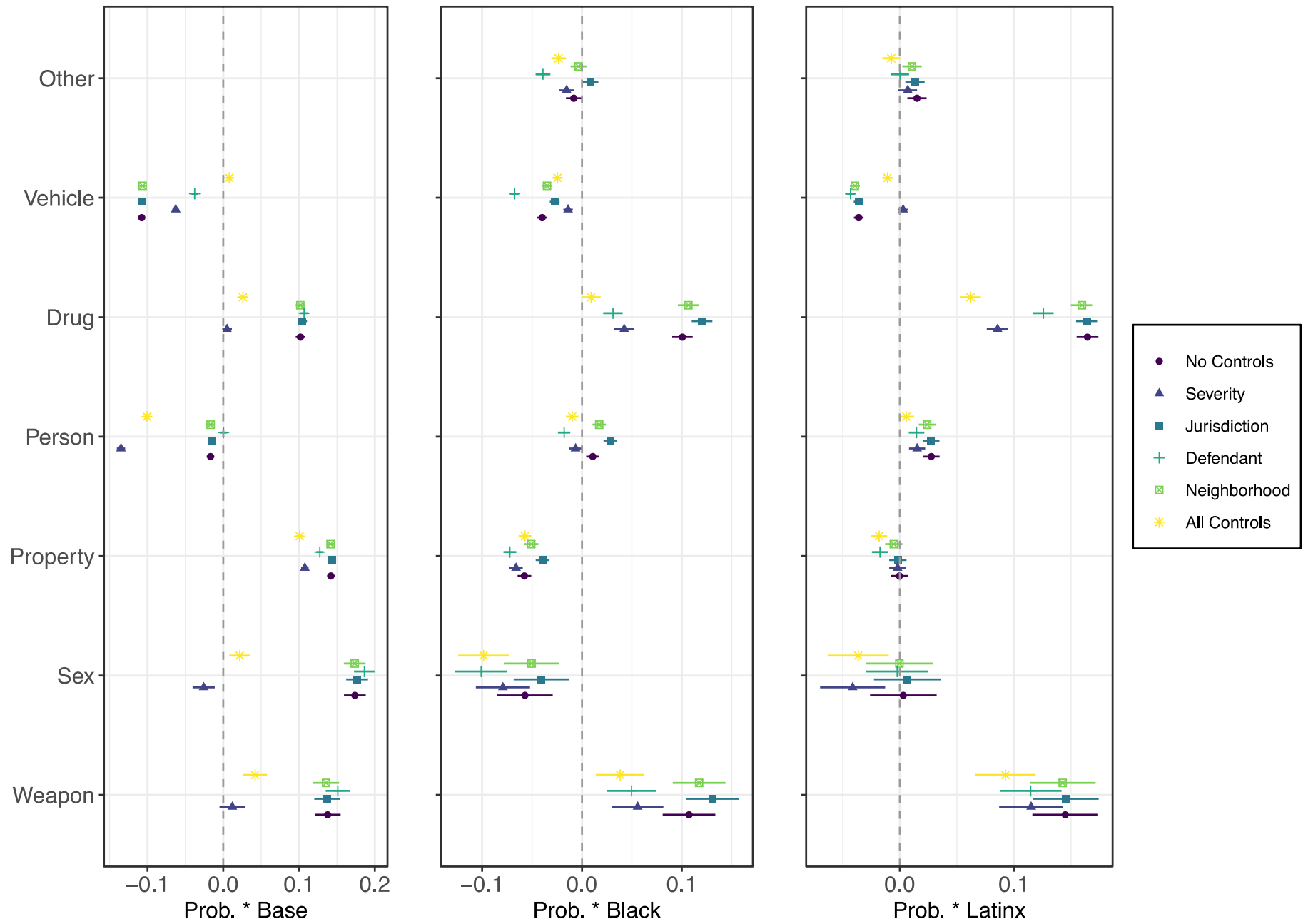


Figure 21: Conviction Probability in the Total Caseload by Category of Governing Charge



Before moving on to explore racial disparities in charging offenses that carry mandatory and statutory minimum sentences, it is important to consider the rationale for why some offenses carry severe and non-discretionary sentences while others do not. Differences in punishment severity and discretion across offense types can lead to stark racial disparities that appear justified by law and individual conduct, but are not necessarily justified from a public safety perspective. These differences are of particular concern when there is evidence that they may be motivated in part by racial stereotypes.

For example, despite the significant risk they pose to public safety, people charged with operating a motor vehicle under the influence (OUI) remain far more likely to have their case resolved through treatment, diversion, and intermediate dispositions than through jail or prison terms. Indeed, although the sentence for OUI is a fine of up to \$5000 and/or incarceration for up to two-and-a-half years,⁵⁹ there is a statutory provision permitting first-time offenders to agree to a term of probation and a driver alcohol education program,⁶⁰ which, if successfully completed, can result in dismissal of the case.⁶¹ In stark contrast to the lenient dispositions assigned to people convicted of OUIs, people convicted of firearm possession offenses face a more punitive response. The mandatory minimum sentence for carrying a firearm without a license for a first offense is 18 months in a jail or House of Correction or two-and-a-half years in state prison.⁶² A second offense carries a mandatory sentence of 5 years in state prison.⁶³ Third and fourth offenses carry mandatory sentences of 7 and 10 years in state prison respectively.⁶⁴ Furthermore, the severe penalties associated with mandatory firearm offenses more easily trigger systemic disadvantages associated with multiple convictions. Compared with OUI offenses, mandatory firearm offenses bring a heightened risk of status-based convictions like “habitual criminal” convictions that use past offenses to compound incarceration sentence length. “Habitual criminal” convictions, which require the Commonwealth to establish beyond a reasonable doubt that someone has been convicted of two prior offenses carrying sentences of *at least 3 years each*, result in the maximum sentence being imposed for the third felony offense.⁶⁵

Merely possessing a firearm—albeit without authorization—is not necessarily dangerous, but rather a threat of a threat.⁶⁶ Still, the punishment if found guilty is often severe and non-discretionary. The choice to treat OUI, a potentially deadly offense, leniently, while treating

⁵⁹ M.G.L. c. 90, § 24(1)(a)(1).

⁶⁰ M.G.L. c. 90, § 24D.

⁶¹ M.G.L. c. 90, § 24E.

⁶² Mass. Gen. Laws Ann. c. 269, § 10(a).

⁶³ Mass. Gen. Laws Ann. c. 269, § 10(d).

⁶⁴ *Id.*

⁶⁵ See Mass. Gen. Laws Ann. c. 279, § 25; see also J.W. Carney Jr. & Wendy J. Kaplan, *Dispositions and Sentencing Advocacy in MASSACHUSETTS CRIMINAL PRACTICE* 52 (Eric Blumenson ed., 4th ed., 2012), https://www.suffolk.edu/-/media/suffolk/documents/law/faculty/mcp/ch39sentencing_pdf.txt.pdf?la=en&hash=49E8933EC20078F64FE3CA4B0590AD3CEE0BAFC2.

⁶⁶ Benjamin Levin, *Guns and Drugs*, 84 *FORDHAM L. REV.* 2173, 2214 (2016) (“‘[T]he point of [possession] offenses is the identification and neutralization of sources of danger, i.e., threats of threats.’”).

weapons possession harshly, may well be driven by racial stereotypes about the people who are most often subject to the charges. A 2013 Survey of Massachusetts Sentencing Practices revealed 79.8 percent of OUI cases were resolved without a sentence of incarceration, with probation being the most common disposition.⁶⁷ It is also worth noting that 82.2 percent of the people convicted of OUI offenses were White.⁶⁸ We observe similar patterns in our sample. Table 12 shows the charges that are most likely to be adjudicated through a CWOFF. Under a CWOFF disposition, the accused individual admits to sufficient facts of the charge against them but does not receive a conviction for that charge. CWOFF dispositions are typically dismissed after a period of time if the defendant is able to meet certain court-imposed conditions such as participating in counseling, completing community service, and remaining free of contact with the criminal system. CWOFFs do not appear as a guilty finding on the person's criminal record. OUI offenses are by far the most common charges to be resolved through CWOFFs, and 77.7% of the people who receive CWOFFs for that offense are White.

Table 12: Most Common Charges Disposed with CWOFF

Rank	Charge	Statute	Count	Percent White	Percent Black	Percent Latinx	Percent Other Race	Percent Unknown Race
1	OUI-LIQUOR OR .08%	M.G.L. c.90 s.24(1)(a)(1)	17,712	77.7%	6.8%	9.3%	2.3%	3.9%
2	NEGLIGENT OPERATION OF MOTOR VEHICLE	M.G.L. c.90 s.24(2)(a)	8,123	79.1%	8.2%	7.9%	1.4%	3.4%
3	LICENSE SUSPENDED, OP MV WITH	M.G.L. c.90 s.23	6,227	64.2%	16.0%	17.2%	1.4%	1.2%
4	A&B	M.G.L. c.265 s.13A(a)	4,493	65.1%	16.7%	12.8%	1.5%	3.8%
5	LARCENY OVER \$250	M.G.L. c.266 s.30(1)	4,438	69.9%	15.4%	10.3%	1.7%	2.7%

⁶⁷ MASSACHUSETTS SENTENCING COMMISSION, SURVEY OF SENTENCING PRACTICES FY 2010 47 (April 2011), <https://www.mass.gov/files/documents/2016/08/tz/fy2010survey.pdf>. This number excludes the OUI cases that were disposed through CWOFFs. *Id.*

⁶⁸ *Id.* at 54.

6	LEAVE SCENE OF PROPERTY DAMAGE	M.G.L. c.90 s.24(2)(a)	4,213	73.5%	8.6%	11.7%	1.8%	4.4%
7	DRUG, POSSESS CLASS B	M.G.L. c.94C s.34	3,293	76.9%	8.7%	12.3%	0.8%	1.3%
8	DRUG, POSSESS CLASS A	M.G.L. c.94C s.34	3,020	88.6%	2.8%	6.8%	0.6%	1.2%
9	RESIST ARREST	M.G.L. c.268 s.32B	2,977	58.6%	20.4%	16.7%	1.4%	2.8%
10	A&B ON FAMILY / HOUSEHOLD MEMBER	M.G.L. c.265 s.13M(a)	2,850	66.1%	13.9%	15.4%	1.4%	3.2%

Nationally, weapons offenses are brought against Black people with disproportionate frequency. In 1995, national data showed Black people were arrested for weapons offenses at 5 times the rate of White people.⁶⁹ In 2004, Black defendants accounted for 54 percent of all people convicted of weapons offenses.⁷⁰ In Massachusetts, the statistics are comparable. In 2010, despite comprising 18.2 percent of convicted defendants overall, Black people made up 28.4 percent of people convicted of weapons offenses and 51.4 percent of the people convicted of mandatory firearms offenses.⁷¹ In 67.2 percent of cases involving all mandatory firearms convictions, the governing offense was carrying a firearm without a license.⁷² In 2012, despite comprising only 16.4 percent of all defendants, 46.6 percent of people convicted for firearms offenses were Black.⁷³ In the majority of those cases—70.3 percent—the governing offense was carrying a firearm without a license.⁷⁴ We observe the same trends in our data, with Table 10 showing that over 70% of the people charged with both carrying a firearm without a license and leaving a firearm unattended are Black or Latinx.

Massachusetts has decided to apply public health solutions to the problem of drunk driving by resolving OUI charges using diversion, treatment, and rehabilitation, whereas it has taken a far more punitive approach to firearm offenses by instead imposing long mandatory

⁶⁹ Benjamin Levin, *Guns and Drugs*, 84 *FORDHAM L. REV.* 2173, 2194 (2016).

⁷⁰ *Id.*

⁷¹ MASSACHUSETTS SENTENCING COMMISSION, *SURVEY OF SENTENCING PRACTICES FY 2010* 54 (April 2011), <https://www.mass.gov/files/documents/2016/08/tz/fy2010survey.pdf>.

⁷² *Id.* at 46.

⁷³ EXECUTIVE OFFICE OF THE TRIAL COURT, *SURVEY OF SENTENCING PRACTICES FY 2013* 54 (Dec. 2014), <https://www.mass.gov/files/documents/2016/08/00/fy2013-survey-sentencing-practices.pdf>.

⁷⁴ *Id.* at 46.

minimum incarceration sentences. In light of evidence concluding that mandatory minimum sentences for firearm offenses have little to no effect on crime rates, the treatment of Black people convicted of mandatory firearm offenses appears especially punitive and disconnected from the promotion of public safety.⁷⁵ The differential punishment for OUI and weapons offenses in Massachusetts thus has the potential to generate large racial disparities in outcomes that do not obviously reflect differences in risks to public safety. The historical record suggests that one explanation for the stark difference in treatment of OUI offenses and weapons offenses may well be racial stereotypes and other beliefs about the criminality of those who commit such offense.⁷⁶

⁷⁵ See David S. Abrams, *Estimating the Deterrent Effect of Incarceration Using Sentencing Enhancements*, 4 AM. ECON. J.: APPLIED ECON. 32, 36 n.6, 44 (2012) (finding that mandatory minimum sentencing laws for gun crimes do not have an effect on gun robberies); see also Thomas B. Marvell & Carlisle E. Moody, *The Impact of Enhanced Prison Terms for Felonies Committed with Guns*, 33 CRIMINOLOGY 247 (1995) (finding that firearm sentencing enhancements do not decrease gun violence or crime); Michael Tonry and Matthew Melewski, *The Malign Effects of Drug and Crime Control Policies on Black Americans*, 37 CRIME & JUST. 1, 37 (2008) (criticizing punitive policies, including mandatory minimum sentences as “adopted primarily for symbolic or expressive purposes rather than with any basis for believing that they would significantly affect crime rates and patterns, and they do great and disproportionate harm to [B]lack Americans”).

⁷⁶ A 1985 report on OUI treatment included a survey of Massachusetts county corrections officials who revealed they viewed people charged with operating under the influence as distinct from the “typical county inmate.” This distinction rested on notions of “(1) differences in background and social characteristics of the two types of inmates; (2) the non-criminal nature of the OUI offender; and (3) the seriousness of alcohol abuse among OUI offenders.” According to those officials, people convicted of OUIs “tended to be better educated, have more steady employment records, be more settled, and be older than typical county commitments.” See KATHLEEN MOORE, MASSACHUSETTS DEPARTMENT OF CORRECTION, OPERATING UNDER THE INFLUENCE: PROGRAMS AND TREATMENT FOR CONVICTED OFFENDERS 10-11 (1985), <https://archive.org/details/operatingunderinnoomoor/page/n4/mode/1up>. By contrast, legislators and system actors readily invoke long-standing stereotypes of “Black criminality and intra-racial homicide” to support punitive gun laws. See Nicholas J. Johnson, *Firearms and the Black Community: An Assessment of the Modern Orthodoxy*, 45 CONN. L. REV. 1491, 1584 (2013), (describing “Black criminality and intra-racial homicide” as a “dominant theme” in historic and contemporary views surrounding Black people and firearms). Professor Ian Haney Lopez suggests that “many and possibly most whites accept the connection between minorities and crime, and by extension widespread racial inequity in society, as part of the natural order of things... [and] [r]acial beliefs in this conception work like commonsense: an ‘obvious’ truth that, while rooted in social structures and cultural beliefs, is nevertheless accepted simply as reality.” IAN HANEY LOPEZ, DOG WHISTLES POLITICS: HOW CODED RACIAL APPEALS HAVE REINVENTED RACISM AND WRECKED THE MIDDLE CLASS 36 (2013). Coded racialized language about “gangs,” “felons,” and “urban communities” can be seen in the introductory comments to two Massachusetts gun bills. See AN ACT TO REDUCE FIREARM VIOLENCE, 2009-10, House Bill 4102, <https://archives.lib.state.ma.us/bitstream/handle/2452/791809/ocm39986872-2009-HB-4102.pdf?sequence=1&isAllowed=y> (“Gun violence plagues citizens in many of the Commonwealth’s neighborhoods. claiming lives and causing immeasurable pain to the families of victims. Illegal firearms flow into the Commonwealth and end up in the hands of felons and young people. Gangs threaten the safety and security of many neighborhoods and create a climate of fear that jeopardizes efforts by police, prosecutors, and social service providers to keep our citizens safe. We simply cannot allow violence committed with illegal guns to continue.”); AN ACT TO REDUCE CRIME COMMITTED WITH THE ILLEGAL USE OF GUNS 1997-98 House Bill 4309, An Act To Reduce Crime Committed With The Illegal Use Of Guns, [https://archives.lib.state.ma.us/bitstream/handle/2452/761679/ocm39986872-1997-98-HB-](https://archives.lib.state.ma.us/bitstream/handle/2452/761679/ocm39986872-1997-98-HB-4309.pdf?sequence=1&isAllowed=y)

Mandatory and Statutory Minimums in Superior Court

For the purposes of this study, we use the Sentencing Commission's Master Crime List⁷⁷ to identify offenses that carry mandatory minimum sentences. In most cases, judges have substantial discretion in sentencing. The MA Advisory Sentencing Guidelines includes recommendations based on the crime's severity and the defendant's criminal history, but judges are typically free to impose any sentence below the maximum legal penalty. A charge carries a mandatory minimum sentence if judges are required to sentence convicted individuals to incarceration for a certain period of time. Charges carrying statutory minimum sentences are those for which the statute sets forth a minimum term of incarceration, but also provides the judge with some discretion, including to impose an alternative sentence, such as probation or a fine, suspend the sentence, file the case, and/or continue the case without a finding.⁷⁸

Table 13 shows the most commonly charged mandatory and statutory minimum offenses in Superior Court and the distribution of those charges across race. As noted in the previous section, many of the most frequently charged mandatory minimum offenses in Superior Court are gun and drug offenses.

4309.pdf?sequence=1&isAllowed=y ("Every year approximately 600,000 violent crimes are committed with handguns in this country, approximately 6,000 of which are committed in Massachusetts. Increasingly the victims and perpetrators of these crimes are children and young adults. This is result of more and more children carrying guns in our schools and in our neighborhoods. The damage caused by the illegal use of guns, whether the result of random or gang related violence, suicide or accident, tears at our urban communities and spreads fear in our neighborhood streets."). While the architects of an early Massachusetts gun law featuring mandatory minimum sentences and sentencing enhancements assured readers in a New York Times Op-Ed that a different category of people—the "gasoline station owner, the drug-store proprietor, the variety-store keeper, the doctor in a hospital, the executive or employee who works late at an office"—would be unaffected by the new harsher gun law. Dana Goldstein, *Politicians Still Say Longer Prison Sentences Prevent Gun Violence—But Do They*, MARSHALL PROJECT, Oct. 14, 2015, <https://www.themarshallproject.org/2015/10/14/politicians-still-say-longer-prison-sentences-prevent-gun-violence-but-do-they>.

⁷⁷ See MASSACHUSETTS SENTENCING COMMISSION, ADVISORY SENTENCING GUIDELINES 147-491 (2017) <https://www.mass.gov/files/documents/2019/04/26/jud-final-advisory-sentencing-guidelines.pdf>. Some mandatory minimums have been repealed in recent years, but this list was accurate at the time of our data set.

⁷⁸ Compare M.G.L. c.140, §128 (any person convicted of this offense "shall be punished by a fine of not less than \$1,000 nor more than \$10,000, or by imprisonment for not less than one year nor more than ten years, or by both such fine and imprisonment") with M.G. L. c.94C, §32F(a) ("No sentence imposed under the provisions of this section shall be for less than a mandatory minimum term of imprisonment of five years and a fine of not less than one thousand nor more than twenty-five thousand dollars may be imposed but not in lieu of the mandatory minimum term of imprisonment, as established herein.").

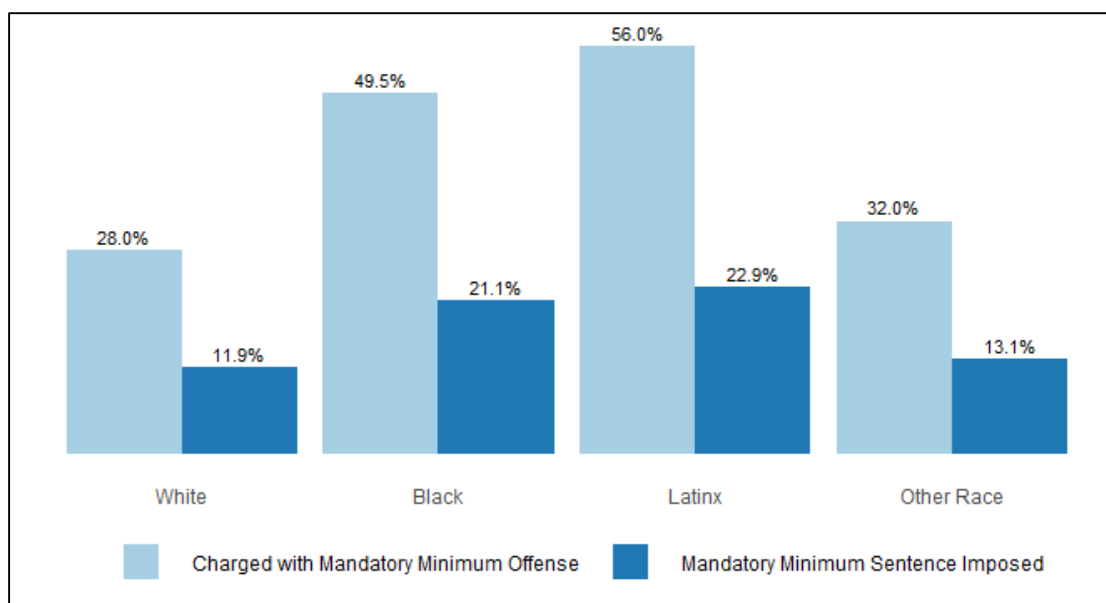
Table 13: Most Frequent Charges Carrying Mandatory or Statutory Minimum Incarceration Sentences

Rank	Charge	Statute	Count	Percent White	Percent Black	Percent Latinx	Percent Other Race	Percent Unknown Race
1	FIREARM, POSSESS LARGE CAPACITY	M.G.L. c.269 s.10(m)	1435	42.8%	29.5%	21.6%	3.2%	2.9%
2	HOME INVASION	M.G.L. c.265 s.18C	1066	35.7%	33.1%	24.6%	2.7%	3.8%
3	DRUG, POSSESS TO DISTRIB CLASS A, SUBSQ.	M.G.L. c.94C s.32(b)	982	26.5%	25.5%	45.2%	0.3%	2.5%
4	COCAINE, POSSESS TO DISTRIBUTE	M.G.L. c.94C s.32A(c)	871	28.0%	34.9%	30.8%	1.3%	5.1%
5	DRUG, DISTRIBUTE CLASS A, SUBSQ.OFF.	M.G.L. c.94C s.32(b)	866	21.1%	21.7%	56.1%	0.1%	0.9%
6	DRUG, POSSESS TO DISTRIB CLASS B, SUBSQ.	M.G.L. c.94C s.32A(b)	837	27.1%	44.7%	25.8%	0.6%	1.8%
7	ROBBERY, ARMED & MASKED	M.G.L. c.265 s.17	810	50.2%	31.1%	16.8%	0.1%	1.7%
8	COCAINE, TRAFFICKING IN 18 GRAMS OR MORE, LESS THAN 36 GRAMS	M.G.L. c.94C s.32E(b)	728	28.6%	33.7%	33.5%	1.2%	3.0%
9	COCAINE, TRAFFICKING IN, 36 GRAMS OR MORE, LESS THAN 100 GRAMS	M.G.L. c.94C s.32E(b)	723	32.9%	21.2%	41.8%	0.8%	3.3%
10	COCAINE, DISTRIBUTE	M.G.L. c.94C s.32A(c)	642	22.1%	37.2%	35.4%	NA%	5.3%

Figure 22 shows cases in Superior Court involving at least one charge carrying a mandatory minimum sentence by race, and whether that mandatory minimum was ultimately imposed. The first column in every group shows the percent of cases in which a person of the specified race is charged with at least one offense that carries a mandatory minimum.⁷⁹ The second column in each group shows the percent of cases in which a person of the specified race receives an incarceration sentence that is equal to or longer than the minimum sentence for the charged offense that carries a mandatory minimum.

Superior Court cases with Black and Latinx defendants are more likely to include a charge that carries a mandatory minimum incarceration sentence. Indeed, cases involving Latinx defendants are twice as likely to include a mandatory minimum charge than cases involving White defendants. White defendants are also proportionally less likely to ultimately receive a sentence that is consistent with the mandatory minimum, indicating that they are more likely to be given a plea deal that does not include the mandatory minimum charge.

Figure 22: Cases with Mandatory Minimums in Superior Court



This trend holds when we consider cases that include a charge that carries a statutory minimum penalty that is not mandatory, as is shown in Figure 23.

⁷⁹ To determine whether a charge was mandatory, we used the Master Crime List attached to the Massachusetts Sentencing Commission's 2017 Advisory Sentencing Guidelines. MASSACHUSETTS SENTENCING COMMISSION, ADVISORY SENTENCING GUIDELINES 147-491 (2017) <https://www.mass.gov/files/documents/2019/04/26/jud-final-advisory-sentencing-guidelines.pdf>.

Figure 23: Cases with Mandatory or Statutory Minimums in Superior Court

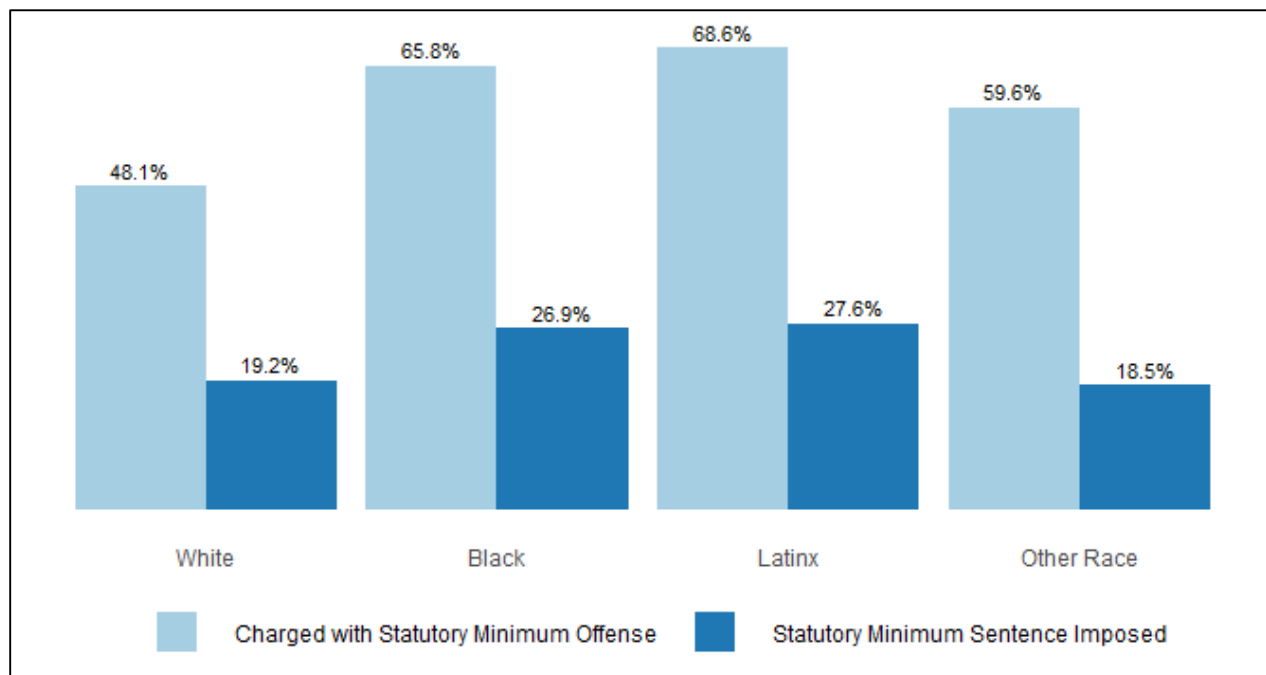


Figure 24 shows estimates from regression models that are analogous to those presented in Table 8, but in which the race variables are interacted with an indicator for whether the defendant's case includes an initial charge that carries a mandatory minimum sentence. Unsurprisingly, cases involving charges carrying mandatory minimum sentences tend to result in longer incarceration sentences. The additional penalty that Black and Latinx defendants with mandatory minimum charges face, however, is striking and persists even after accounting for other factors, including charge severity. Notably, there is almost no racial disparity in sentence length for cases that do not include a charge carrying a mandatory or statutory minimum sentence. It is important to note, however, that this does not necessarily indicate that there are no racial disparities related to incarceration for cases not involving mandatory minimums, just that any disparities do not manifest as differences in average incarceration sentence length among those charged with crimes.

Figure 24: Incarceration Length by Mandatory Minimum Charge

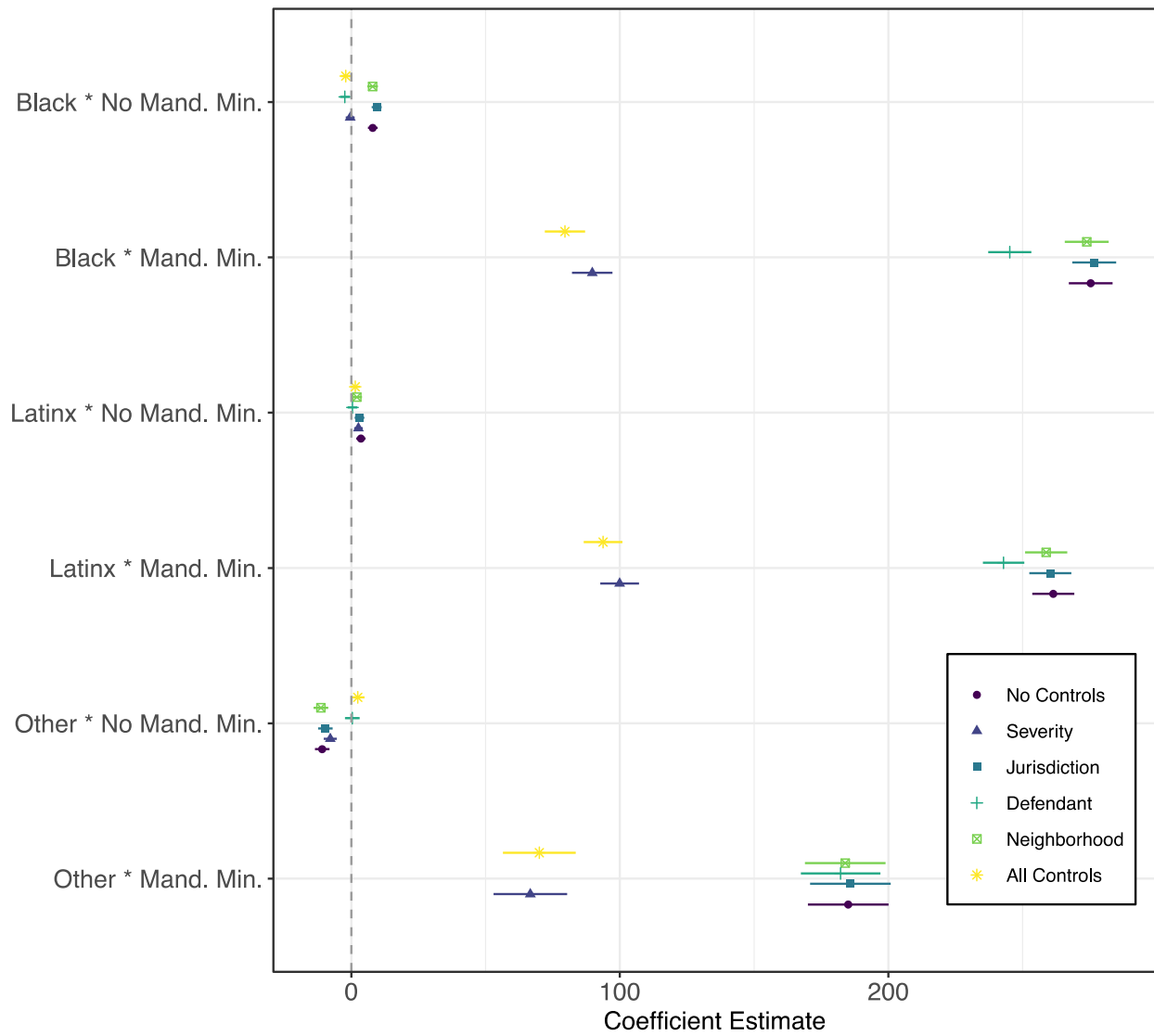


Figure 25 includes results from regression models that are analogous to those in Figure 24, but with an indicator for whether the defendant was sentenced to incarceration of any length as the outcome. Incarceration probability follows a similar pattern as incarceration length, with Black and Latinx defendants being substantially more likely to be incarcerated when facing charges carrying mandatory minimum sentences. The trend in Figures 24 and 25 are similar when charges carrying statutory minimum charges are included as well.

Figure 25: Probability of Incarceration by Mandatory Minimum Charge

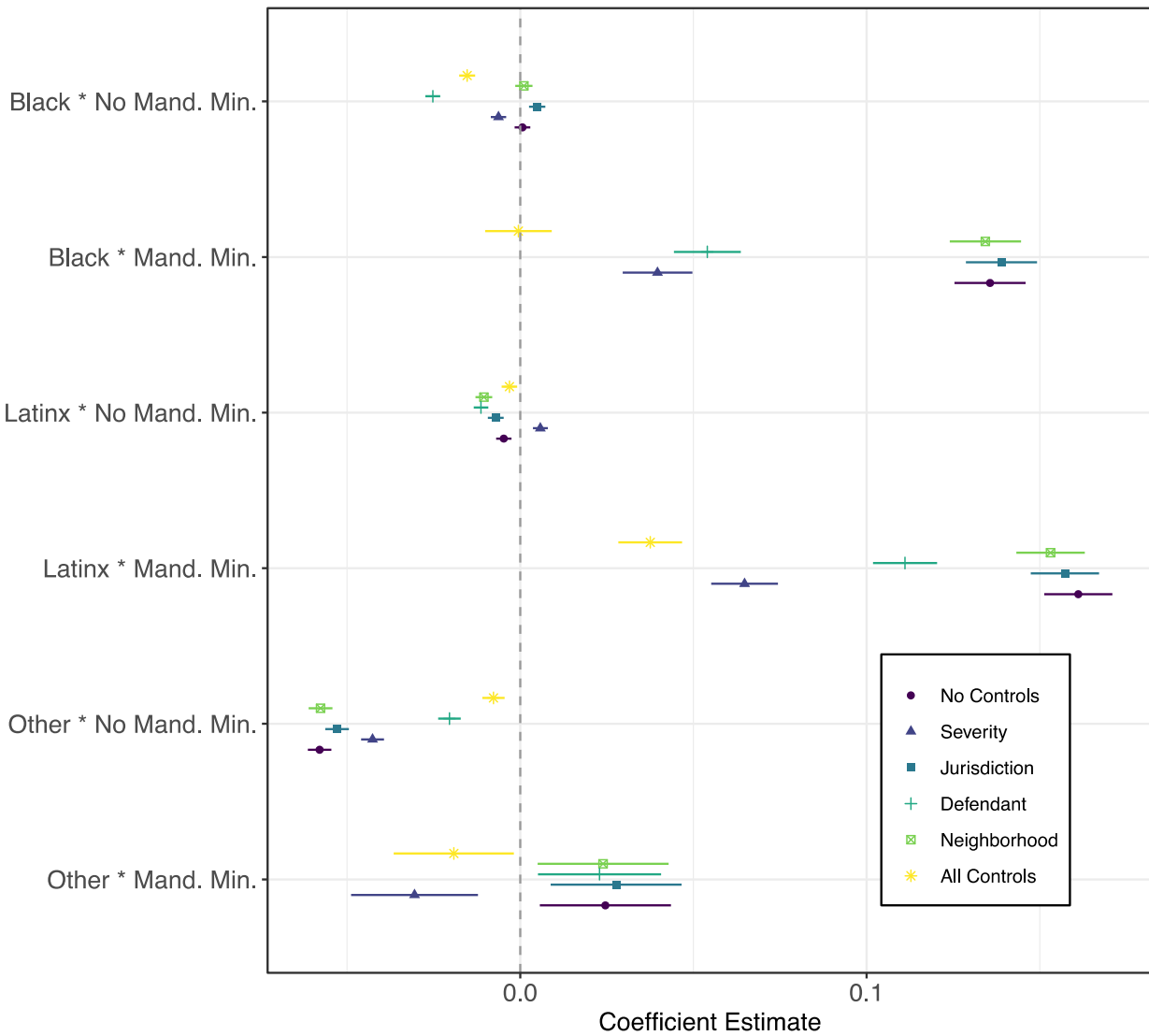


Table 14 shows the most commonly charged mandatory offenses across the entire sample. 2nd offense alcohol OUI is by far the most commonly given charge that carries a mandatory minimum sentence in our sample, and more than 80% of defendants facing it are White. Despite carrying a mandatory incarceration sentence, only about 10.5% of individuals convicted in cases where 2nd offense alcohol OUI is the most serious charge were sentenced to any incarceration at all. As a point of comparison, 52.2% of individuals convicted in cases involving any mandatory minimum are sentenced to incarceration in these data, and the incarceration rate for individuals convicted of 2nd offense drug OUI is 26.1%. This difference likely contributes to the sizable racial disparity in incarceration rates identified in Figure 25 and raises several questions about the distributional impact of mandatory minimum sentences and their enforcement.

Table 14: Most Frequent Charges Carrying Mandatory Minimum Incarceration Sentences

Rank	Charge	Statute	Count	Percent White	Percent Black	Percent Latinx	Percent Other Race	Percent Unknown Race
1	OUI-LIQUOR OR .08%, 2ND OFFENSE	M.G.L. c.90 s.24(1)(a)(1)	6420	83.0%	5.5%	7.7%	1.6%	2.3%
2	DRUG VIOLATION NEAR SCHOOL/PARK	M.G.L. c.94C s.32J	3623	25.5%	34.4%	36.5%	1.5%	2.2%
3	FIREARM, CARRY WITHOUT LICENSE	M.G.L. c.269 s.10(a)	2466	27.7%	38.0%	30.0%	1.9%	2.4%
4	LICENSE SUSPENDED FOR OUI, OPER MV WITH	M.G.L. c.90 s.23	1859	70.3%	10.3%	15.8%	2.4%	1.2%
5	OUI-LIQUOR OR .08%, 3RD OFFENSE	M.G.L. c.90 s.24(1)(a)(1)	1481	89.1%	3.4%	5.6%	0.7%	1.1%
6	DRUG, POSSESS TO DISTRIB CLASS A, SUBSQ.	M.G.L. c.94C s.32(b)	982	26.5%	25.5%	45.2%	0.3%	2.5%
7	COCAINE, POSSESS TO DISTRIBUTE	M.G.L. c.)	871	28.0%	34.9%	30.8%	1.3%	5.1%
8	DRUG, DISTRIBUTE CLASS A, SUBSQ.OFF.	M.G.L. c.94C s.32(b)	866	21.1%	21.7%	56.1%	0.1%	0.9%
9	DRUG, POSSESS TO DISTRIB CLASS B, SUBSQ.	M.G.L. c.94C s.32A(b)	837	27.1%	44.7%	25.8%	0.6%	1.8%
10	COCAINE, TRAFFICKING IN 18 GRAMS OR MORE, LESS THAN 36 GRAMS	M.G.L. c.94C s.32E(b)	728	28.6%	33.7%	33.5%	1.2%	3.0%

These estimates indicate that much of the racial disparity in prison populations is driven by cases involving charges carrying mandatory minimum sentences. Black and Latinx defendants facing potentially mandatory sentences are both more likely to be sentenced to incarceration and more likely to face longer sentences when incarcerated than their White

counterparts. This trend holds when charges carrying statutory minimum charges are included as well.

Taken together, the analysis above indicates that cases involving offenses that carry mandatory and statutory minimum sentences contribute to the disparities we see in incarceration length for people of color. Defendants of color are more likely to face charges that carry mandatory incarceration time, and these more serious and high-risk sentencing possibilities translate into plea deals that are more likely to involve incarceration and longer sentences. Further, existing mandatory minimums are rarely applied in cases involving charges commonly faced by White defendants, such as subsequent OUI offenses.

Our findings are consistent with other studies that find that Black and Latinx people are disproportionately impacted by more severe charging decisions.⁸⁰ A study of the federal system found that racial disparities in how prosecutors charge people with offenses carrying mandatory minimum sentences were a major driver of sentencing length disparities.⁸¹ Similarly, a study of racial disparities in the Delaware criminal system attributed the significant racial disparities in incarceration sentence lengths primarily to differences in charge types and the seriousness of charges.⁸² In addition, numerous studies have found racial and ethnic disparities in prosecutor decisions to seek sentencing enhancements, such as decisions to designate people as “habitual offenders”⁸³ and decisions to pursue charges that require mandatory minimum sentences.⁸⁴ For example, a study of the exercise of prosecutorial discretion to bring charges carrying mandatory minimum sentences in Pennsylvania found that Latinx people in the criminal system were nearly twice as likely to receive a mandatory sentence as White people in the criminal system.⁸⁵ Another study

⁸⁰ See JOHN M. MACDONALD & ELLEN A. DONNELLY, EVALUATING THE ROLE OF RACE IN CRIMINAL JUSTICE ADJUDICATIONS IN DELAWARE 3-4 (Sep. 19, 2016), https://courts.delaware.gov/supreme/docs/DE_DisparityReport.pdf; ADJOA A. AIYETORO & DAVID R. MONTAGUE, RACIAL DISPARITIES IN THE ARKANSAS CRIMINAL JUSTICE SYSTEM: REPORT OF RESEARCH FINDINGS 26-29 (2015), <http://www.madpmo.org/wp-content/uploads/2016/04/RACIAL-DISPARITIES-IN-THE-ARKANSAS-CRIMINAL-JUSTICE-SYSTEMreportfinal-08151.pdf>; M. Marit Rehavi and Sonja B. Starr, *Racial Disparity in Federal Criminal Sentences*, 122 J. OF POL. ECON. 1320, 1323 (2014).

⁸¹ M. Marit Rehavi and Sonja B. Starr, *Racial Disparity in Federal Criminal Sentences*, 122 J. OF POL. ECON. 1320, 1323 (2014).

⁸² JOHN M. MACDONALD & ELLEN A. DONNELLY, EVALUATING THE ROLE OF RACE IN CRIMINAL JUSTICE ADJUDICATIONS IN DELAWARE 3-4 (Sep. 19, 2016), https://courts.delaware.gov/supreme/docs/DE_DisparityReport.pdf.

⁸³ See Cyndy Caravelis et al., *Static and Dynamic Indicators of Minority Threat in Sentencing Outcomes: A Multi-Level Analysis*, 27 J. OF QUANTITATIVE CRIMINOLOGY 405, 421 (2011) (analyzing “habitual offender” designations in Florida and concluding that “[t]he overall odds of being designated as Habitual are about 20% higher for Latino defendants than for similarly situated Whites and at least 22% higher for [B]lacks”); see also Martha S. Crow & Katherine A. Johnson, *Race, Ethnicity, and Habitual-Offender Sentencing: A Multilevel Analysis of Individual and Contextual Threat*, 19 CRIM. JUST. POL’Y REV. 63, 72-73 (2008) (analyzing “habitual offender” designations in Florida and concluding that “Blacks’ odds of being habitualized are 28% greater than Whites’ odds of being habitualized” and “Hispanics’ odds of habitualization are 14% greater than those of Whites”).

⁸⁴ See Jeffrey T. Ulmer et al., *Prosecutorial Discretion and the Imposition of Mandatory Minimum Sentences*, 4 J. OF RES. IN CRIME AND DELINQUENCY 427, 442 (2007).

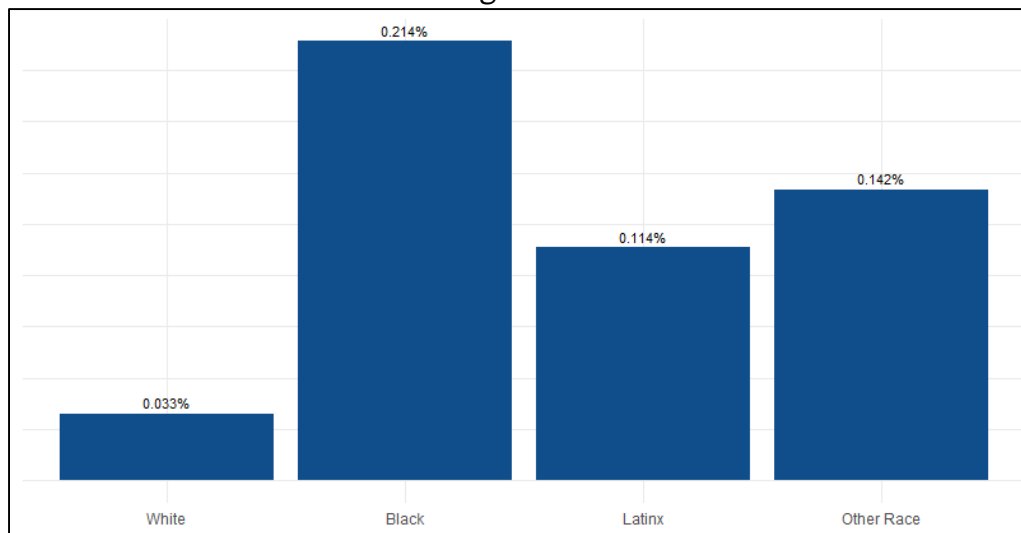
⁸⁵ *Id.*

found that federal prosecutors charged cocaine weight amounts that “bunched” just above the threshold to trigger a mandatory minimum sentence more often for Black and Latinx defendants than for White defendants.⁸⁶ After the Supreme Court required prosecutors to meet a stronger evidentiary threshold for drug amounts, the practice of bunching declined, indicating that prosecutors were previously claiming drug amounts that could not withstand scrutiny.⁸⁷

Murder Cases

Although murder charges are relatively rare, they are the most serious charge that a defendant can face in a Massachusetts state court and carry particularly long incarceration sentences. Thus, despite the small number of murder cases in our data set, we hypothesized that those cases could have a large impact on the aggregate disparities in incarceration length across racial groups detailed above. Figure 26 shows the percentage of cases with an initial charge of murder by race. For example, of all the cases brought against Black people, .214% of them involved an initial charge of murder.

Figure 26: Percent of Cases with Initial Charge of Murder⁸⁸



Though we did not receive final conviction offense data for the majority of cases, we did receive it for cases that resulted in a sentence to a Department of Corrections. Figure 27 shows the final conviction offense in cases that had at least one initial charge of murder.⁸⁹

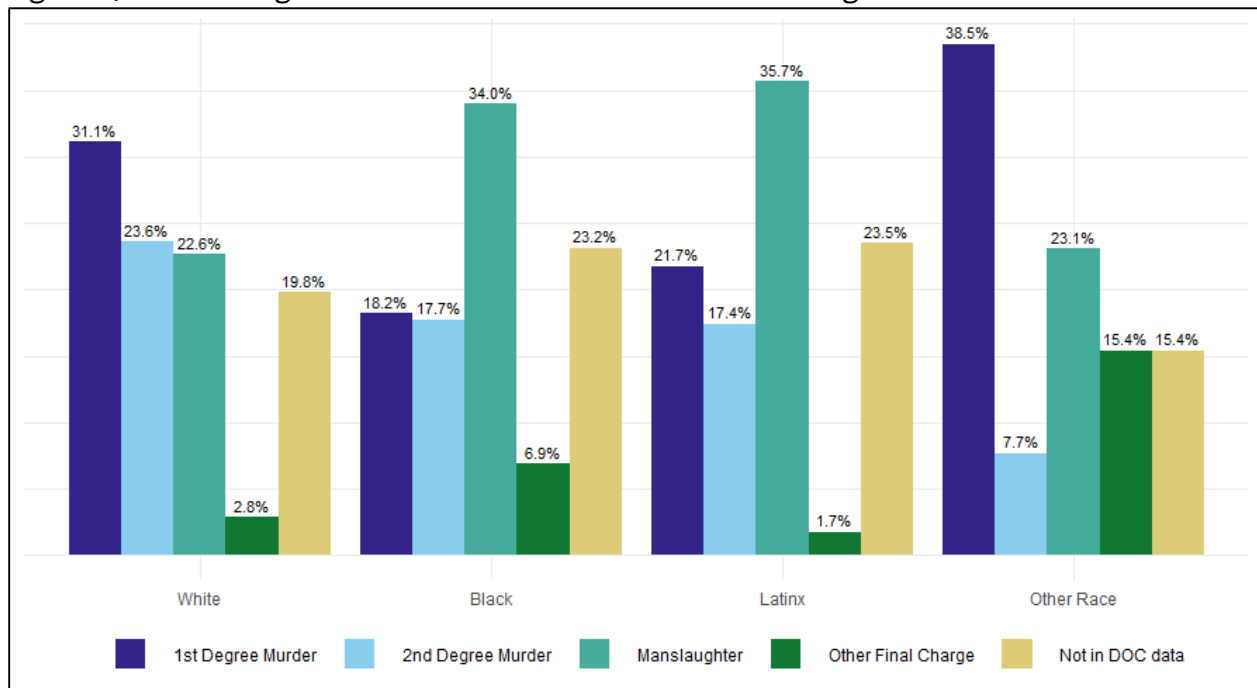
⁸⁶ Cody Tuttle, Racial Disparities in Federal Sentencing: Evidence from Drug Mandatory Minimums, (October 19, 2019) (working job market paper, available at http://www.google.com/url?q=http%3A%2F%2Feconweb.umd.edu%2F~tuttle%2Ffiles%2Ftuttle_mandatory_minimums.pdf&sa=D&sntz=1&usg=AFQjCNGc6PUXrsDgSJJTAI8UI-T-t3xR3w).

⁸⁷ *Id.*

⁸⁸ In our sample, there were 106 cases with a white defendant, 203 cases with a Black defendant, 115 cases with a Latinx defendant, 13 cases with a “other race” defendant, 11 cases with a defendant of unknown race.

⁸⁹ Murder is defined as “the unlawful killing of a human being with malice aforethought.” 32 MASSACHUSETTS PRACTICE SERIES, CRIMINAL LAW § 172 (3d ed. 2019). First degree murder is “(1) murder committed with

Figure 27: Final Charge of Conviction for Cases with Initial Charge of Murder



In this figure, “Other Final Charge” means that the highest final charge was a charge other than first degree murder, second degree murder, or manslaughter, for example, armed robbery. “Not in DOC data” means that we were unable to find a final charge for the case. This could be because it did not result in conviction or because it was not fully disposed at the time we requested data.

Defendants of color are much more likely to be initially charged with murder than White defendants, with Black defendants facing murder charges at a rate over six times higher than their White counterparts. We see, however, that Black and Latinx defendants are much more likely to have their initial murder charges reduced to manslaughter or some other final charge in those cases where we are able to observe the final charge of conviction.

Charge Reductions

Because all but 2.04% of cases in our data set disposed of all charges without a trial, the plea bargaining process has a tremendous impact on sentence forms and sentence lengths. Below we leverage additional data from the Massachusetts Department of Corrections on

deliberately premeditated malice aforethought; (2) murder committed with extreme atrocity, or; (3) murder in the commission or attempted commission of a crime punishable by death or life imprisonment.”³² MASSACHUSETTS PRACTICE SERIES, CRIMINAL LAW § 174 (3d ed. 2019). Any murder that is not first degree murder is second degree murder. ³² MASSACHUSETTS PRACTICE SERIES, CRIMINAL LAW § 187 (3d ed. 2019). Manslaughter is defined as “the unlawful killing of a person without malice.” ³² MASSACHUSETTS PRACTICE SERIES, CRIMINAL LAW § 201 (3d ed. 2019).

the offenses that people are convicted of (as opposed to the initial charges) to consider the impact of the plea bargaining process more explicitly.

The charging decisions of police and prosecutors have a significant effect on the ultimate sentence that a person receives. In many cases, there are multiple offenses that can be charged for the same underlying conduct. Some of these offenses are more serious and carry longer sentencing ranges, statutory minimums, and mandatory minimums. In the course of plea bargaining, prosecutors often reduce charges (and thus the exposure to long sentences) in exchange for guilty pleas.

For the vast majority of the cases in our dataset, we were not able to track charge reductions using the data we received from the trial court. To determine how prosecutors exercise their discretion to reduce charges in plea bargaining, we would need to compare each defendant's initial charges with their final conviction offenses, but the trial court was able to provide only initial charging data, not final conviction offense data. We were also unable to obtain final conviction offense data from the district attorneys or the sheriffs.

For a small subset of cases, however we were able to obtain final conviction offense data from the Department of Corrections, which allowed us to deduce charge reductions. For cases in which a defendant was sentenced to a term of incarceration in state prison, we received DOC data about final conviction offenses. These cases make up only 4,152 out of a total of 553,801 cases in our dataset, but they cover the majority of the most serious cases.

Table 15 shows charge reductions for all cases that resulted in a DOC sentence. It shows the average level of seriousness of the initially charged governing offense (measured using the MCL level), the average level of seriousness of the governing offense at conviction, and the average difference in seriousness between the initial and final governing offense, all by race. The final column tracking the difference between initial and final governing offense is a function of plea bargaining in the vast majority of cases because only about 2% of criminal cases in our data include a charge that is disposed in trial.

Table 15: Charge Reductions for all Cases with DOC Sentences

Race	Number of cases	Average MCL Level, initial governing offense	Average MCL Level, final governing offense	Average difference between initial and final governing offense
Black	1,124	5.76	4.92	.84
Latinx	1,176	5.95	5.09	.86
Other Race/Unknown	173	5.79	5.16	.63
White	1,679	5.57	5.02	.55

Cases for Black and Latinx defendants tend have more serious initial charges than their White counterparts. We see, however, that as the cases proceed, Black and Latinx defendants receive steeper charge reductions, such that the final charges for all races coalesce around a similar average level. Although we do not observe many of the relevant circumstances of the cases in our data set, the fact that the level of seriousness of the final conviction offense is similar across race raises questions as to whether racial disparities in defendants' initial charges reflect racial discrimination, differences in the defendant's conduct, or both.

If Black and Latinx defendants receive more serious initial charges due to more serious conduct, then one would expect them to be convicted of more serious conduct as well, which we do not find to be the case. One potential explanation for this discrepancy is that prosecutors are more interested in obtaining convictions for defendants with particularly serious charges in order to reduce crime through incapacitating the most serious offenders. This is inconsistent with the evidence presented in Table 10 however, which shows that Black and Latinx people are less likely to be convicted than their White counterparts if anything.

It may also be that prosecutors expect it to be particularly hard to convict Black defendants and offer larger charge discounts during the plea bargaining process to obtain similar conviction rates. However, this interpretation is inconsistent with other research documenting that Black defendants are more likely to be convicted in jury trials compared to White counterparts.⁹⁰ We think that a more plausible explanation is that prosecutors consistently seek to convict defendants on the most serious charges that are supported by the available evidence. Put another way, the evidence is most consistent with Black and Latinx defendants receiving more severe initial charges than White defendants for similar conduct. If we take seriously the implications of the discrimination that Black, and particularly dark complected, defendants face in jury trials as documented in past research, it is possible that Black and Latinx people actually engage in *less* serious conduct than their White counterparts.

Regardless of the explanation, the disparity in initial charge level is important because it sets the baseline against which the parties negotiate plea bargains. More serious initial charges expose defendants to the risk of longer (sometimes mandatory) incarceration sentences, and likely influence the terms that they are willing to accept in a plea deal.

As shown in Table 16, this trend of larger charge reductions for Black and Latinx defendants can also be seen in the subset of cases that include an initial charge that carries a statutory minimum. The majority of cases that received DOC sentences had at least one initial charge that carried a statutory minimum.

⁹⁰ See Shamena Anwar, Patrick Bayer & Randi Hjalmarsson, *The Impact of Jury Race in Criminal Trials*, 127 Q. J. ECON. 1017 (2012); Justin D. Levinson & Danielle Young, *Different Shades of Bias: Skin tone, Implicit Racial Bias, and Judgments of Ambiguous Evidence*, 112 W. VA. L. REV. 307 (2009).

Table 16: Charge Reductions for Cases with DOC Sentences, Initial Statutory Minimum Charges

Race	Number of cases	Average MCL level, initial governing offense	Average MCL level, final governing offense	Average difference between initial and final governing offense
Black	773	6.16	5.02	1.14
Latinx	876	6.24	5.18	1.07
Other Race/Unknown	123	5.96	5.24	0.72
White	899	6.15	5.14	1.01

Conclusion

Our analysis indicates that the large aggregate disparities in incarceration sentences across race are concentrated among the most serious cases. According to our regression results, they are largely explained by differences in initial charge severity. Black and Latinx defendants tend to face more serious initial charges that are more likely to carry a mandatory or statutory minimum sentence. Despite facing more serious initial charges, however, Black and Latinx defendants in Superior Court are convicted of offenses roughly equal in seriousness to their White counterparts. As shown in Tables 15 and 16, Black defendants in particular who are sentenced to incarceration in the DOC are convicted of *less* severe crimes on average than White defendants despite facing more serious initial charges.

We cannot say conclusively the extent to which differences in initial charge severity across racial groups reflect police and prosecutor discretion vs. differences in defendants' conduct. The lack of racial disparity in conviction offense severity and conviction rates among the cases that drive the overall disparity, however, does not support the interpretation that differences in the severity of criminal conduct across races alone can explain the substantial racial disparities in incarceration sentences. Further, the penalty in incarceration length is largest for drug and weapons charges, offenses that carry longstanding racialized stigmas. We believe that this evidence is consistent with racially disparate initial charging practices leading to weaker initial positions in the plea bargaining process for Black defendants, which then translate into longer incarceration sentences for similar offenses.

Appendices

- Appendix 1: Historical Background
- Appendix 2: Data Challenges
- Appendix 3: Probation Analysis
- Appendix 4: Trial Court Data Fields
- Appendix 5: Determining Race
- Appendix 6: Determining Governing Offense
- Appendix 7: Categorizing Charges
- Appendix 8: Criminal History Score Calculation
- Appendix 9: Probation Length Calculation
- Appendix 10: Sentence Length Calculation
- Appendix 11: Dropped Cases
- Appendix 12: Address Processing
- Appendix 13: Disposition Definitions

Appendix 1: Historical Background

Racial and ethnic disparities in incarceration rates are not unique to the Commonwealth. Numerous federal, state, and local level studies have examined disparities in various points in the criminal system in an attempt to explain disparities in incarceration rates.⁹¹ These studies have largely found that Black and Latinx people tend to be over-represented throughout the process.

This report should be read in the context of the ongoing exploration of the institutionalized racism that pervades every aspect of the criminal system. Although individualized racial animus plays a role in the way that different racial groups experience the criminal system,⁹² pervasive racial disparities cannot be explained without examining institutionalized racism.⁹³ Institutional or systemic racism refers to the policies and practices that prioritize White people through the creation and maintenance of undeserved advantages while contributing to racially biased beliefs about people of color that reproduce racial inequality.⁹⁴ The treatment of Black people in the criminal system is an extension of the racially motivated treatment they have been subjected to since the inception of slavery, continuing through formal and informal patterns of segregation and exclusion, upheld by legislation, policies, common law, and cultural practices.⁹⁵

⁹¹ See, e.g., JOHN M. MACDONALD & ELLEN A. DONNELLY, EVALUATING THE ROLE OF RACE IN CRIMINAL JUSTICE ADJUDICATIONS IN DELAWARE (Sep. 19, 2016), https://courts.delaware.gov/supreme/docs/DE_DisparityReport.pdf (reporting “significant disparities in incarceration sentences and sentence lengths for African Americans relative to Whites arrested on criminal offenses”); ADJOA A. AIYETORO & DAVID R. MONTAGUE, RACIAL DISPARITIES IN THE ARKANSAS CRIMINAL JUSTICE SYSTEM: REPORT OF RESEARCH FINDINGS (2015), <http://www.madpmo.org/wp-content/uploads/2016/04/RACIAL-DISPARITIES-IN-THE-ARKANSAS-CRIMINAL-JUSTICE-SYSTEMreportfinal-08151.pdf> (finding race plays a role in prosecutorial charging decisions); David S. Abrams et al., *Do Judges Vary in Their Treatment of Race*, 41 J. LEGAL STUD. 347, 347-48 (2012) (finding race plays a role in judicial determinations).

⁹² See, e.g., Bryan A. Stevenson & Ruth E. Friedman, *Deliberate Indifference: Judicial Tolerance of Racial Bias in Criminal Justice*, 51 WASH. & LEE L. REV. 509, 512 (1994) (recounting a remark made in a capital case by a Florida judge who referred to a Black defendant’s parents as the “nigger mom and dad”).

⁹³ See Barbara A. Schwabauer, *The Emmett Till Unsolved Civil Rights Crime Act: The Cold Case of Racism in the Criminal Justice System*, 71 OHIO ST. L.J. 653, 690 (2010) (“Without regard to intent, racism plays a foundational role in the construction and maintenance of the criminal justice system in ‘how crimes are defined, how suspects are identified, how charging decisions are made, how trials are conducted, and how punishments are imposed.’”).

⁹⁴ See Naomi Murakawa, Katherine Beckett, *The Penology of Racial Innocence: The Erasure of Racism in the Study and Practice of Punishment*, 44 L. & SOC’Y REV. 695, 701 (2010) (“Specifically, we view racial power as systemic, institutional, and long-standing; it is premised on ideologies and institutions that preserve [W]hite advantage, and it perpetuates ongoing patterns of unjust impoverishment... racial power is not the sole province of [W]hite bigots to which people of color are subject, but rather a systemic and institutional phenomenon that reproduces racial in-equality and the presumption of [B]lack and [B]rown criminality.”); see also Barbara A. Schwabauer, *The Emmett Till Unsolved Civil Rights Crime Act: The Cold Case of Racism in the Criminal Justice System*, 71 OHIO ST. L.J. 653, 663-64 (2010) (defining institutional racism and outlining its impact).

⁹⁵ See, e.g., Cyndi Banks, *Criminal Justice Ethics: Theory and Practice* 66 (3rd ed. 2012) (explaining that Americans have “suffered discrimination on grounds of race; initially through the system of slavery, and then through a pattern of exclusion and segregation, both informal and formal, in the shape of legislation and court decisions

Though some may consider the harms of slavery to be sufficiently attenuated from the current condition of Black people, the “elaborate and enduring mythology about the inferiority of [B]lack people... created to legitimate, perpetuate and defend slavery... survived slavery’s formal abolition following the Civil War.”⁹⁶ Black Codes, originally enacted to set forth and secure the legal rights of newly freed Black people, instead became a body of laws through which to control their labor and livelihoods.⁹⁷ The Codes were comprehensive and sought to punish Black people for everything from unlawfully gathering to owning a deadly weapon.⁹⁸ The penalties for violating these Codes, from fines to imprisonment and even death, violently re-enforced racialized systems of control.⁹⁹ The Black Codes succeeded in excluding Black people from social and political life, while White people, “often aided by law enforcement, waged a campaign against [B]lack people that would rob them of an incalculable amount of wealth.”¹⁰⁰ Black Codes further denigrated Black people by requiring, even for minor infractions, outsized fines far beyond the resources of many Black people.¹⁰¹ For those who could not afford the fines, “Black Codes authorized their confinement to labor.”¹⁰² Thus, targeted enforcement of the Black

that have historically endorsed overt racial discrimination”); see also Michael Tonry, *The Social, Psychological, and Political Causes of Racial Disparities in the American Criminal Justice System*, 39 CRIME & JUST., 273 (2010) (discussing how policies and practices promoting racially disparate treatment in the criminal system were shaped by “distinctive sociological, psychological, and political features of American race relations”).

⁹⁶ EQUAL JUSTICE INITIATIVE, *SLAVERY IN AMERICA: THE MONTGOMERY SLAVE TRADE* 6 (2013), <https://eji.org/files/slavery-in-america-report.pdf>.

⁹⁷ A.E. Raza, *Legacies of the Racialization of Incarceration: From Convict-Lease to the Prison Industrial Complex*, J. INST. JUST. INT’L STUD. 159, 162 (2011); see also Rasheena Latham, *Who Really Murdered Trayvon—A Critical Analysis of the Relationship Between Institutional Racism in the Criminal Justice System and Trayvon Martin’s Death*, 8 S. J. POL’Y & JUST. L.J. 80, 89 (2014) (“These codes referenced legislation passed by southern states at the end of the Civil War to control labor, mobility and other pursuits of the formerly enslaved.”).

⁹⁸ Rasheena Latham, *Who Really Murdered Trayvon—A Critical Analysis of the Relationship Between Institutional Racism in the Criminal Justice System and Trayvon Martin’s Death*, 8 S. J. POL’Y & JUST. 80, 89 (2014); see also Michele Goodwin, *The Thirteenth Amendment: Modern Slavery, Capitalism, and Mass Incarceration*, 104 CORNELL L. REV. 899, 937 (2019) (“Some states’ codes also affixed excessive penalties for Blacks found guilty of such crimes... [and] [t]he Black Codes were exhaustive, covering all manner of freedoms associated with housing, family, sex, farming, associations, possessing paperwork to farm and sell goods, and more.”).

⁹⁹ Rasheena Latham, *Who Really Murdered Trayvon—A Critical Analysis of the Relationship Between Institutional Racism in the Criminal Justice System and Trayvon Martin’s Death*, 8 S. J. POL’Y & JUST. 80, 89 (2014).

¹⁰⁰ Trymaine Lee, *A Vast Wealth Gap, Driven by Segregation, Redlining, Evictions and Exclusion, Separates Black and White America*, N. Y. TIMES (Aug. 14, 2019), <https://www.nytimes.com/interactive/2019/08/14/magazine/racial-wealth-gap.html>; see also Richard A. Epstein, *Against Redress*, DAEDALUS, Winter 2002, at 43 (“[S]lavery as practiced in the United States before the Civil War and the racial restrictions that lay at the heart of Jim Crow and the [B]lack [C]odes were wholly indefensible when measured against a basic theory of libertarian rights. Excluding [B]lacks from participation in the political and social life of that time constitutes one of the great stains on our history, made still worse by the countless acts of private violence and intimidation to which the state turned a blind eye.”).

¹⁰¹ Michele Goodwin, *The Thirteenth Amendment: Modern Slavery, Capitalism, and Mass Incarceration*, 104 CORNELL L. REV. 899, 937-38 (2019).

¹⁰² *Id.*

Codes resulted in the re-establishment of involuntary labor relations that entrapped Black people.¹⁰³

Convict leasing—a system of hiring out those convicted of Black Code violations to work off their sentences—further enabled White people to recapture much of the involuntary labor force lost through emancipation.¹⁰⁴ This new iteration of enslavement no longer explicitly relied on notions of inferiority; instead it invoked ideas of crime and punishment to justify the treatment of Black people.¹⁰⁵ Convict leasing continued into the 20th century and was so profitable that Black people were aggressively policed and arrested to sustain it.¹⁰⁶ The criminalization of Blackness continued with the advent of mass incarceration, which emerged from a combination of punitive policies like mandatory minimum sentencing, the war on drugs, truth in sentencing laws, and the creation of the private prison industry.¹⁰⁷ As scholar Naomi Murakawa put it, “the United States did not face a crime problem that was racialized, it faced a race problem that was criminalized.”¹⁰⁸ The practice of over-policing Black communities and the creation of narratives to justify that practice perpetuated the persistent notion of Black hyper-criminality.¹⁰⁹

So deeply embedded are notions equating Blackness with criminality that, in addition to being punished more severely than White people, Black people with darker skin and “African” features are punished more severely than those with lighter skin and “European” features.¹¹⁰ And these disparities can also be seen within other races. Indeed, within each race, “more stereotypical [B]lack features” are a significant predictor of sentence length.¹¹¹

¹⁰³ *Id.* at 936 (“Black Codes provided an urgent legal solution to the demand for low- or no-wage labor after the ratification of the Thirteenth Amendment.”).

¹⁰⁴ *Id.*

¹⁰⁵ *Id.* at 944 (arguing that, compared to slavery, convict leasing was “no more offensive to southern sensibilities than slavery had been only years before. If anything, it was easier to rationalize—*after all, these laborers were prisoners who deserved punishment.*”).

¹⁰⁶ *Id.* at 945.

¹⁰⁷ See Cecil J. Hunt II, *The Jim Crow Effect: Denial, Dignity, Human Rights, and Racialized Mass Incarceration*, 29 J. C.R. & ECON. DEV. 15, 17 (2016).

¹⁰⁸ NAOMI MURAKAWA, *THE FIRST CIVIL RIGHT: HOW LIBERALS BUILT PRISON AMERICA* 3 (Oxford University Press 2014).

¹⁰⁹ Michael Tonry, *The Social, Psychological, and Political Causes of Racial Disparities in the American Criminal Justice System*, 39 CRIME & JUST., 273, 281 (2010) (“Americans, especially White Americans, are predisposed to associate [B]lackness with crime and dangerousness and are prepared to treat Black [people in the criminal system] especially harshly as a result.”).

¹¹⁰ Michael Tonry, *The Social, Psychological, and Political Causes of Racial Disparities in the American Criminal Justice System*, 39 CRIME & JUST., 273, 283 (2010) (“Research on the influence of skin tone and ‘Afrocentric’ features shows that negative stereotypes are deeply embedded in American culture and operate to the detriment of [B]lacks in the criminal justice system. They cause [Black people in the criminal system] to be punished more severely than [W]hites, and among [B]lacks they cause dark-skinned people, and people with distinctively ‘African’ facial features, to be punished more severely than light-skinned people and people with more ‘European’ features.”).

¹¹¹ *Id.* at 285. Even White people with features that “looked Black” were found to receive longer sentences than other White people in prison. *Id.*

It is important to note that while there is much evidence indicating that Latinx people receive disparate treatment in the criminal system,¹¹² this phenomenon is drastically understudied.¹¹³ Often, information on Latinx people is neither collected nor reported.¹¹⁴ The lack of data contributes to inaccuracies about the full extent of racial disparities in the criminal system. In large part, this is because states that fail to collect data on Latinx people may count them as White, leading to White people being overrepresented in criminal system data and thus obscuring the full extent of racial disparities.¹¹⁵

Widespread disagreement about whether Latinx identity constitutes a racial or ethnic designation presents a challenge even when data is collected. Some Latinx people view this aspect of their identity as constituting their racial background. Still others, in addition to identifying as Latinx, identify clearly with a particular race, usually Black or White.¹¹⁶ Data collection broadly reflects this confusion. There are many examples of research reflecting Latinx identity as a racial identity, as an ethnic identity, or as an ethnic identity that interacts with race.¹¹⁷ The lack of consensus regarding whether data being collected identifies people as Hispanic or Latinx—and whether that data is collected as a racial or ethnic designation—means that the data being collected is further fractured and unrepresentative. There are

¹¹² See Jenny Rivera, *The Continuum of Violence Against Latinas and Latinos*, 12 N.Y. CITY L. REV. 399, 400 (2009) (explaining that Latinx people experience racially motivated policing, police brutality, arrests, and prosecution); see generally CALIFORNIANS FOR SAFETY & JUSTICE, *LATINO VOICES: THE IMPACTS OF CRIME AND CRIMINAL JUSTICE POLICIES ON LATINOS* (2014), https://safeandjust.org/wp-content/uploads/LatinoReport_7.8.14v1-2.pdf; see also Jeffrey T. Ulmer et al., *Prosecutorial Discretion and the Imposition of Mandatory Minimum Sentences*, 4 J. OF RES. IN CRIME AND DELINQUENCY 427, 442 (2007) (finding that Latinx people in the criminal system are almost twice as likely to receive a mandatory sentence as White people in the criminal system).

¹¹³ Christy Lopez, *The Reasonable Latinx: A Response to Professor Henning's The Reasonable Black Child: Race, Adolescence, and the Fourth Amendment*, 68 AM. U. L. REV. F. 55, 66 (2019) (“[I]n comparison to what we know about race, we know remarkably little about the Latinx experience within the criminal justice system, particularly in police interactions.”).

¹¹⁴ URBAN INSTITUTE, *THE ALARMING LACK OF DATA ON LATINOS IN THE CRIMINAL JUSTICE SYSTEM* (Dec. 2016), <http://apps.urban.org/features/latino-criminal-justice-data>.

¹¹⁵ See ASHLEY NELLIS, *THE SENTENCING PROJECT, THE COLOR OF JUSTICE: RACIAL AND ETHNIC DISPARITY IN STATE PRISONS* 4 (2016), <https://www.sentencingproject.org/publications/color-of-justice-racial-and-ethnic-disparity-in-state-prisons/>; see also IAN HANEY LOPEZ, *DOG WHISTLES POLITICS: HOW CODED RACIAL APPEALS HAVE REINVENTED RACISM AND WRECKED THE MIDDLE CLASS* 67 (2013) (arguing that the lack of information on Latinx people in the criminal system “masks disparate treatment of African Americans and compromises the ability to advocate for better treatment or even understand police interactions with Latinx [people]”). Further, Latinx identity is complex because of how it interacts with race. While there may be Latinx people who identify as neither White nor Black, there are others who identify as White and still others who identify as Black. This presents a challenge for jurisdictions hoping to interpret current criminal data and should be a key consideration for jurisdictions hoping to collect similar data in the future. See IAN HANEY LOPEZ, *DOG WHISTLES POLITICS: HOW CODED RACIAL APPEALS HAVE REINVENTED RACISM AND WRECKED THE MIDDLE CLASS* 67-68 (2013).

¹¹⁶ URBAN INSTITUTE, *THE ALARMING LACK OF DATA ON LATINOS IN THE CRIMINAL JUSTICE SYSTEM* (Dec. 2016), <http://apps.urban.org/features/latino-criminal-justice-data>.

¹¹⁷ *Id.* (reporting that state agencies collect data in numerous ways: (1) asking about race and ethnicity separately and combining them in reporting; (2) asking about race and ethnicity separately and not combining them in reporting; (3) combining race and ethnicity into one category; or (4) failing to include a category for Latinx people at all).

over 60 million Latinx people in the United States, making them the second largest racial or ethnic group behind White people.¹¹⁸ Even so, the full extent of Latinx involvement in the criminal system is unknown and will remain so without more robust, standardized data collection.¹¹⁹

Additionally, more theoretical, historical, and sociological research is needed about the unique structural and historical forces operating on Latinx people in relation to the criminal system, how stereotypes about criminality came to be developed, and how the carceral system extracts wealth from Latinx communities. Though the history of Latinx people in the United States may share similarities with that of Black people,¹²⁰ it requires distinct focus and study. Certain factors uniquely relevant to the Latinx community, such as language barriers, immigration status, and anti-Latinx sentiment further support this need.¹²¹

This report identifies areas of racially disparate treatment in the criminal system, but identifying the causes of that treatment is beyond the scope of our analysis. It is thus imperative that this report is interpreted in light of the substantial body of research spanning several disciplines identifying institutional racism as a key driver of the ways Black and Brown people experience the criminal system.¹²²

¹¹⁸ U.S. CENSUS BUREAU, QUICK FACTS, <https://www.census.gov/quickfacts/fact/table/US/PST045219>.

¹¹⁹ URBAN INSTITUTE, THE ALARMING LACK OF DATA ON LATINOS IN THE CRIMINAL JUSTICE SYSTEM (Dec. 2016), <http://apps.urban.org/features/latino-criminal-justice-data> (“No one knows exactly how many Latinos are arrested each year or how many are in prison, on probation, or on parole.”).

¹²⁰ IAN HANEY LOPEZ, DOG WHISTLES POLITICS: HOW CODED RACIAL APPEALS HAVE REINVENTED RACISM AND WRECKED THE MIDDLE CLASS 79-80 (2013) (“While Latinx [people] have not had an experience comparable to slavery or mass lynching that African Americans have collectively endured, Latinx [people] did experience an era of intense mob violence, including lynching, at the beginning of the twentieth century. This violence was often condoned, and sometimes committed, by law enforcement with impunity.”).

¹²¹ IAN HANEY LOPEZ, DOG WHISTLES POLITICS: HOW CODED RACIAL APPEALS HAVE REINVENTED RACISM AND WRECKED THE MIDDLE CLASS 67, 75, 78 (2013).

¹²² See generally Michael Tonry, *The Social, Psychological, and Political Causes of Racial Disparities in the American Criminal Justice System*, 39 CRIME & JUST., 273 (2010); see also KELLY CAPATOSTO, KIRWAN INSTITUTE FOR THE STUDY OF RACE AND ETHNICITY, TWO LENSES, ONE GOAL: UNDERSTANDING THE PSYCHOLOGICAL AND STRUCTURAL BARRIERS PEOPLE OF COLOR FACE IN THE CRIMINAL SYSTEM (2016), <http://kirwaninstitute.osu.edu/wp-content/uploads/2016/12/criminal-justice-lenses-v3.pdf> (reporting that two barriers communities of color face while interacting with various systems are “race and cognition,” defined as “the role of individual-level thoughts and actions in maintaining discrimination” and “structural racialization,” which “[c]onsiders the influence of our country’s racial history on policies, practices, and values that perpetuate racial inequity”); Amanda M. Petersen, *Beyond Bad apples, Toward Black life: A Re-reading of the Implicit Bias Research*, 23 THEORETICAL CRIMINOLOGY 491 (2018) (“[P]ractices of state violence are not arbitrary, but always laden with bias. The bias is pervasive and perpetual—it will always be with us. Further, this bias is not coincidental, but purposive in its anti-Blackness and White supremacy.”).

Appendix 2: Data Challenges

Table A1: Data Challenges

Data	Problem
Arrest Reports	Many police departments did not respond to our request or responded with pdfs, print-outs, or other forms of data that could not be easily aggregated and analyzed, rather than electronically in a plain-text or tabular format such as a .csv, .xlsx, or .txt file.
Race/Ethnicity	Not always self-reported and recorded inconsistently across agencies. There is also a great deal of missing race (24%) and ethnicity (65%) data. We were able to determine that the ethnicity field is used as an additional race category for Latinx people. In most cases, a Latinx person will have a blank race field and “Hispanic” is entered in the ethnicity field.
Outcome of Show Cause Hearings	Trial Court did not provide this data because it was not recorded electronically at the time.
Identity of Judge	Trial Court did not provide this data. This field is not always recorded electronically and when it is, the judge recorded is the session judge, who is not necessarily the presiding judge.
Identity of Prosecutor	This data is not recorded/collected by Trial Court.
Pretrial Events	We were unable to aggregate and analyze the trajectory of pretrial events because they are not consistently recorded electronically across cases and jurisdictions. We were also told that many events are recorded as “held,” when they may have been resolved in some way other than an actual hearing or court event.
Pretrial Detention	Although we were able to observe when a person was detained for the duration of their case, we were not able to observe the precise length of shorter periods of pretrial detention because the electronic data was not sufficient to determine pretrial release.
Cases moving from District Court to Superior Court	The trial court does not reliably track when cases are dismissed from the district court because the defendant has been indicted for the same offense in Superior Court. Many such cases appear as dismissals with nothing to distinguish them from cases that were dismissed with no further criminal proceedings. This may be due to inconsistent data recording practices or to district attorney practices. There is no consistent way to link cases that were started in District Court with the subsequent Superior Court record for the same underlying offense.
Charge Reductions/Amendments	This field is not always recorded electronically or recorded on the electronic record in a format that can be compiled, which makes it difficult to track disparities in plea bargains.
Final Conviction Offense	It is impossible to determine final conviction offense from the trial court data. We were able to get final conviction offense data from the

	Department of Corrections for people sentenced to terms of incarceration in a Department of Corrections prison. That is a very small percentage of the convictions in our data. We were unable to determine final conviction offense for most of the cases in our data set.
Sentence	There is a great deal of missing sentencing data in the trial court database. We were told that at the time of our data set, court personnel often fail to record this data electronically, especially when the sentence does not involve an incarceration sentence. We supplemented our analysis with sentencing data from DCJIS, but this was a time-consuming process given differences in the databases.
Fees and Fines	We were given payment data but it was linked to the case, not the charge, and there was no imposition data.
Full probation record	The probation department keeps data by individual and it cannot be determined which case the data pertains to unless the probation officer links to the trial court case when creating the file. In more than half of the cases in which we expected to find probation records, that link was not made so we were unable to obtain that data.
Prosecutor Data	We were unable to obtain usable data from prosecutors, so we were not able to track disparities in prosecutorial outcomes, such as the plea deals offered. One office provided us with data but it was incomplete. Another office was willing to provide us data, but we were informed that their data system is set up for case management and so old that it would take months and possibly years to aggregate the data we needed. We were informed that every District Attorney office has a different data system and there is no consistency across offices on fields or even basic definitions of key terms.
Criminal History Data	The offense codes used by DCJIS are more broad than those used by the trial court. This makes our criminal history analysis less precise. Additionally, because we had to use DCJIS data for sentencing and probation because of missing, unreliable, or unusable trial court and probation data, the different offense codes made it more difficult to link cases.
Diversion Programs	We received insufficient information about diversion programs to conduct any analysis.

Suggested Data Reforms¹²³

- **Data Consistency**
 - o Implement the cross-agency tracking system required by M.G.L. c. 6A, §18 ¾.
 - o Create a uniform identification system for tracking individuals across all agencies.
 - o Standardize and define data fields consistently across agencies and throughout the state.
 - o For local agencies such as sheriff offices and district attorney offices, coordinate across offices to develop consistent and compatible data definitions, collection practices, and management systems.
- **Data Quality**
 - o Collect uniform and accurate race and ethnicity data in all cases. Self-reported race and ethnicity information is best.
 - o Strengthen universal standards for recording important case events such as charge amendments.
 - o Use structured data fields and other formats that can be easily compiled electronically wherever possible.
 - o Record bail amount in structured data field for every defendant.
 - o Track term of pre-trial detention and reason for such detention.
 - o Create a method for tracking cases that begin in District Court and are ultimately indicted in Superior Court.
 - o Create structured data field for recording final conviction offenses.
 - o Require collection of sentence data in every case.
 - o Collect data regarding all imposed fees, fines, and restitution by charge rather than by case.
 - o Facilitate communication between research staff and clerical staff to identify data quality trends and patterns.
 - o Conduct periodic external audits of data quality.
- **Data Completeness**
 - o Make arrest records electronic and link them to court records.
 - o Collect electronic data about show cause hearings.
 - o Collect information on who is receiving diversion. If identity protection is desired, track aggregate race and ethnicity data instead.
 - o Record identity of prosecutor at all court appearances.

¹²³ These recommendations reflect our experience analyzing data collected between 2014 and 2016. Since that time, MassCourts has been expanded and improved and certain case events such as charge amendments, lesser included offenses, sentence length, and show cause hearing outcomes are now electronically recorded in a way that can be compiled for research. We have not worked with data collected since these improvements, but we presume these changes address some of the challenges we encountered in our research.

- o Record identity of presiding judge at all court proceedings.
- *Data Transparency*
 - o Implement the provisions of M.G.L. c. 6A, § 18 ¾ (12)(3) requiring public access to electronic records.
 - o Make robust de-identified data sets available to researchers.
 - o Create streamlined process for requesting data that is consistent across agencies.

Appendix 3: Probation Analysis

Another component of the Massachusetts criminal system that may indirectly contribute to racial disparities in incarceration, is probation. In Massachusetts, 72% of those under correctional control are on probation¹²⁴—a sentence that requires people to comply with stipulated conditions (such as reporting to a probation officer, drug testing, residency restrictions, and more) while living in the community under supervision. There are approximately 86,000 people currently on probation throughout the state.¹²⁵ Probation can be imposed as a stand-alone sentence or in combination with incarceration. When a person is placed on probation, there are several discretionary decisions made by different system actors—principally the sentencing judge and the probation officer—that can affect the duration and severity of the person’s punishment.

Discretionary decisions by judges and probation officers are a part of virtually every aspect of a probation sentence. Judges decide how long the person will be on probation, what form of probation they receive, and which probation conditions they will have to comply with.¹²⁶ Probation officers evaluate the risk level of each person on probation and determine the level of supervision they will receive. Probation officers also decide how to respond to violations of probation conditions. They can impose intermediate punishments that fall short of revoking probation, but can still be quite punitive.¹²⁷ They can also file a revocation petition with the court, asking the court to end probation and impose a period of incarceration or asking the court to extend the length of probation.¹²⁸

Figure 30 provides a snapshot of the breadth and scale of the Massachusetts Adult Probation system. It includes everything from relatively low touch administrative probation to more treatment-oriented programs specifically for OUI offenders to “Risk/Need” probation that involves regular in-person check ins, GPS tracking, and other forms of supervision.

¹²⁴ ALEXI JONES, PRISON POL’Y INST., CORRECTIONAL CONTROL 2018: INCARCERATION AND SUPERVISION BY STATE (Dec. 2018), <https://www.prisonpolicy.org/reports/correctionalcontrol2018.html>.

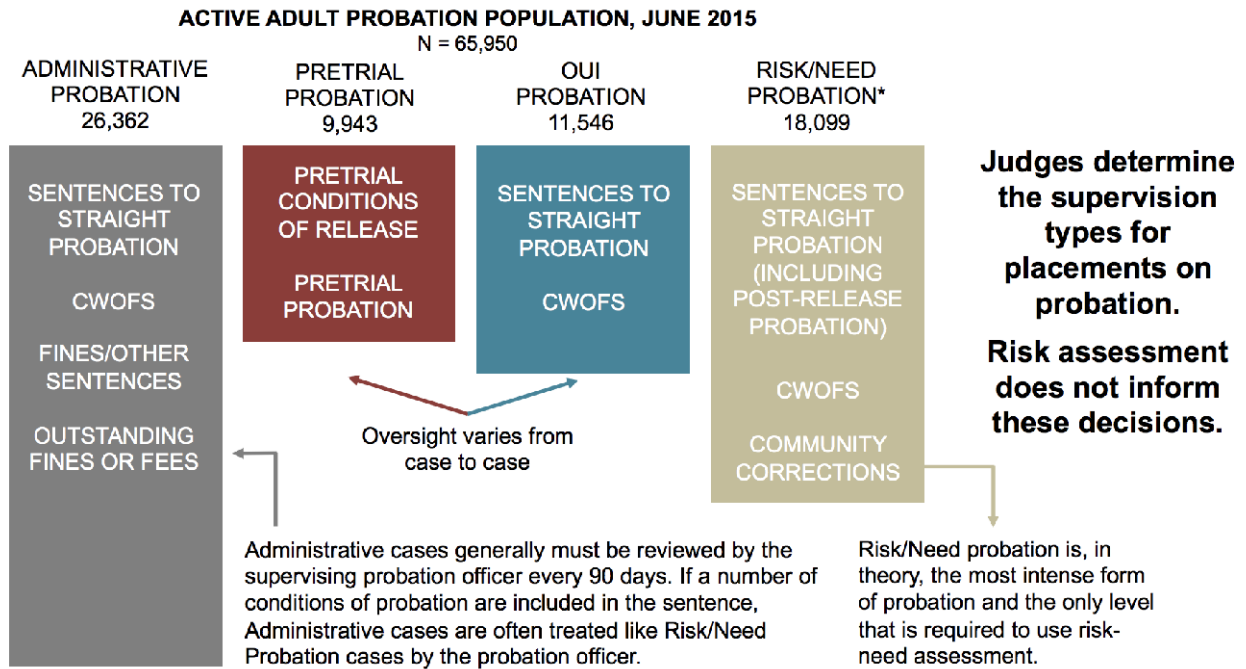
¹²⁵ “Learn about your probation sentence,” <https://www.mass.gov/service-details/learn-about-your-probation-sentence>.

¹²⁶ A significant amount of literature—by both academics and advocates—has been written about probation conditions. See Fiona Doherty, *Obey All Laws and Be Good: Probation and the Meaning of Recidivism*, 104 GEO. L. J. 314, 300–16 (2016) (discussing the wide range of probation conditions that are generally imposed on people); Cecelia Klingele, *Rethinking the Use of Community Supervision*, 103 J. CRIM. L. & CRIMINOLOGY 1015, 1034–41 (2013) (describing conditions and range of responses to violations); Michelle S. Phelps, *Mass Probation and Inequality: Race, Class, and Gender Disparities in Supervision and Revocation*, in HANDBOOK ON PUNISHMENT DECISIONS: LOCATIONS OF DISPARITY 43 (ed. Jeffrey T. Ulmer and Mindy S. Bradley, 2018).

¹²⁷ These are often called graduated sanctions, and they are frequently imposed by the probation officer without notifying the court. Massachusetts law allows for graduated sanctions, but the code does not specify what types of sanctions are allowed or when they can be imposed. M.G.L. c. 211E, § 3(a)(3)(B).

¹²⁸ See KELLY LYN MITCHELL, ET. AL, ROBINA INST., PROFILES IN PROBATION REVOCATION: EXAMINING THE LEGAL FRAMEWORK IN 21 STATES 44 (2014).

Figure A1: Probation Type Summary



Source: The Council of State Governments Justice Center

Risk/Need probation is further subdivided into supervision levels largely based on the results of the Ohio Risk Assessment System. Defendants assigned to Risk/Need probation complete the Ohio Risk Assessment System Community Supervision and Screening Tool (ORAS-CSST) to determine if they are low or high risk. Potentially moderate or high risk probationers undergo a more detailed assessment (the Ohio Risk Assessment System Community Supervision Tool, ORAS-CST) and assigned a level of supervision based on their score. Figure A2 details the overall assignment rules recommended by the ORAS.

Figure A2: ORAS Risk Classification Levels

CLASSIFICATION LEVELS				
	Males		Females	Case Work Units
Low	0-14	Low	0-14	0.3
Moderate	15-23	Low/Moderate	15-21	1.0
High	24-33	Moderate	22-28	2.0
Very High	34+	High	29+	3.0

There are also domain-specific risk thresholds to identify probationers who, for example, face particularly high risk of substance abuse. Reviewing the assessment instrument itself highlights just how subjective this risk score can be. The probation officers who administer the assessment have to determine, for example, whether the person they are assessing is likely to walk away from a fight or is generally concerned for others. Further, several of the risk factors are things entirely out of the control of the person being assessed, like whether drugs are available in their neighborhood or their parents' criminal record. Beyond the subjective and often hypothetical nature of the risk assessment's questions, we find that people are sometimes assigned to higher or lower levels of supervision than would be warranted by their assessment score, indicating yet another level of discretion in the supervision assignment process.

All of these discretionary decisions made by courts and probation officers can create racial disparities within the probation system itself. In other words, it is important to investigate disparities not only in who get sentenced to probation and for how long, but also in how people *experience* probation. And because probation violations can lead to terms of incarceration, racial disparities within probation may contribute to racial disparities in incarceration.

Unfortunately, we know very little about how discretionary decisions within probation are made. Practices vary widely, and largely occur outside the public view.¹²⁹ The data that we received from the OCP, while quite detailed in terms of the breadth of fields included on probation types, risk assessment scores, and other outcomes, represent only a portion of the total number of people from our trial court data set who were sentenced to probation. This is because over 75% of the probation records were never linked to the trial court record. So while we can analyze this data we received, we do not know how the missing data would affect the patterns and trends we observe.

We observe data on probation sentences in data received from the Trial Court and DCJIS as well, but those data lack the level of detail in the OCP data. We do not include probation length and probability as outcomes in our regression framework in the body of the report. Because probation is often an intermediate outcome that is more serious than a non-conviction but less serious than incarceration, differences in probation sentences have an ambiguous interpretation. For example, seeing that a particular racial group is more likely to be sentenced to probation could mean that they are being treated more harshly and that someone of a different race who have faced no consequence or not been arrested in the first place, or that they are being treated more leniently and someone of a different race would have been incarcerated or faced a longer incarceration sentence.

¹²⁹ See Cecelia Klingele, *Rethinking the Use of Community Supervision*, 103 J. CRIM. L. & CRIMINOLOGY 1015, 1036–39 (2013) (describing how “supervision styles are tremendously varied and are heavily influence by office culture,” but that “agent responses to low-level violations vary tremendously, even within the same office”).

Below we present the results of regression analyses analogous to those shown in Tables 7 and 9 respectively with probation length and the probability of a probation sentence as the outcomes of interest rather than incarceration length and rates, but we caution against interpreting the results as evidence of racial disparities or the lack thereof without further information.

Table A2: Probation Length

	(1)	(2)	(3)	(4)	(5)	(6)
Black	-23.20*** (0.81)	-24.64*** (0.78)	-23.82*** (0.84)	-25.15*** (0.82)	-21.35*** (0.89)	-21.46*** (0.86)
Latinx	-30.89*** (0.79)	-21.91*** (0.76)	-29.01*** (0.82)	-32.99*** (0.80)	-24.48*** (0.87)	-16.90*** (0.84)
Other	-34.51*** (1.23)	-19.56*** (1.17)	-35.52*** (1.23)	-32.36*** (1.25)	-32.57*** (1.24)	-20.58*** (1.21)
Sample	All Cases	All Cases	All Cases	All Cases	All Cases	All Cases
Severity	No	Yes	No	No	No	Yes
Jurisdiction	No	No	Yes	No	No	Yes
Defendant	No	No	No	Yes	No	Yes
Neighborhood	No	No	No	No	Yes	Yes
<i>N</i>	553,622	553,622	553,622	553,622	553,622	553,622
Adjusted R ²	0.004	0.10	0.01	0.01	0.01	0.10

Notes:

Standard errors are shown in parenthesis

People of color tend to receive shorter probation sentences on average. The fact that they also face longer incarceration sentences might indicate that these results reflect a preference for incarceration over probation for people of color, but again we do not have enough information to interpret whether the differences reflect more or less lenient outcomes. We also find that probation sentences are less likely among people of color, but again we urge caution in interpreting these results for the reasons outlined above.

Table A3: Probability of Probation Sentence

	(1)	(2)	(3)	(4)	(5)	(6)
Black	-0.08*** (0.002)	-0.07*** (0.001)	-0.08*** (0.002)	-0.08*** (0.002)	-0.07*** (0.002)	-0.05*** (0.002)
Latinx	-0.10*** (0.002)	-0.05*** (0.001)	-0.09*** (0.002)	-0.10*** (0.002)	-0.08*** (0.002)	-0.04*** (0.002)
Other	-0.11*** (0.002)	-0.06*** (0.002)	-0.11*** (0.002)	-0.10*** (0.002)	-0.10*** (0.002)	-0.06*** (0.002)
Sample	All Cases	All Cases	All Cases	All Cases	All Cases	All Cases
Severity	No	Yes	No	No	No	Yes
Jurisdiction	No	No	Yes	No	No	Yes
Defendant	No	No	No	Yes	No	Yes
Neighborhood	No	No	No	No	Yes	Yes
<i>N</i>	553,622	553,622	553,622	553,622	553,622	553,622
Adjusted R ²	0.01	0.14	0.01	0.01	0.01	0.14

Notes:

Standard errors are shown in parenthesis

Additional data about the probation experience would also allow us to better understand whether and how racially disparate treatment occurs within probation. Such data would include data about levels of supervision and whether/how they change over the course of a probation term, number and nature of probation conditions imposed, and probation-related fees and costs imposed (including supervision fees, drug testing fees, fees for court-ordered classes, etc.). It would also include all disciplinary actions taken by probation officers and the underlying violations alleged. And to better understand how probation contributes to incarceration, we would need to analyze data by race on arrests of probationers, revocation petitions filed and granted, number and nature of violations alleged in revocation petitions, and the sentence imposed after a hearing including the length of probation extension and the length of any incarceration sentence.

Appendix 4: Trial Court Data Fields

Below is a list of the data tables that were provided by the trial court. It is important to note that this list reflects only the types of data that MassCourts is capable of collecting. In the tables that we received, certain fields had a high degree of missing data and the data in certain fields were inconsistently collected and recorded depending on the practices of the particular jurisdiction. Additionally, we were informed by court personnel that the data in certain fields was unreliable.

- **Case File**
 - o Court division
 - o Case ID
 - o Docket number
 - o Case filing date
 - o Case code
 - o Case code descriptor
 - o Action code
 - o Action code descriptor
 - o Jurisdiction
 - o Police agency code
 - o Police agency descriptor
 - o Filing year
 - o Filing day
 - o Filing month
 - o Filing date
 - o Court type (D-district; S-superior)
- **Charge File**
 - o Case ID
 - o Charge number
 - o Action code
 - o Action code descriptor
 - o MGL
 - o Offense degree
 - o Amended action cd
 - o Amended action descriptor
 - o Amended MGL
 - o Amended offense degree
 - o Amended date
 - o Offense date
- **Charge Disposition File**
 - o Case ID
 - o Charge number

- o Charge disposition code
- o Charge disposition descriptor
- o Disposition date
- o Disposition method
- o Disposition method descriptor
- o Charge disposition year
- o Charge disposition day
- o Charge disposition month
- o Disposition date
- **Warrant File**
 - o Warrant ID
 - o Warrant code
 - o Warrant descriptor
 - o Police descriptor
 - o Case ID
 - o Order date
 - o Issue date
 - o Served date
 - o Cancel date
 - o Active (Active = T, Inactive = F)
 - o Warrant reason code
 - o Warrant reason descriptor
 - o Order year
 - o Order day
 - o Order month
 - o Order date (N)
 - o Issue year
 - o Issue day
 - o Issue month
 - o Issue date (N)
 - o Served year
 - o Served day
 - o Served month
 - o Served date (N)
- **Subsequent arraignment file**
 - o Docket (current case)
 - o Case ID (current case)
 - o Person ID (current case)
 - o PCF (current case)
 - o Docket (new case)

- o Case ID (new case)
- o Person ID (new case)
- o PCF (new case)
- o Charge number
- o Action code
- o Action code descriptor
- o MGL
- o Offense degree
- o Amended action cd
- o Amended action descriptor
- o Amended MGL
- o Amended offense degree
- o Amended date
- o Offense date
- o Offense year
- o Offense day
- o Offense month
- o Offense date (N)
- **Payment File**
 - o Case ID
 - o Person ID
 - o Payment code
 - o Payment code descriptor
 - o Cashbook code descriptor
 - o Pay year
 - o Pay day
 - o Pay month
 - o Pay date
 - o Payment type
- **Sentencing File**
 - o Docket
 - o Case ID
 - o Charge number
 - o Sentence month
 - o Sentence day
 - o Sentence year
 - o Correction flag
 - o Correction flag descriptor
 - o Incarceration type
 - o Incarceration descriptor

- o Committed term years (HOC)
- o Committed term months (HOC)
- o Committed term days (HOC)
- o Suspended term years (HOC)
- o Suspended term months (HOC)
- o Suspended term days (HOC)
- o To serve years (HOC)
- o To serve months (HOC)
- o To serve days (HOC)
- o SP Max years
- o SP max months
- o SP max days
- o SP min years
- o SP min months
- o SP min days
- o Sentence type code
- o Sentence type descriptor
- o Aggregate with charge number
- o Aggregate with docket
- o Stay date
- o Institution ID
- o Institution Label
- o Credited days
- o License loss 24 D (days)
- o License loss (Days)
- o Probation code
- o Probation descriptor
- o Probation years
- o Probation months
- o Probation days
- o Probation start month
- o Probation start day
- o Probation start year
- o Probation end month
- o Probation end day
- o Probation end year
- **Docket File**
 - o Case ID
 - o Docket code
 - o Docket code descriptor
 - o Docket date

- o Docket text
 - o Docket year
 - o Docket day
 - o Docket month
 - o Docket date (N)
- **Defendant Address File**
 - o Person ID
 - o Address Line 1
 - o Address Line 2
 - o Address Line 3
 - o City
 - o State
 - o Zip
- **Event File**
 - o Case ID
 - o Event ID
 - o Event site ID
 - o Event court
 - o Event code
 - o Event code descriptor
 - o Event date
 - o Session site ID
 - o Session court
 - o Session code
 - o Session code descriptor
 - o Event year
 - o Event day
 - o Event month
 - o Event date (N)
- **Event Results File**
 - o Case ID
 - o Event ID
 - o Result sequence
 - o Event result code
 - o Event result description
 - o Event result date
 - o Result year
 - o Result day
 - o Result month
 - o Result date

- **Identity File**
 - o Person ID
 - o Last name
 - o First name
 - o Middle name
 - o PCF (probation central file)
 - o DOB
 - o Gender code
 - o Gender descriptor
 - o Race code
 - o Race descriptor
 - o Ethnicity code
 - o Ethnicity descriptor
 - o DNA
 - o CSO
 - o Life parole
 - o Dept Revenue
 - o DOB year
 - o DOB day
 - o DOB month
- **Party File**
 - o Case ID
 - o Person ID
 - o Party code
 - o Party code description
- **Defendant Attorney File**
 - o Case ID
 - o Person ID
 - o Party code
 - o Attorney ID
 - o Bar ID
 - o Attorney Ident ID
 - o Appointed date
 - o Dismissed date
 - o Attorney code
 - o Attorney descriptor
 - o Appointed year
 - o Appointed day
 - o Appointed month
 - o Appointed Date (N)

- **Probation Link File**

- o Case ID
- o Docket
- o Linked case ID
- o Linked case docket
- o Linked ID

Appendix 5: Determining Race

Before filtering for analysis (see Appendix 11 for an explanation of filtering), there are 348,581 unique defendants who have cases in the data we received from the Trial Court. We received several fields of identity data for these defendants, including their “race” (“American Indian/Alaska,” “Asian,” “Black/African American,” “Native Hawaiian/Pacific,” “Other Race/Multi-Race,” “White,” and “Not known/Not reported”) and their “ethnicity” (“Hispanic or Latino,” “Non Hispanic or Latino,” “Unknown/Not reported”). There are 83,516 defendants whose race is listed as not known. Of those, 50,925 have “Hispanic or Latino” listed as their ethnicity. The vast majority of defendants (225,189) had unknown/not reported ethnicity and only 62,821 people had “Not Hispanic or Latino” listed.

Given that such a large percentage of the defendants with unknown race had “Hispanic or Latino” listed as their ethnicity, we hypothesized that those entering the data were using “Hispanic or Latino” ethnicity as an additional race category. To test this hypothesis, we used WRU,¹³⁰ an R package that uses Bayes’s rule and the Census Bureau’s surname list to predict an individual’s race by examining their home address and last name. This tool predicts “Hispanic” as a race, not an ethnicity. We were able to use this package on 282,304 of the defendants in our data (some individuals had last names that did not match Census lists and others had addresses that we could not geocode). We calculated the probability that each defendant was “White,” “Black,” “Asian,” “Hispanic,” or “Other.” These probabilities added up to 1 for each person. For defendants of any race who had an “Unknown” or missing ethnicity, there was a mean .153 prediction that the person was Hispanic. For defendants of any race who have “Hispanic or Latino” ethnicity, there was a mean .811 prediction that the person was Hispanic.

Table A4: Hispanic Predictor Values

<i>Race/Ethnicity</i>	<i>Mean Hispanic Predictor</i>
Any race, “Unknown” ethnicity	15.3
Any race, “Hispanic or Latino” ethnicity	81.1
Non-Black race, “Hispanic or Latino” ethnicity	81.1

Sample: 282,304 Trial Court defendants with addresses that could be geocoded and with last names that could be matched to census lists.

Our analysis suggested that the ethnicity category of “Hispanic or Latino” was likely being used as an additional racial category. Because of this, we decided to collapse race and ethnicity into a single column. For all people whose race was listed as “Black” and whose

¹³⁰ Kosuke Imai & Kabir Khanna, *Improving Ecological Inference by Predicting Individual Ethnicity from Voter Registration Record*, 24 POL. ANALYSIS 263-272 (2016).

ethnicity was listed as “Hispanic or Latino,” we categorized them as “Black.” For all people who were listed as belonging to any non-Black race or whose race was unknown and whose ethnicity was listed as “Hispanic or Latino,” we categorized them as “Latinx.”

In addition to the race data we received from the Trial Court, we also received race data from DCJIS. We used the race data we received from DCJIS to fill in more of the missing and conflicted fields from the Trial Court data. For any person who had conflicting or missing race information in the Trial Court data and a specified race in the DCJIS data, we assigned that person the race listed in the DCJIS data. If a person’s race was listed as “Cape Verdean” in the DCJIS data, we assigned their race as “Other.”

Table A5: Comparison of Trial Court Race Data (Vertical) and DCJIS Race Data (Horizontal)

	Asian	Black/ African American	American Indian/ Alaska	Hispanic/ Latino	Other/ Multi Race	Native Hawaiian/ Pacific Islander	White	Conflicted	Unknown
Asian	4,552	7	0	39	0	257	12	12	17
Black, non Hispanic	5	44,849	0	163	6	2	91	94	364
Cape Verdean	0	3	0	18	0	0	69	0	636
Hispanic	2	59	0	28,201	0	0	66	1	554
Native American	1	8	17	5	0	0	7	0	202
White, non Hispanic	9	85	0	6,524	5	1	174,883	82	737
Unknown	276	3,846	2	16,878	88	12	10,653	21	14,651
Not in DCJIS	439	3,845	1	7,351	2	50	13,456	0	14,365

A table comparing racial categorization of people in our Trial Court data to that of people in our DCJIS data. The column names describe defendants’ racial categorization in the Trial Court data (after preliminary processing). The row names describe defendants’ racial categorization in the DCJIS data. “Conflicted” denotes people who have conflicting race information across multiple cases in the Trial Court data. “Not in DCJIS” denotes people who we were not able to link between the Trial Court and DCJIS data.

Appendix 6: Determining Governing Offense

All cases, also called dockets, in our data set contain one or more charges. Sometimes the charges in a single case range from minor to quite serious. To evaluate the seriousness of each case and to enable accurate comparisons across cases, we identified the “governing offense” for each case, which the Massachusetts Sentencing Commission defines as the charge that has the “highest level of seriousness pursuant to the sentencing guidelines grid.” The Massachusetts Sentencing Commission publishes a Master Crime List, which categorizes over 1800 offense into ten levels of seriousness.” These rankings are used by the Massachusetts Sentencing Commission to measure offense seriousness, assign governing offense, and determine an appropriate sentence. The figure below demonstrates how the Master Crime List rankings are used to determine an appropriate sentence.

Figure A3: Sentencing Guidelines Grid

Sentencing Guidelines Grid							
Level	Example	Presumptive Sentence Range					Suggested Maximum Probation Term Range
9	Murder	Life	Life	Life	Life	Life	
8	Manslaughter (Voluntary)	96 - 144 Mos.	108 - 162 Mos.	120 - 180 Mos.	144 - 216 Mos.	204 - 306 Mos.	3 Y e a r s
7	Armed Robbery (Gun)	60 - 90 Mos.	68 - 102 Mos.	84 - 126 Mos.	108 - 162 Mos.	160 - 240 Mos.	
6	Manslaughter (Involuntary)	40 - 60 Mos.	45 - 67 Mos.	50 - 75 Mos.	60 - 90 Mos.	80 - 120 Mos.	
5	Indecent A&B on Child Under 14	12 - 36 Mos.	24 - 36 Mos.	36 - 54 Mos.	48 - 72 Mos.	60 - 90 Mos.	2 Y e a r s
4	Larceny From a Person	0 - 24 Mos.	3 - 30 Mos.	6 - 30 Mos.	20 - 30 Mos.	24 - 36 Mos.	
3	A&B DW (No or minor injury)	0 - 12 Mos.	0 - 15 Mos.	0 - 18 Mos.	0 - 24 Mos.	6 - 24 Mos.	
2	Assault		0 - 6 Mos.	0 - 6 Mos.	0 - 9 Mos.	0 - 12 Mos.	1 Y e a r
1	Operating Aft Suspended Lic				0 - 3 Mos.	0 - 6 Mos.	
0	Lic Law Violation (not MV) Violation Town By-Law	IS-0					
Criminal History Scale		A No/Minor Record	B Moderate Record	C Serious Record	D Violent or Repetitive	E Serious Violent	

131

We used the 2017 Master Crime List as a tool to help us to determine governing offense. If a case has multiple charges, we will select the charge with the highest charge as the governing offense. If a case has multiple charges that all have the highest MCL level on the

¹³¹ See MASSACHUSETTS SENTENCING COMMISSION, ADVISORY SENTENCING GUIDELINES (2017) <https://www.mass.gov/files/documents/2019/04/26/jud-final-advisory-sentencing-guidelines.pdf>.

case, we then check if any the Superior Courts have exclusive jurisdiction over any of these highest charges. If only one does, we select that charge as the governing offense. If the Superior Courts have exclusive jurisdiction over more than one of the charges with the highest MCL offense level, or if the Superior Courts have exclusive jurisdiction over zero of the charges, we look at other factors to assign governing offense.

After narrowing down the charges to charges with the highest MCL offense level on the case and determining that multiple or zero charges are exclusively within the jurisdiction of the Superior Courts, we next check whether the remaining charges are felonies, high-level misdemeanors (misdemeanor plus), or low-level misdemeanors. If only one charge of the remaining charges is a felony charge, that will be the governing offense. If multiple of the remaining charges are felonies, we look at other factors to assign governing offense. If none of the remaining charges are felony charges, we next see if exactly one charge is a high-level misdemeanor. If only one of the remaining charges is a high-level misdemeanor charge, that charge will be the governing offense. If multiple of the remaining charges are high-level misdemeanors, we look at other factors to assign governing offense. If none of the remaining charges are high-level misdemeanors, we look at other factors to assign governing offense.

At the next stage of selecting governing offense, all charges that may be selected as the governing offense have the same MCL offense level, the same court jurisdiction (either exclusive jurisdiction in the Superior Courts or dual jurisdiction between Superior and District Courts), and the same offense type (felony, high-level misdemeanor, or low-level misdemeanor). If all remaining charges are felonies or if all remaining charges are high-level misdemeanors, we next check what type of penalty the MCL recommends. We first check if the MCL recommends that any remaining charge result in a State Prison Sentence. If exactly one charge falls into this category, it is the governing offense. If multiple charges fall into this category, we select one at random. If no charges carry the recommendation of “State Prison Sentence,” we next check if the MCL recommends that any remaining charge result in “State Prison Sentence or House of Corrections Sentence.” If exactly one charge falls into this category, it is the governing offense. If multiple charges fall into this category, we select one at random. If no charges carry the recommendation of “State Prison Sentence” or a “State Prison Sentence or House of Corrections Sentence,” we select any remaining charge at random and assign that as the governing offense.

If all remaining charges are low-level misdemeanors, we check if the MCL recommends any charge result in a “Non-Jailable” penalty. If all charges except one have the penalty type of “Non-Jailable,” we select the one penalty that could result in jail as the governing offense. If multiple charges do not have the penalty type of “Non-Jailable,” we select one at random to be the governing offense. If all charges have the MCL penalty recommendation of “Non-Jailable,” we select one at random to be the governing offense.

Appendix 7: Categorizing Charges

We categorize offenses into one of seven categories using the Chapter divisions in the Massachusetts General Laws.¹³² We categorized all offenses described in Massachusetts General Laws Chapter 94C as “drug offenses,” all offenses described in Massachusetts General Laws Chapter 266 as “property offenses,” and all offenses described in Massachusetts General Laws Chapter 90 as “motor vehicle offenses.” We categorized all offenses described in Massachusetts General Laws Chapter 265 as “person offenses,” except offenses defined as sex offenses under the Sex Offender Registry Act.¹³³ We categorized sex offenses using the definition provided in the Sex Offender Registry Act.¹³⁴ We categorized offenses described in Massachusetts General Laws Chapter 269 as “weapons offenses,” except for airport security violations; false fire alarm offenses; false crime report offenses; annoying/obscene telephone calls; false/silent 911 calls; hazing offenses; and riot, failure to disperse offenses. Our weapons offense category does not include firearm offenses that are described in the property offense or person offense sections of the code, including Assault and Battery with a Firearm and Trespassing with a Firearm. We categorized all remaining offenses as “other offenses.”

¹³² This is consistent with the approach taken by the Department of Corrections. See <https://www.mass.gov/files/documents/2019/06/05/Research%20Data%20Dictionary.pdf>.

¹³³ M.G.L. c. 6 § 178C.

¹³⁴ *Id.*

Appendix 8: Criminal History Score Calculation

We calculated criminal history for every case in our Trial Court data set. To do this, we followed the instructions laid out in the Massachusetts Sentencing Guidelines to assign the defendant into one of five criminal history categories: Group A (No/Minor Record), Group B (Moderate Record), Group C (Serious Record), Group D (Violent or Repetitive Record), or Group E (Serious Violent Record).

We first determined which of a defendant's past charges resulted in conviction before the disposition date of their case in our data set. We then used the criminal history data we received from DCJIS to group each defendant's prior convictions by arraignment date.¹³⁵ DCJIS data is given on the charge level, therefore to create a case we assume that convictions that resulted from offenses with the same arraignment date came from the same case. Next, we used the Master Crime List to assign an offense seriousness level to each case based on charge in the case with the highest MCL offense level.¹³⁶ Offense seriousness levels are described in Figure A3. Finally, we counted the number of offenses at each level and assigned each case a Criminal History Group using the table in Figure A4.

Figure A4: Criminal History Assignment Tool

II. Criminal History					
Prior Convictions for Level 7, Level 8, or Level 9	None			One	Two or More
Prior Convictions for Level 5 or Level 6 Offenses	None		One	Two or	
Prior Convictions for Level 3, 4, 5, or 6 Offenses	None			Six or More	
Prior Convictions for Level 3 or Level 4 Offenses	None	One or Two	Three to Five	Six or More	
Prior Convictions for Level 1 or Level 2 Offenses	Zero to Five	Six or More			
Final Criminal History Group	Group A	Group B	Group C	Group D	Group E

The Massachusetts Sentencing Commission recommends Judges use this table to assign defendants to a criminal history category.¹³⁷

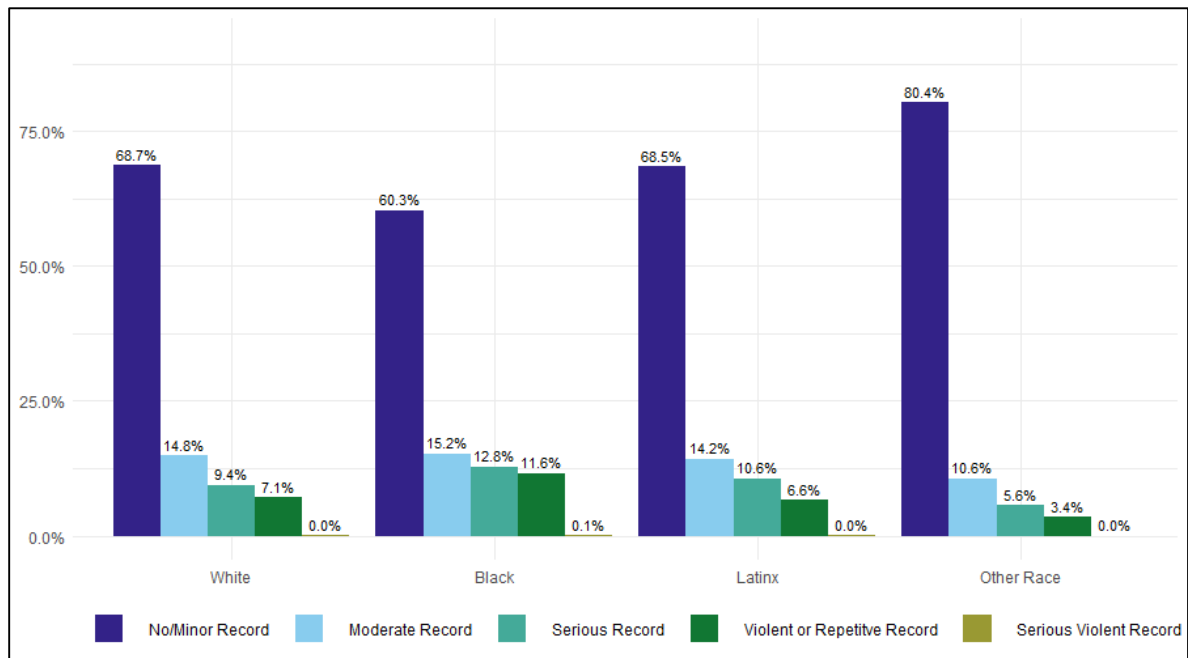
The following figure shows how this method was applied to defendants of different races:

¹³⁵ MASSACHUSETTS SENTENCING COMMISSION, ADVISORY SENTENCING GUIDELINES (1998). In accordance to the Sentencing Guidelines, we included juvenile cases in the criminal history calculation only when they were for offenses with a seriousness level of 7 or higher.

¹³⁶ *Id.*

¹³⁷ *Id.*

Figure A5: Distribution of Criminal History Groups



Appendix 9: Probation Length Calculation

We estimated probation length using probation sentences recorded in two data sets: data from the data from the Department of Criminal Justice Information Services and from the Trial Court. We attempted to calculate probation sentence length in days on the case level. Our analysis does not include pre-trial probation or pre-trial supervision because we do not believe that our data sets record pre-trial probation consistently. For this reason, we decided to measure post-disposition probation terms.

The Department of Criminal Justice Information Services (DCJIS) provided us with information about probation sentence lengths, probation lengths as the result of a CWOFF, lengths of pre-trial probation (this appears infrequently and we suspect it is not recorded consistently) and lengths of split and suspended sentences. For sentences to probation in the DCJIS data, we were sometimes given term length and sometimes given start and end dates. Because we were not given start and end dates for all probation sentences, we were not able to check if probation dates overlapped if a case had multiple sentences to probation. Because of this, in cases with at least one charge with a sentence length given by sentence duration, we assigned probation length as the maximum probation sentence.

For some cases, we did not receive probation information from DCJIS. In these cases, we use data from the Trial Court to calculate probation sentence length. The Trial Court data contains some probation sentences, some split sentences, and some suspended sentences. As with the DCJIS records, we are not always given start and end dates, sometimes we are only given the length of the probation term. Thus, if a single case has more than one probation sentence, we assigned probation length as the maximum probation sentence.

After collecting all of this information, we estimated probation length (not including split or suspended sentences), suspended sentence length (not including probation length, including split and suspended sentences), and straight suspended sentence length (only including suspended sentences).

Appendix 10: Sentence Length Calculation

We received sentencing data from both the Trial Court and from DCJIS. We calculated sentence length for each data sets and compared our results. We were advised that DCJIS keeps more detailed and consistent sentencing information than the Trial Court. Accordingly, if our sentence length calculation differed across the two data sets, we used the sentence length from the DCJIS data. In the majority of cases, we found that the sentence lengths were the same in both data sets. If we had sentencing data from only one data set, we used that data to calculate sentence length.

DCJIS Processing: Sentence Length and Time Served

DCJIS also provided us with charge-level data. In cases where we are able to link a DCJIS case with a Trial Court case, we are able to use DCJIS data to calculate sentence length. To find a sentence length in the DCJIS data, we had to parse a free text field of dispositions

Method:

- We looked for dispositions that resulted in a defendant being committed for each disposition date on a charge. Many cases had several charges in the DCJIS database.
- To estimate sentences, we added up all incarceration lengths for every disposition and every charge for each case after removing sentence lengths for dispositions that were marked as concurrent.
- Many DCJIS dispositions do not note whether sentences are concurrent or consecutive. To deal with this, we considered any dispositions for the same case that occurred on the same date that have identical dispositions to be duplicates and we dropped them.
- We include only initial sentence length in our sentence length calculation. We do not include incarceration time that resulted from probation violations or any other kinds of additional incarceration time.
- For prison sentences that were recorded as ranges, we used the low end of the range to calculate sentence length.

Trial Court Processing: Sentence Length

The trial court provided us with charge-level sentencing data so we had to aggregate sentences in order to conduct case-level analysis for this study. To aggregate sentences, do this, we first converted all sentence lengths to days. We multiplied by 30 any sentence length recorded in months, and we multiplied by 365 any sentence length recorded in years.

Method:

- First, for all cases with only one charge, we use the sentence listed for that charge as the sentence length for the case.
- Second, for all cases with a designated “primary charge,” we calculated the sentence for that charge and used it as the base sentence length. If any of the sentences for additional offences were described as “consecutive,” we added those additional days to the base sentence length.
- Third, for cases with no designated “primary charge,” we determined whether there was a charge for which the “Aggregated with Charge Number” value was empty and all other charges had non-empty “Aggregated with Charge Number” values. In these cases, we determined the charge with the empty value was the primary charge, and calculated the sentence length as described above.
- For all other cases, we used the longest sentence labelled “concurrent” to calculate the base sentence length and added to that any additional sentences listed as “consecutive.”
- We marked all charges that had an incarceration type of “Suspended Sentence” as a 0-day incarceration sentence.
- Any probation violations that resulted in the revocation of suspended sentences are not included in the calculation for sentence length because we do not have sufficient data to determine when this occurs.
- Where the sentence was recorded as a range, we used the lower end of the range to calculate sentence length.

Linking Trial Court and DCJIS Data:

We linked DCJIS cases with Trial Court using the Trial Court docket numbers. In cases where there was not a matching Docket number, we linked cases using the defendant’s PCF number and the arraignment date.

We calculated incarceration length for 64,952 cases. We were able to match 35,968 cases on estimated sentence length from DCJIS and estimated sentence length from the Trial Court, 11,968 on our trial court estimation and a single DCJIS disposition. In addition, we found 3,325 mismatches. There were 6,934 cases that had sentences in the Trial Court data but not in DCJIS and 6,754 cases that had sentences in DCJIS but not the Trial Court.

Appendix 11: Dropped Cases

As we worked with the data, we decided to drop cases from the study for two reasons: (1) the case data contained errors that could not be corrected; or (2) the data concerned cases or events that did not help us answer our question about racial disparities in the criminal system.

We dropped cases for which the age of the defendant was recorded as less than 0 years old or greater than 100 years old. Though we understand that it is possible for a defendant to be older than 100, because there were so many instances where a defendant had an age significantly greater than 100, we chose to use 100 years old as our cut-off. This decision caused 225 cases to be dropped.

We also dropped cases that fell into the following categories:

- 1) The governing offense on the case was “Juror, Fail to Attend” (14,437 cases)
The Office of the Jury Commissioner of the Commonwealth is required to bring this charge under M.G.L c. 234A. We were advised that they do not collect race information and race data was missing for 62% of charges in our data set. We were also advised this charge is almost always dismissed
- 2) The case is a District Court or Boston Municipal Court case that contained at least one charge that was dismissed due to indictment (13,028 cases)
When a case in District Court or Boston Municipal Court is dismissed due to indictment, that means that the same or similar charges will be heard in Superior Court. Thus, a dismissal for indictment is different from other kinds of dismissals because it does not end the defendant’s exposure to criminal punishment for the underlying conduct. For this reason, we chose to categorize dismissal due to indictment as an intermediate disposition rather than a final disposition, and dropped those cases from our analysis. In some instances, the associated Superior Court case is in our data set, and we included those cases in our analysis. In other cases, the associated Superior Court case did not fall within the time range of our data set.
- 3) The case contained at least one charge that was transferred (1,877 cases)
Charges that are transferred will be brought in a different court. Thus, the defendant will remain exposed to criminal liability for the underlying conduct. As such, we chose to categorize charge transfers as intermediate dispositions and omit them from our analysis.
- 4) The case contained only civil offenses (724 cases).
Our data set included some cases with only civil charges. Because this study investigates disparities in the Massachusetts criminal system, we choose to filter out any cases that did not contain any criminal charges.

[Appendix 12: Address Processing](#)

The majority (92.7%) of home addresses in our data set link with demographic information from the American Community Survey. We link addresses with ACS data through zip codes. These linked addresses cover defendants in about 92.6% of cases after filtering.

We use addresses to estimate the neighborhoods the defendants in our data set live in. For this reason, we processed several types of zip codes in order to best achieve this goal. We first cleaned zip codes for residential addresses that were formatted in ways that did not link with ACS data, for example, if the zip code was stored as a decimal or as a negative number. We also removed addresses that are the addresses of Massachusetts jails and prisons, as these are not representative of a person's home address.

After this process, defendants in 93.2% of cases were able to be linked with ACS data.

Appendix 13: Disposition Definitions

Dismissal: Criminal complaints can be dismissed pre-trial in a variety of different ways. Defense counsel may move the court to dismiss criminal charges on a number of grounds, including a lack of speedy trial, lack of jurisdiction, lack of prosecution, or upon the accord and satisfaction of both parties. The prosecution may also move to dismiss a criminal case. A criminal case that is vacated on appeal by the Massachusetts Appeals Court of the SJC will also be deemed dismissed. A dismissal does not appear as a prior offense on an individual's criminal record.

Guilty: A disposition of "guilty" is entered when an accused individual is found guilty of the charges against them, either by jury verdict, plea, guilty filed, or a converted civil infraction. A "guilty filed" disposition occurs after an accused individual admits guilt, which results in a conviction on the individual's criminal record, but the court refrains from imposing a sentence for the conviction. The guilty finding is instead "filed" for a specified period of time, after which the court either allows the individual to remain without a sentence or sentences the individual. An individual may receive a disposition of "responsible" when an individual is found responsible for a violation of a misdemeanor, ordinance, or by-law offense that is treated as a civil infraction pursuant to M.G.L. c. 277, §70C. See M.G.L. c. 277 §70C.

Continuance without a finding (CWOFF): A CWOFF disposition is entered when an accused individual admits to sufficient facts of the charge against them but does not receive a conviction for that charge. A CWOFF disposition may eventually result in a dismissal should the individual meet certain court-imposed conditions, which may include requirements such as the payment of court costs, participation in counseling, community service, or noncontact with the criminal justice system. A CWOFF does not appear as a conviction or guilty finding on the individual's criminal record, but it is considered a prior offense in regard to some future criminal charges.

Nolle prosequi: Nolle prosequi is a prosecutor's formal decision to not prosecute a criminal case further and withdraw all or part of the criminal charges against the accused individual. If a prosecutor enters nolle prosequi after the commencement of trial, but prior to a rendered verdict, then the accused individual is acquitted of the charges subject to the nolle prosequi. Ma. R. Crim. Pro 16.

Pretrial probation as disposition (PPAD): PPAD is the placement of an accused individual on probation while their criminal case is pending. The individual on PPAD is subject to probation-like conditions for a designated period of time. Compliance with these conditions may result in the accused individual's criminal case being dismissed. Failure to comply with PPAD conditions results in reinstatement of the individual's criminal case. PPAD conditions may include supervision by a probation officer, participation in substance-abuse programs, counseling, or regular employment. The prosecutor must consent to an accused individual's placement on PPAD.

Indictment: A disposition of indictment indicates that an individual's criminal case was dismissed in District Court or BMC due to a grand jury indictment against the individual in Superior Court. The disposition appears as a dismissal from District Court or BMC, however the charges are brought instead in Superior Court through grand jury indictment.

Diversion: Pre-trial diversion is the placement of an accused individual in a diversion program prior to arraignment. If the individual successfully completes the diversion program and complies with court-ordered conditions, the person's case may be dismissed. Placement into a diversion program is decided by the probation department based on the accused individual's alleged offense and criminal history. Diversion programs may include services such as anger management treatment, substance abuse rehabilitation, counseling, or halfway-house residency.

Not Guilty: A "not guilty" disposition is entered when an individual is found not guilty of the criminal charges issued against either by a jury verdict, bench finding, or reason of insanity.