



JUDICIAL COUNCIL OF CALIFORNIA

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REPORT TO THE JUDICIAL COUNCIL

Item No.: 21-176

For business meeting on: November 19, 2021

Title

Report to the Legislature: Disposition of Criminal Cases According to Race and Ethnicity of the Defendant

Submitted by

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Agenda Item Type

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Date of Report

November 2, 2021

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Executive Summary

Penal Code section 1170.45 directs the Judicial Council to report annually on the statewide disposition of criminal cases according to defendants' race and ethnicity. In accordance with this requirement, Judicial Council staff will submit this annual report on November 19, 2021. The data used in this report come from the Automated Criminal History System, which is a repository of data that includes dispositions maintained by the California Department of Justice. This report describes patterns seen in criminal case dispositions of adult felony arrests by race/ethnicity and tests whether any available legal or demographic information can account for the observed patterns.

Relevant Previous Council Action

The Judicial Council's Office of Court Research submitted these annual reports from 2001 through 2017, and Criminal Justice Services submitted them from 2018 through 2020. The council approved the reports from 2012 through 2017 and directed staff to transmit each year's report to the Legislature. Before 2012, protocol did not require council action on reports that did not include recommendations. Starting in 2018, protocol does not require council action.

Analysis/Rationale

This report presents findings based on four case disposition outcome measures:

- Conviction rates—whether a case results in a conviction or alternatively in a dismissal or acquittal;
- Conviction offense level—whether the case resulted in a felony or misdemeanor conviction;
- Type of sentence—whether the defendant was sentenced to prison or received a lesser sentence; and
- Sentence length—the length of the sentenced prison term for defendants who were sentenced to prison.

For each outcome, descriptive information is presented on patterns seen in the data. In addition to looking at the race/ethnicity breakdown of the data, several other legal and demographic features that may relate to outcomes are also described and analyzed, including gender, age, county, prior criminal history, and features of the current offense or offenses. Next, statistical testing is used to determine whether race/ethnicity plays a role in predicting disposition outcomes above and beyond differences across groups in these other relevant legal and demographic factors.

The 2021 report indicates that legal factors such as features of the current offense and the defendant's prior criminal record, as well as jurisdiction, exerted the strongest influence on conviction rate, and sentencing to prison. Current crime exerted the strongest influence on felony versus misdemeanor conviction. More serious offenses and prior records were both associated with higher conviction rates, more felony versus misdemeanor convictions, and more prison sentences. Legal factors, particularly those related to the current crime, and the defendant's prior criminal record also exerted the strongest influence on prison sentence length.

After accounting for differences in outcomes that can be explained by legal factors such as charge type and criminal history and county variation such as conviction rates and demographics, the analyses found that defendant characteristics such as race/ethnicity, gender, and age are still significantly associated with rates of conviction, rates of felony versus misdemeanor convictions, and imposition of a prison versus an intermediate sentence. Prison sentence length, however, while still significantly associated with gender, was not significantly associated with defendant age or race/ethnicity.

Accounting for differences mentioned above, relative to White defendants, Hispanic and Asian/Pacific Islander defendants were more likely to be convicted rather than be acquitted or have their cases dismissed; White defendants were more likely to receive a felony versus a misdemeanor conviction when compared to black defendants; and relative to White defendants, Black and Hispanic individuals convicted of a felony were more likely to receive a sentence to prison rather than a lesser sentence. These findings are generally consistent with prior years' reports in that race differences persisted after controlling for all available legal and demographic factors.

Fiscal Impact and Policy Implications

No fiscal impacts or policy implications are associated with this report.

Attachments and Links

1. Attachment A: *Disposition of Criminal Cases According to the Race and Ethnicity of the Defendant: 2021 Report to the Legislature*



Disposition of Criminal Cases According to the Race and Ethnicity of the Defendant

2021 REPORT TO THE LEGISLATURE
AS REQUIRED BY PENAL CODE
SECTION 1170.45



JUDICIAL COUNCIL
OF CALIFORNIA

Judicial Council of California
Operations and Programs Division
Criminal Justice Services
455 Golden Gate Avenue
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This report has been prepared and submitted to the California Legislature as required by Penal Code section 1170.45.

This report is also available on the California Courts website at www.courts.ca.gov.

JUDICIAL COUNCIL OF CALIFORNIA

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Background

This report examines the disposition of criminal cases across racial/ethnic groups as required by Penal Code section 1170.45.¹ To identify patterns by race/ethnicity, it also analyzes the impact of age, gender, and legal predictors—including criminal history and current charges—on disposition outcomes. This report fulfills the legislative mandate by identifying criminal case disposition outcomes broken out by race/ethnicity based on four distinct outcome measures: conviction rates, level of conviction offense (i.e., felony versus misdemeanor), prison sentencing rates, and length of prison sentences.

Source of Data

The data used in this report originates from the California Department of Justice (DOJ) Automated Criminal History System (ACHS), which is comprised of information reported to the DOJ by law enforcement agencies, prosecutors, and courts through fingerprint cards (FD-249) and *Adult Disposition of Arrest and Court Action* (JUS 8715) forms, on paper or electronically. The extract used for this report includes all available data on individuals with an adult felony arrest with a final disposition in 2020.² The unit of analysis for this report is a unique person and disposition date combination, for which the final disposition date was in 2020 and the arrest charges included at least one felony offense. Arrests that occurred before 2020 are included if their final disposition date was in 2020. Data related to prior dispositions was summarized into criminal history indicators.

Figure 1 shows the number of dispositions at distinct case processing stages for all ACHS felony arrest dispositions in 2020. The entry point for cases analyzed in this report is a felony arrest. ACHS recorded 86,513 final dispositions of adult felony arrests in calendar year 2020. Of these cases, 4.5 percent were dropped by law enforcement or prosecution before being filed with the court. An arresting agency or the prosecutor may dispose of the case for multiple reasons including insufficient or inadmissible evidence, lack of probable cause, or absence of a witness. The remaining 95.5 percent (82,647) of cases proceeded to a court disposition. The race/ethnicity breakdown for filed cases closely resembles that of all felony arrest cases. This report focuses on felony defendants with final court dispositions; thus, all data and analyses presented in the remainder of the report include only filed cases.³

Analysis

This report presents findings based on four case disposition outcome measures:

- Conviction rates—whether a case results in a conviction or alternatively in a dismissal or acquittal;

¹ See Appendix A for full text of Penal Code section 1170.45.

² The production and publication of this report was delayed due to the COVID-19 pandemic.

³ For summary statistics of felony defendants, see Appendix B, table B1.

- Conviction offense level—whether the case resulted in a felony or misdemeanor conviction;
- Type of sentence—whether the defendant was sentenced to prison or received a lesser sentence; and
- Sentence length—the length of the sentenced prison term for defendants who were sentenced to prison.

For each outcome, descriptive information is presented on patterns seen in the data. In addition to looking at the breakdown of the data by race/ethnicity, several other legal and demographic features that may relate to outcomes are also described and analyzed, including gender, age, prior criminal history, and features of the current offense or offenses. This year’s report adds an additional control variable, sentence exposure, that was not utilized in the previous report.⁴ Next, statistical testing is used to determine whether race/ethnicity plays a role in predicting disposition outcomes above and beyond differences across groups in these other relevant legal and demographic factors (see Appendix B for detail).

Limitations

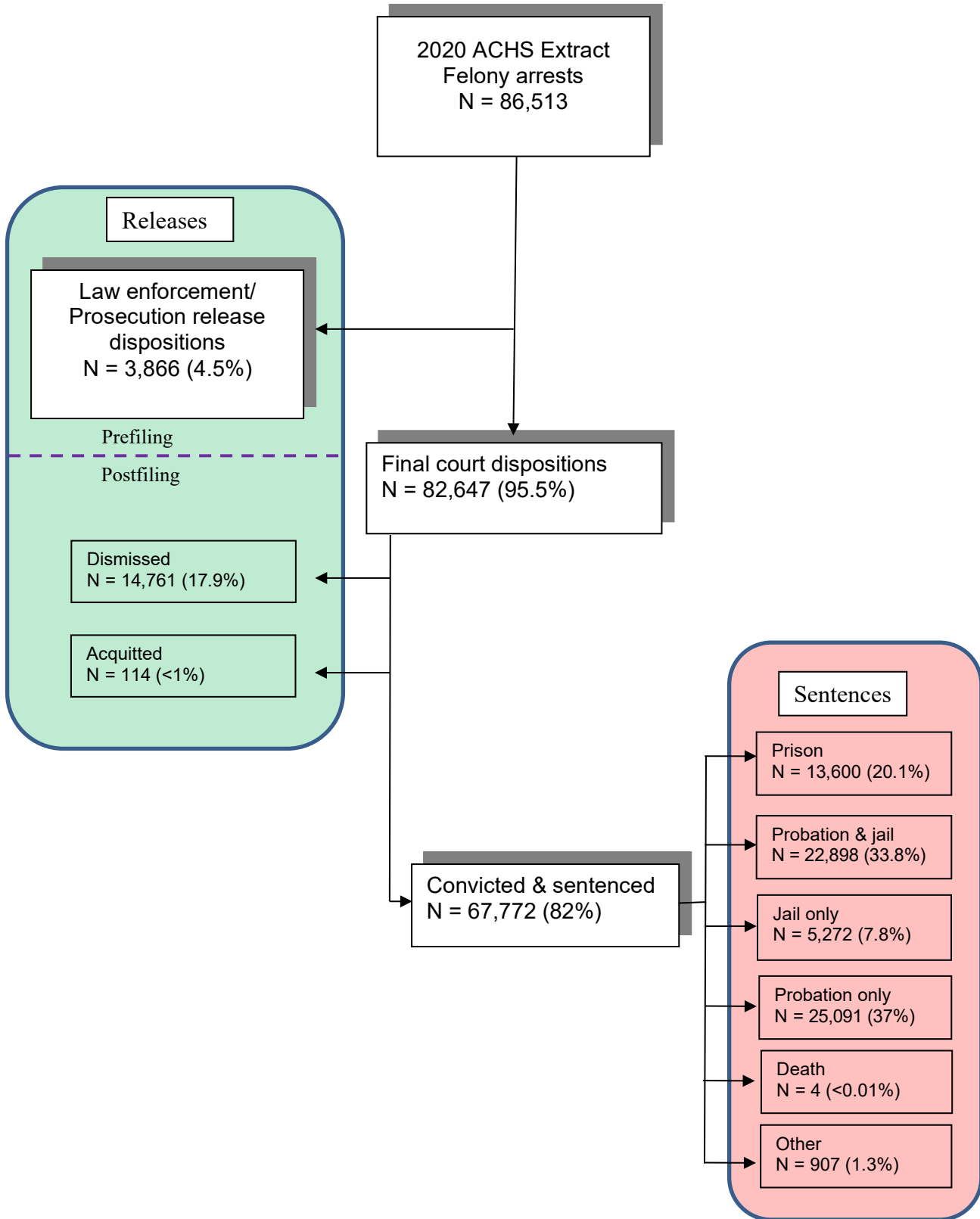
This report does not address differences in the disposition of misdemeanor arrests by race/ethnicity. The ACHS extract is not a complete record of all felony arrests in the state, but rather the subset of those with final dispositions in 2020 reported to the DOJ—estimated by the Criminal Justice Statistics Center to be about 65 to 75 percent of all felony arrests disposed in an average calendar year, though 2020 was noted to have an unusually low number of felony arrest dispositions reported to the DOJ.

The patterns observed in this report may have been impacted by the COVID-19 pandemic, which affected court operations during 2020.

None of the results found in this report can be taken as causal evidence of discrimination or bias at any point in the system. The analyses presented here are correlational, and any correlations between race and outcomes could be the result of more detailed case information not contained in ACHS. Additionally, each outcome discussed is reached through the interaction of many actors and structural elements within the system, and so cannot be attributed to any single actor. It is important to note that approximately 97 percent of convictions are a result of plea bargain agreements in which both the prosecutor and defense agree to the terms prior to judicial action.

⁴ See Appendix B for a list of all control variables and a definition of sentence exposure.

Figure 1: Numbers of Dispositions at Distinct Case Processing Stages in ACHS Felony Dispositions Extract (2020)



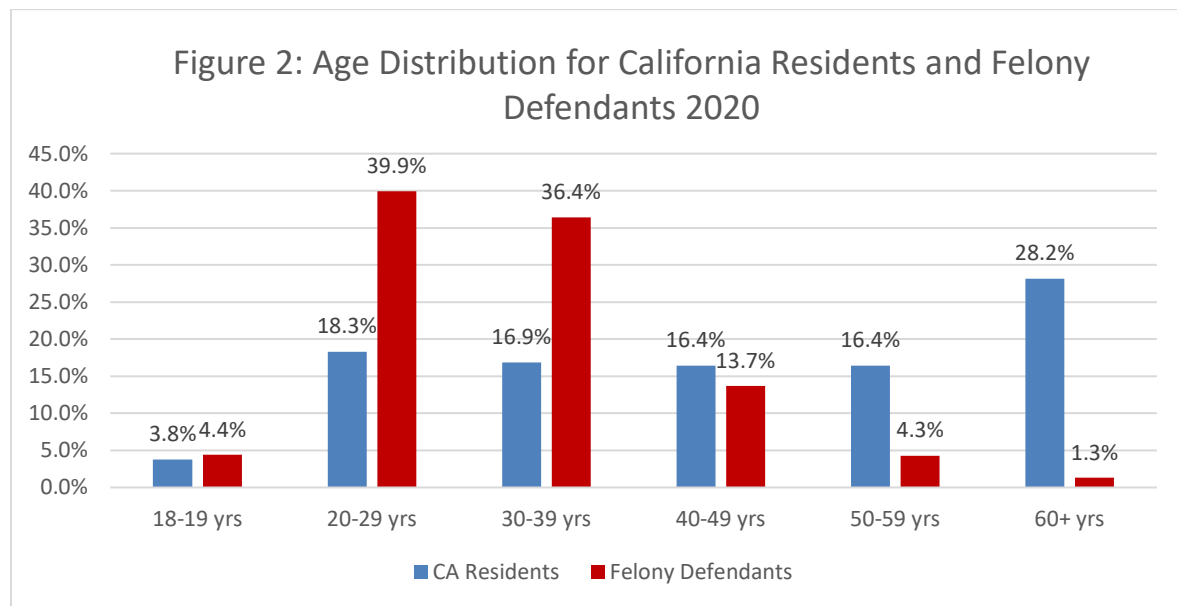
Demographics of Felony Defendants

Gender

Males made up 82.2 percent of the defendants reported to have received a court disposition in 2020; females made up 17.8 percent. Compared to the state as a whole, in which males are 49.6 percent of the population,⁵ felony defendants are disproportionately male (82.2 percent).

Age

Relative to the state's population, felony defendants are more concentrated between the ages of 20–39 years of age (figure 2).⁶ Compared to the California population, defendants ages 20–29 (39.9 percent) and 30–39 (36.4 percent) were arrested for felony-level offenses at disproportionately high rates, those ages 40–49 (13.7 percent) at slightly lower rates, and those ages 18–19 (4.4 percent) at slightly higher rates.⁷ Defendants ages 60 or older (1.3 percent) and those ages 50–59 (4.3 percent) were arrested at disproportionately lower rates relative to the state's population.⁸



⁵ Data on gender/sex is based on the California Department of Finance's total state population estimate for 2020, www.dof.ca.gov/Forecasting/Demographics/Projections/.

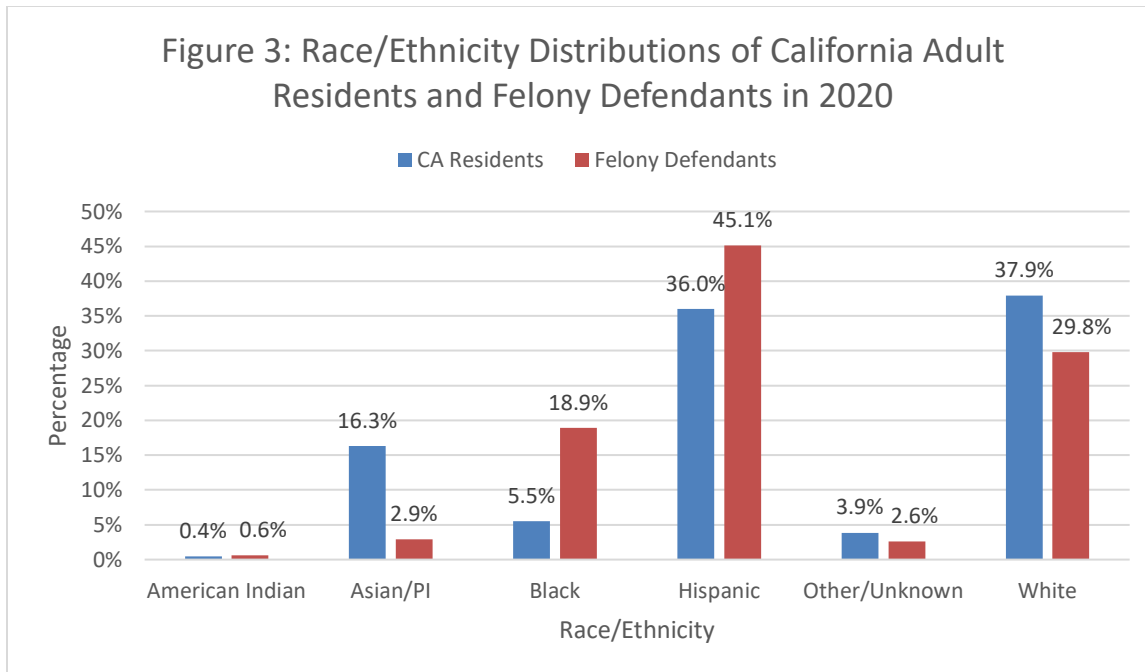
⁶ The ACHS file contains the age at time of arrest for each felony defendant. This information was classified into the following age categories: ages 18–19, 20–29, 30–39, 40–49, 50–59, and 60 or older.

⁷ ACHS also includes 86 dispositions of individuals under the age of 18 at the time of arrest; due to small numbers, these individuals are not shown in figure 2. These individuals are not included in the later analyses.

⁸ Age data was drawn from the California Department of Finance's total state population estimate for 2020, www.dof.ca.gov/Forecasting/Demographics/Projections/.

Race/ethnicity

As with age and gender, the racial and ethnic makeup of felony defendants differs from the general adult population (figure 3). Black individuals make up 18.9 percent of felony defendants and 5.5 percent of the total California adult population. Asian/Pacific Islander (Asian/PI) individuals make up 2.9 percent of felony defendants compared to 16.3 percent of the general adult population. Hispanic individuals make up 45.1 percent of felony defendants and 36 percent of the overall state adult population, and White individuals represent 29.8 percent of felony defendants and 37.9 percent of the general population.⁹



Prior criminal record

The majority of felony cases in the data set involved defendants who already had a criminal record (figure 4). Around one-fifth (19.9 percent) of felony defendants had no identified prior convictions in California.¹⁰ Almost one-quarter (24.3 percent) had one or more identified prior prison commitments, 37.6 percent of defendants had a prior criminal history including prior jail but no prior prison commitment, and 18.2 percent of defendants had a prior criminal history not involving incarceration in jail or prison.

⁹ Race/ethnicity data was drawn from the 2020 Decennial Census, <https://data.census.gov/>. Due to low numbers in American Indian and Other/Unknown categories, these groups were not included in the main analyses.

¹⁰ Data are from the California DOJ and only include California-based criminal history. Defendants may have other prior criminal records not captured in this dataset from other locales, including other states or the federal system.

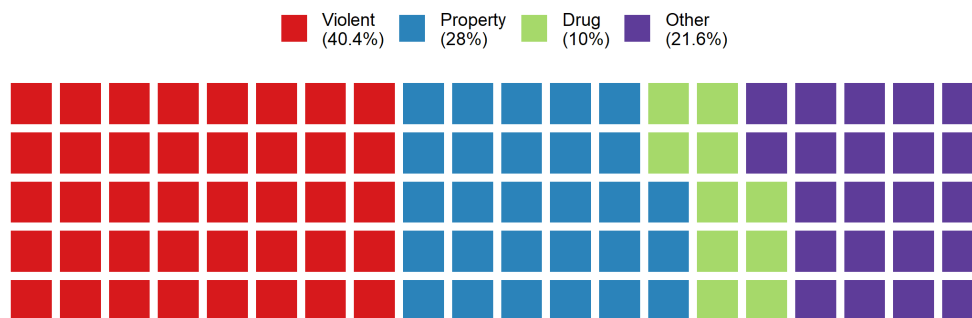
Figure 4: Prior Record of Felony Defendants



Arrest offense type

The largest proportion of felony defendants in ACHS were arrested for violent crimes (40.4 percent), followed by defendants arrested for property offenses (28 percent) and other felony offenses (21.6 percent) (figure 5). Defendants arrested for drug offenses (10 percent) comprised the smallest group in this data set for calendar year 2020.¹¹

Figure 5: Arrest Offense Type for Felony Defendants



¹¹ Categories are based on those used by the U.S. Department of Justice, Bureau of Justice Statistics. Violent offenses include homicide, rape, robbery, and assault. Property offenses include burglary, theft, forgery, and arson. Drug offenses include all felony-level drug offenses. Other felony offenses include all weapons offenses and a range of other offenses such as vandalism and driving under the influence of drugs or alcohol. For the purposes of creating an offense category, only felony-level arrest offenses were used, and violent offenses were prioritized, followed by property offenses, drug offenses, and other offenses. Later analyses allow for multiple categories of offenses to be accounted for.

Outcomes

This report presents findings based on four case outcomes:

- Conviction rates—whether a case results in a conviction or alternatively in a dismissal or acquittal;
- Conviction offense level—whether the case resulted in a felony or misdemeanor conviction;
- Type of sentence—whether the defendant was sentenced to prison or received a lesser sentence; and
- Length of sentence—the sentence length for defendants who were sentenced to prison.

The construction of each outcome from the ACHS data set is described briefly below.

Conviction Versus Acquittal/Dismissal

Once a case has been filed with the court, the case may result in either a conviction or alternatively in a dismissal or acquittal.¹² Dismissal and acquittal are combined into a single category in the following analyses.¹³ The vast majority of convictions (97 percent for felony cases) are achieved by plea bargaining deals that are negotiated between the prosecution and defense prior to judicial decisionmaking.¹⁴

Felony Versus Misdemeanor Conviction

Although all arrest charges in the ACHS data set are felony-level arrests, a reduction in charges may occur by plea deal or dismissal of the primary felony charge, resulting in conviction on a secondary misdemeanor charge or an infraction.¹⁵ Overall, felony convictions made up 60.8 percent and misdemeanors 39.2 percent of convictions with a known conviction level.¹⁶ In this report, the term “felony conviction rate” is used to refer to the percentage of defendants whose conviction was for a felony-level offense as opposed to a lesser offense.

¹² Cases filed with no known filing offense levels (n = 2,471) were removed for analysis of all outcomes.

¹³ The small number of cases in this data set resulting solely in an acquittal (n = 78) were combined with the dismissed category because there were too few to analyze acquittals as its own category.

¹⁴ The ACHS extract used for this report does not have a data field for whether a case was resolved by plea or by trial, so it is impossible to analyze these outcomes separately. The percentage of convictions achieved by plea deal were calculated from Judicial Council of California, *2021 Court Statistics Report: Statewide Caseload Trends 2010–11 Through 2019–20*, www.courts.ca.gov/documents/2021-Court-Statistics-Report.pdf. This is comparable to the proportion of convictions achieved by plea found in other states (95 percent of felony convictions; data on all convictions for felony cases not available). Bureau of Justice Statistics, *Felony Sentences in State Courts, 2004*, <https://bjs.ojp.gov/content/pub/pdf/fssc04.pdf>.

¹⁵ The small number of cases in this data set resulting solely in an infraction conviction (n = 147) were included in the misdemeanor category because there were too few to analyze infractions as its own category.

¹⁶ Convictions with no known conviction offense levels (n = 4,227) were removed for analysis of conviction offense level and sentencing outcomes.

Prison Versus Intermediate Sentence

Sentencing is the final disposition stage analyzed in this report.¹⁷ This report looks at sentencing through two separate analyses: prison versus intermediate sentencing, and length of sentence for those sentenced to prison. Prison sentences are on average longer, and are considered the more severe sentencing category in this report. All nonprison sentencing options are categorized in this report as “intermediate sentences.”¹⁸ Prison sentences that have had the imposition suspended are not counted as prison sentences for the purpose of this analysis.

Because convictions below the felony level are categorically ineligible for prison sentences, analyses of prison versus intermediate sentences are restricted to defendants convicted of a felony. Further restriction to prison-eligible felony crimes is challenging; although criminal justice realignment shifted sentencing so that in some cases sentences that previously would have been served in state prison are now served in county jail, the many exceptions based on criminal history and other factors make it difficult to achieve categorical separation among felonies.¹⁹ Therefore, all felony-level convictions are included in the analyses. The “prison sentence rate” discussed in the following analyses represents the proportion of all felony-level convictions receiving a prison sentence.

Prison Sentence Length

Sentence length is analyzed only for those sentenced to prison on a felony conviction. Prison sentences which have had their imposition suspended are not counted as prison sentences for the purpose of this analysis.²⁰ While the other outcomes analyzed in this report are all expressed as rates, sentence length is analyzed and expressed in terms of days sentenced to prison on a continuous scale.

Observed Disposition Outcomes

Prior Criminal Record

Prior criminal record has a significant impact on whether a defendant is convicted, receives a felony or misdemeanor conviction, and, if convicted of a felony, receives a prison sentence. Figure 6 arrays each outcome (rows) by prior criminal record, arrest offense, and race/ethnicity (columns). The first column shows that the effect of prior criminal history is consistent for these three outcomes. For example, the conviction rate ranges from a low of 74.8 percent for those with no prior convictions to a high of just over 85 percent for those with a prior jail or prison

¹⁷ Plea deals represent approximately 97 percent of convictions in felony cases in California and may impact sentencing outcomes; see note 14.

¹⁸ Other sentencing options in ACHS include jail, probation, combined probation and jail, and fines.

¹⁹ California Public Safety Realignment Act of 2011 (Assem. Bill 109 [Comm. on Budget]; Stats. 2011, ch. 15).

²⁰ Death sentences have no sentence length and are therefore not included in this analysis. Life sentences with no associated sentence length are also excluded (92 out of 214 identified life sentences had no associated sentence length).

record. Similarly, the share of those convicted of a felony versus a misdemeanor ranges from 52 percent for those with no prior convictions to 72.4 percent for those with a prior prison record. The share of convicted felons sentenced to prison was 22.7 percent for those without prior convictions and 55.8 percent for those with a prior prison record.

Prior criminal record also impacts sentence length for those sentenced to prison. Those sentenced to prison with no prior convictions received an average sentence length of 10.6 years, while those with priors ranged from 4.8 to 6.3 years on average. While it may seem counterintuitive that individuals with no prior convictions receive longer sentences, these numbers are without controlling for any other variables.

Arrest Offense

Arrest offense type also has a significant impact on whether a defendant is convicted, receives a felony or misdemeanor conviction, and, if convicted of a felony, receives a prison sentence. However, the pattern varies based on the outcome. For example, figure 6 (second column) illustrates the percentage of defendants convicted versus dismissed/acquitted by arrest offense type. The highest conviction rates (first row) are for property offenses (83.9 percent), and the lowest for drug offenses (74.2 percent). The felony conviction rate (second row) for violent crime is 59.6 percent, while for drug crimes the felony conviction rate is 61.2 percent and property crimes 64.8 percent. Prison sentencing rates (third row) range from about 24 percent for property and drug crimes to 40.5 percent for violent crimes.

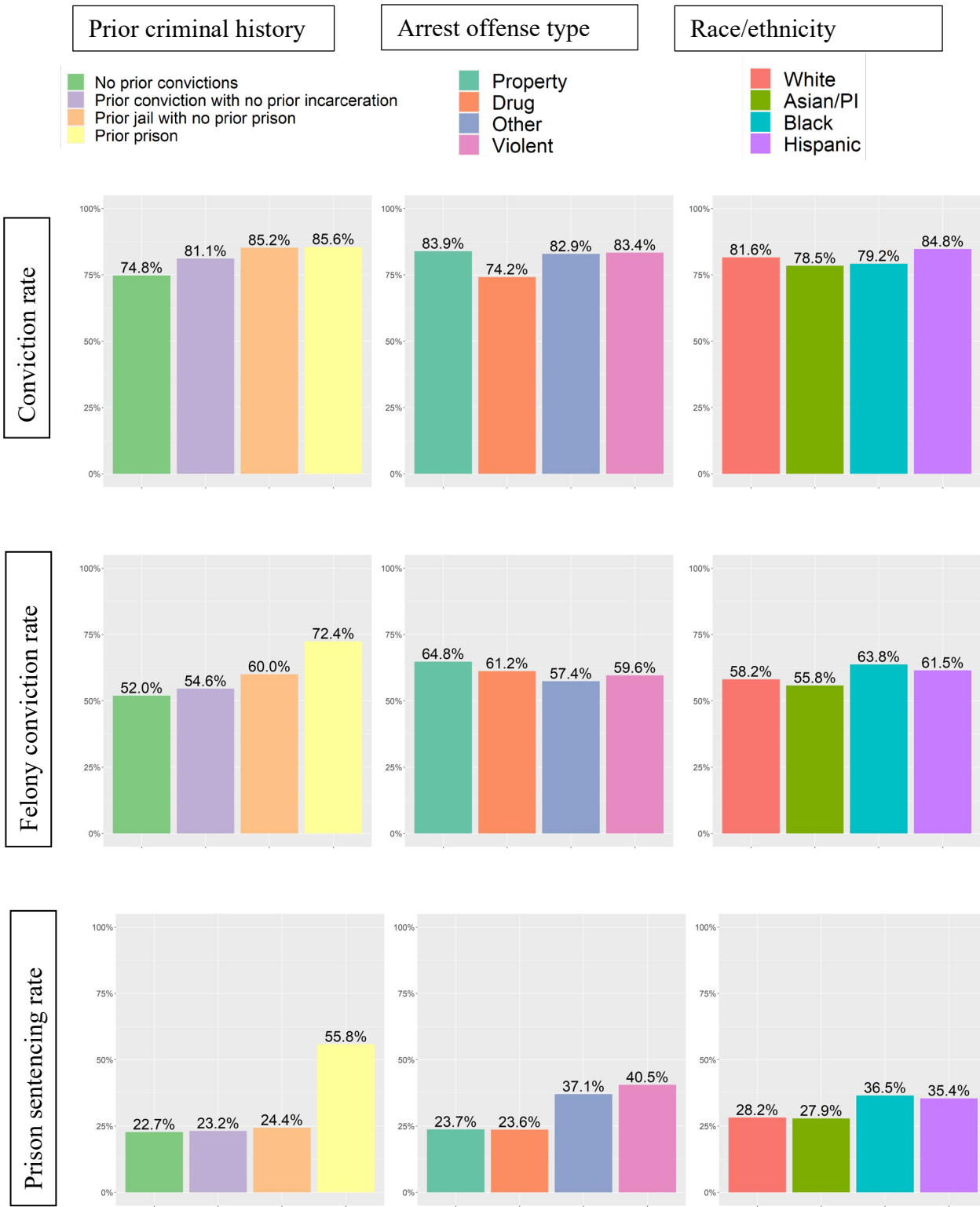
Arrest offense type also impacts sentence length for those sentenced to prison. Violent crimes receive the longest prison terms, 7.4 years on average, while drug and property crimes (4.1 years) receive shorter average prison terms.

Race/Ethnicity

Figure 6 also presents the percentage of individuals convicted versus dismissed/acquitted by race/ethnicity without taking any other factors into account (third column). For all racial/ethnic groups, conviction rates are high (78.5–84.8 percent). They range from a low of 78.5 percent for Asian/PI individuals to a high of 84.8 percent for the Hispanic group. Felony conviction rates range from a low of 55.8 percent for the Asian/PI group to a high of 63.8 percent for Black individuals. The percentage of individuals who received a sentence to prison as opposed to an intermediate sentence shows that prison sentences were less frequent for White (28.2 percent) and Asian/PI (27.9 percent) individuals, and more frequent for Black (36.5 percent) and Hispanic (35.4 percent) individuals.

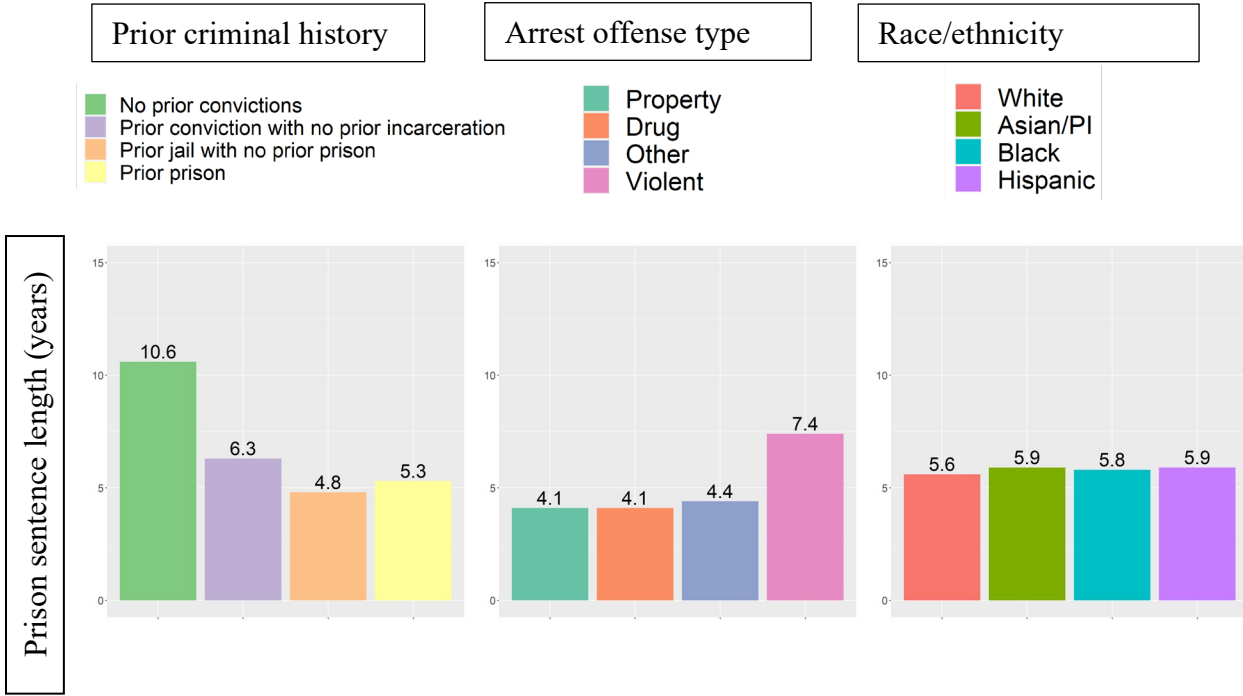
Average sentence length for individuals sentenced to prison ranged from 5.6 years for White defendants to 5.8 years for Black defendants, and 5.9 years for Hispanic and Asian/PI defendants.

Figure 6: Observed Outcomes by Prior Criminal History, Arrest Offense Type, and Race/Ethnicity



Note: The graphs above show the overall percentages, not controlling for other factors.

Figure 6 (continued)



Outcomes for Similarly Situated Defendants

The last column in figure 6 illustrates that Hispanic defendants have conviction rates of 84.8 percent, compared to White defendants at 81.6 percent, Black defendants at 79.2 percent, and Asian/PI defendants at 78.5 percent. Asian/PI defendants have a lower rate of felony convictions (55.8 percent) relative to White defendants (58.2 percent), Hispanic defendants (61.5 percent), and Black defendants (63.8 percent). When convicted of a felony, Black (36.5 percent) and Hispanic defendants (35.4 percent) receive prison sentences more often than White (28.2 percent) and Asian/PI defendants (27.9 percent). When sentenced to prison, White defendants are sentenced to fewer years (5.6) on average than Black (5.8), Hispanic (5.9), and Asian/PI (5.9) defendants.

However, the differences between racial/ethnic groups in these outcomes are confounded by the differences between groups in criminal history, features of the current offense or offenses, county-specific practices, gender, and age. For racial/ethnic differences in these characteristics, see Appendix B, table B1. The following section controls for these differences to compare outcomes for defendants who are similarly situated in terms of age, gender, county, and legal factors available through ACHS.²¹

Conviction Rates for Similarly Situated Defendants by Race/Ethnicity

It is possible to focus on the effect of race/ethnicity in convictions of felony arrests by using statistical methods that control for the confounding effects of other observable differences between groups: age, gender, county, and legal factors. This type of analysis estimates the effect of race/ethnicity for a given group compared to a hypothetical group of White defendants who are similarly situated in terms of age, gender, and legal factors.

Relative to similarly situated White defendants, the average Hispanic defendant was 2.1 percentage points more likely to receive a conviction.²² If the available factors other than race/ethnicity (age, gender, county, and legal factors) accounted for all of the differences in conviction rates, the estimation would be 0 instead of 2.1 percentage points. That is, if race/ethnicity had no effect on conviction rates, then both White and Hispanic defendants with otherwise the same characteristics would have the same conviction rate.

Using this same statistical method, relative to similarly situated White defendants, on average Asian/PI defendants were 1.6 percentage points more likely to receive a conviction. Though not

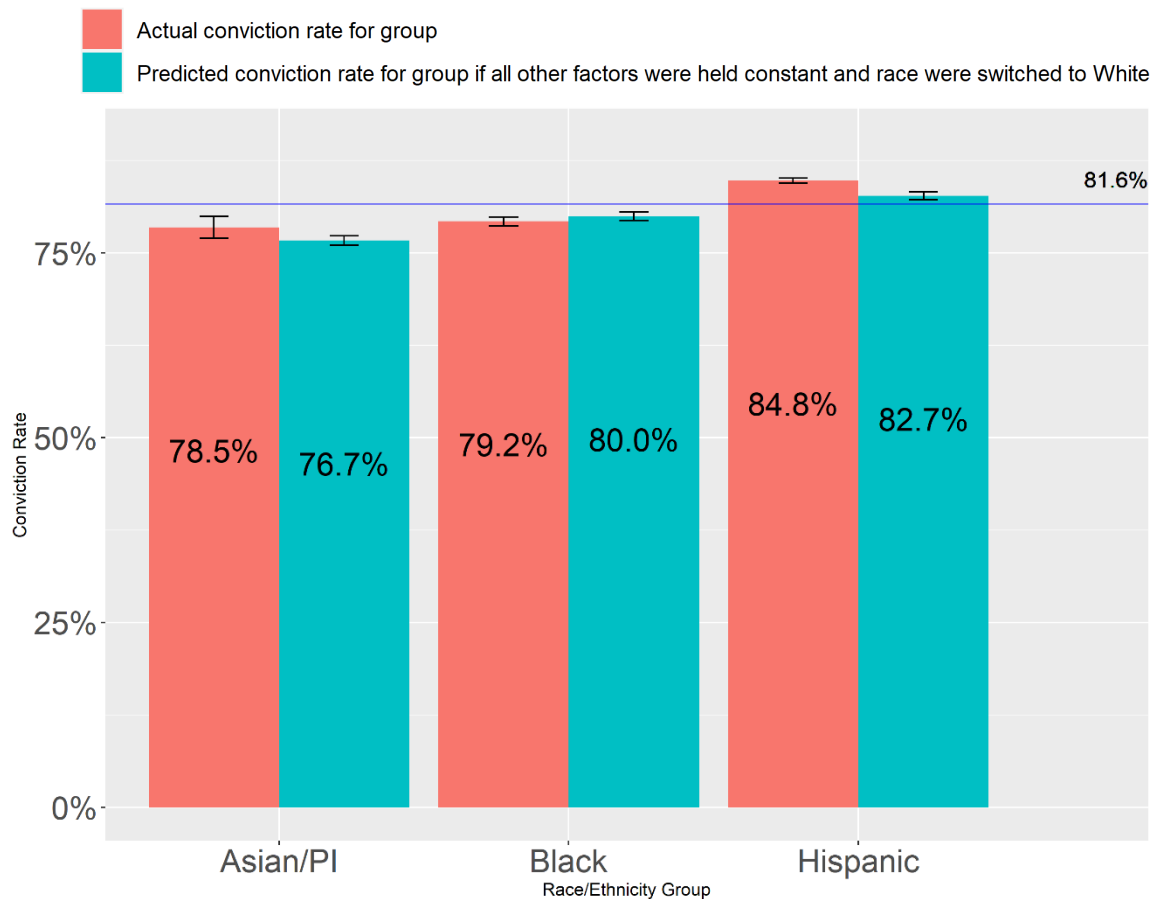
²¹ Defendants may not be similarly situated based on other unobserved variables; “similarly situated” is an approximation based on available data.

²² This is a marginal effect derived from the binomial logistic model. The model is used to predict the conviction rate for Hispanic defendants if all other factors are held constant and race were switched to White. Prior years of this report have presented results in terms of *relative risk* rather than percentage point marginal effects. See Appendix B for more information on methodology.

statistically significant, on average Black defendants were 0.7 percentage points less likely to receive a conviction.

Figure 7 shows the actual conviction rates (red bars) for Asian/PI, Black, and Hispanic individuals, and the estimated conviction rates (green bars) for these groups if all characteristics were held constant but race was changed to White. The blue line shows the actual conviction rate for White defendants.

Figure 7: Actual and Estimated Conviction Rates

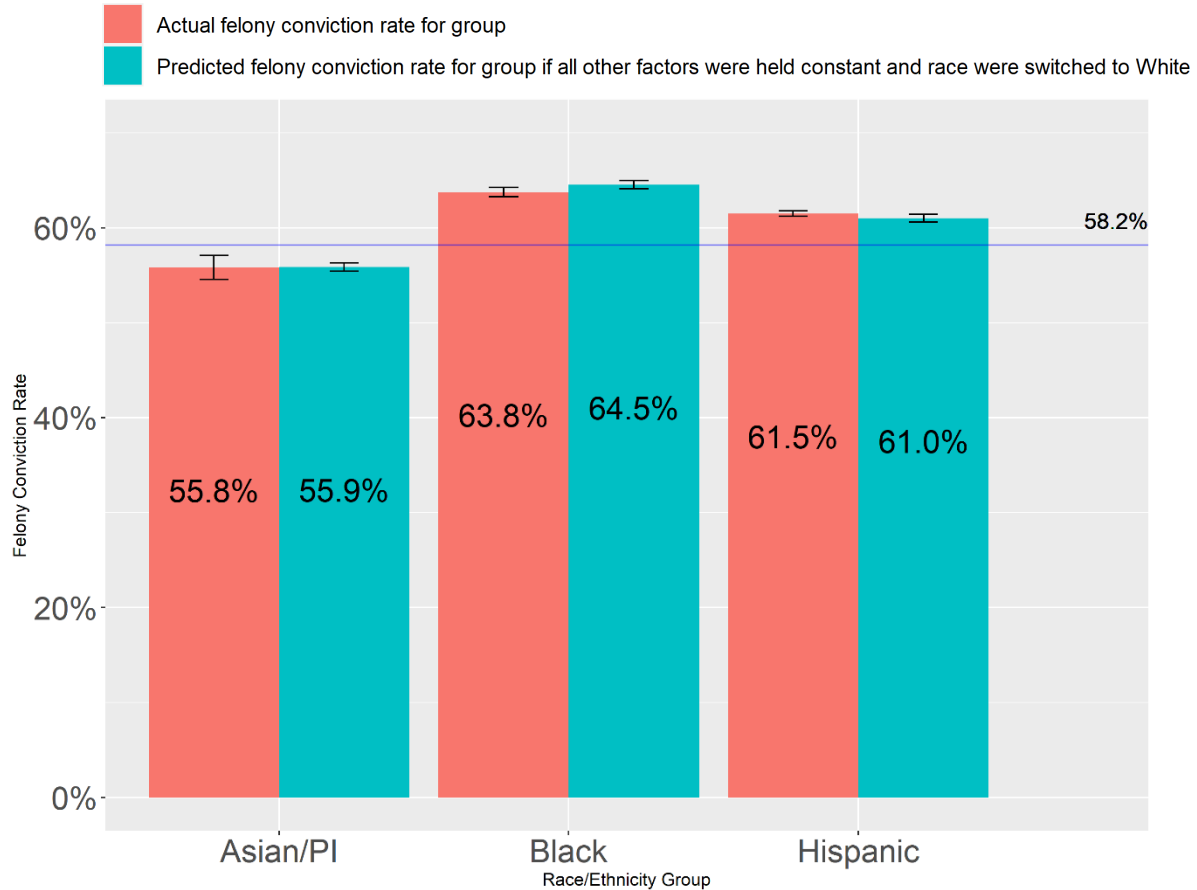


Felony Versus Misdemeanor Conviction Rate for Similarly Situated Defendants by Race/Ethnicity

The effect of race/ethnicity on felony conviction rate was estimated using the same technique described above. The statistical method estimated that relative to similarly situated White defendants, on average Black defendants were 0.8 percentage points less likely to receive a felony conviction. Although not significant, Hispanic individuals were on average 0.5 percentage points more likely and Asian/PI defendants less than 0.1 percentage points less likely to receive a felony conviction compared to similarly situated Whites.

Figure 8 shows the actual felony conviction rates (red bars) for Asian/PI, Black, and Hispanic individuals, and the estimated felony conviction rates (green bars) for these groups if all characteristics were held constant but race was changed to White. The blue line shows the actual felony conviction rate for White defendants.

Figure 8: Actual and Estimated Felony Conviction Rates



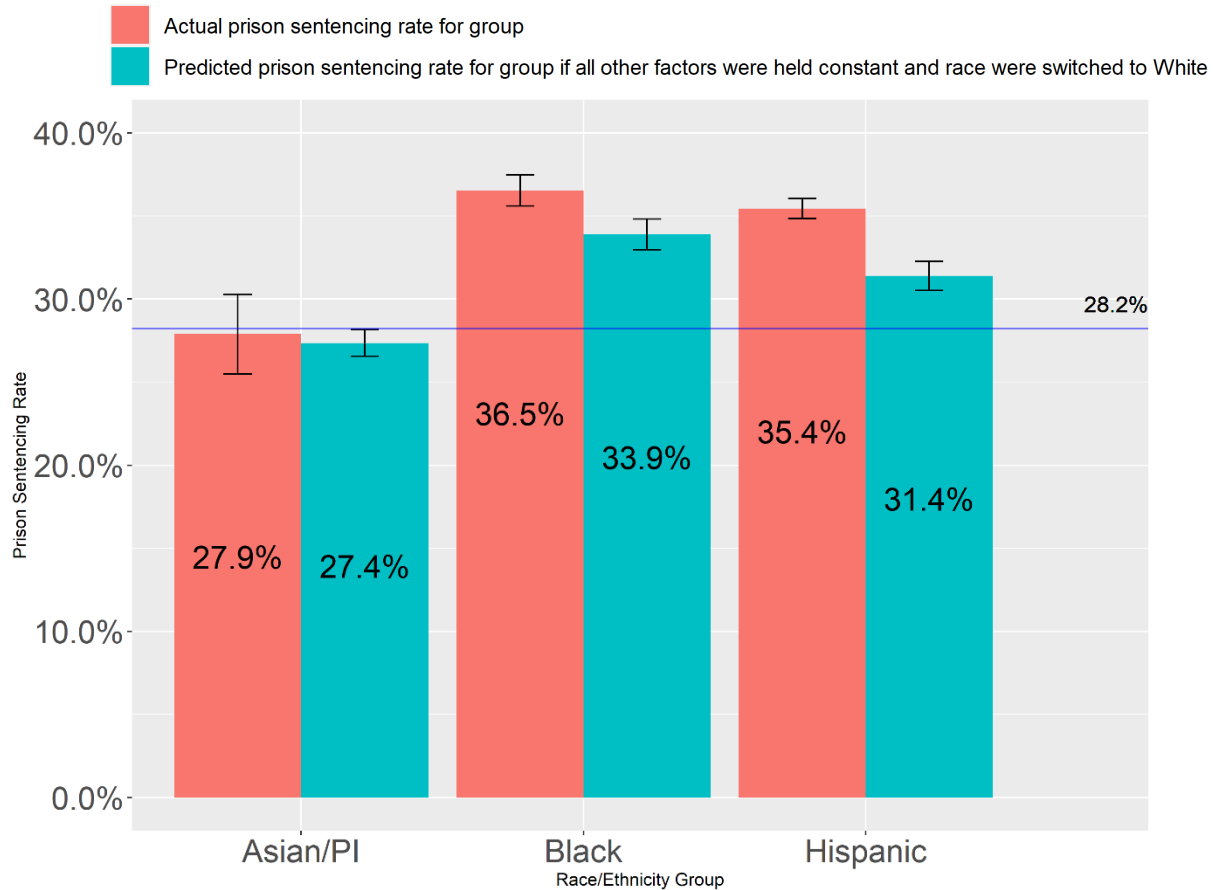
Sentencing for Similarly Situated Individuals by Race/Ethnicity

Again, using the same technique described above, the statistical method estimated that the average Hispanic defendant was 4 percentage points more likely to receive a prison sentence compared to similarly situated White defendants. Relative to similarly situated White defendants, the average Black defendant was 2.6 percentage points more likely to receive a prison sentence. Although not statistically significant, Asian/PI defendants were 0.6 percentage points more likely to receive a prison sentence compared to similarly situated White defendants.

Figure 9 shows the actual prison sentencing rates (red bars) for Asian/PI, Black, and Hispanic individuals, and the estimated prison sentencing rates (green bars) for these groups if all

characteristics were held constant but race were changed to White. The blue line shows the actual prison sentencing rate for White defendants.

Figure 9: Actual and Estimated Prison Sentencing Rates



Prison Sentence Length for Similarly Situated Defendants by Race/Ethnicity

The effect of race/ethnicity on prison sentence length was estimated using a slightly different statistical technique appropriate for the estimation of continuous variables. A statistical test found that adding race as a predictor of sentence length did not improve the predictions. When controlling for age, gender, county, and legal factors, differences in prison sentence lengths across racial groups were not significant.

Summary of Findings

Legal factors such as features of the current offense and the defendant's prior criminal record, as well as jurisdiction, exerted the strongest influence on conviction rate and sentencing to prison.²³ Current criminal charges exerted the strongest influence on felony versus misdemeanor conviction. More serious offenses and prior criminal records were both associated with higher conviction rates, more felony versus misdemeanor convictions, and more prison sentences. Legal factors, particularly those related to the current criminal charges, and the defendant's prior criminal record also exerted the strongest influence on prison sentence length.²⁴

After accounting for differences in outcomes that can be explained by legal factors such as charge type and criminal history and county variation such as conviction rates and demographics, the analyses found that defendant characteristics such as race/ethnicity, gender, and age are still significantly associated with rates of conviction, rates of felony versus misdemeanor convictions, and imposition of a prison sentence versus an intermediate sentence. After controlling for legal factors and county, this report found that the age and race/ethnicity of the defendant were not significantly associated with prison sentence length, while gender was still significantly associated for this outcome.

Accounting for differences mentioned above in all available legal and demographic factors:

- Relative to White defendants, Hispanic and Asian/PI defendants were more likely to be convicted rather than be acquitted or have their cases dismissed;
- White defendants were more likely to receive a felony versus a misdemeanor conviction when compared to Black defendants;
- Relative to White individuals, Black and Hispanic individuals convicted of a felony were more likely to receive a sentence to prison rather than a lesser sentence; and
- Prison sentence length did not differ significantly between racial groups.

These findings are generally consistent with prior years' reports in that race differences persisted after controlling for all available legal and demographic factors.²⁵

²³ As determined by a comparison of McFadden pseudo R-squared values, which estimate the relative contribution of each predictor to the overall predictive power of the statistical model. See Appendix B for more detail.

²⁴ As determined by a comparison of R-squared values.

²⁵ See Appendix C for trends over time. See Appendix B for a description of available controls.

Appendix A

Penal Code section 1170.45:

The Judicial Council shall collect data on criminal cases statewide relating to the disposition of those cases according to the race and ethnicity of the defendant, and report annually thereon to the Legislature beginning no later than January 1, 1999. It is the intent of the Legislature to appropriate funds to the Judicial Council for this purpose.

Appendix B

This appendix contains a table (table B1) of the characteristics of felony defendants in the Automated Criminal History System database and the regression results referred to in this report. Regression is a statistical process of determining the relationship between an outcome of interest and a set of predictors. The mathematical equation that is used to determine this relationship contains the predictors being examined and is referred to as a “model.”

For all outcomes, the prior criminal history items included in the model were:

- Years prior prison;
- Years prior jail;
- Number of prior sentences to probation;
- Number of prior convictions including a violent felony (summary code);
- Number of prior convictions including a violent misdemeanor (summary code);
- Number of prior convictions including a property felony (summary code);
- Number of prior convictions including a property misdemeanor (summary code);
- Number of prior convictions including a drug felony (summary code);
- Number of prior convictions including a drug misdemeanor (summary code);
- Number of prior convictions including another sex felony (summary code);
- Number of prior convictions including another sex misdemeanor (summary code);
- Number of prior convictions including another felony (summary code);
- Number of prior convictions including another misdemeanor (summary code);
- Number of prior convictions including a violent felony (statutory);
- Number of prior convictions including a serious felony (statutory);
- Number of prior convictions including a sexual offense;
- Number of prior convictions including a domestic violence offense;
- Number of prior convictions including a DUI offense;
- Whether the defendant was on probation at the time of the current arrest;
- The highest hierarchy value for any prior conviction offense; and
- Years since the most recent conviction (ceiling, and inverted).

For all outcomes, the demographic and location items included in the model were:

- Age;
- Gender;
- Race; and
- County.

For conviction rate and level of conviction offense, the current offense items included in the model were:

- Whether the filed charges included a violent felony charge (summary code);
- Whether the filed charges included a violent misdemeanor charge (summary code);

- Whether the filed charges included a property felony charge (summary code);
- Whether the filed charges included a property misdemeanor charge (summary code);

- Whether the filed charges included a drug felony charge (summary code);
- Whether the filed charges included a drug misdemeanor charge (summary code);
- Whether the filed charges included another sex felony charge (summary code);
- Whether the filed charges included another sex misdemeanor charge (summary code);
- Whether the filed charges included another felony charge (summary code);
- Whether the filed charges included another misdemeanor charge (summary code);
- Whether the filed charges included a violent felony (statutory);
- Whether the filed charges included a serious felony (statutory);
- Whether the filed charges included a sex offense;
- Whether the filed charges included a domestic violence offense;
- Whether the filed charges included a DUI offense;
- The highest DOJ offense hierarchy value for filed charges (scaled);
- The number of filed felony charges;
- The number of filed misdemeanor charges; and
- The number of arrests involved in the current disposition; and
- The maximum sentence exposure of filed charges, expressed as days of incarceration.²⁶

For prison sentencing and prison sentence length, the current offense items included in the model were:

- Whether the convicted charges included a violent felony charge (summary code);
- Whether the convicted charges included a violent misdemeanor charge (summary code);
- Whether the convicted charges included a property felony charge (summary code);
- Whether the convicted charges included a property misdemeanor charge (summary code);
- Whether the convicted charges included a drug felony charge (summary code);
- Whether the convicted charges included a drug misdemeanor charge (summary code);
- Whether the convicted charges included another sex felony charge (summary code);
- Whether the convicted charges included another sex misdemeanor charge (summary code);
- Whether the convicted charges included another felony charge (summary code),
- Whether the convicted charges included another misdemeanor charge (summary code),
- Whether the convicted charges included a violent felony (statutory),
- Whether the convicted charges included a serious felony (statutory),
- Whether the convicted charges included a sex offense,
- Whether the convicted charges included a domestic violence offense,
- Whether the convicted charges included a DUI offense;
- The highest DOJ offense hierarchy value for convicted charges (scaled);
- The number of convicted felony charges;

²⁶ The maximum sentence exposure is of filed charges calculated using sentencing triads from the DOJ, and sums the highest incarcerative sentence length from the filed charge with the longest exposure with the middle triad value for all other filed charges. In calculating this variable, exposure to a life sentence was counted as equivalent to 50 years' exposure and exposure to a death sentence was counted as equivalent to 75 years' exposure.

- The number of convicted misdemeanor charges; and
- The number of arrests involved in the current disposition; and
- The maximum sentence exposure of convicted charges, expressed as days of incarceration.²⁷

For the three rate outcomes, a binomial logit model was used. Binomial regression is a specific type of regression ideal for estimating binary outcome variables, such as felony versus misdemeanor conviction. For prison sentence length, linear regression was used, with robust standard errors.

A likelihood ratio test was used to compare the model strength for each model with and without race/ethnicity. These tests demonstrate that a model that includes race as a predictor is significantly more predictive than a model without race for conviction versus acquittal or dismissal, for felony versus misdemeanor conviction, and for prison versus lesser sentencing.²⁸ For sentence length, the test indicated that the model was not significantly more predictive with race as a predictor.

Marginal effects for each race/ethnicity were used to express the magnitude of the effect of race/ethnicity. The marginal effects shown are derived from the binomial logistic model, and represent the average effect of race for each racial group.

²⁷ The maximum sentence exposure of convicted charges is calculated using sentencing triads from the DOJ, and sums the highest incarcerative sentence length from the convicted charge with the longest exposure with the middle triad value for all other convicted charges. In calculating this variable, exposure to a life sentence was counted as equivalent to 50 years' exposure and exposure to a death sentence was counted as equivalent to 75 years' exposure.

²⁸ For each of these outcomes $p < 0.05$, indicating it is unlikely to observe this difference by chance if the two models were equally predictive.

Table B1: Characteristics of felony defendants

	Total %	Asian/PI %	Black %	Hispanic %	White %
All defendants	--	3.0	19.4	46.8	30.8
Outcome Variables					
<i>Case Outcome</i>					
Acquittal or Dismissal	17.5	21.5	20.8	15.2	18.4
Conviction	82.5	78.5	79.2	84.8	81.6
<i>Conviction type (among convictions)</i>					
Misdemeanor	39.2	44.2	36.2	38.5	41.8
Felony	60.8	55.8	63.8	61.5	58.2
<i>Sentence Outcome (among felonies)</i>					
Intermediate Sentence	66.7	72.1	63.5	64.6	71.8
Prison	33.3	27.9	36.5	35.4	28.2
<i>Sentence Length (prison sentences)</i>					
Average years	5.8	5.9	5.8	5.9	5.6
Situational Variables					
<i>Arrest Offense Type</i>					
Violent	41.1	37.3	47.1	41.5	37.0
Property	27.7	31.4	25.8	26.1	31.1
Drug	9.9	11.6	6.1	10.0	12.0
Other	21.3	19.7	21.1	22.4	19.9
<i>Arrest Offense DOJ Hierarchy^a</i>					
Average hierarchy value	0.0596	0.0523	0.0921	0.0591	0.0403
<i>Arrest Offense Exposure^b</i>					
Max sentence exposure (days)	2,239.9	2,277.2	2,473.6	2,259.9	2,041.5
<i>Prior Record</i>					
No prior convictions	19.5	32.5	19.7	19.7	17.7
Prior conviction (no prior jail)	18.4	17.0	15.4	20.7	16.9
Prior jail (no prior prison)	37.9	33.5	35.2	35.8	43.2
Prior prison	24.2	17.0	29.8	23.7	22.2
Defendant Characteristics					
<i>Gender</i>					
Male	82.2	83.3	80.7	85.3	78.4
Female	17.8	16.7	19.3	14.7	21.6
<i>Average Age (years)</i>					
	32.2	34.7	31.0	30.9	34.7
<i>Number of Cases</i>					
	77,505 ^c	2,326	15,020	36,262	23,897

^a The DOJ produces a hierarchy of criminal codes with values representing the severity of crimes. The variable has been scaled for ease of interpretability so that the overall mean hierarchy value is 0, and the standard deviation is 1. Positive values represent average hierarchy values more severe than the mean. Total average hierarchy is not equal to 0 because the variable was scaled for all dispositions, and this table only includes those with court dispositions.

^b The maximum sentence exposure is calculated using sentencing triads from the DOJ, and sums the highest incarcerative sentence length from the charge with the longest exposure with the middle triad value for all other charges. In calculating this variable, exposure to a life sentence was counted as equivalent to 50 years' exposure and exposure to a death sentence was counted as equivalent to 75 years' exposure.

^c Excluding those with race other than White, black, Hispanic, or Asian/PI; genders other than male or female; age less than 18; and cases with no known offense level.

Table B2: Binomial logit model predicting conviction versus dismissal/acquittal

Term	estimate	std.error	p-value [†]	
(Intercept)	-0.50577	0.061322	1.61E-16	***
years_prior_prison	0.008682	0.00302	0.00404	**
years_prior_jail	0.007365	0.005248	0.160486	
prior_sent_probation_flag_count	0.022258	0.007881	0.004739	**
prior_conviction_summ_f_violent_flag_count	-0.09766	0.027192	0.000329	***
prior_conviction_summ_m_violent_flag_count	0.018549	0.013877	0.181321	
prior_conviction_summ_f_property_flag_count	-0.02591	0.011899	0.029475	*
prior_conviction_summ_m_property_flag_count	0.035311	0.015978	0.027107	*
prior_conviction_summ_f_drug_flag_count	-0.01145	0.014351	0.425042	
prior_conviction_summ_m_drug_flag_count	0.03902	0.010031	0.0001	***
prior_conviction_summ_f_other_sex_flag_count	0.138973	0.068673	0.043003	*
prior_conviction_summ_m_other_sex_flag_count	-0.03794	0.027427	0.166524	
prior_conviction_summ_f_other_flag_count	-0.05246	0.018032	0.003622	**
prior_conviction_summ_m_other_flag_count	-0.0242	0.00966	0.012244	*
prior_conviction_violent_felony_flag_count	-0.03949	0.050809	0.437047	
prior_conviction_serious_felony_flag_count	0.025119	0.039627	0.526162	
prior_conviction_sex_flag_count	0.049396	0.07682	0.520221	
prior_conviction_dv_flag_count	0.052543	0.019165	0.006114	**
prior_conviction_dui_flag_count	0.016803	0.020769	0.418493	
on_prob	0.231335	0.026034	6.35E-19	***
prior_max_conv_hier_scaled	0.350077	0.06398	4.46E-08	***
inv_yrs_since_prior_conv	0.54003	0.037561	7.19E-47	***
court_summ_f_violent_flag	0.093638	0.048797	0.054993	.
court_summ_m_violent_flag	0.758144	0.032112	3.1E-123	***
court_summ_f_property_flag	0.241498	0.040688	2.93E-09	***
court_summ_m_property_flag	0.691562	0.040209	2.69E-66	***
court_summ_f_drug_flag	-0.16985	0.050353	0.000743	***
court_summ_m_drug_flag	-0.05793	0.032204	0.072064	.
court_summ_f_other_sex_flag	0.640058	0.117963	5.77E-08	***
court_summ_m_other_sex_flag	0.597663	0.124544	1.6E-06	***
court_summ_f_other_flag	0.293064	0.032426	1.6E-19	***
court_summ_m_other_flag	0.779484	0.028342	1.6E-166	***
court_violent_felony_flag	0.020154	0.059953	0.736748	
court_serious_felony_flag	0.069921	0.044493	0.116068	
court_sex_flag	0.26545	0.110957	0.01674	*
court_dv_flag	-0.08236	0.034544	0.017121	*
court_dui_flag	1.582084	0.078873	1.69E-89	***
max_court_hier_scaled	3.064095	0.124947	8.4E-133	***
filed_fcharge_count	0.083657	0.009776	1.16E-17	***
filed_mcharge_count	-0.02867	0.008466	0.000706	***
combined_cycles_count	0.170986	0.020846	2.36E-16	***
exp_filed_sent_days	-1E-05	5.2E-06	0.049223	*
age	-0.00317	0.001176	0.007026	**
genderF	-0.20878	0.026686	5.13E-15	***
raceAsian/PI	0.128618	0.060389	0.033185	*
raceBlack	-0.05355	0.031583	0.089961	.
raceHispanic	0.176433	0.026517	2.86E-11	***
County fixed effects [‡]	‡	‡	‡	‡

Notes:

n = 77,505

Excluding those with race other than White, black, Hispanic, or Asian/PI; genders other than male or female; age less than 18; and cases with no recorded filed charge level.

* p < 0.05; ** p < 0.01; *** p < 0.001

† P-values represent the probability that these results could be obtained by chance if that predictor did not have any predictive value. P-values below 0.05 are typically viewed as representing a “significant” result—that the estimate is unlikely to have occurred by chance if there were no true effect.

‡ County included as a categorical variable; individual county fixed effects not shown. Many counties significantly differed.

Table B3: Pseudo R-squared results for model predicting conviction versus dismissal/acquittal

Contribution for each variable was calculated by taking the McFadden pseudo R-squared value for the full model and subtracting the McFadden pseudo R-squared value for a model without that variable. McFadden pseudo R-squared values are difficult to interpret individually, but the relative values give information about the relative contribution of each predictor to the overall predictive power of the model.

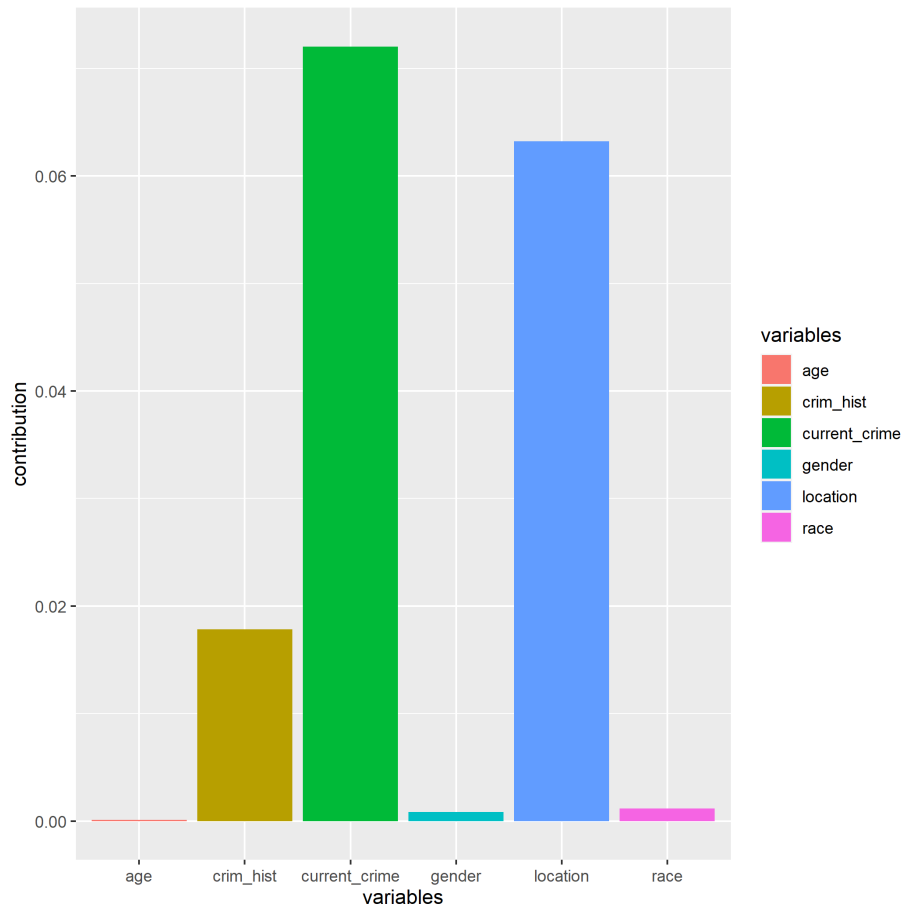


Table B4: Binomial logit model predicting felony versus misdemeanor conviction

Term	estimate	std.error	p-value [†]	
(Intercept)	-2.61679	0.099944	4.2E-151	***
years_prior_prison	0.007594	0.004817	0.114903	
years_prior_jail	-0.00305	0.004257	0.474134	
prior_sent_probation_flag_count	0.03135	0.010309	0.002357	**
prior_conviction_summ_f_violent_flag_count	0.047817	0.03956	0.226767	
prior_conviction_summ_m_violent_flag_count	0.033658	0.017346	0.052334	.
prior_conviction_summ_f_property_flag_count	0.099577	0.017495	1.26E-08	***
prior_conviction_summ_m_property_flag_count	0.035899	0.020721	0.083182	.
prior_conviction_summ_f_drug_flag_count	0.029933	0.020189	0.138159	
prior_conviction_summ_m_drug_flag_count	-0.04649	0.011098	2.8E-05	***
prior_conviction_summ_f_other_sex_flag_count	-0.02262	0.083693	0.786904	
prior_conviction_summ_m_other_sex_flag_count	0.018377	0.043122	0.669994	
prior_conviction_summ_f_other_flag_count	0.084178	0.027166	0.001944	**
prior_conviction_summ_m_other_flag_count	-0.02892	0.01264	0.022127	*
prior_conviction_violent_felony_flag_count	0.010351	0.082105	0.899673	
prior_conviction_serious_felony_flag_count	-0.02858	0.059283	0.629785	
prior_conviction_sex_flag_count	0.25225	0.106044	0.017373	*
prior_conviction_dv_flag_count	-0.00289	0.023381	0.901753	
prior_conviction_dui_flag_count	0.030714	0.027559	0.265071	
on_prob	0.181014	0.03699	9.9E-07	***
prior_max_conv_hier_scaled	1.27041	0.10058	1.43E-36	***
inv_yrs_since_prior_conv	0.390002	0.053181	2.24E-13	***
court_summ_f_violent_flag	2.524885	0.083534	1.1E-200	***
court_summ_m_violent_flag	-1.43559	0.04105	6.1E-268	***
court_summ_f_property_flag	2.773165	0.073657	0	***
court_summ_m_property_flag	-1.80644	0.051904	2.1E-265	***
court_summ_f_drug_flag	1.817207	0.08975	3.74E-91	***
court_summ_m_drug_flag	-0.68215	0.045303	3.09E-51	***
court_summ_f_other_sex_flag	2.794567	0.181973	3.18E-53	***
court_summ_m_other_sex_flag	-1.15538	0.152683	3.81E-14	***
court_summ_f_other_flag	2.468108	0.06013	0	***
court_summ_m_other_flag	-1.35313	0.037857	8.5E-280	***
court_violent_felony_flag	-0.0711	0.092209	0.440651	
court_serious_felony_flag	-0.37665	0.056514	2.65E-11	***
court_sex_flag	0.139425	0.167169	0.40426	
court_dv_flag	-0.31372	0.051547	1.16E-09	***
court_dui_flag	0.538453	0.065654	2.38E-16	***
max_court_hier_scaled	3.74428	0.255669	1.45E-48	***
filed_fcharge_count	0.685309	0.022534	3.7E-203	***
filed_mcharge_count	-0.11639	0.011896	1.32E-22	***
combined_cycles_count	0.598772	0.022417	3.5E-157	***
exp_filed_sent_days	2.19E-05	1.37E-05	0.109586	
age	-0.02248	0.001817	0.0000000	***
genderF	-0.51036	0.04132	0.0000000	***
raceAsian/PI	-0.00535	0.096357	0.955694	
raceBlack	-0.11843	0.049081	0.015821	*
raceHispanic	0.07342	0.038741	0.058072	.
County fixed effects [‡]	‡	‡	‡ ‡	

Notes:

n = 61,619

Excluding those with race other than White, black, Hispanic, or Asian/PI; genders other than male or female; age less than 18; and cases with no convicted charges.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

† P-values represent the probability that these results could be obtained by chance if that predictor did not have any predictive value. P-values below 0.05 are typically viewed as representing a “significant” result—that the estimate is unlikely to have occurred by chance if there were no true effect.

‡ County included as a categorical variable; individual county fixed effects not shown. Many counties significantly differed.

Table B5: Pseudo R-squared results for model predicting felony versus misdemeanor conviction

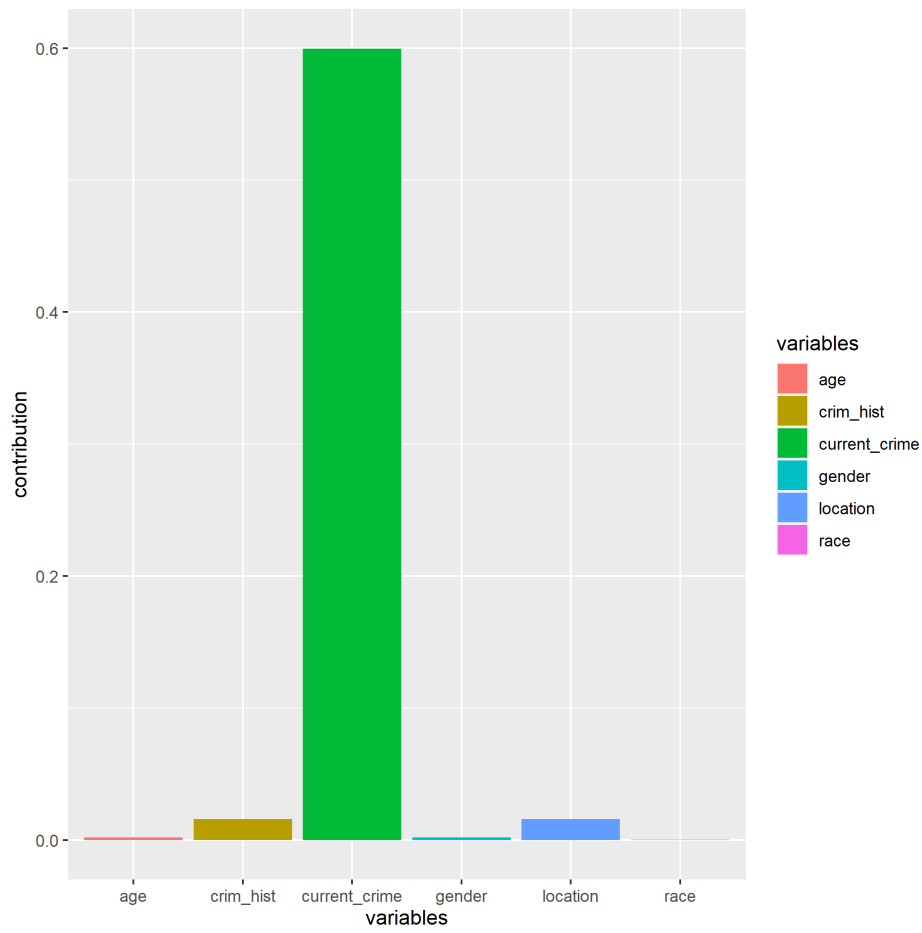


Table B6: Binomial logit model predicting prison versus intermediate sentence

Term	estimate	std.error	p-value [†]	
(Intercept)	-2.91598	0.154453	1.68E-79	***
years_prior_prison	0.071988	0.003963	9.69E-74	***
years_prior_jail	0.003165	0.005137	0.537863	
prior_sent_probation_flag_count	-0.02773	0.008369	0.000923	***
prior_conviction_summ_f_violent_flag_count	0.248765	0.028564	3.06E-18	***
prior_conviction_summ_m_violent_flag_count	-0.01653	0.014047	0.239165	
prior_conviction_summ_f_property_flag_count	0.071354	0.012942	3.52E-08	***
prior_conviction_summ_m_property_flag_count	-0.0335	0.017686	0.058197	.
prior_conviction_summ_f_drug_flag_count	-0.03136	0.015356	0.041103	*
prior_conviction_summ_m_drug_flag_count	0.02173	0.009881	0.027868	*
prior_conviction_summ_f_other_sex_flag_count	0.137732	0.059321	0.020244	*
prior_conviction_summ_m_other_sex_flag_count	-0.02836	0.033263	0.393966	
prior_conviction_summ_f_other_flag_count	0.193132	0.018443	1.17E-25	***
prior_conviction_summ_m_other_flag_count	0.010338	0.010258	0.313521	
prior_conviction_violent_felony_flag_count	0.249969	0.056421	9.4E-06	***
prior_conviction_serious_felony_flag_count	0.363149	0.041775	3.53E-18	***
prior_conviction_sex_flag_count	0.135479	0.079728	0.089269	.
prior_conviction_dv_flag_count	0.043142	0.01881	0.021815	*
prior_conviction_dui_flag_count	-0.06111	0.022958	0.007775	**
on_prob	0.067086	0.028977	0.020603	*
prior_max_conv_hier_scaled	2.177108	0.092703	5.9E-122	***
inv_yrs_since_prior_conv	-0.28541	0.042774	2.52E-11	***
conviction_summ_f_violent_flag	0.639382	0.055468	9.64E-31	***
conviction_summ_m_violent_flag	-0.11859	0.059017	0.044495	*
conviction_summ_f_property_flag	0.074253	0.051483	0.149225	
conviction_summ_m_property_flag	-0.04383	0.093677	0.63985	
conviction_summ_f_drug_flag	-0.05161	0.063745	0.418152	
conviction_summ_m_drug_flag	-0.18762	0.083068	0.023906	*
conviction_summ_f_other_sex_flag	0.759977	0.106043	7.68E-13	***
conviction_summ_m_other_sex_flag	-0.19635	0.226774	0.386586	
conviction_summ_f_other_flag	0.849949	0.046403	6.07E-75	***
conviction_summ_m_other_flag	-0.07969	0.056771	0.160418	
conviction_violent_felony_flag	0.280887	0.071102	7.8E-05	***
conviction_serious_felony_flag	0.743314	0.043702	7.08E-65	***
conviction_sex_flag	1.606272	0.110075	3.13E-48	***
conviction_dv_flag	-0.23553	0.051702	5.22E-06	***
conviction_dui_flag	0.144211	0.066278	0.029567	*
max_conv_hier_scaled	0.400327	0.21756	0.065757	.
convicted_fcharge_count	0.213271	0.018212	1.13E-31	***
convicted_mcharge_count	-0.04213	0.022101	0.056642	.
combined_cycles_count	0.020707	0.01654	0.21058	
exp_conv_sent_days	0.000278	2.33E-05	6.76E-33	***
age	-0.02825	0.001761	6.43E-58	***
genderF	-0.5966	0.044903	2.77E-40	***
raceAsian/PI	0.037622	0.089265	0.673413	
raceBlack	0.162166	0.041349	8.79E-05	***
raceHispanic	0.248796	0.033645	1.42E-13	***
County fixed effects [‡]	‡	‡	‡	‡

Notes:

n = 37,424

Excluding those with race other than White, black, Hispanic, or Asian/PI; genders other than male or female; age less than 18; and cases with no felony level conviction offenses.

* p < 0.05; ** p < 0.01; *** p < 0.001

† P-values represent the probability that these results could be obtained by chance if that predictor did not have any predictive value. P-values below 0.05 are typically viewed as representing a “significant” result—that the estimate is unlikely to have occurred by chance if there were no true effect.

‡ County included as a categorical variable; individual county fixed effects not shown. Many counties significantly differed.

Table B7: Pseudo R-squared results for model predicting prison sentence length

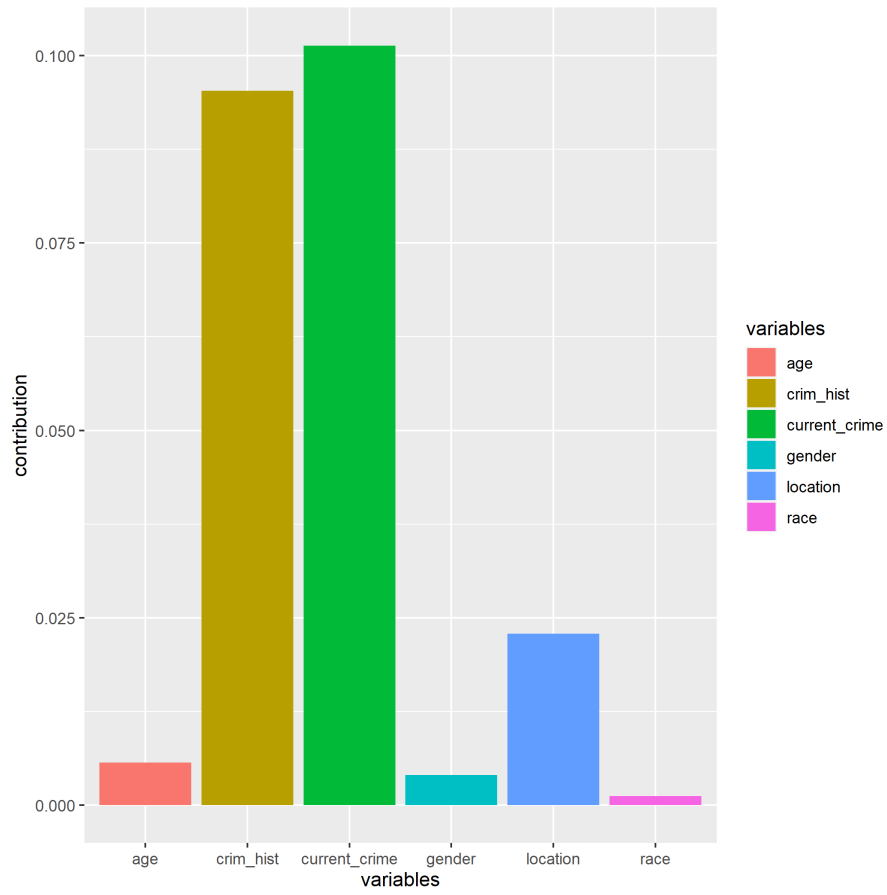


Table B8: Linear regression model predicting prison sentence length

Term	estimate	std.error	p-value	
(Intercept)	-369.657	297.2132	0.213618	
years_prior_prison	31.6805	9.448582	0.000802	***
years_prior_jail	1.396519	5.070827	0.783012	
prior_sent_probation_flag_count	-23.1841	19.89008	0.243794	
prior_conviction_summ_f_violent_flag_count	-203.621	59.65665	0.000644	***
prior_conviction_summ_m_violent_flag_count	-7.49353	19.13454	0.695343	
prior_conviction_summ_f_property_flag_count	-10.3681	23.36931	0.657295	
prior_conviction_summ_m_property_flag_count	-83.2603	31.1035	0.007441	**
prior_conviction_summ_f_drug_flag_count	-76.1499	26.10515	0.00354	**
prior_conviction_summ_m_drug_flag_count	-4.2309	16.34484	0.795753	
prior_conviction_summ_f_other_sex_flag_count	149.9604	133.6013	0.261694	
prior_conviction_summ_m_other_sex_flag_count	-85.9982	82.0436	0.294567	
prior_conviction_summ_f_other_flag_count	-92.0616	27.57195	0.000843	***
prior_conviction_summ_m_other_flag_count	30.34336	21.84783	0.164904	
prior_conviction_violent_felony_flag_count	258.0511	206.3967	0.211226	
prior_conviction_serious_felony_flag_count	169.6009	67.30862	0.011756	*
prior_conviction_sex_flag_count	119.0801	354.405	0.736877	
prior_conviction_dv_flag_count	24.28736	32.78256	0.458791	
prior_conviction_dui_flag_count	-28.241	58.7978	0.631017	
on_prob	21.27576	89.28727	0.811665	
prior_max_conv_hier_scaled	1443.79	613.2038	0.018563	*
inv_yrs_since_prior_conv	-438.545	108.1239	5.02E-05	***
conviction_summ_f_violent_flag	514.0519	356.6411	0.149506	
conviction_summ_m_violent_flag	115.1928	137.8882	0.403505	
conviction_summ_f_property_flag	-82.1567	231.3904	0.722553	
conviction_summ_m_property_flag	234.2778	181.3183	0.196354	
conviction_summ_f_drug_flag	-197.155	197.8993	0.319153	
conviction_summ_m_drug_flag	-36.3981	156.0373	0.815559	
conviction_summ_f_other_sex_flag	315.9423	527.2885	0.549062	
conviction_summ_m_other_sex_flag	-1825.66	597.8159	0.002264	**
conviction_summ_f_other_flag	173.0961	225.4983	0.44273	
conviction_summ_m_other_flag	78.39364	141.5474	0.579703	
conviction_violent_felony_flag	655.4653	257.7454	0.011	*
conviction_serious_felony_flag	139.2266	192.1456	0.468718	
conviction_sex_flag	2220.219	482.8779	4.31E-06	***
conviction_dv_flag	-206.919	129.6639	0.110557	
conviction_dui_flag	37.64362	151.5793	0.803873	
max_conv_hier_scaled	-1492.48	520.7765	0.004166	**
convicted_fcharge_count	936.9221	94.07655	2.82E-23	***
convicted_mcharge_count	-111.078	52.1236	0.033105	*
combined_cycles_count	-204.515	52.86802	0.00011	***
exp_conv_sent_days	0.562458	0.090247	4.74E-10	***
age	-0.082	9.229305	0.992912	
genderF	-223.693	65.31471	0.000617	***
raceAsian/PI	-224.479	245.421	0.360383	
raceBlack	134.4534	116.1351	0.246996	
raceHispanic	126.5386	106.5721	0.235112	
County fixed effects‡	‡	‡	‡ ‡	

Notes:

n = 12,478

Prison sentence length represented in days.

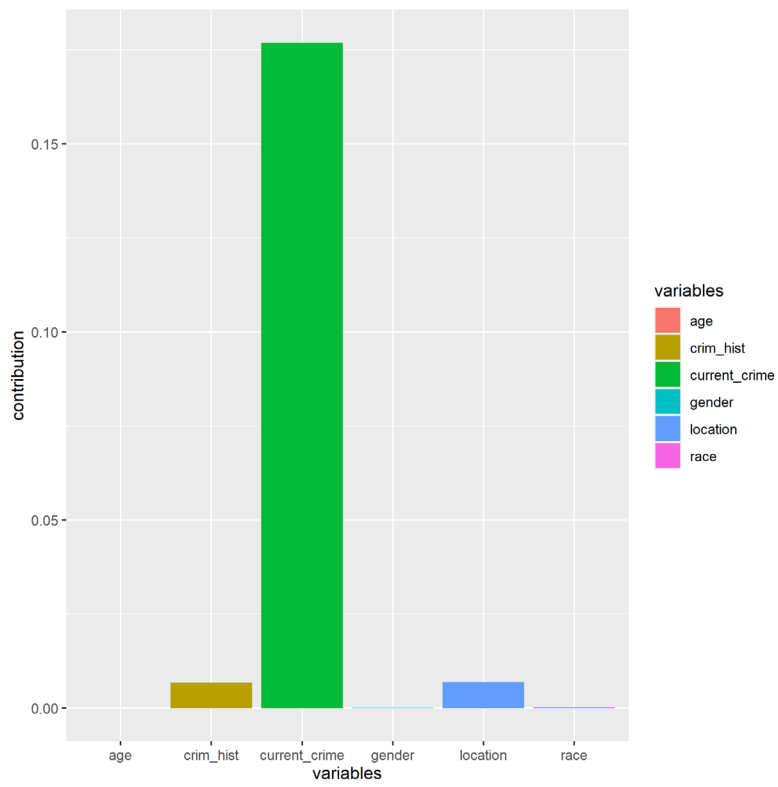
Excluding those with race other than White, black, Hispanic, or Asian/PI; genders other than male or female; age less than 18; cases with no felony level conviction offenses; and cases not sentenced to prison.

* p < 0.05; ** p < 0.01; *** p < 0.001

† P-values represent the probability that these results could be obtained by chance if that predictor did not have any predictive value. P-values below 0.05 are typically viewed as representing a “significant” result—that the estimate is unlikely to have occurred by chance if there were no true effect.

‡ County included as a categorical variable; individual county fixed effects not shown. Many counties significantly differed; relative risk varied.

Table B9: R-squared results for model predicting prison sentence length



Appendix C

Descriptive data from previous years' reports²⁹ (compiled in figures C1 and C2) suggests that the trends found in this year's report are consistent with that of prior years.³⁰ Additional research is needed to gain a clearer understanding of what is driving these trends.

²⁹ For figure C2, the prison sentence rate is out of all convicted defendants, not solely those charged with felonies, in order to be consistent with previous years' analyses.

³⁰ Felony versus misdemeanor conviction charge is not graphed because prior years' reports did not analyze this outcome.

Figure C1: Conviction rate by race/ethnic group and year

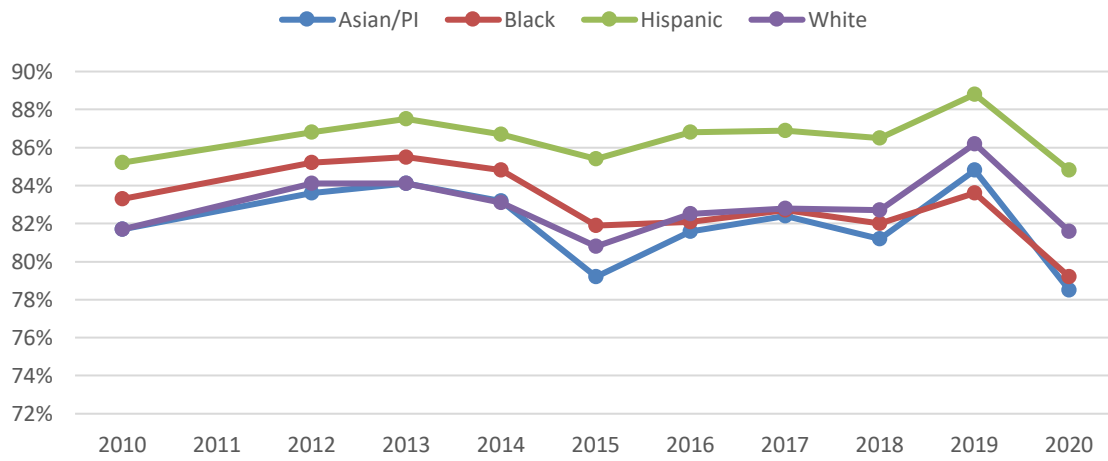
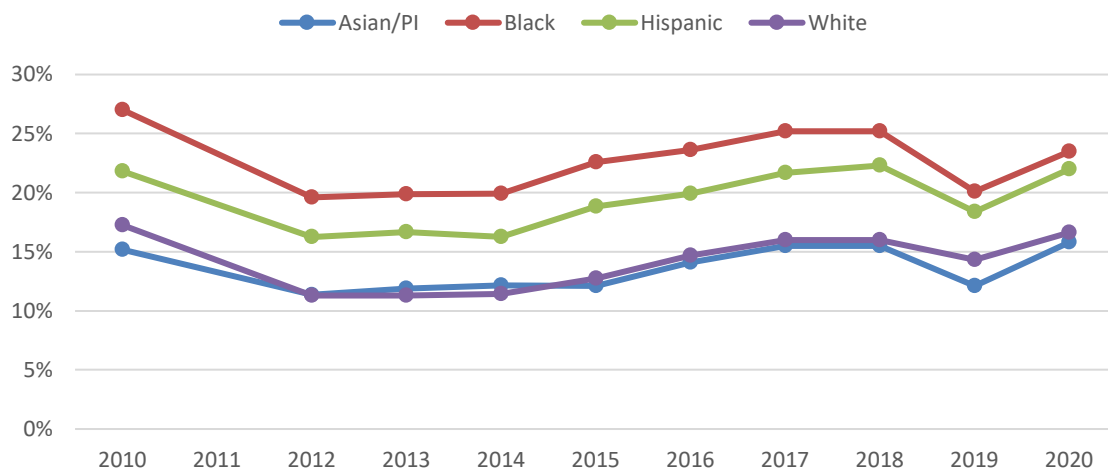


Figure C2: Prison sentence rate by race/ethnic group and year



Note: These graphs show overall percentages, not controlling for prior record, offense features, age, or gender. Data not available for calendar year 2011.

Appendix D

The analyses presented in this report represent average differences across each racial/ethnic group. The following charts show the more nuanced patterns of outcomes broken down by race/ethnicity, prior criminal record, and arrest offense type. Since the numbers for Asian/PI defendants are comparatively small, caution should be used in interpreting the subsetted percentages visualized below.

These graphs show the observed percentages, not controlling for prior record, arrest offense, number of arrest charges, age, or gender. “Other felony” type is not shown due to the lack of interpretability of such a broad category of offenses.

Figure D1: Percent convicted by race, prior criminal record, and felony arrest offense type

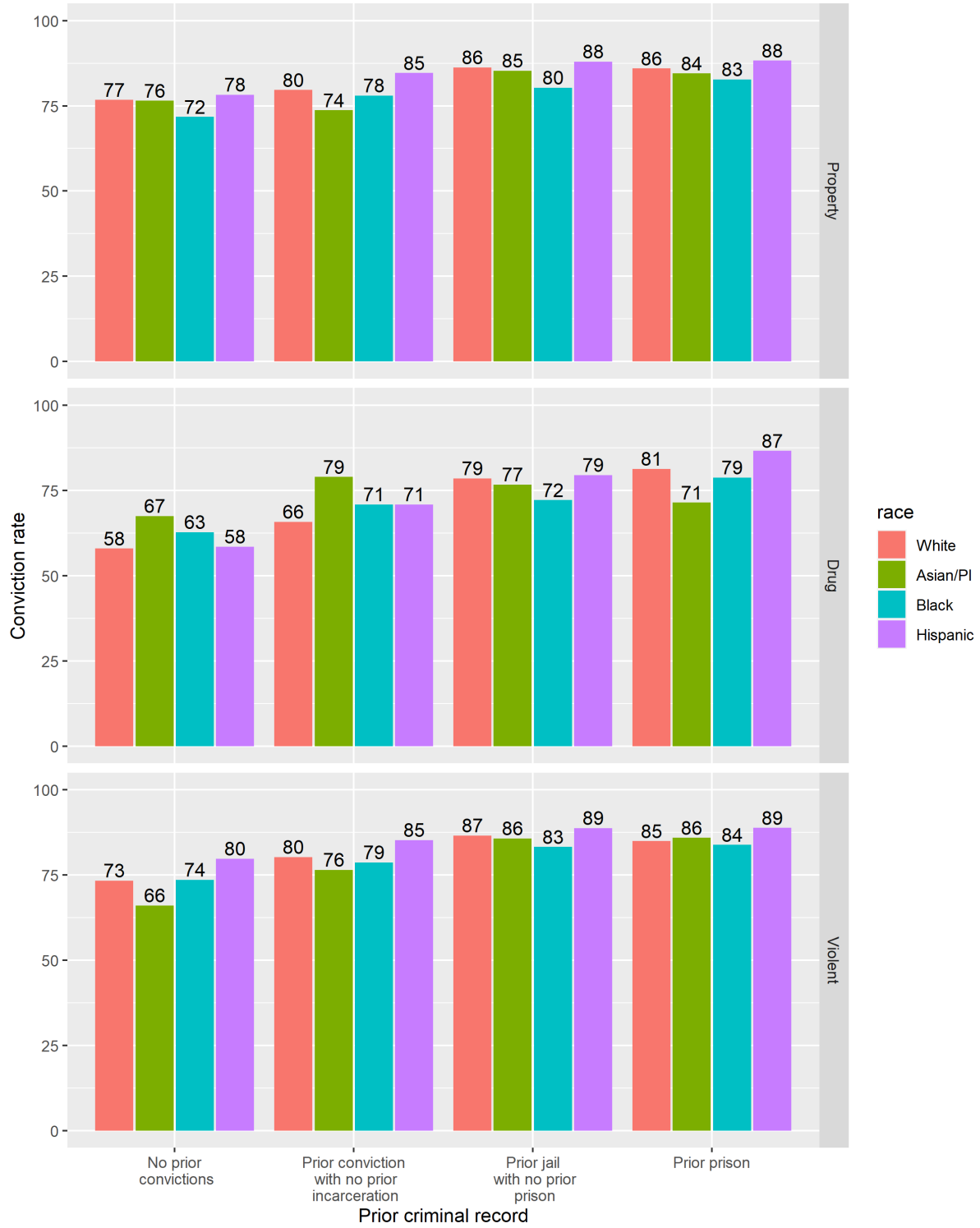


Figure D2: Percent of convicted defendants with felony conviction by race, prior criminal record, and felony arrest type

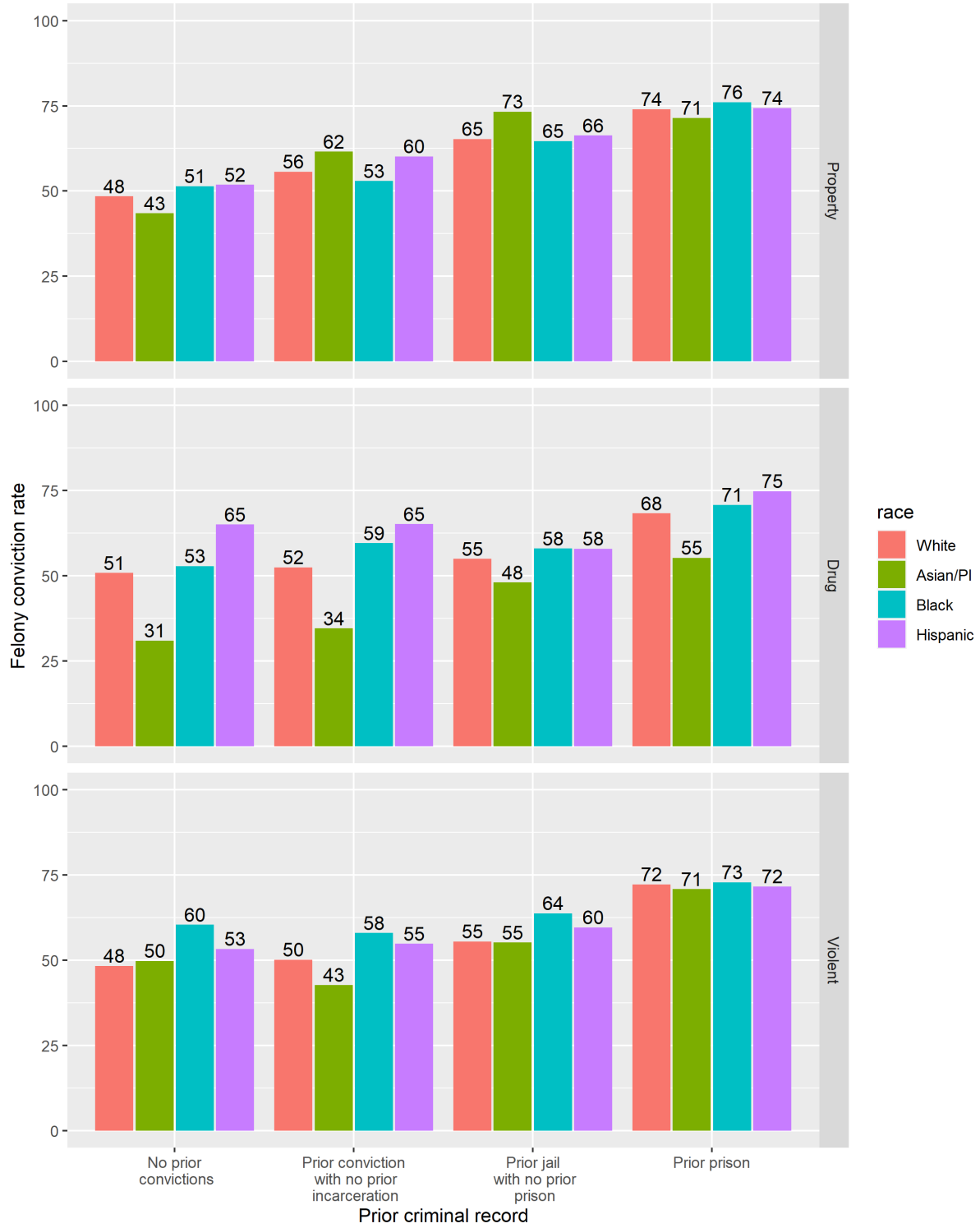


Figure D3: Percent of felony-convicted defendants given a prison sentence by race, prior criminal record, and felony arrest type

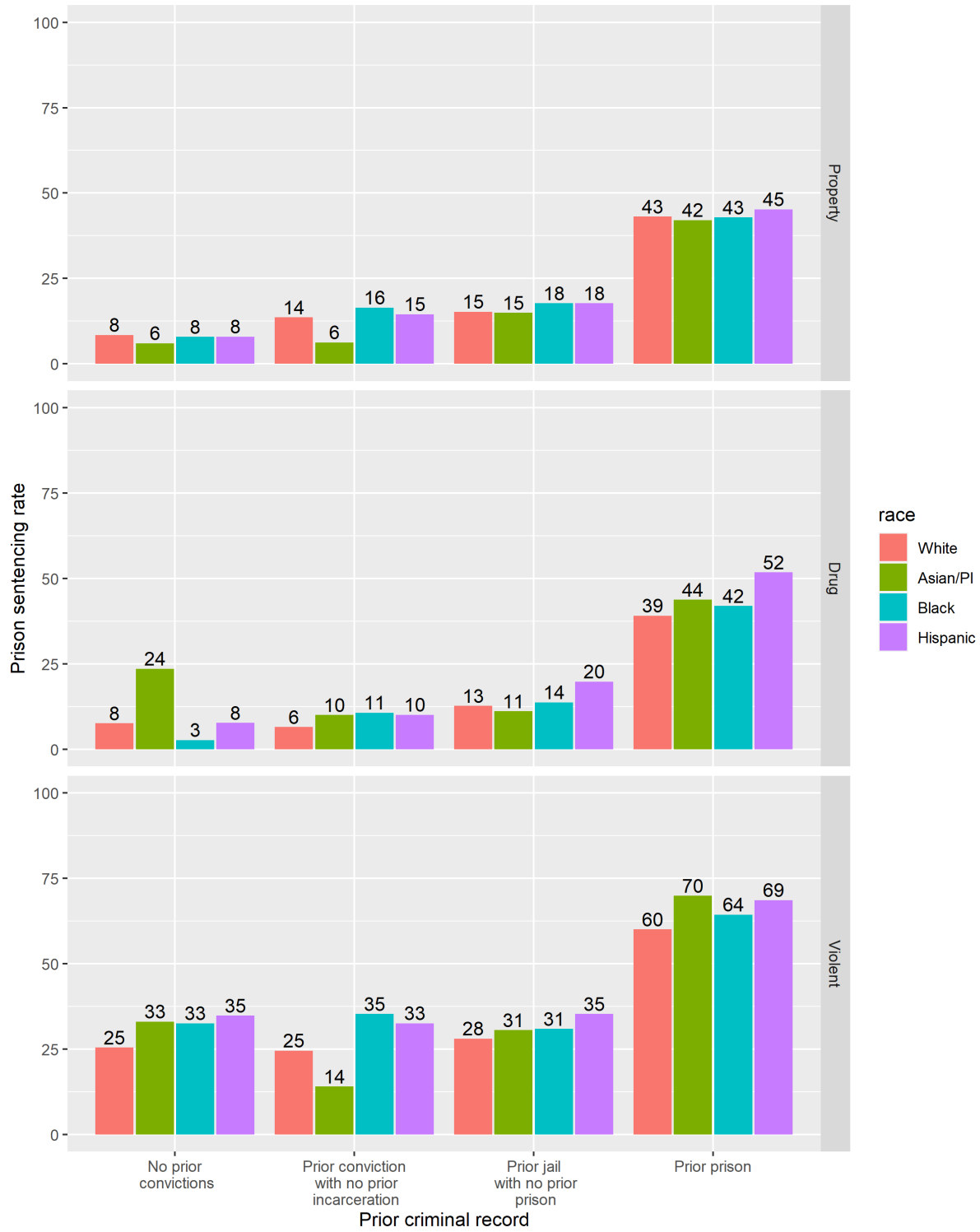
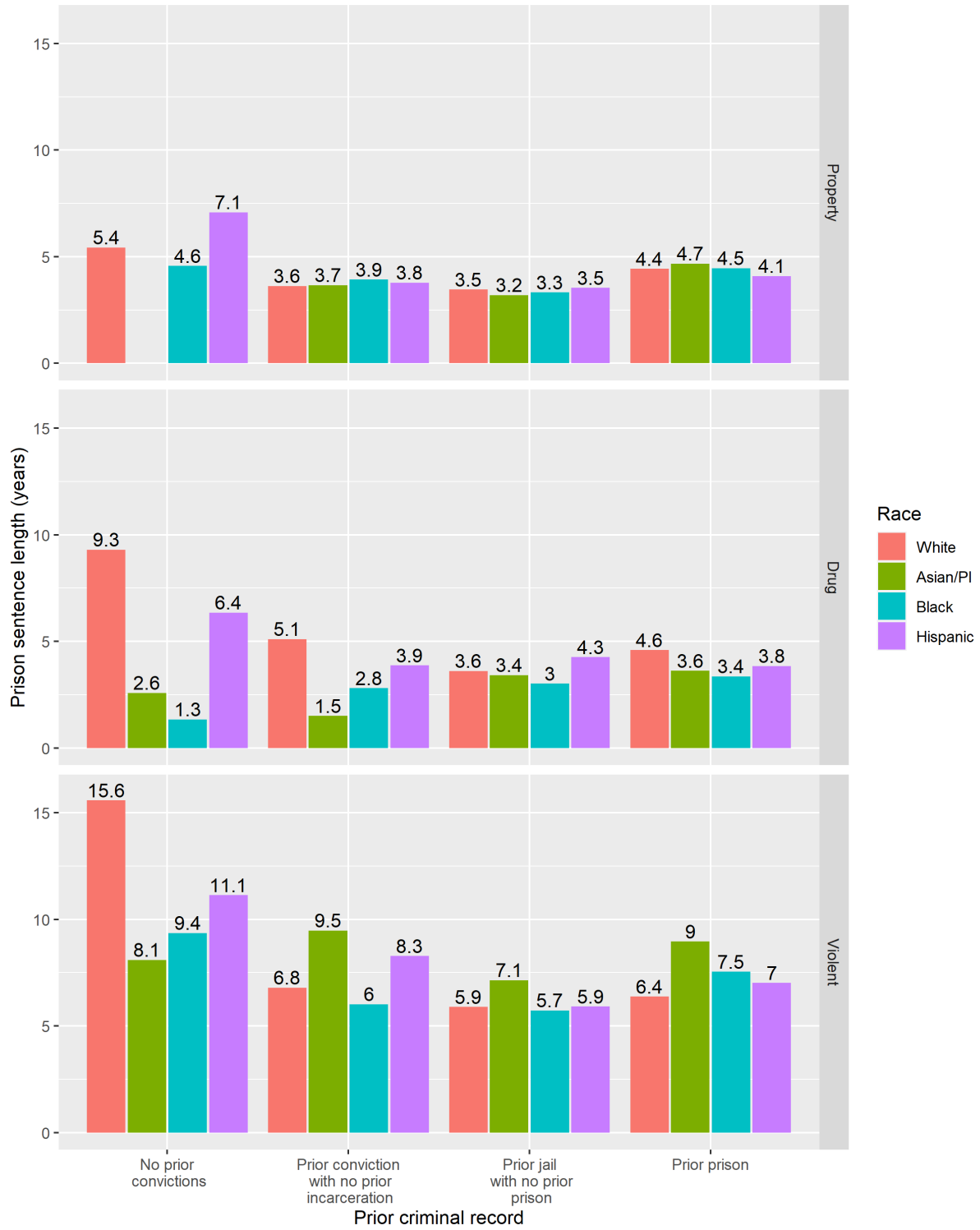


Figure D4: Prison sentence length for those sentenced to prison by race, prior criminal record, and felony arrest type



Appendix E

Automated Criminal History System data was received in raw, long format with one row per event. Data contained all criminal offender record information (CORI) on all persons with a disposition in 2020 of a felony arrest, as identified by the California DOJ in their Disposition of Adult Level Arrests (DALA) report file extract.

Data was collapsed to the level of each distinct person and disposition date combination, using flags and sums to keep relevant information. This level was selected because sometimes multiple cycles (collections of events initiated by an arrest event) were rolled into a single disposition date. Sentences with suspended imposition were accounted for at the level of each count.

For each person-disposition, all prior criminal history data was cumulatively summarized and appended. The final data set was filtered to only include dispositions of felony arrests in 2020.

The code is available upon request.