Commonwealth of Massachusetts
Disproportionate Minority Contact
Statewide Assessment Report

Submitted to the Juvenile Justice Advisory Group
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EXECUTIVE SUMMARY

The Massachusetts Trial Court conducted a disproportionate minority contact assessment to determine if and to what extent disparate contact exists in the juvenile justice system. Disproportionate minority contact (DMC) is the overrepresentation of minority youth at a point of contact in the juvenile justice system. All states are required to identify, assess, and address DMC in order to be in compliance with the federal regulations of the Juvenile Justice and Delinquency Prevention Act's Formula Grant Program. The requirements of the program mandate an assessment of DMC in addition to strategies for intervening and monitoring racial and ethnic disparities every three to five years. This DMC assessment was performed with the support of the Executive Office of Public Safety and Security which is the designated State Administering Agency for the Title II Formula Grant Program awarded by the Office of Juvenile Justice and Delinquency Prevention.

While the assessment presents statistical results that suggest the existence of disproportionate minority contact, it is important to emphasize that disparities found in the data may not be indicative of unequal treatment. There were a large number of records with blank race and ethnicity fields which did not allow for the computation of racial-ethnic categories. With respect to the results, many of the statistical findings stated in the assessment had weak associations between characteristics and outcomes. Earlier points of contact in the juvenile justice system, such as arrest and diversion, were not included in the analyses. Future assessments should aim to reduce the number of missing race and ethnicity records and incorporate earlier juvenile justice stages for analysis.

Throughout the Commonwealth, there are many ongoing efforts to address and reduce disproportionate minority contact in the juvenile justice system. Recent legislation known as "An Act Relative to Criminal Justice Reform" enacted provisions that act as intervention strategies to reduce disparity. The statute expands judicial diversion for less serious offenses, increases the minimum age a youth can be charged with a delinquency, expands the use of sealing and expunging records, and mandates implicit bias and de-escalation trainings for law enforcement officers. Within the Trial Court, training programs, conferences, and leadership committees were instituted to identify, address, and reduce implicit bias. Future DMC assessments will include analyzing the effect these efforts have on reducing disparity in the population of referrals to the Juvenile Court.

The assessment comprised of four types of analyses: an analysis of the population of referrals, an analysis of the decision points, an analysis of rates of contact, and an analysis of the relationship between characteristics and decision points. Findings from the analysis of the population suggest that there is racial and ethnic disparities occurring in the population of referrals to the Juvenile Court. This means that there is disproportionate representation of racial and ethnic groups in the cases referred to the Juvenile Court for a delinquency complaint. Among the statistically significant findings for population characteristics:

- Defendants of other races and Hispanic defendants had the highest proportion of males among their respective categories.
- Black defendants and Hispanic defendants were referred to the courts at a younger age when compared to their peer groups. White defendants were referred to the courts at an older age when compared to their peer groups.
- Court regions were statistically different in their racial and ethnic composition.
- Black defendants and Hispanic defendants had the highest proportions of referrals made by arrest. White defendants and defendants with an unreported ethnicity had the highest proportions of referrals made by summons.
- White defendants had the highest percentage of misdemeanor lead offenses. Black defendants and Hispanic defendants had the highest percentages of felony lead offenses when compared to their respective groups.
- Black defendants and Hispanic defendants had the highest percentages of referrals involving one or more firearm charge.
- Defendants with an unreported race and defendants with an unreported ethnicity had the lowest percentages of referrals with one or more prior juvenile charges.
- Black defendants and Hispanic defendants had the highest percentages of referrals with one or more subsequent juvenile charges occurring before case disposition.

The results of the analysis of the decision points showed that there is racial and ethnic disparities occurring in the 1) decision to issue a complaint, 2) decision to hold an arraignment event, 3) decision to detain the defendant at arraignment, 4) initial disposition decision, and 5) initial sanction decision. This indicates that the disparity found in the population of referrals compounded as it progressed through each subsequent decision point resulting in disproportionate minority contact. Among the statistically significant findings for the decision outcomes:

- Across racial groups, Black defendants had the highest proportion of petitions issue (78.7%), while defendants with an unreported race had the lowest proportion of petitions issue (66.0%). Among ethnic groups, Hispanic defendants had the highest proportion of petitions issued (84.9%) whereas defendants with an unreported ethnicity had the lowest proportion of petitions issue (63.0%).
- Black defendants had the highest proportion of arraignments held (81.4%) followed by defendants of other races (78.0%), White defendants (76.8%), and defendants with an unreported race (72.3%). Hispanic defendants had the highest proportion of arraignments held (85.2%) followed by Non-Hispanic defendants (81.4%), and defendants with an unreported ethnicity (68.9%).
- While 17.7% of cases had a decision to detain at arraignment, Black defendants and Hispanic defendants had the highest proportions of detentions than their peer groups (25.0%, 22.1%).
- There was no statistically significant association between the variables, race and initial disposition of dismissal; there was a statistically significant association between ethnicity and an initial disposition of dismissal.

- Defendants of other races had the highest proportion of cases continued without a finding / filed with consent (36.8%) followed by White defendants (35.4%), defendants with an unreported race (32.3%), and Black defendants (29.4%). There was no statistically significant association between ethnicity and initial disposition of continued without a finding / filed with consent.
- Adjudicated delinquent comprised of 15.5% of the population of dispositions. Black defendants and Hispanic defendants had the highest proportions of delinquent adjudications when compared to their peer groups (19.4%, 19.0%). Defendants of other races had the lowest proportion of delinquent adjudications among all subgroups (5.9%).
- Across the racial groups, White defendants had the lowest rate of commitment to DYS (5.3%), followed by defendants with an unreported race (7.5%) and Black defendants (10.5%). Across the ethnic groups, Hispanic defendants had the highest rate of commitment (9.8%), followed by Non-Hispanic defendants (7.1%) and defendants with an unreported ethnicity (5.7%).

Following the decision point analysis, the rates of contact for each racial and ethnic group were computed to assess if there was overrepresentation of one or more groups at a specific juvenile justice contact point. A relative rate index (RRI) measure was used to illustrate the magnitude of representation. Findings from the relative rate analysis indicate that there was overrepresentation for one or more racial groups at three of the six contact points in the analysis: referral to the Juvenile Court, detention, and adjudicated delinquent. Among the key findings:

- For the contact point referral to the Juvenile Court, Black youths were overrepresented by 3.31 times the rate of White youths. Hispanic youths were overrepresented by 2.56 times the rate of White youths. Non-Hispanic youth had a petition issue at 0.54 times the rate of White youth.
- For the contact point detention, Black youths were overrepresented by 2.21 times the
 rate of White youths. Hispanic defendants were overrepresented by 2.21 times the rate
 of White youth. Defendants with an unreported race and Non-Hispanic defendants were
 slightly overrepresented by 1.52 times and 1.63 times the rate of White youth,
 respectively.
- For the contact point adjudicated delinquent, Black defendants and Hispanic defendants were slightly overrepresented at 1.56 times and 1.58 times the rate of White youth, respectively.
- There was no overrepresentation of any one group at the following contact points: issuance of a delinquent petition, arraignment, and committed to DYS.

Following the rates of contact analysis, a logistic regression analysis was conducted to assess if and which characteristic(s) influence the likelihood of an outcome occurring. An odds ratio measure was used to illustrate the magnitude of the likelihood. Findings from the analysis indicate that there were several characteristics that influenced the likelihood of decision outcomes from petition through adjudication. Among the statistically significant findings:

- Black defendants were 1.526 times more likely to have a petition issued than White
 defendants. Defendants with unreported race were 29.9% less likely to have a petition
 issued than White defendants. Hispanic defendants were 2.460 times more likely to have
 a petition issued when compared to defendants with an unreported ethnicity.
- Defendants with a felony lead offense were 1.341 times more likely to have a petition issued than defendants with a misdemeanor lead offense.
- Race was found to not be associated with the likelihood of being arraigned; ethnicity was found to be associated with the likelihood of being arraigned.
- Hispanic defendants were 1.680 times more likely be arraigned than defendants with an unreported ethnicity. Non-Hispanic defendants were 1.304 times more likely be arraigned than defendants with an unreported ethnicity.
- Female defendants were 14.2% less likely to be arraigned than male defendants.
- Defendants under arrest were 1.643 times more likely to be arraigned than defendants issued a summons. Felony lead offenses increased the likelihood of being arraigned by 2.203 times, while civil infraction lead offenses decreased the likelihood of being arraigned by 0.538 times.
- Defendants with one or more prior juvenile charges were 4.895 times more likely to be arraigned than defendants with no prior juvenile charges. Subsequent juvenile charges was found to be not associated with the likelihood of being arraigned.
- Black defendants were 1.646 times more likely to be held with or without bail than White
 defendants. Hispanic defendants were 1.473 times more likely to be held compared to
 defendants with an unreported ethnicity.
- Defendants under arrest were 5.139 times more likely to be held at arraignment than defendants issued a summons.
- Defendants with one or more prior juvenile charges were 2.719 times more likely to be held with or without bail than defendants with no prior juvenile charges.
- Race and ethnicity were found to be not associated with the likelihood of an adjudicated delinquent finding when controlling for all other independent variables.
- Female defendants were 44.0% less likely to be adjudicated delinquent than male defendants.
- Defendants with one or more prior juvenile charges were 3.471 times more likely to be adjudicated delinquent than defendants with no prior juvenile charges.
- Defendants that were never held during the pendency of the case were 66.8% less likely
 to be adjudicated delinquent than defendants that were held at any point during the
 pendency of their case.

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INTRODUCTION

The Massachusetts Executive Office of Public Safety and Security (EOPSS), Office of Grants and Research (OGR) is the designated State Administering Agency for the Title II Formula Grant Program awarded by the Office of Juvenile Justice and Delinquency Prevention (OJJDP). The Formula Grant is authorized by the Juvenile Justice and Delinquency Prevention Act (JJDP Act) of 1974, as amended. It provides funding to support state and local efforts to plan, establish, operate, coordinate, and evaluate policies and projects (directly or through grants and contracts with public and private agencies) for the development of more effective juvenile justice related education, training, research, prevention, diversion, treatment, rehabilitation, and system improvement efforts.

In the Juvenile Justice and Delinquency Prevention Act of 2002, Congress required that States participating in the Formula Grants Program "address juvenile delinquency prevention efforts and system improvement efforts designed to reduce, without establishing or requiring numerical standards or quotas, the disproportionate number of juvenile members of minority groups, who come into contact with the juvenile justice system." Disproportionate minority contact (DMC) is the overrepresentation of minority youth at a point of contact in the juvenile justice system. States participating in the Formula Grants Program must identify and address disparate contact on an ongoing basis by moving through the following phases:

- Identification. To determine the extent to which DMC exists;
- Assessment. To assess the reasons for DMC, if it exists;
- Intervention. To develop and implement intervention strategies to address these identified reasons;
- Evaluation. To evaluate the effectiveness of the chosen intervention strategies; and
- Monitoring. To note changes in DMC trends and to adjust intervention strategies as needed.

In cooperation with EOPSS, the Executive Office of the Trial Court (EOTC) in conjunction with the Juvenile Court Department and the Trial Court Department of Research and Planning, completed several cycles of the identification phase of these requirements. In order to further meet federal reporting requirements, EOTC conducted a quantitative assessment study to assess the reasons for disproportionate contact across the Commonwealth of Massachusetts.

The purpose of the assessment study is to determine the factors that are associated with disproportionate minority contact and provide an analysis of the data to observe if and to what extent DMC may be experienced by youth at the following decision points: (1) the decision to issue a delinquency petition, (2) the decision to hold an arraignment event, (3) the initial decision to detain the defendant at the arraignment event, (4) the initial disposition decision; and, (5) the initial sanction decision. The assessment collected data on race, ethnicity, gender, age, and offense information to inform statistical analyses on the selected decision points. The collected

data relate to referrals to the juvenile courts and delinquency petitions issued by the juvenile courts.

Important decision points related to arrest and charging will not be considered in this assessment given that these analyses rely on administrative data from the Juvenile Court. With a focus on decisions and contact points within the court system, this assessment study aims to better understand the factors that are associated with DMC with the goal of developing policies and practices that effectively reduce DMC.

LITERATURE REVIEW

This assessment focused on five mechanisms for analyses that the research literature identified as contributing to disproportionate minority contact (OJJDP 2009).

Differential Behavior. The concept of differential behavior suggests that youths from various racial or ethnic groups may engage in different rates of delinquent behaviors, different types of delinquent behaviors, or delinquent behaviors at different ages. This assessment study considered characteristics of current offenses and prior involvement in the juvenile courts as part of the analysis of differential behavior.

Differential Processing. The concept of differential processing suggests that youths may be disproportionately affected by the criteria on which decisions are made. Issues arise when factors in determining eligibility or alternatives are structured in a manner that may place some groups at a disadvantage. This assessment study considered the manner in which a youth is referred to the courts (i.e. arrest or summons) and the bail process for minors as part of the analysis of differential processing.

Justice by Geography. The concept of justice by geography suggests that youths may be processed differently in jurisdictions within the same state. The assessment study considered the court jurisdiction as part of the analysis of justice by geography.

Legislation, Policies, and Legal Factors. The concept of legal factors suggests that youths may be disadvantaged by policies enacted through legislation or administrative action that target certain types of offenses or juvenile history. While these statutory factors may be racially neutral, they constrain the decisions of the juvenile justice system and may be related to DMC. This assessment study considered the firearm statute as a legal factor in the analysis of legislation and policies. The firearm statute mandates that juveniles adjudicated for a violation of the statute must be committed to the custody of the Department of Youth Services. This mandate may impact certain offender populations more so than others.

Accumulated Disadvantage. The concept of accumulated disadvantage refers to the impact of earlier decisions on later consequences for youth. This can refer to pre-adjudicatory decisions such as pre-trial detention, or prior history of delinquencies. The assessment study considered the following decision outcomes or contact points as part of the analysis of accumulated disadvantage: (1) referral to courts, (2) issuance of a delinquency petition, (3) arraigned in court, (4) detention, (5) adjudicated delinquent; and, (6) committed to the Department of Youth Services. For each cohort, relative rates were computed as the cases proceed from application through disposition.

METHODS

Data Collection

The source for the data is an administrative dataset from MassCourts, an electronic case management system. The total number of records in the sample is 13,583 application for complaint cases filed in the Juvenile Court involving youths aged 7 or older. Application for complaint cases must have been filed between July 1, 2015 and June 30, 2016 to be included in the analysis.

Data Analysis Measures and Statistical Procedures

Measuring Race and Ethnicity

On June 1, 2017, the Trial Court changed the manner in which it recorded race and ethnicity. Prior to the change, racial categories were defined as American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or other Pacific Islander, and White. Ethnic categories were defined as Hispanic or Latino or Not Hispanic or Latino. In order to conform to federal data collection and reporting standards of race and ethnicity, the race group Hispanic or Latino was removed as an option in the race category. Any individuals previously recorded with a race of Hispanic or Latino are now recorded in the ethnicity category of Hispanic or Latino and in the race category of Not Reported / Not Known.

Under the new reporting framework, there were 3,845 cases (28.3%) with a reported race and ethnicity and 9,738 cases (71.7%) with an unreported race or ethnicity. Of the 9,738 cases, 2,186 or 22.4% had an unreported race, 4,474 or 45.9% had an unreported ethnicity, and 3,078 or 31.6% had an unreported race and an unreported ethnicity. Due to the high numbers of unreported records, a category of Not Reported / Not Known was included as both a racial group and as an ethnic group to assess if these groups were statistically different from the other subgroups. It is important to note that first time offenders and offenders who participated in a diversion program may not have race and ethnicity information recorded due to minimal contact with the juvenile justice system.

Measuring Descriptive Statistics and Chi-Square Associations

Descriptive statistics are measures used to describe basic features of data in an analysis. Frequencies, means, standard deviations, and ranges were measures used to describe this data. The mean is the average value in the data and the standard deviation is the distribution of values around the mean.

The Chi-Square Test for Independence was used to examine if and to what extent associations between two variables exist. The Chi-Square statistic compares and tests the statistical significance of the expected counts for the sample to the actual counts occurring in the sample.

A high Chi-Square value indicates there is low correlation between the sets of data and a low Chi-Square value indicates there is a high correlation between the sets of data. The significance level is the probability that results are occurring by chance. For the purposes of the assessment, only significance at the 0.10 level (*), 0.05 level (**) and at the 0.01 level (***) were reported. No statistical significance is denoted as NS.

Measuring Disproportionate Minority Contact

The relative rate index is a statistical measure of comparing the rates of juvenile justice contact experienced by groups of youth. The relative rate index is calculated by dividing the relative rate for one subgroup by the relative rate of the White subgroup. For example, if the relative rate for Black youth is 26.08 and the relative rate for White youth is 7.88, the RRI for Black youth is 3.31 (26.08 divided by 7.88). It is important to note that the ethnic group Hispanic may include White individuals since Hispanic individuals may identify as any race. A relative rate index value greater than 1.00 indicates overrepresentation for a specific group and a relative rate index value less than 1.00 indicates underrepresentation for a specific group. A relative rate index value of 1.00 indicates equal representation for a specific group. The magnitude of disparity at any contact point is a combination of the disparities introduced at prior contact points in addition to disparity added by the contact point of interest (Puzzanchera & Hockenberry 2013). As previously stated, low risk offenders may not have race and ethnicity information recorded due to minimal contact with the juvenile justice system.

Measuring the Effect of the Independent Variable on a Decision Point

A multi-variate logistic regression analysis was used to determine the impact (if any) of race and ethnicity at the various decision points after other factors were considered. The logistic regression reproduces the likelihood or odds associated with the occurrence of an outcome. The analysis identifies if and the extent to which each independent variable has an influence on the dependent variable. Each decision point was the subject of a separate logistic regression analysis and each outcome was handled as a dichotomous variable (e.g. petition not issued / petition issued, not arraigned / arraigned, not held / held, not adjudicated delinquent / adjudicated delinquent). Of the independent variables included in the model, fourteen variables were categorical variables and four variables were continuous variables. Reference (dummy) variables were created to assess if and by how much the outcome of the decision was explained in relation to the members of the reference group. The reference variables were the categories which contained the highest number of cases or the lowest number of cases. Cases with missing or incomplete information were re-coded to the average or median value respective to the variable.

For the purposes of the assessment, the logistic regression results include the regression coefficient (B), odds ratio (Exp B), and p value (significance) for each variable category. The p value indicates the significance (or lack thereof) of the relationship between one independent variable and the outcome, when controlling for all other independent variables. The B coefficient explains the magnitude of the odds (likelihood) of the outcome. A negative B coefficient results in an odds ratio less than 1.0 and a positive B coefficient results in an odds ratio greater than 1.0.

An odds ratio over 1.0 signifies that the independent variable increases the likelihood or odds of the outcome occurring. An odds ratio under 1.0 signifies that the independent variable decreases the likelihood of the outcome occurring. For the purposes of the assessment, only significance at the 0.10 level (*), 0.05 level (**) and at the 0.01 level (***) were reported. No statistical significance is denoted as NS.

RESULTS

Youth, Offense, and Other Characteristics (Independent Variables)

Youth Characteristics

A series of variables were created to identify the types of demographic information on the case. Characteristics of youth included a defendant's race, ethnicity, gender, and age information. The descriptive statistics and results of the Chi-Square Tests for Independence are presented in Table 1.

Race and Ethnicity

There were four racial groups in the race category: White, Black or African American, Other Race / Multi-Race, and Not Reported / Not Known. It is important to note that Hispanic or Latino was not treated as a racial group. There were a total of 13,583 complaints or referrals to the Juvenile Court. Of the referrals, White defendants accounted for the majority of referrals (5,465 or 40.2%) followed by defendants with an unreported race (38.8%), Black defendants (20.0%), and defendants of other races (1.0%).

There were three ethnic groups in the ethnicity category: Hispanic, Non-Hispanic, and Not Reported / Not Known. Of the 13,583 referrals, defendants with an unreported ethnicity accounted for the majority of cases (7,552 cases or 55.6%), followed by Non-Hispanic or Latino defendants (3,099, 22.8%), and Hispanic or Latino defendants (2,932, 21.6%).

Gender

Male defendants accounted for the majority of cases in the sample, 9,533 or 70.2% of cases, while female defendants accounted for 3,656 or 26.9% of cases. There were 394 defendants with an unreported gender. The proportion of males in the population was compared to the proportion of males for each racial and ethnic group to assess if the proportions were equal to the population's proportion of 70.2%.

Across the racial groups, defendants of other races had the highest proportion of males (80.0%) and defendants with an unreported race had the lowest proportion of males (64.9%). The proportion of males for White defendants and Black defendants were about equal to one another (73.5%, 73.3%). The differences between the racial groups' proportions and the population's proportion ranged from -5.3% to 9.8%. This means that the difference in spread between the lowest proportion of males and the highest proportion of males was 15.1%. An overall statistically significant association was found between race and gender¹. This indicates that male composition varied more than expected across one or more racial groups.

¹ Race and Gender (χ^2 (6, N = 13,583) = 647.016, p < .01; V = 0.154, p < .01).

Across the ethnic categories, Hispanic or Latino defendants had the highest proportion of males (75.9%). Defendants with an unreported ethnicity had the lowest proportion of males, 66.6%. The proportion of males for Non-Hispanic defendants was 73.5%. The differences between the ethnic groups' proportions and the population's proportion ranged from -3.6% to 5.7%. This means that the range between the lowest proportion of males and the highest proportion of males was 9.3%. An overall statistically significant association was found between ethnicity and gender². This indicates that male composition varied more than expected across one or more ethnic groups.

Age at Referral

Age was calculated as a continuous variable using the case file date of the application for complaint (referral) and the defendant's date of birth. There were 13,542 cases with an age at referral and 41 cases with an unreported date of birth. The age at referral ranged between 7 years old to 49 years old. The mean or average age at referral was 15.4 years and the standard deviation from the mean was 1.8 years. This means that approximately 95% of the ages were between 11.8 years and 19.0 years. The difference between the lowest age and the highest age, also called the range, was 42. This means that the distribution of age showed large variation since the range is a large number. The most frequent age at referral was 17 years old (30.6%) followed by 16 years old (23.4%) and 15 years old (18.3%). These three ages represented 72.3% of cases. The age distribution for the population was compared across the racial and ethnic groups to assess if a subgroup's age distribution was statistically different from the population's distribution.

For White defendants, the most frequent age at referral was 17 years old (35.6%) followed by 16 years old (21.7%) and 15 years old (16.8%). These three ages represented 74.1% of cases. There was a 5.0% difference in the age distribution for 17 years old between the population's proportion of 30.6% and White defendants' proportion of 35.6%. These proportions and differences in age distribution indicate that White defendants tended to be older at the time of referral compared to the overall population. For Black defendants, the most frequent age at referral was 17 years old (25.5%), followed by 16 years old (24.9%) and 15 years old (21.5%). These three ages represented 71.9% of cases. There was a -5.1% difference in the age distribution for 17 years old between the population's proportion of 30.6% and Black defendants' proportion of 25.5%. These proportions and differences in age distribution indicate that Black defendants tended to be younger at the time of referral when compared to the population. For defendants of other races, the most frequent age at referral was 17 years old (38.5%) followed by 16 years old (22.2%) and 15 years old (15.6%). These three ages represented 76.3% of cases. There was a 7.9% difference in the age distribution for 17 years old between the population's proportion of 30.6% and defendants of other races' proportion of 38.5%. These proportions and differences in

² Ethnicity and Gender (χ^2 (4, N = 13,583) = 360.696, p < .01; V = 0.115, p < .01).

age distribution indicate that the age at referral for defendants of other races tended to be older at the time of referral compared to the population's distribution. For defendants of unreported race, the most frequent age at referral was 17 years old (28.0%) followed by 16 years old (24.4%) and 15 years old (18.2%). These three ages represented 70.6% of cases. There was a -2.6% difference in the age distribution for 17 years old between the population's proportion of 30.6% and defendants with an unreported race's proportion of 28.0%. These proportions and differences in age distribution indicate that defendants with an unreported race tended to be younger at the time of referral compared to the population. An overall statistically significant association was found between the variables, race and age at referral³. This indicates that the distribution of age at referral varied more than expected across one or more racial groups.

Across the ethnic groups, the age distribution varied from the population's distribution. For Hispanic defendants, the most frequent age at referral was 17 years old (26.1%), followed by 16 years old (25.1%) and 15 years old (19.8%). These three ages represented 71.0% of cases. There was a -4.5% difference in the age distribution for 17 years old between the population's proportion of 30.6% and Hispanic defendants' proportion of 26.1%. These proportions and differences in age distribution indicate Hispanic defendants tended to be younger at the time of referral compared to the population. For Non-Hispanic defendants, the most frequent age at referral was 17 years old (32.2%), followed by 16 years old (21.4%) and 15 years old (20.2%). These three ages represented 73.8% of cases. There was a 1.6% difference in the age distribution for 17 years old between the population's proportion of 30.6% and Non-Hispanic defendants' proportion of 32.2%. These proportions and differences in age distribution indicate that Non-Hispanic defendants tended to be older at the time of referral compared to the population. For defendants with an unreported ethnicity, the most frequent age at referral was 17 years old (31.8%), followed by 16 years old (23.5%) and 15 years old (16.9%). These three ages represented 72.2% of cases. There was a 1.2% difference in the age distribution for 17 years old between the population's proportion of 30.6% and the defendants' proportion of 31.8%. The age distribution for defendants with an unreported ethnicity was similar to that of the population. An overall statistically significant association was found between the variables, ethnicity and age at referral⁴. This indicates that the distribution of age at referral varied more than expected across one or more ethnic groups.

Offense Characteristics

A series of variables were created to identify the region and type of referral, and to classify the types of offenses on each referral. Offense characteristics included manner of entry, court region, total charges, lead offense severity, lead offense category, and one or more charges involving use of firearm. The descriptive statistics and results of the Chi-Square Tests for Independence are presented in Table 1.

³ Race and Age at Referral (χ^2 (69, N = 13,583) = 220.679, p < .01; V = 0.074, p < .01).

⁴ Ethnicity and Age at Referral (χ^2 (46, N = 13,583) = 143.317, p < .01; V = 0.073, p < .01).

Court Region

There are eleven divisions of the Juvenile Court, with court sessions in more than forty locations. The divisions were divided into four court regions based on geographic location and case management practices. Each region consisted of two to four divisions. Region 3 accounted for 6,034 or 44.4% of referrals followed by Region 1 (29.4%), Region 2 (18.4%), and Region 4 (7.8%). The regional distribution of referrals was compared across the racial and ethnic groups to assess if the regional distribution for the population of referrals was equal to the regional distribution of referrals for each subgroup.

The regional composition of referrals differed by race. The most populous region for White defendants was Region 3 (49.3%) followed by Region 1 (31.4%), Region 4 (11.6%), and Region 2 (7.7%). For Black defendants, the most populous regions were Region 2 (38.4%) and Region 3 (37.7%), while Region 1 made up 20.2% of referrals and Region 4 made up 3.7% of referrals. Defendants of other races had referrals mostly concentrated in Region 3 (65.2%) while Regions 1, 2, and 4 accounted for 34.8% of referrals. For defendants with an unreported race, the most populous region was Region 3 (42.3%) followed by Region 1 (32.4%), Region 2 (19.4%) and Region 4 (6.0%). An overall statistically significant association was found between race and court region⁵. This indicates that the distribution of referrals for the court regions varied more than expected across one or more racial groups.

The distribution of referrals by ethnic group also varied across regions. The most populous region for Hispanic defendants was Region 1 (43.8%), Region 3 (37.2%), Region 2 (16.9%), and Region 4 (2.0%). Non-Hispanic defendants were concentrated in Region 3 (40.8%), Region 1 (23.8%), Region 2 (22.8%), and Region 4 (12.6%). The most populous region for defendants with an unreported ethnicity was Region 4 (48.7%), Region 1 (26.0%), Region 2 (17.2%), and Region 4 (8.0%). An overall statistically significant association was found between ethnicity and court region⁶. This indicates that the distribution of referrals for the court regions varied more than expected across or more ethnic groups.

Manner of Entry

An application for complaint (referral) may result from a summons or an arrest. A summons is a notice to a party that the person must appear in court. An arrest is an act of apprehending a person and taking them into custody. A summons and an arrest are two manners of entry for a referral. The majority of referrals had a manner of entry evenly split between arrest (50.0%) and summons (50.0%). The distribution of referral entries was compared across racial and ethnic groups to assess if the distribution for the population of referrals was equal to the distribution of referrals for each subgroup.

⁵ Race and Court Region (χ^2 (9, N = 13,583) = 1,303.404, p < .01; V = 0.179, p < .01).

⁶ Ethnicity and Court Region (χ^2 (6, N = 13,583) = 602.634, p < .01; V = 0.149, p < .01).

Across racial categories, Black defendants had the highest proportion of arrest-based referrals (61.0%) followed by defendants of other races (54.8%), White defendants (47.1%), and defendants with an unreported race had the lowest proportion of arrest-based referrals (47.1%). The differences between the racial groups' proportions of arrests and the population's proportion of arrests ranged from -2.9% to 11.0%. This means that the difference in spread between the lowest proportion of arrests and the highest proportion of arrests was 13.9%. An overall statistically significant association was found between race and manner of entry⁷. This indicates that manner of referral to the Juvenile Court varied more than expected across one or more racial groups.

Across the ethnic categories, Hispanic defendants had the highest proportion of arrest-based referrals (63.9%), followed by Non-Hispanic defendants (53.7%) and defendants with an unreported ethnicity (43.0%). Defendants with an unreported ethnicity had the highest proportion of summons-based referrals (56.9%). The difference in spread between the lowest proportion of arrests and the highest proportion of arrests was 20.9%. An overall statistically significant association was found between ethnicity and manner of entry⁸. This indicates that that the manner in which a youth was referred to the Juvenile Court varied more than expected across one or more ethnic groups.

Total Charges

The total number of charges associated with each referral was calculated as a continuous variable. A continuous variable is a variable that has an infinite number of values. The total number of charges on each referral ranged from 1 to 46. The mean number of charges was 1.9 and the standard deviation from the mean was 1.6. This indicates that approximately 95% of referrals had between 1 to 5 charges. Overall, 7,316 cases (53.9%) had one charge and 6,267 cases (46.1%) had two or more charges. The distribution of charges was compared across racial and ethnic groups to assess if the distribution of charges for the population of referrals was equal to the distribution of charges for each subgroup.

Across the racial groups, the proportion of charges for each group was equal to the population's proportion of charges. This indicates that the distribution of charges did not vary more than expected from the population across one or more racial groups. There was no statistically significant association between race and total charges on a referral.

The distribution of charges also varied across ethnic groups. Defendants with an unreported ethnicity had the highest proportion of referrals associated with one charge (56.7%), followed by Non-Hispanic defendants (51.2%) and Hispanic defendants (49.4%). The differences between the ethnic group's distributions of one charge and the population's distribution of one charge ranged from -4.5% to 2.8%. An overall statistically significant association was found between ethnicity

⁷ Race and Manner of Entry (χ^2 (6, N = 13,583) = 175.282, p < .01; V = 0.080, p < .01).

⁸ Ethnicity and Manner of Entry (χ^2 (4, N = 13,583) = 390.774, p < .01; V = 0.120, p < .01).

and total number of charges at referral⁹. This indicates that the distribution of charges varied more than expected across one or more ethnic groups.

Severity of Lead Offense

A defendant may have one or more charges associated with a referral. The first charge listed on the referral was designated as the "lead offense". The lead offense was classified by severity: felony, misdemeanor, civil infraction, or other / not available. Overall, misdemeanors accounted for 8,883 lead offenses (65.4%), followed by felonies (32.7%), civil infractions (1.4%), and other / not available (0.5%). The distribution of lead offense severity was compared across racial and ethnic groups to assess if the composition for the population of referrals was equal to the composition for each subgroup.

White defendants had the highest proportion of misdemeanors as a lead offense severity (68.8%) followed by defendants of other races (66.7%), defendants with an unreported race (66.7%), and Black defendants (55.9%). The differences between the racial groups' proportions of misdemeanors and the population's proportion of misdemeanors ranged from -9.5% to 3.4%. This means that the difference in spread between the lowest proportion of misdemeanors and the highest proportion of misdemeanors was 12.9%. An overall statistically significant association was found between race and severity of lead offense¹⁰. This indicates that lead offense severity varied more than expected across one or more racial groups.

The distribution of lead offense severity also varied across ethnic groups. Defendants with an unreported ethnicity had the highest proportion of misdemeanors as a lead offense severity (69.0%), followed by Non-Hispanic defendants (62.3%) and Hispanic defendants (59.3%). The difference between the ethnic groups' proportion of misdemeanors and the population's proportion of misdemeanors ranged from -6.1% to 3.6%. An overall statistically significant association was found between ethnicity and severity of lead offense¹¹. This indicates that severity type for the lead offense differed more than expected across one or more ethnic groups.

Lead Offense Category

The lead offense was also classified by type of offense: person, property, motor vehicle, public order, drug / alcohol, weapons, sex, and other offenses. The most frequently occurring offenses were person offenses which accounted for 4,286 or 31.6% of referrals, followed closely by property offenses (4,209 or 31.0% of referrals), motor vehicle offenses (1,201 or 8.8% of referrals), and public order offenses (1,018 or 7.5% of referrals). The distribution of offense categories was compared across the racial and ethnic groups to assess if the distribution for the population of referrals was equal to the distribution for each subgroup.

⁹ Ethnicity and Total Number of Charges at Referral (χ^2 (46, N = 13,583) = 100.466, p < .01; V = 0.063, p < .01).

¹⁰ Race and Severity of Lead Offense (χ^2 (9, N = 13,583) = 193.799, p < .01; V = 0.069, p < .01).

¹¹ Ethnicity and Severity of Lead Offense (χ^2 (6, N=13,583) = 132.888, p < .01; V = 0.070, p < .01).

White defendants had the highest proportions of drug / alcohol offenses (9.5%) and public order offenses (8.3%) compared to other racial groups. Black defendants had the highest proportions of person offenses (36.9%) and weapons offenses (4.9%). Defendants of other races had the highest proportions of property offenses (34.8%) and motor vehicle offenses (16.3%). The distribution of offenses for defendants with an unreported race was about equal to the distribution of offenses for the population. The distribution of offenses varied across some of the racial groups. An overall statistically significant association was found between race and lead offense category¹². This indicates that lead offenses varied more than expected across one or more racial groups.

The distribution of lead offense category also varied by ethnic group. Hispanic defendants had the highest proportions of person offenses (35.5%), public order offenses (8.2%), and weapons offenses (4.3%) compared to other ethnic groups. The distribution of offenses for Non-Hispanic defendants was about equal to the distribution of offenses for the population. Defendants with an unreported ethnicity had the highest proportions of motor vehicle (10.1%), drug/alcohol (9.2%), and sex (3.0%) offenses. An overall statistically significant association was found between ethnicity and lead offense category¹³. This indicates that lead offenses varied more than expected across one or more ethnic groups.

Use of Firearm (Firearm Statute)

In Massachusetts, youth adjudicated delinquent for certain firearm offenses in violation of Massachusetts General Law c. 269 §10(a), 10(c), 10(d), or 10(e), shall be committed to the custody of the Department of Youth Services. Over the study period, 90 referrals or 0.7% had one or more firearm charges. The distribution of one or more firearm charges was compared across racial and ethnic groups to assess if the distribution for the population was equal to the distribution for each subgroup.

Across racial categories, Black defendants had the highest proportion of firearm charges (1.7%), followed by defendants of other races (0.7%), defendants with unreported race (0.6%), and White defendants (0.2%). The differences between the racial groups' proportions of one or more firearm charges and the population's proportion ranged from -0.5% to 1.0%. An overall statistically significant association was found between race and use of firearm¹⁴. This indicates that distribution of firearm charges varied more than expected across one or more racial groups.

Across ethnic categories, Hispanic defendants had the highest proportion of firearm charges (1.1%), followed by Non-Hispanic defendants (0.8%) and defendants with an unreported ethnicity (0.5%). The differences between the racial groups' proportions of firearm charges and the population's proportion ranged from -0.2% to 0.4%. An overall statistically significant

¹² Race and Lead Offense Category (χ^2 (21, N = 13,583) = 296.942, p < .01; V = 0.085, p < .01).

¹³ Ethnicity and Lead Offense Category (χ^2 (14, N = 13,583) = 184.968, p < .01; V = 0.083, p < .01).

¹⁴ Race and Use of Firearm (χ^2 (3, N = 13,583) = 57.233, p < .01; V = 0.065, p < .01).

association was found between ethnicity and use of firearm¹⁵. This indicates that the distribution of firearm charges varied more than expected across one or more ethnic groups.

Other Characteristics

A series of variables were created to determine if and what type of involvement in the Juvenile Court a defendant had prior to or at case disposition. These variables included juvenile history and detention decisions made during the pendency of the case. The descriptive statistics and results of the Chi-Square Tests for Independence are presented in Table 1.

Juvenile History - Prior Juvenile Charge(s)

A prior juvenile charge was defined as an arraignment occurring before the filing date of the current delinquency petition. Of the 9,519 delinquency petitions, 4,895 defendants (51.4%) had one or more prior juvenile charges. The proportion of petitions with a prior juvenile charge was compared across racial and ethnic groups to assess if the proportion differed from the population's proportion.

Across racial groups, the proportion of defendants with petitions with one or more prior juvenile charge varied from the population's proportion of 51.4%. Black defendants had the highest proportion of petitions with one or more prior juvenile charges (62.9%), followed by White defendants (50.6%), defendants of other races (47.0%), and defendants with an unreported race (45.3%). The differences in the proportions of defendants with one or more prior juvenile charges between the racial groups and the population ranged from -6.1% to 11.5%. An overall statistically significant association was found between the variables, race and prior juvenile charges ¹⁶. This indicates that the distribution of prior juvenile charges varied more than expected across one or more racial groups.

Across ethnic groups, the proportion of defendants with one or more prior juvenile charges varied from the population's proportion of 51.4%. Hispanic defendants had the highest proportion of petitions with one or more prior juvenile charges (62.6%) followed by Non-Hispanic defendants (57.8%), and defendants with an unreported ethnicity (42.4%). The differences in the proportions of one or more prior juvenile charges between the ethnic groups and the population ranged from -9.0% to 11.2%. An overall statistically significant association was found between the variables, ethnicity and prior juvenile charges¹⁷. This indicates that the distribution of prior juvenile charges varied more than expected across one or more ethnic groups.

¹⁵ Ethnicity and Use of Firearm (χ^2 (2, N = 13,583) = 13.955, p < .01; V = 0.032, p < .01).

¹⁶ Race and Prior Juvenile Charges (χ^2 (3, N = 9,519) = 165.761, p < .01; V = 0.132, p < .01).

¹⁷ Ethnicity and Prior Juvenile Charges (χ^2 (2, N = 9,519) = 316.885, p < .01; V = 0.182, p < .01).

Juvenile History - Subsequent Juvenile Charge(s)

A subsequent juvenile charge was defined as a new, subsequent arraignment on one or more charges during the pendency of the current delinquency petition. Of the 9,519 petitions, there were 1,714 (18.0%) cases that had one or more subsequent charges. The proportion of petitions with one or more subsequent charges was compared across racial and ethnic groups to assess if the proportions differed from the population's proportion.

Across racial groups, the proportion of petitions with at least one or more subsequent charges varied from the population's proportion of 18.0%. Black defendants had the highest proportion of petitions with one or more subsequent charges (23.4%), followed by White defendants (16.5%), defendants with an unreported race (16.4%), and defendants of other races (13.0%). The differences in the proportions of one or more prior subsequent charges between the racial groups and the population was more than ten percent and ranged from -5.0% to 5.4%. An overall statistically significant association was found between the variables, race and subsequent juvenile charges varied more than expected across one or more racial groups.

Across ethnic groups, the proportion of petitions with at least one or more subsequent charges varied from the population's proportion of 18.0%. Hispanic defendants had the highest proportion of petitions with one or more subsequent charges (24.1%), followed by Non-Hispanic defendants (22.6%) and defendants with an unreported ethnicity (12.5%). The differences in the proportions of one or more prior subsequent charges between the ethnic groups and the population ranged from -5.5% to 6.1%. An overall statistically significant association was found between the variables, ethnicity and subsequent juvenile charges¹⁹. This indicates that the distribution of subsequent juvenile charges varied more than expected across one or more ethnic groups.

Any Type of Detention (during the pendency of the case)

This analysis captured several types of detention: detained with bail conditions (e.g. when bail is set), detained without bail conditions (e.g. no bail set), and detained on other conditions (e.g. habeas corpus for appearance in another case). There were 4,186 petitions (65.2%) where a defendant was never held nor detained during the pendency of the case. There were 2,239 petitions (34.8%) where a defendant was held or detained during the pendency of the case. The proportion of petitions with an outcome of never held nor detained was compared across racial and ethnic groups to assess if a subgroup's proportion was statistically different from the population's proportion of 65.2%.

White defendants had the highest proportion of never held nor detained (73.0%) outcomes, followed by defendants of other races (67.6%), defendants with an unreported race (63.9%), and

¹⁸ Race and Subsequent Juvenile Charges (χ^2 (3, N = 9,519) = 55.080, p < .01; V = 0.076, p < .01).

¹⁹ Ethnicity and Subsequent Juvenile Charges (χ^2 (2, N = 9,519) = 193.507, p < .01; V = 0.143, p < .01).

Black defendants (53.5%). The differences in the proportions between racial groups and the population ranged from -11.7% to 7.8%. An overall statistically significant association was found between race and any type of detention during the pendency of the case²⁰. This indicates that "type of detention during the pendency of the case" varied more than expected across one or more racial groups.

Across ethnic groups, the proportion defendants never held nor detained also varied from the population's proportion of 65.2%. Defendants with an unreported ethnicity had the highest proportion of never held or detained (71.7%) outcomes, followed by Non-Hispanic defendants (62.9%), and Hispanic defendants (56.8%). The differences in the proportions between ethnic groups and the population was about fifteen percent and ranged from -8.4% to 6.5%. An overall statistically significant association was found between the variables, ethnicity and any type of detention during the pendency of the case²¹. This indicates that "type of detention during the pendency of the case" varied more than expected across one or more ethnic groups.

Detained with Bail Conditions (during the pendency of the case)

There were 5,155 petitions (80.2%) where a defendant was not held with bail conditions and 1,270 petitions (19.8%) where a defendant was held with bail conditions. It is important to note that the outcome, not held with bail conditions, includes petitions where a defendant may have been held without conditions, held on other conditions, or never held nor detained. The proportion of petitions with an outcome of held with bail conditions was compared across racial and ethnic groups to assess if a subgroup's proportion was statistically different from the population's proportion of 19.8%.

The proportion of petitions with an outcome of held with bail conditions varied across racial groups. Black defendants accounted for the highest proportion held with bail conditions (27.8%), followed by defendants with an unreported race (21.5%), defendants of other races (17.6%) and White defendants (13.7%). The differences in the proportions between racial groups and the population ranged from -6.1% to 8.0%. An overall statistically significant association was found between the variables, race and detained with bail conditions during the pendency of the case²². This indicates that the distribution of the variable detained with bail conditions varied more than expected across one or more racial groups.

The population's proportion of petitions with an outcome of held with bail conditions also varied across ethnic groups. Hispanic defendants had the highest proportion held with bail conditions (23.3%), followed by Non-Hispanic defendants (21.1%) and defendants with an unreported ethnicity (16.8%). The differences in the proportions between ethnic groups and the population ranged from -3.0% to 3.5%. An overall statistically significant association was found between the

²⁰ Race and Any Type of Detention (χ^2 (3, N = 6,425) = 164.432, p < .01; V = 0.160, p < .01).

²¹ Ethnicity and Any Type of Detention (χ^2 (2, N = 6,425) = 114.571, p < .01; V = 0.134, p < .01).

²² Race and Detained With Bail Conditions (χ^2 (3, N = 6,425) = 128.911, p < .01; V = 0.142, p < .01).

variables, ethnicity and detained with bail conditions during the pendency of the case²³. This indicates that the distribution of the variable detained with bail conditions varied more than expected across one or more ethnic groups.

Detained without Bail Conditions (during the pendency of the case)

There were 5,466 petitions (85.1%) where a defendant was not held without bail conditions and 959 petitions (14.9%) where a defendant was held without bail conditions. It is important to note that the outcome, not held without bail conditions, includes petitions where a defendant may have been held with conditions, held on other conditions, or never held or detained. The proportion of petitions with an outcome of held without bail conditions was compared across racial and ethnic groups to assess if a subgroup's proportion was statistically different from the population's proportion of 14.9%.

The proportion of defendants held without bail conditions for each racial subgroup was approximately equal to the population's proportion of 14.9%. This means that the distribution of defendants held without bail conditions did not vary more than expected across one or more racial groups. There was no statistically significant association between race and the status of "detained without bail conditions".

The population's proportion of petitions with an outcome of "held without bail conditions" varied across ethnic groups. Hispanic defendants had the highest proportion of defendants held without bail conditions (21.3%), followed by Non-Hispanic defendants (13.4%) and defendants with an unreported ethnicity (11.8%). The difference in the proportion between the ethnic groups and the population was about ten percent and ranged from -3.1% to 6.4%. An overall statistically significant association was found between the variables, ethnicity and detained without bail condition during the pendency of the case²⁴. This indicates that the distribution of the variable detained without bail conditions varied more than expected across one or more ethnic groups.

Detained on Other Conditions (during the pendency of the case)

There were 271 petitions (4.2%) where a defendant was held on other conditions (e.g., habeas corpus for appearance in another case), and 6,154 petitions (95.8%) where a defendant was not held on other conditions. It is important to note that the outcome, not held on other conditions, includes petitions where a defendant may have been held with bail conditions, held without bail conditions, or never held or detained. The proportion of petitions with an outcome of held on other conditions was compared across racial and ethnic groups to assess if a subgroup's proportion was statistically different from the population's proportion of 4.2%.

The population's proportion of petitions associated with a defendant held on other conditions varied by racial groups. White defendants had the lowest proportion held on other conditions,

²³ Ethnicity and Detained With Bail Conditions (χ^2 (2, N = 6,425) = 32.420, p < .01; V = 0.071, p < .01).

²⁴ Ethnicity and Detained Without Bail Conditions (χ^2 (2, N = 6,425) = 85.213, p < .01; V = 0.115, p < .01).

(2.6%), followed by defendants with an unreported race (3.5%), defendants of other races (4.4%) and Black defendants (8.0%). The differences in the proportions between the racial groups and the population ranged from -1.6% to 3.8%. An overall statistically significant association was found between the variables, race and detained on other conditions during the pendency of the case²⁵. This indicates that the proportion of defendants detained on other conditions varied more than expected across one or more racial groups.

The population's proportion of petitions with an outcome of held on other conditions also varied across ethnic groups. Defendants with an unreported ethnicity had the lowest proportion held on other conditions (3.2%), followed by Hispanic defendants (4.1%) and Non-Hispanic defendants (6.1%). The differences in the proportions between the ethnic groups and the population ranged from -1.0% to 1.9%. An overall statistically significant association was found between the variables, ethnicity and detained on other conditions during the pendency of the case²⁶. This indicates that the proportion of defendants detained on other conditions varied more than expected across one or more ethnic groups.

²⁵ Race and Detained on Other Conditions (χ^2 (3, N = 6,425) = 73.836, p < .01; V = 0.107, p < .01).

²⁶ Ethnicity and Detained on Other Conditions (χ^2 (2, N = 6,425) = 21.750, p < .01; V = 0.058, p < .01).

Decision Points (Dependent Variables)

There were five decision points included in these analyses: (1) the decision to issue a delinquent petition, (2) the decision to hold an arraignment event, (3) the initial decision to hold the defendant at the arraignment event, (4) the initial disposition decision; and, (5) the initial sanction decision. The descriptive statistics and results of the Chi-Square Tests for Independence are presented in Tables 3 - 4.

Decision to Issue a Delinquent Petition

Analysis of the first decision point – whether to issue a delinquency petition – was based on the population of referrals to the Juvenile Court and included the outcomes of petition issued and no petition issued. There were a total of 13,583 referrals to the Juvenile Court. Of the referrals, 9,586 or 70.6% of cases resulted in petition issued and 3,997 or 29.4% of cases resulted in no petition issued.

Across racial groups, Black or African American defendants had the highest proportion of petitions issue (78.7%), while defendants with an unreported race had the lowest proportion of petitions issue (66.0%). This means that Black defendants had a higher proportion of petitions issue than defendants with an unreported race. White defendants and defendants of other races had petitions issue at proportions similar to the population of referrals (70.9% and 71.9%), respectively. An overall statistically significant association was found between race and the decision to issue a delinquency petition²⁷. This indicates that the distribution of issued petitions varied more than expected across one or more racial groups.

Across ethnic groups, Hispanic or Latino defendants had the highest proportion of petitions issued (84.9%) followed by Non-Hispanic or Latino defendants (75.4%) and defendants with an unreported ethnicity (63.0%). An overall statistically significant association was found between ethnicity and the decision to issue a delinquency petition²⁸. This indicates that the distribution of issued petitions varied more than expected across one or more ethnic groups.

Decision to Hold an Arraignment Event

Analysis of the second decision point – to hold an arraignment event – was based on the population of defendants for whom a delinquency petition issued and included the outcomes of arraignment held and no arraignment held. There were a total of 9,519 issued petitions with an arraignment decision. Of the petitions, 7,256 or 76.2% of cases resulted in an arraignment held and 2,263 or 23.8% of cases resulted in no arraignment held.

Among racial groups, Black defendants had the highest proportion of arraignments held (81.4%) followed by defendants of other races (78.0%), White defendants (76.8%), and defendants with

²⁷ Race and Decision to Issue a Delinquency Petition (χ^2 (3, N = 13,583) = 141.804, p < .01; V = 0.102, p < .01).

²⁸ Ethnicity and Decision to Issue a Delinquency Petition (χ^2 (2, N = 13,583) = 532.479, p < .01; V = 0.198, p < .01).

an unreported race (72.3%). An overall statistically significant association was found between race and the decision to hold an arraignment event²⁹. This means that the distribution of arraignments held varied more than expected across one or more racial groups.

The proportion of arraignments held also varied between ethnic groups. Hispanic defendants had the highest proportion of arraignments held (85.2%) followed closely by Non-Hispanic defendants (81.4%). Defendants with an unreported ethnicity had the lowest proportion of arraignments held (68.9%). An overall statistically significant association was found between ethnicity and the decision to hold an arraignment event³⁰. This suggests that the distribution of arraignments held varied more than expected across one or more ethnic groups.

Initial Decision to Detain the Defendant

Analysis of the third decision point – to detain the defendant at arraignment – was based on the population of arraigned defendants and included the outcomes of not held and held with / without bail conditions. There were a total of 7,057 petitions with a bail decision at arraignment. Of the bail decisions, 5,810 or 82.3% of cases had a decision of not held at arraignment and 1,247 or 17.7% of cases had a decision of held with / without bail conditions at arraignment.

The proportion of cases with a decision to detain with / without bail conditions varied across racial groups. Defendants of other races had the lowest rate of held with / without bail conditions (11.7%) followed by White defendants (12.0%), defendants of an unreported race (19.5%), and Black defendants (25.0%). An overall statistically significant association was found between race and the decision to detain the defendant at the arraignment³¹. This indicates that the distribution of held with / without bail conditions varied more than expected across one or more racial groups.

The proportion of cases with a decision to detain with / without bail conditions also varied across ethnic groups. Defendants with an unreported ethnicity had the lowest rate of held with / without bail conditions (14.3%) followed by Non-Hispanic defendants (18.5%), and Hispanic defendants (22.1%). An overall statistically significant association was found between ethnicity and the decision to detain the defendant at the arraignment³². This means that the distribution of held with / without bail conditions varied more than expected across one or more ethnic groups.

²⁹ Race and Decision to Hold an Arraignment Event (χ^2 (3, N = 9,519) = 61.589, p < .01; V = 0.080, p < .01).

³⁰ Ethnicity and Decision to Hold an Arraignment Event (χ^2 (2, N = 9,519) = 283.336, p < .01; V = 0.173, p < .01).

³¹ Race and Decision to Detain the Defendant at the Arraignment (χ^2 (3, N = 7,057) = 132.695, p < .01; V = 0.137, p < .01).

³² Ethnicity and Decision to Detain the Defendant at the Arraignment (χ^2 (2, N = 7,057) = 53.930, p < .01; V = 0.087, p < .01).

Initial Disposition Decision

Analysis of the fourth decision point — initial disposition — was based on the population of petitions with an initial disposition and included four outcomes: (1) dismissal, (2) adjudicated not delinquent, (3) continued without a finding / filed with Consent; and, (4) adjudicated delinquent. A disposition of "dismissal" is measured as an order or judgment deciding a case by terminating it without a trial. A disposition of "adjudicated not delinquent" is measured as a finding of not delinquent by bench or jury trial. A disposition of "continued without a finding/filed with consent" is measured as the continuance of a case for a period of time without making a delinquency finding. A disposition of "adjudicated delinquent" is measured as a finding of delinquency by bench or jury trial.

There were a total of 6,425 petitions with an initial disposition. Of the dispositions, 3,246 or 50.5% of petitions had a disposition of dismissal, 70 or 1.1% of petitions had a disposition of adjudicated not delinquent, 2,114 or 32.9% of petitions had a disposition of continued without a finding / filed with consent, and 995 or 15.5% of petitions had a disposition of adjudicated delinquent. Across racial groups and ethnic groups, the distribution of dispositions varied from the population's distribution. An overall statistically significant association was found between race and initial disposition³³ and between ethnicity and initial disposition³⁴. To assess which of the dispositions varied more than expected by race and by ethnicity, Chi-Square Tests were performed for each disposition.

Dismissal

Across racial groups, the proportion of dismissals was equal to the population's proportion of 50.5%. This means that the distribution of this disposition did not vary more than expected across one or more racial groups. There was no statistically significant association between the variables, race and initial disposition of dismissal.

Across ethnic groups, the proportion of dismissals differed from the population's proportion of 50.5%. Defendants with an unreported ethnicity had the highest rate of dismissals (52.3%), followed by Non-Hispanic defendants (49.2%) and Hispanic defendants (48.9%). An overall statistically significant association was found between the variables, ethnicity and initial disposition of dismissal³⁵. This means that the distribution of the disposition dismissal varied more than expected across one or more ethnic groups.

³³ Race and Initial Disposition (χ^2 (9, N = 6,425) = 50.322, p < .01; V = 0.051, p < .01).

³⁴ Ethnicity and Initial Disposition (χ^2 (6, N = 6,425) = 37.278, p < .01; V = 0.054, p < .01).

³⁵ Ethnicity and Initial Disposition of Dismissal (χ^2 (2, N=6,425) = 6.771, p < .05; V = 0.032, p < .05).

Adjudicated Not Delinquent

Across racial groups, the proportion of not delinquent adjudications differed from the population's proportion of 1.1%. Black defendants had the lowest proportion of not delinquent adjudications (0.7%) followed by White defendants (1.1%), defendants with an unreported race (1.3%), and defendants of other races (4.4%). Although defendants of other races had the highest proportion of not delinquent adjudications, the number of petitions was less than five and too small to be included in the analysis of this disposition. An overall statistically significant association was found between the variables, race and initial disposition of adjudicated not delinquent³⁶. This means that the distribution of the disposition adjudicated not delinquent varied more than expected across one or more racial groups.

Across ethnic groups, the proportion of defendants adjudicated not delinquent was equal to the population's proportion of 1.1%. This means that the distribution of this disposition did not vary more than expected across one or more ethnic groups. There was no statistically significant association between the variables, ethnicity and initial disposition of adjudicated not delinquent.

Continued Without a Finding / Filed with Consent

Across racial groups, the proportion continuances without a finding / filed with consent varied from the population's proportion of 32.9%. Defendants of other races had the highest proportion of cases continued without a finding / filed with consent (36.8%) followed by White defendants (35.4%), defendants with an unreported race (32.3%), and Black defendants (29.4%). An overall statistically significant association was found between race and continued without a finding / filed with consent³⁷. This means that the distribution of the disposition continued without a finding / filed with consent varied more than expected across one or more racial groups.

Across ethnic groups, the proportion of the disposition continued without a finding / filed with consent was equal to the population's proportion of 32.9%. This means that the distribution of this disposition did not vary more than expected across one or more ethnic groups. There was no statistically significant association between the variables, ethnicity, and initial disposition of continued without a finding / filed with consent.

³⁶ Race and Initial Disposition of Adjudicated Not Delinquent (χ^2 (3, N=6,425) = 10.808, p < .05; V = 0.041, p < .05).

³⁷ Race and Continued Without a Filing / Filed With Consent (χ^2 (3, N = 6,425) = 16.637, p < .01; V = 0.051, p < .01).

Adjudicated Delinquent

Across racial groups, the proportion of delinquent adjudications differed from the population's proportion of 15.5%. Defendants of other races had the lowest proportion of delinquent adjudications (5.9%) followed by White defendants (13.2%), defendants with an unreported race (15.8%), and Black defendants (19.4%). Although defendants of other races had the lowest proportion of delinquent adjudications, the number of petitions was less than five and too small to be included in the analysis of this disposition. An overall statistically significant association was found between the variables, race and initial disposition of adjudicated delinquent³⁸. This means that the distribution of delinquent adjudications varied more than expected across one or more racial groups.

Across ethnic groups, the proportion of delinquent adjudications varied from the population's proportion of 15.5%. Hispanic defendants had the highest proportion of delinquent adjudications (19.0%) followed by Non-Hispanic defendants (16.5%), and defendants with an unreported ethnicity (12.7%). An overall statistically significant association was found between the variables, ethnicity and initial disposition of adjudicated delinquent³⁹. This means that the distribution of delinquent adjudications varied more than expected across one or more ethnic groups.

Initial Sanction Decision

Analysis of the fifth decision point — initial sanction — was based on the population of petitions with an initial sanction and included four outcomes: (1) no sanction, (2) filed / delinquency — file, (3) probation; and, (4) commitment to the Department of Youth Services (DYS). There were a total of 6,425 petitions with an initial sanction. Of the sanctions, 3,316 or 51.6% of petitions had no sanction, 218 or 3.4% of petitions had a sanction of Filed / Delinquency — File, 2,425 or 37.7% of petitions had a sanction of probation, and 466 or 7.3% of petitions had a sanction of committed to DYS.

The distribution of sanctions varied from the population's distribution across racial and ethnic groups. An overall statistically significant association was found between race and initial sanction⁴⁰ and between ethnicity and initial sanction⁴¹. This indicates that the distribution of sanctions varied more than expected across one or more racial groups and across one or more ethnic groups. For the purposes of this analysis, Chi-Square Tests for Independence were performed for the most serious sanction, commitment to DYS.

³⁸ Race and Initial Disposition of Adjudicated Delinquent (χ^2 (3, N = 6,425) = 33.581, p < .01; V = 0.072, p < .01).

³⁹ Ethnicity and Initial Disposition of Adjudicated Delinquent (χ^2 (2, N = 6,425) = 35.296, p < .01; V = 0.074, p < .01).

⁴⁰ Race and Initial Sanction (χ^2 (9, N=6,425) = 54.951, p < .01; V =0.053, p < .01).

⁴¹ Ethnicity and Initial Sanction (χ^2 (6, N=6,425) = 34.766, p < .01; V =0.052, p < .01).

Committed to DYS

Across racial groups, the rate of commitment differed from the population's proportion of 7.3%. White defendants had the lowest rate of commitment (5.3%), followed by defendants with an unreported race (7.5%) and Black defendants (10.5%). The number of petitions for defendants of other races was too small to be included in this analysis. An overall statistically significant association was found between race and committed to DYS⁴². This means that the distribution of commitments varied more than expected across one or more racial groups.

Across ethnic groups, the rate of commitment differed from the population's proportion of 7.3%. Hispanic defendants had the highest rate of commitment (9.8%), followed by Non-Hispanic defendants (7.1%) and defendants with an unreported ethnicity (5.7%). An overall statistically significant association was found between ethnicity and committed to DYS⁴³. This means that the distribution of commitments varied more than expected across one or more ethnic groups.

⁴² Race and Committed to DYS (χ^2 (3, N = 6,425) = 41.393, p < .01; V = 0.080, p < .01).

⁴³ Ethnicity and Committed to DYS (χ^2 (2, N = 6,425) = 28.488, p < .01; V = 0.067, p < .01).

Rates of Contact

There were six contact points included in the analysis of relative rates of contact: (1) referral to the courts (2) issuance of a petition, (3) arraignment, (4) detention, (5) adjudicated delinquent; and, (6) committed to DYS. The relative rates and the relative rate index (RRI) are presented in Tables 5 - 10.

Referral to the Juvenile Court

Referral to the Juvenile Court is the first contact point in the analysis and includes all application for complaint cases filed in the Juvenile Court. A **relative rate** was computed for each racial and ethnic group, where data was available. A relative rate is the proportion of contact at a decision point for a specific group. The relative rate for all youths at the first contact point was 15.64. This means that for every 1,000 youths aged 7 – 17 in Massachusetts, there were approximately 16 referrals to the Juvenile Court. The relative rate for White youths was 7.88, while for Black or African American youths the relative rate was 26.08. This indicates that Black youths had a higher rate of referral to the Juvenile Court when compared to White youths. Hispanic or Latino youths had the second highest relative rate (20.21). This means that Hispanic youths were referred to the Juvenile Court at a higher rate than White youths. Non-Hispanic or Latino youths had the lowest relative rate (4.28) which suggests that Non-Hispanic youths were referred to the Juvenile Court at a much lower rate than all other youths.

A **relative rate index (RRI)** is a statistical measure used to compare the rates of contact between two groups. The RRI is calculated by dividing the relative rate for one subgroup by the relative rate of the White subgroup. It is important to note, the ethnic group Hispanic may include White individuals given that Hispanic individuals may identify as one or more race. The RRI for all youths at the first contact point was 1.98. The RRI for White youths at the contact point was 1.00. A RRI greater than 1.00 indicates overrepresentation for a specific group and a RRI of 1.00 indicates equal representation for a specific group. This means that there was overrepresentation for all youths at this contact point and equal representation for White youths at this contact point.

Black youths had the highest RRI (3.31) followed by Hispanic youths (2.56). This indicates that Black youths were overrepresented at the contact point by 3.31 times the rate of White youths, and Hispanic youths were overrepresented by 2.56 times the rate of White youths. Non-Hispanic youths had the lowest RRI (0.54). A RRI less than 1.00 indicates underrepresentation for a specific group. The low RRI for Non-Hispanic youths suggests that these youths were referred to the Juvenile Court at half the rate of White youths. The relative rate and relative rate index for youths of other races and youths with an unreported race could not be computed since population figures for these subgroups were not available.

Issuance of a Delinquent Petition

Issuance of a petition is the second contact point and includes all application for complaint cases where a delinquency petition issued. The relative rate for all defendants at this contact point was 70.57. The relative rates for the racial and ethnic groups were within a range of 63.02 and 84.89. This means that for every 100 referrals to the Juvenile Court, there were 63 to 85 petitions issued by the courts. While the relative rate for White defendants was 70.92, defendants with an unreported ethnicity and defendants with an unreported race had the lowest relative rates (63.02 and 65.96, respectively). These low rates suggest that these defendants had delinquency petitions issued at a lower rate when compared to other defendants. Hispanic defendants had the highest relative rate (84.89) followed by Black defendants (78.74), Non-Hispanic defendants (75.44), and defendants of other races (71.85).

The RRIs did not vary from a RRI value of 1.00; a RRI of 1.00 indicates equal representation. The RRIs ranged from 0.89 for defendants with an unreported ethnicity to 1.20 for Hispanic defendants. Defendants with an unreported ethnicity and defendants with an unreported race had RRIs of 0.89 and 0.93 respectively. Defendants of other races had an RRI of 1.01 while Black defendants had a RRI of 1.11 and Non-Hispanic defendants had a RRI of 1.06. The low RRIs indicate that there was no overrepresentation for any one group at this contact point.

Arraignment

Arraignment is the third contact point and includes all petitions where an arraignment was held. The relative rate for all defendants at this contact point was 53.42. This means that for every 100 issued petitions, approximately 53 arraignments were held. Hispanic defendants had the highest relative rate (72.17) and defendants with an unreported ethnicity had the lowest relative rate (42.90). This indicates that Hispanic defendants had about 30 more held arraignments than defendants with an unreported ethnicity. Black defendants and Non-Hispanic defendants had similar rates of 63.96 and 61.31 respectively.

The RRIs for the groups varied from a RRI of 1.00. Black defendants had a RRI of 1.18 and defendants of other races had a RRI of 1.06. Defendants with an unreported race had a RRI of 0.86 and defendants with an unreported ethnicity had a RRI of 0.79. These RRIs imply that these defendants had fewer arraignments when compared to other defendants. Non-Hispanic defendants had a RRI of 1.13 and Hispanic defendants had a RRI of 1.33. Although the RRI for Hispanic defendants is 1.33, this RRI is within a value of 1.00. The RRIs for all the subgroups indicate that there was no overrepresentation of any one group at this contact point.

Detention

Detention is the fourth contact point and includes all petitions where the initial decision at the arraignment was to detain the defendant with or without bail conditions. The relative rate for all defendants at this contact point was 13.01. This means that for every 100 bail decisions made, approximately 13 decisions involved detaining the defendant with or without bail conditions.

Black defendants had the highest relative rate (19.71) followed by Hispanic defendants (18.28), Non-Hispanic defendants (14.59), and defendants with an unreported race (13.54). Defendants of other races, defendants with an unreported ethnicity and White defendants had relative rates lower than 13.00.

The RRIs for the racial and ethnic groups differed from a RRI of 1.00. They ranged from 1.00 for White defendants to 2.21 for Black defendants. Defendants of other races had a RRI of 1.04 and defendants with an unreported ethnicity had a RRI of 1.06. These RRIs suggest that these defendants were not overrepresented at this contact point. Defendants with an unreported race had a RRI of 1.52 and Non-Hispanic defendants had a RRI of 1.63. These RRIs suggest that these two groups were slightly overrepresented at this contact point. Black defendants had a RRI of 2.21 and Hispanic defendants had a RRI of 2.05. These RRIs indicate that Black defendants and Hispanic defendants were overrepresented at this contact point.

Adjudicated Delinquent

Adjudicated delinquent is the fifth contact point and includes all petitions where there was a delinquent adjudication for one or more charges on a petition. The relative rate for all defendants at this contact point was 10.38. The relative rates for the racial and ethnic groups were within a range of 4.12 and 14.02. This means that for every 100 case dispositions, there were 4 to 14 dispositions involving a finding of delinquency. While the relative rate for White defendants was 8.90, defendants with an unreported ethnicity and defendants of other races had the lowest relative rates of 7.84 and 4.12, respectively. This suggests that these defendants were adjudicated delinquent at a lower rate than other defendants at this contact point. Hispanic defendants had the highest relative rate (14.02), followed by Black defendants (13.92), Non-Hispanic defendants (11.68) and defendants with an unreported race (10.02).

The RRIs for the racial and ethnic groups differed from a RRI of 1.00. The RRIs ranged from 0.46 for defendants of other races to 1.58 for Hispanic defendants. Defendants of other races had a RRI of 0.46 and defendants with an unreported ethnicity had a RRI of 0.88. These low RRIs suggest that these defendants had fewer delinquent adjudications when compared to other defendants. Defendants with an unreported race had a RRI of 1.13 and Non-Hispanic defendants had a RRI of 1.31. These RRIs suggest these groups were not overrepresented at this contact point. Black defendants and Hispanic defendants had RRIs of 1.56 and 1.58 respectively. These RRIs suggest that these two groups were slightly overrepresented at this contact point.

Committed to DYS

Initial commitment to DYS is the sixth contact point and includes all petitions where there was a commitment to the Department of Youth Services (DYS) as a result of a delinquent adjudication. The relative rate for all defendants at this contact point was 46.83. This means that for every 100 petitions with a delinquent adjudication, about 46 petitions had an initial sanction of committed to DYS. The relative rates ranged from 25.00 for defendants of other races to 54.03 for Black defendants. The low relative rate for defendants of other races suggests that these defendants

were committed to DYS at a much lower rate than all other defendants. The high relative rate for Black defendants suggests that these defendants were committed to DYS at a higher rate than all other defendants.

The RRIs for the racial and ethnic groups did not vary from a RRI value of 1.00. They ranged from 0.62 for defendants of other races to 1.33 for Black defendants. Defendants with an unreported race had a RRI of 1.16 and defendants with an unreported ethnicity had a RRI of 1.11. Hispanic defendants had a RRI of 1.28 and Non-Hispanic defendants had a RRI of 1.06. The low RRIs for these groups indicate that there was no overrepresentation of any one group at this contact point.

Effect of the Independent Variable on a Decision Point

Logistic regression analyses were used to assess the individual effects of the independent variables on decision points from petition through adjudication. The descriptive statistics for the logistic regression variables are presented in Table 11 and the logistic regression results for four decision points are presented in Table 12.

Decision to Issue a Delinquency Petition

The regression model for the decision to issue a delinquency petition included the outcomes of petition issued and no petition issued. The model for the decision had an overall accuracy percentage of 85.1%. This means that 85.1% of the cases were correctly predicted by independent variables in the regression model. The logistic results for the decision to issue a delinquency petition varied in significance across demographic, offense, and other case characteristics. This suggests that there were only a few statistically significant factors that influence the decision to issue a delinquency petition.

The results for the racial and ethnic variables, when compared to their reference variables, were found to be associated with the likelihood of a petition issuing when controlling for all other independent variables⁴⁴. This means that race and ethnicity were associated with the outcome of the decision to issue a petition. The regression coefficients for the variables, Black or African American, Hispanic or Latino and Non-Hispanic or Latino, were positive. A positive coefficient indicates that the variable increases the likelihood of the outcome occurring. This means that Black defendants, Hispanic defendants and Non-Hispanic defendants were more likely to have a delinquency petition issue when compared to their respective reference group. Hispanic defendants had the highest odds ratio (2.460), followed by Black defendants (1.526), and Non-Hispanic defendants (1.355). An odds ratio greater than one indicates the likelihood or odds of the outcome occurring increases by one or more. This means that Hispanic defendants were 2.460 more likely to have a petition issue than defendants with an unreported ethnicity. Black defendants were 1.526 times more likely to have a petition issue than White defendants. Non-Hispanic defendants were 1.355 times more likely to have a petition issue than defendants with an unreported ethnicity.

Gender was also found to be associated with the likelihood of a petition issuing when controlling for all other independent variables. The regression coefficients for female defendants and defendants with an unreported gender were negative. A negative coefficient indicates that the variable decreases the likelihood of the outcome occurring. This means that female defendants and defendants with an unreported gender were less likely to have a petition issue when compared to male defendants. Female defendants had an odds ratio of 0.878 and defendants with an unreported gender had an odds ratio of 0.392. An odds ratio of less than one indicates the likelihood of the outcome occurring decreases by a fraction of one. This means that female

⁴⁴ Race (N = 13,583) Wald = 75.799, p < .01. Ethnicity (N = 13,583) Wald = 131.178, p < .01.

⁴⁵ Gender (N = 13,583) Wald = 30.741, p < .01.

defendants were 12.2% less likely to have a petition issue than male defendants. This can be restated as male defendants were 1.139 times more likely to have a petition issue than female defendants. Defendants with an unreported gender were 60.8% less likely to have a petition issue than male defendants.

The total number of charges, lead offense type, and lead offense severity were found to be associated with the likelihood of a petition issuing when controlling for all other independent variables⁴⁶. The variable, total charges, had a positive coefficient and an odds ratio of 1.122. This means that as the number of charges increased by one, the likelihood of having a petition issued increased by 1.122 times per charge. Defendants with a motor vehicle lead offense were 0.784 times or 21.6% less likely to have a petition issued than defendants with a person offense. Defendants with a public order lead offense were 1.248 times more likely to have a petition issued than defendants with a person offense. Other offense types were found to be not statistically significant. When compared to misdemeanor lead offenses, felony lead offenses increased the likelihood of a petition issuing by 1.341 times while civil infraction lead offenses decreased the likelihood of a petition issuing by 0.680 times or 32.0%.

Court region was found to be associated with the likelihood of a petition issuing when controlling for all other independent variables.⁴⁷ All court regions had negative coefficients which indicates that defendants in Region 2, 3, and 4 were less likely to have a petition issue than defendants in Region 1. Defendants in Region 2 had the lowest odds ratio (0.087). This can be stated as defendants in Region 1 were 11.5 times more likely to have a petition issue than defendants in Region 2. The large odds ratios suggest that these regions may have different petition procedures.

The variables, manner of entry, age at referral, and use of a firearm were found to not be predictive of a delinquency petition issuing when controlling for all other independent variables. This implies that these variables do not influence the decision to issue a delinquent petition.

Decision to Hold an Arraignment

The regression model for the decision to hold an arraignment event included the outcomes of arraigned and not arraigned. The model for the decision had an overall accuracy percentage of 81.9%, which is the percent of cases correctly predicted by the variables in the model. The logistic results for the decision to arraign were statistically significant across almost all characteristics. This suggests that there were many statistically significant factors considered in the decision to hold an arraignment.

Overall, race was found to not be associated with the likelihood of being arraigned when controlling for all other independent variables.⁴⁸ It is important to note the variable, unreported

 $^{^{46}}$ Total charges (N = 13,583), Wald (Charges) = 17.766, p < .01. Lead offense type (N = 13,583) Wald = 18.001, p < .05. Lead offense severity (N = 13,583), Wald = 15.541, p < .01.

⁴⁷ Court Region (N = 13,583) Wald = 762.871, p < .01.

⁴⁸ Race (N = 9,519) Wald = 5.419, p > .05.

race, was found to be statistically significant with a negative regression coefficient and an odds ratio of 0.866.⁴⁹ This indicates that White defendants were 13.4% less likely to be arraigned than defendants with an unreported race. Alternatively, this can be restated as White defendants were 1.155 times more likely to be arraigned than defendants with an unreported race. The variable, ethnicity, was found to be associated with the likelihood of an arraignment being held, when controlling for all other independent variables.⁵⁰ Both Hispanic and Non-Hispanic defendants had positive coefficients and odds ratios of 1.680 and 1.304 respectively. This means that Hispanic defendants and Non-Hispanic defendants were 1.680 times and 1.304 times more likely be arraigned than defendants with an unreported ethnicity.

Gender and age were also found to be associated with the likelihood of an arraignment being held when controlling for all other independent variables.⁵¹ Both female defendants and defendants with an unreported gender had negative coefficients and odds ratios of 0.858 and 0.039 respectively. This indicates that these defendants were 14.2% and 96.1% less likely to be arraigned than male defendants. The variable, age at petition, had a positive coefficient and an odds ratio of 1.047. This means that as the age of the defendant increased by one, the likelihood of being arraigned increased by 1.047 times.

The variables, manner of entry and total charges, were found to be associated with the likelihood of an arraignment being held when controlling for all other independent variables.⁵² The arrest manner of entry had a positive coefficient and an odds ratio of 1.643. This indicates that defendants under arrest were 1.643 times more likely to be arraigned than defendants issued a summons. The total number of charges on the petition had a positive coefficient and an odds ratio of 1.334. This means that as the number of charges increased by one, the likelihood of being arraigned increases by 1.334 times or 33.4%.

Lead offense type, lead offense severity, and court region were found to be associated with the likelihood of an arraignment being held when controlling for all other independent variables.⁵³ All offense types had negative coefficients and odds ratios of less than one. The low odds ratios for these variables imply that the reference category, person lead offense, was associated with higher likelihoods of being arraigned when compared to the other offense types. For example, defendants with a person offense as the lead offense type were 3.704 times more likely to be arraigned than defendants with a property offense as the lead offense type. When compared to a misdemeanor lead offense, felony lead offenses increased the likelihood of being arraigned by 2.203 times, while civil infraction lead offenses decreased the likelihood of being arraigned by 0.538 times. It is important to note that the defendants with a missing lead offense severity were 2.498 times more likely to be arraigned than defendants with a misdemeanor lead offense. Court Region 2 had a negative coefficient and an odds ratio of 0.517, while Region 3 had a positive

 $^{^{49}}$ Race Not Reported / Not Known (N = 9,519), Wald = 3.848, p < .05.

⁵⁰ Ethnicity (N = 9,519) Wald = 48.313, p < .01.

⁵¹ Gender (N = 9,519) Wald = 49.060, p < .01. Age (N = 9,519) Wald = 6.638, p < .01.

 $^{^{52}}$ Manner of Entry (N = 9,519) Wald = 54.938, p < .01. Total charges (N = 9,519) Wald = 101.622, p < .01.

 $^{^{53}}$ Lead offense type (N = 9,519) Wald = 309.102, p < .01. Lead offense severity (N = 9,519) Wald =116.022, p < .01. Court Region (N = 9,519) Wald = 96.461, p < .01.

coefficient and an odds ratio of 1.208. This means that defendants in Region 2 were 48.3% less likely to be arraigned than defendants in Region 1. Defendants in Region 3 were 1.208 times more likely to be arraigned than defendants in Region 1. The odds ratio for Region 4 was found to be not statistically significant.

The variable, use of a firearm, was found to not be predictive of being arraigned when controlling for all other independent variables. This suggests that this variable does not influence the decision to hold an arraignment event.

There were two new variables entered into the logistic regression model to assess if a juvenile's court history increased or decreased the likelihood of being arraigned. The variable, prior juvenile charges filed, was found to be associated with the likelihood of holding an arraignment event when controlling for all other independent variables. The odds ratio for one or more prior juvenile charges was 4.895. This means that defendants with one or more prior juvenile charges were 4.895 times more likely to be arraigned than defendants with no prior juvenile charges. This implies that the outcome of the decision to arraign was influenced by having one or more prior juvenile charges. The other juvenile history variable, subsequent juvenile charges filed, was found to not be predictive of being arraigned.

Decision to Detain the Defendant at Arraignment

The regression model for the decision to detain the defendant at the arraignment event included the outcomes of not held and held with or without bail conditions. The model for the decision had an overall accuracy percentage of 83.9% which is the percent of cases correctly predicted by the variables in the model. The logistic results for the outcome held with or without bail varied in significance across characteristics.

Race, ethnicity, gender, and age at petition were found be associated with the likelihood of a defendant being held at the arraignment event when controlling for all other independent variables. Black defendants had the highest odds ratio (1.646), followed by Hispanic defendants (1.473), and defendants with an unreported race (1.292). This means that Black defendants were 1.646 times more likely to be held with or without bail than White defendants. Defendants with an unreported race were 1.292 times more likely be held than White defendants. Hispanic defendants were 1.473 times more likely to be held compared to defendants with an unreported ethnicity. Female defendants were 0.796 times or 20.4% less likely to be held at arraignment than male defendants. The age at petition had an odds ratio of 1.143 which indicates that as the age of the defendant increased by one, the likelihood of being held with or without bail increased by 1.143 times.

The majority of the variables for offense characteristics, court region, and prior juvenile charges were found to be associated with the likelihood of being held with or without bail at arraignment when controlling for all other independent variables.⁵⁴ The use of a firearm had the highest odds

 $^{^{54}}$ Manner of Entry (N = 7,057) Wald = 147.326, p < .01. Total charges (N = 7,057) Wald = 28.417, p < .01.

ratio (8.953). This means that defendants that had a charge involving the use of a firearm were 8.953 times more likely to be held than defendants who did not have a charge involving a firearm. Defendants under arrest were 5.139 times more likely to be held at arraignment than defendants issued a summons. The total number of charges were found to increase the likelihood of being held with / without bail by 1.095 times per charge.

All lead offense types had negative coefficients and odds ratios of less than one. This suggests that the reference variable, person lead offense, was associated with higher likelihoods of being held with or without bail. The odds ratios for defendants with a person lead offense ranged between 1.592 when compared to drug / alcohol offenses and 2.717 when compared to sex offenses. The lead offense types, weapons and other / not available, were found to be not statistically significant. Felony lead offenses increased the likelihood of being held at arraignment by 1.422 times when compared to misdemeanor lead offenses. Civil infraction lead offenses and missing severity lead offenses were found to be not statistically significant.

Court Region 2 was found be associated with the likelihood of a defendant being held at the arraignment event when compared to Region 1. Region 2 had a positive coefficient and an odds ratio of 1.595 which means that defendants in Region 2 were 1.595 times more likely to be held than defendants in Region 1. This suggests that the petition procedures in Region 2 and Region 1 were statistically different from one another. The variable, prior juvenile charges, was also found to be associated with the likelihood of being held with or without bail at arraignment when controlling for all other independent variables. This suggests that the outcome held at arraignment was influenced by having prior juvenile charges. Defendants with one or more prior juvenile charges were 2.719 times more likely to be held with or without bail than defendants with no prior juvenile charges.

Decision to Adjudicate Delinquent as an Initial Disposition

The regression model for the initial disposition decision included the outcomes of adjudicated delinquent and not adjudicated delinquent. The model for the decision had an overall accuracy percentage of 84.5% which is the percent of cases correctly predicted by the variables in the model. The logistic results for the outcome adjudicated delinquent varied in significance findings across characteristics. These results suggest that there may be other characteristics not captured in the model that influence the decision to make a delinquent adjudication.

Race and ethnicity were found to not be associated with the likelihood of an adjudicated delinquent finding when controlling for all other independent variables⁵⁵. This suggests that these variables do not influence or affect the initial disposition decision. Other demographic variables such as a defendant's gender and age at initial disposition were found be associated with the likelihood of a defendant being adjudicated delinquent when controlling for all other

Lead offense type (N = 7,057) Wald = 129.598, p < .01. Lead offense severity (N = 7,057) Wald = 20.108, p < .01. Use of Firearm (N = 7,057) Wald = 41.632, p < .01. Prior juvenile charges (N = 7,057) Wald = 150.592 p < .01. Court Region (N = 7,057) Wald = 33.877, p < .01.

⁵⁵ Race (N = 6,425) Wald = 4.673, p > .05. Ethnicity (N = 6,425) Wald = 1.730, p > .05.

independent variables⁵⁶. The regression coefficient for the female defendants was negative, while the regression coefficient for age at disposition was positive. Female defendants had an odds ratio of .560 which indicates that female defendants were 44.0% less likely to be adjudicated delinquent than male defendants. Age at disposition had an odds ratio of 1.084. This means that as the age of the defendant increased by one, the likelihood of being adjudicated delinquent increased by 1.084 times.

The variables manner of entry and court region were found to not be predictive of a delinquent adjudication when controlling for all other independent variables⁵⁷. Other variables – total charges, lead offense type, felony lead offense, and use of firearm were found to be associated with the likelihood of an adjudicated delinquent finding when controlling for all other independent variables⁵⁸.

The total number of charges had a positive coefficient and an odds ratio of 1.137. This means that as the number of charges increased by one, the likelihood of being adjudicated delinquent increased by 1.137 times. All lead offense types had positive coefficients and odds ratios of greater than one. This suggests that these lead offense types were associated with higher likelihoods of being adjudicated delinquent when compared to the reference category, person offense type. Defendants with a sex lead offense were 2.889 times more likely to be adjudicated delinquent than defendants with a person offense. Defendants with a public order lead offense and defendants with a drug / alcohol lead offense were more likely to be adjudicated delinquent than defendants with a person offense by 1.639 times and 1.367 times respectively. Weapon offenses and motor vehicle offenses were found to be not statistically significant. Felony lead offenses increased the likelihood of being adjudicated delinquent by 1.403 times when compared to defendants with misdemeanor lead offenses. Civil infraction lead offenses and missing severity lead offenses were found to be not statistically significant. Lastly, defendants who had a charge involving the use of a firearm were 1.980 times more likely to be adjudicated delinquent than defendants who did not have a charge involving the use of a firearm.

The variable, prior juvenile charges, was found to be associated with the likelihood of being adjudicated delinquent when controlling for all other independent variables⁵⁹. Defendants with one or more prior juvenile charges were 3.471 times more likely to be adjudicated delinquent than defendants with no prior juvenile charges. The variable, subsequent juvenile charges, was found to not be predictive of a delinquent adjudication.

There were four new variables entered into the logistic regression model to assess if juvenile detention at any stage of the case increased or decreased the likelihood of being adjudicated delinquent. The variables, never held during the pendency of the case and held on other conditions during the pendency of the case, were found to be associated with the likelihood of

⁵⁶ Gender (N = 6,425) Wald = 27.375, p < .01. Age at disposition (N = 6,425) Wald = 10.683, p < .01.

⁵⁷ Manner of Entry (N = 6,425) Wald = 0.038, p > .05. Court Region (N = 6,425) Wald = 2.432, p > .05.

⁵⁸ Total charges (N = 6,425) Wald = 46.430, p < .01. Lead offense type (N = 6,425) Wald = 38.370, p < .01.

Felony lead offense severity (N = 6,425) Wald = 12.640, p < .01. Use of Firearm (N = 6,425) Wald = 5.812, p < .05.

⁵⁹ Prior juvenile charges (N = 6,425) Wald = 143.557, p < .01.

adjudicated delinquent when controlling for all other independent variables.⁶⁰ Defendants that were never held during the pendency of the case were 66.8% less likely to be adjudicated delinquent than defendants that were held at any point during the pendency of their case. Defendants that were held on other conditions during the pendency of their case were 1.526 times more likely to be adjudicated delinquent than defendants that were not held on other conditions. The variables, held without bail during the pendency of the case and held with bail conditions during the pendency of the case, were found to not be predictive of a delinquent adjudication. This suggests that these variables did not influence the decision to make a delinquent adjudication.

 60 Never held during case (N=6,425) Wald = 31.279, p < .01. Held other during the case (N=6,425) Wald = 3.419, p < .10.

DISCUSSION, LIMITATIONS AND FUTURE DIRECTIONS

Discussion

Findings from the current assessment indicate that various racial and ethnic groups have different experiences at the decision points studied in the analyses.

Youth, Offense, and Other Characteristics

Results from the Chi-Square Tests on the independent variables showed that the distribution of cases for twelve of the fourteen independent variables varied more than expected across one or more racial groups. This means that one or more racial groups were disproportionately represented in twelve of the independent variables within the population of referrals.

White defendants and defendants of other races had proportions of category outcomes that were about equal to the proportions of the independent variables' categories for the population. Black defendants had higher proportions of the most serious category for the independent variables when compared to other racial groups. For example, Black defendants had the highest proportions of felony offenses (43.3%), one or more prior juvenile charges (62.9%), and being held or detained during the pendency of the case (46.5%). It is also likely that the variation from the expected values found in the analysis may have been influenced by the racial group, Not Reported / Not Known. This group represented the second largest number of cases in the racial group and had lower proportions of the most serious categories when compared to the other racial groups. For example, defendants with an unreported race had significantly higher proportions of referrals with misdemeanor lead offenses (66.7%) and no prior juvenile charges (54.7%) when compared to the other racial groups. Overall, the findings from this analysis indicate that there is disproportionate representation occurring in the population of referrals for one or more racial groups.

The distribution of cases for all of the independent variables varied more than expected across one or more ethnic groups. This means that one or more ethnic groups were disproportionately represented in all of the independent variables within the population of referrals. Hispanic defendants had higher proportions of the most serious categories for the independent variables when compared to other ethnic groups. For example, Hispanic defendants had the highest proportions of felony offenses (39.2%), one or more prior juvenile charges (62.6%), and detention during the pendency of the case (43.2%) when compared to the other ethnic groups. Furthermore, defendants with an unreported ethnicity represented the largest number of cases in the ethnic groups and were found to have the lowest proportions of the most serious categories. These proportions were higher than the expected proportions for the population. Overall, the findings from this analysis indicate that there is disproportionate representation occurring in the population of referrals for one or more ethnic groups.

Decision Points

Results from the Chi-Square Tests on the decision points showed that the distribution of cases for each decision point varied more than expected across one of more racial groups. This means that one or more racial groups were disproportionately represented in all of the decision points. White defendants had proportions of cases that were about equal to the proportions of cases for the population in the decision points. For example, the proportion of no petition issued for the population was 29.4% which is about the same to the proportion for White defendants (29.1%) and defendants of other races (28.1%). Black defendants had higher proportions of the most serious decisions when compared to other racial groups. For example, Black defendants had the highest proportions of petitions issued (78.7%), held arraignments (81.4%), detentions with or without bail conditions (25.0%), and delinquent adjudications (19.4%) than other defendants. Defendants of other races and defendants with an unreported race were found to have lower proportions of the most serious decisions when compared to other racial groups. Defendants of other races had lower proportions of detentions with or without bail conditions (11.7%), delinguent adjudications (5.9%), and commitments to DYS (1.5%) when compared to other races and the population of referrals. Defendants with an unreported race had the lowest proportions of petitions issued (66.0%) and held arraignments (72.3%). The findings for the decision points suggests that there is disproportionate representation in each decision point for one or more racial groups.

The distribution of cases for the decision points also varied more than expected across one or more ethnic groups, indicating that one or more ethnic groups were disproportionately represented throughout the decision points. Hispanic defendants had the highest proportions of the most serious decisions when compared to other ethnic groups. For example, Hispanic defendants had higher proportions of petitions issued (84.9%), held arraignments (85.2%), detentions with or without bail conditions (22.1%), and delinquent adjudications (19.0%) than other defendants. Non-Hispanic defendants had higher proportions of the most serious decisions when compared to the population. Defendants with an unreported ethnicity were found to have the lowest proportions of the most serious decisions when compared to other racial groups. These defendants had lower proportions of petitions issued (63.0%), detentions with or without bail conditions (14.3%), and commitments to DYS (5.7%) than other defendants. The findings for the decision points suggests that there is disproportionate representation in each decision point for one or more ethnic groups.

Rates of Contact

Results from the relative rates analysis indicate that there was overrepresentation for one or more racial groups at various contact points. Based on their RRI, Black youth were found to be overrepresented at the contact points, decision to refer the youth to the juvenile court and decision to detain with or without bail conditions. There was slight overrepresentation for Black youth at the contact point, decision to adjudicate delinquent. For youth with an unreported race, overrepresentation was found at the contact point, decision to detain with or without bail conditions (detained). Across all racial groups, there was no overrepresentation found at the

contact points: decision to issue a delinquency petition, decision to arraign the youth, and decision to commit to DYS. The findings for the RRIs suggest that the racial groups had equal representation across the majority of contact points.

The results for the ethnic groups indicate that there was overrepresentation for one or more ethnic groups at various contact points. It is important to note that the ethnic group Hispanic may include White individuals since Hispanic individuals may identify as any race. With respect to ethnicity, Hispanic youth were found to be overrepresented at the contact points, decision to refer the youth to the juvenile court and decision to detain with or without bail conditions. There was some slight overrepresentation for Hispanic youth at the contact point, decision to adjudicate delinquent. Non-Hispanic youth were found to be overrepresented at the contact point, decision to detain with or without bail. Across all ethnic groups, there was no overrepresentation found at the contact points: decision to issue a delinquency petition, decision to arraign the youth, and decision to commit to DYS. The findings for the RRIs suggest that the ethnic groups had equal representation across the majority of contact points.

Effect of the Independent Variable on a Decision Point

Lastly, results from the logistic regression analysis indicate that there were several independent variables that individually influenced the occurrence of the outcome of interest. Race, ethnicity, gender, court region, total number of charges, lead offense category, and lead offense severity were found to be associated with the likelihood of a petition issuing when controlling for all other independent variables. Black defendants were 1.526 times more likely to have a petition issue than White defendants. Defendants with unreported race were 29.9% less likely to have a petition issue than White defendants. Defendants of other races were found to have a non-statistically significant likelihood when compared to White defendants. Hispanic defendants were 2.460 times more likely to have a petition issue when compared to defendants with an unreported ethnicity. Non-Hispanic defendants were 1.355 times more likely to have a petition issue when compared to defendants with an unreported ethnicity.

The logistic results for the decision to hold an arraignment event were statistically significant across almost all characteristics. Ethnicity, gender, age, court region, manner of entry, total number of charges, lead offense category, lead offense severity, and prior juvenile charges were found to be associated with the likelihood of an arraignment occurring when controlling for all other independent variables. This suggests that there were many factors considered in the decision to hold an arraignment. The variables race, use of firearm, and subsequent juvenile charges were found to not be predictive of an arraignment occurring when controlling for all other independent variables. Hispanic defendants and Non-Hispanic defendants were 1.680 times and 1.304 times more likely be arraigned than defendants with an unreported ethnicity.

The logistic results for the decision to detain at arraignment imply that there were varying factors considered in the decision to detain a defendant with or without bail conditions at arraignment. All the variables for youth characteristics, offense characteristics, and prior juvenile charges were found to be associated with the likelihood of being held with or without bail at arraignment when

controlling for all other independent variables. Black defendants were 1.646 times more likely to be held with or without bail conditions than White defendants. Defendants with unreported race were 1.292 times more likely to be held with or without bail conditions than White defendants. Defendants of other races were found to have a non-statistically significant likelihood of being held with or without bail conditions when compared to White defendants. Hispanic defendants were 1.473 times more likely to be held compared to defendants with an unreported ethnicity.

The logistic results for the decision to adjudicate delinquent varied in significance across characteristics. The following variables were found to be associated with the likelihood of an adjudicated delinquent finding when controlling for all other independent variables: gender, age, total number of charges, lead offense severity, lead offense category, use of firearm, prior juvenile charges, never held during the pendency of the case and held on other conditions during the pendency of the case. Race and ethnicity were found to not be predictive of a delinquent adjudication when controlling for all other independent variables. This suggests that these variables do not influence or affect the initial disposition decision of adjudicated delinquent.

Addressing Mechanisms Contributing to Disproportionate Minority Contact

Key findings from the analyses are consistent with prior DMC research that found that Black youth and Hispanic youth have disproportionate contact at certain points in the juvenile justice system (Leiber 2002; Piquero 2008; Kempf-Leonard 2007). The Chi-Square results for the independent and dependent variables indicate that there is disproportionate representation occurring in the population of referrals that accumulates at each decision point. This accumulation implies that the mechanism, accumulated disadvantage, is present and contributing to disproportionate minority contact for certain racial and ethnic groups. Recent legislation known as "An Act Relative to Criminal Justice Reform" enacted many provisions that act as an intervention strategy to reduce this DMC mechanism. The statute expands judicial diversion for less serious offenses by (1) eliminating delinquency findings for civil infractions and certain first-offense misdemeanors, (2) eliminating age and certification requirements for diversion programs, and (3) expanding use of restorative justice programs for diversion of youth. The provisions which expand diversion and eliminate delinquency findings for certain offenses may reduce accumulation by increasing the rate of participation in diversion programs and reducing the rate of formal processing as a delinquent.

Research also shows that youth who have prior juvenile justice involvement are more likely to have future contact with the juvenile system than youth who have no prior contact (Paschall et al. 2001; Voisin et al. 2017). Other studies illustrate that the type of offense a youth is charged with can lead to disparate contact at points in the system (Kempf-Leonard 2007; Wing 2017). The regression results for the offense and juvenile history characteristics imply that manner of entry into the system, nature of offenses and level of court contact are major factors in the juvenile justice decision-making process. These factors suggest that the mechanisms differential behavior and differential processing are present and contributing to disproportionate minority contact for certain racial and ethnic groups. Provisions in the statute mitigate these mechanisms by (1) increasing the minimum age a youth can be charged with a delinquency from age 7 to age 12, (2)

formally standardizing the notification process when a youth is arrested, (3) decriminalizing offenses related to disruptive behavior in school, (4) expanding "Good Samaritan" protections to alcohol and probation violations for youth and, (5) mandating implicit bias and de-escalation trainings for law enforcement officials. These provisions act as intervention strategies given that these mandates aim to reduce rates of involvement in the juvenile justice system (differential behavior) and standardize procedures that previously may have been applied inconsistently for one or more racial or ethnic groups (differential processing).

Other mechanisms found in the analyses that were also addressed by the law are justice by geography, and legislation, policies and legal factors. Differences in the regression results for each court region suggests that the mechanism, justice by geography, exists in terms of court referrals, arraignments, and detentions. Moreover, the regression results for the firearm statute suggest that this mandate may be contributing to DMC for certain racial or ethnic groups. The provisions that prevent youth arrests from public police logs and expand the use of sealing and expunging records may also mitigate rates of impacts caused by the mechanisms, justice by geography, and legislation, policies and legal factors.

Limitations and Future Directions

While the assessment presents statistical results that suggest the existence of disproportionate minority contact, it is important to emphasize that any disparities found in the data may not be indicative of unequal treatment. There were a large number of records with blank race and ethnicity fields which did not allow for the computation of racial-ethnic categories. For example, the ethnic group 'Hispanic' may have included White youth and Black youth. Furthermore, across court regions, a range of 30% to 61% of referrals were missing race or ethnicity information for the defendant. Practices for the collection and reporting of race and ethnicity vary across the Commonwealth. This is a significant limitation of the assessment and future assessments should aim to reduce the number of missing records prior to data collection and analysis.

With respect to the results, many of the statistical findings stated in the assessment had weak associations between characteristics and outcomes. Due to data collection limitations, earlier points of contact in the juvenile justice system, such as arrest and diversion, were not included in the analyses and a number of community-based variables were not included in the assessment. Several studies have shown that factors such as socioeconomic status, education level, and family structure are associated with more serious juvenile justice outcomes (Huizinga et al. 2007; Aizer & Doyle 2015; Voisin et al. 2017). Future assessments should incorporate earlier juvenile justice stages for analysis and examine characteristics such as the arresting law enforcement agency, education situation, availability of diversion programs, and availability of prevention and treatment resources to account for other possible influences on juvenile justice decision making. Lastly, there were many variables in the assessment that call for a more in-depth analysis in future assessments. The intersection between gender, race, and court outcomes was not explored, although the literature suggests there is an association among the variables (Leiber & Mack 2003).

Recent and Ongoing Trial Court Efforts Focused on Implicit Bias

The Trial Court is committed to improving the quality of justice in the Commonwealth with policies and practices that strengthen and support diversity, equity, and inclusion for all employees and court users. In 2015, the Trial Court introduced the Signature Counter Experience training program to all court departments to identify and mitigate challenges that staff face while trying to meet the needs of the public. As a follow up to the training program, the Trial Court conducted a conference on race and implicit bias with support from the Supreme Judicial Court, the Appeals Court and the Flaschner Judicial Institute. More than 300 judges attended the all-day event, which fostered ideas for ways to address racial biases in the court system and society. As a result of the conference, a series of bench cards addressing implicit bias were developed by each department for dissemination to all judicial officers in the Commonwealth. Lastly, leadership committees were appointed to examine issues related to race and implicit bias within the court departments and develop policies and practices to address these issues.

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APPENDIX A. STATISTICAL TABLES

Table 1. Descriptive Statistics and Chi-Square Results for Youth, Offense, and Other Characteristics by Race

		Total			White		Black	or African	American	Othe	r Race / M	ulti-Race	Not Re	ported / N	lot Known	_	
Independent Variables	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Chi Square	Sig. (p)
Race	13,583	100.0%		5,465	40.2%		2,719	20.0%		135	1.0%		5,264	38.8%			
Gender	13,583	100.0%	100.0%	5,465	40.2%	100.0%	2,719	20.0%	100.0%	135	1.0%	100.0%	5,264	38.8%	100.0%	647.016	***
Male	9,533	100.0%	70.2%	4,017	42.1%	73.5%	1,994	20.9%	73.3%	108	1.1%	80.0%	3,414	35.8%	64.9%		
Female	3,656	100.0%	26.9%	1,446	39.6%	26.5%	724	19.8%	26.6%	27	0.7%	20.0%	1,459	39.9%	27.7%		
Not Reported	394	100.0%	2.9%	2	0.5%	0.0%	1	0.3%	0.0%	0	0.0%	0.0%	391	99.2%	7.4%		
Age at Referral Category	13,583	100.0%	100.0%	5,465	40.2%	100.0%	2,719	20.0%	100.0%	135	1.0%	100.0%	5,264	38.8%	100.0%	220.679	***
7	12	100.0%	0.1%	1	8.3%	0.0%	1	8.3%	0.0%	0		0.0%	10	83.3%	0.2%		
8	22	100.0%	0.2%	7	31.8%	0.1%	2	9.1%	0.1%	0		0.0%	13	59.1%	0.2%		
9	37	100.0%	0.3%	7	18.9%	0.1%	6	16.2%	0.2%	1		0.7%	23	62.2%	0.4%		
10	66	100.0%	0.5%	15	22.7%	0.3%	11	16.7%	0.4%	0		0.0%	40	60.6%	0.8%		
11	194	100.0%	1.4%	64	33.0%	1.2%	57	29.4%	2.1%	2		1.5%	71	36.6%	1.3%		
12	477	100.0%	3.5%	186	39.0%	3.4%	75	15.7%	2.8%	3		2.2%	213	44.7%	4.0%		
13	1,011	100.0%	7.4%	364	36.0%	6.7%	203	20.1%	7.5%	10		7.4%	434	42.9%	8.2%		
14	1,652	100.0%	12.2%	633	38.3%	11.6%	370	22.4%	13.6%	14		10.4%	635	38.4%	12.1%		
15	2,484	100.0%	18.3%	919	37.0%	16.8%	585	23.6%	21.5%	21		15.6%	959	38.6%	18.2%		
16	3,175	100.0%	23.4%	1,186	37.4%	21.7%	676	21.3%	24.9%	30		22.2%	1,283	40.4%	24.4%		
17	4,163	100.0%	30.6%	1,946	46.7%	35.6%	693	16.6%	25.5%	52		38.5%	1,472	35.4%	28.0%		
18+	249	100.0%	1.8%	120	48.2%	2.2%	39	15.7%	1.4%	2		1.5%	88	35.3%	1.7%		
Not Reported	41	100.0%	0.3%	17	41.5%	0.3%	1	2.4%	0.0%	0	0.0%	0.0%	23	56.1%	0.4%		
Annual Bufannal	Count	Mean	Std. Dev.	Range												220 670	***
Age at Referral	13,583	15.43	1.78	42												220.679	***
Court Region	13,583	100.0%	100.0%	•	40.2%	100.0%	•	20.0%	100.0%	135	1.0%	100.0%	5,264	38.8%		1,303.404	***
Region 1	3,991	100.0%	29.4%	1,716	43.0%	31.4%	549	13.8%	20.2%	23	0.6%	17.0%	1,703	42.7%	32.4%		
Region 2	2,503	100.0%	18.4%	421	16.8%	7.7%	,	41.7%	38.4%	17	0.7%	12.6%	1,020	40.8%	19.4%		
Region 3	6,034	100.0%	44.4%	2,696	44.7%	49.3%	1,025	17.0%	37.7%	88		65.2%	2,225	36.9%	42.3%		
Region 4	1,055	100.0%	7.8%	632	59.9%	11.6%	100	9.5%	3.7%	7	0.7%	5.2%	316	30.0%	6.0%	1	
Manner of Entry	13,583	100.0%	100.0%	5,465	40.2%	100.0%	2,719	20.0%	100.0%	135	1.0%	100.0%	5,264	38.8%	100.0%	175.282	***
Summons (Non-Arrest)	6,788	100.0%	50.0%	2,889	42.6%	52.8%	1,056	15.6%	38.8%	61	0.9%	45.2%	2,782	41.0%	52.8%	ı	
Arrest	6,786	100.0%	50.0%	2,572	37.9%	47.1%	1,659	24.4%	61.0%	74	1.1%	54.8%	2,481	36.6%	47.1%		
Not Reported	9	100.0%	0.1%	4	44.4%	0.1%	4	44.4%	0.1%	0	0.0%	0.0%	1	11.1%	0.0%		
Total Charges (Referral)	13,583	100.0%	100.0%	5,465	40.2%	100.0%	2,719	20.0%	100.0%	135	1.0%	100.0%	5,264	38.8%	100.0%	64.597	NS
1	7,316	100.0%	53.9%	2,902	39.7%	53.1%	1,413	19.3%	52.0%	73	1.0%	54.1%	2,928	40.0%	55.6%		
-	•			,	41.4%	26.6%	691	19.7%	25.4%	39	1.1%	28.9%	1,328	37.8%	25.2%		
2	3.511	100.0%	25.8%	1.455													
2 3	3,511 1.578	100.0% 100.0%	25.8% 11.6%	•													
2 3 4	3,511 1,578 589	100.0% 100.0% 100.0%	25.8% 11.6% 4.3%	620 224	39.3% 38.0%	11.3% 4.1%	365 132	23.1% 22.4%	13.4% 4.9%	12 7	.8%	8.9% 5.2%	581 226	36.8% 38.4%	11.0% 4.3%		

		Total			White		Black	or African	American	Othe	r Race / M	ulti-Race	Not Re	eported / N	lot Known	_	
Independent Variables	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Chi Square	Sig. (p)
Total Charges (Referral)	Count 13,583	Mean 1.87	Std. Dev. 1.55	Range 45												64.597	NS
Lead Offense Severity	13,583	100.0%	100.0%	5,465	40.2%	100.0%	2,719	20.0%	100.0%	135	1.0%	100.0%	5,264	38.8%	100.0%	193.799	***
Misdemeanor	8,883	100.0%	65.4%	3,761	42.3%	68.8%	1,519	17.1%	55.9%	90	1.0%	66.7%	3,513	39.5%	66.7%		
Felony	4,442	100.0%	32.7%	1,585	35.7%	29.0%	1,177	26.5%	43.3%	41	0.9%	30.4%	1,639	36.9%	31.1%		
Civil Infraction	194	100.0%	1.4%	84	43.3%	1.5%	16	8.2%	0.6%	3	1.5%	2.2%	91	46.9%	1.7%		
Other / Not Available	64	100.0%	0.5%	35	54.7%	0.6%	7	10.9%	0.3%	1	1.6%	0.7%	21	32.8%	0.4%		
Lead Offense Category	13,583	100.0%	100.0%	5,465	40.2%	100.0%	2,719	20.0%	100.0%	135	1.0%	100.0%	5,264	38.8%	100.0%	296.942	***
Person	4,286	100.0%	31.6%	1,592	37.1%	29.1%	1,003	23.4%	36.9%	37	0.9%	27.4%	1,654	38.6%	31.4%		
Property	4,209	100.0%	31.0%	1,637	38.9%	30.0%	931	22.1%	34.2%	47	1.1%	34.8%	1,594	37.9%	30.3%		
Motor Vehicle	1,201	100.0%	8.8%	572	47.6%	10.5%	118	9.8%	4.3%	22	1.8%	16.3%	489	40.7%	9.3%		
Public Order	1,018	100.0%	7.5%	455	44.7%	8.3%	178	17.5%	6.5%	4	0.4%	3.0%	381	37.4%	7.2%		
Other	1,004	100.0%	7.4%	368	36.7%	6.7%	212	21.1%	7.8%	8	0.8%	5.9%	416	41.4%	7.9%		
Drug / Alcohol	984	100.0%	7.2%	521	52.9%	9.5%	78	7.9%	2.9%	6	0.6%	4.4%	379	38.5%	7.2%		
Weapons	511	100.0%	3.8%	155	30.3%	2.8%	132	25.8%	4.9%	9	1.8%	6.7%	215	42.1%	4.1%		
Sex	370	100.0%	2.7%	165	44.6%	3.0%	67	18.1%	2.5%	2	0.5%	1.5%	136	36.8%	2.6%		
Use of Firearm Charges	13,583	100.0%	100.0%	5,465	40.2%	100.0%	2,719	20.0%	100.0%	135	1.0%	100.0%	5,264	38.8%	100.0%	57.233	***
None	13,493	100.0%	99.3%	5,453	40.4%	99.8%	2,674	19.8%	98.3%	134	1.0%	99.3%	5,232	38.8%	99.4%		
1 or More	90	100.0%	0.7%	12	13.3%	0.2%	45	50.0%	1.7%	1	1.1%	0.7%	32	35.6%	0.6%		
Prior Juvenile Charges	9,519	100.0%	100.0%	3,862	40.6%	100.0%	2,137	22.4%	100.0%	100	1.1%	100.0%	3,420	35.9%	100.0%	165.761	***
None	4,624	100.0%	48.6%	1,907	41.2%	49.4%	793	17.1%	37.1%	53	1.1%	53.0%	1,871	40.5%	54.7%	ı	
1 or More	4,895	100.0%	51.4%	1,955	39.9%	50.6%	1,344	27.5%	62.9%	47	1.0%	47.0%	1,549	31.6%	45.3%	1	
Subsequent Juvenile Charges	9,519	100.0%	100.0%	3,862	40.6%	100.0%	2,137	22.4%	100.0%	100	1.1%	100.0%	3,420	35.9%	100.0%	55.080	***
None	7,805	100.0%	82.0%	3,223	41.3%	83.5%	1,637	21.0%	76.6%	87	1.1%	87.0%	2,858	36.6%	83.6%		
1 or More	1,714	100.0%	18.0%	639	37.3%	16.5%	500	29.2%	23.4%	13	0.8%	13.0%	562	32.8%	16.4%	1	
Any Type of Detention	6,425	100.0%	100.0%	2,621	40.8%	100.0%	1,538	23.9%	100.0%	68	1.1%	100.0%	2,198	34.2%	100.0%	164.432	***
Never Held or Detained	4,186			1,913	45.7%	73.0%	823	19.7%	53.5%	46			•	33.5%	63.9%		
Held or Detained	2,239	100.0%	34.8%	708	31.6%	27.0%	715	31.9%	46.5%	22	1.0%	32.4%	794	35.5%	36.1%		
Detained With Bail Conditions	6,425	100.0%	100.0%	2,621	40.8%	100.0%	1,538	23.9%	100.0%	68	1.1%	100.0%	2,198	34.2%	100.0%	128.911	***
Not Held with Bail Conditions	5,155	100.0%	80.2%	2,263	43.9%	86.3%	1,110	21.5%	72.2%	56	1.1%	82.4%	1,726	33.5%	78.5%		
Held with Bail Conditions	1,270	100.0%	19.8%	358	28.2%	13.7%	428	33.7%	27.8%	12	0.9%	17.6%	472	37.2%	21.5%		

Table 1. Descriptive Statistics and Chi-Square Results for Youth, Offense, and Other Characteristics by Race

	Tota				White		Black	or African	American	Othe	r Race / M	ulti-Race	Not Re	eported / N	lot Known	_	
Independent Variables	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Chi Square	Sig. (p)									
Detained Without Bail Conditions	6,425	100.0%	100.0%	2,621	40.8%	100.0%	1,538	23.9%	100.0%	68	1.1%	100.0%	2,198	34.2%	100.0%	2.291	NS
Not Held without Bail Conditions	5,466	100.0%	85.1%	2,247	41.1%	85.7%	1,311	24.0%	85.2%	57	1.0%	83.8%	1,851	33.9%	84.2%		
Held without Bail Conditions	959	100.0%	14.9%	374	39.0%	14.3%	227	23.7%	14.8%	11	1.1%	16.2%	347	36.2%	15.8%		
Detained on Other Conditions	6,425	100.0%	100.0%	2,621	40.8%	100.0%	1,538	23.9%	100.0%	68	1.1%	100.0%	2,198	34.2%	100.0%	73.836	***
Not Held on Other Conditions	6,154	100.0%	95.8%	2,552	41.5%	97.4%	1,415	23.0%	92.0%	65	1.1%	95.6%	2,122	34.5%	96.5%		
Held on Other Conditions	271	100.0%	4.2%	69	25.5%	2.6%	123	45.4%	8.0%	3	1.1%	4.4%	76	28.0%	3.5%		

Table 2. Descriptive Statistics and Chi-Square Results for Youth, Offense, and Other Characteristics by Ethnicity

		Total		His	panic or La	atino	Non-F	lispanic oı	r Latino	Not Rep	orted / No	ot Known		
Independent Variables	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Chi Square	Sig. (p)
Ethnicity	13,583	100.0%		2,932	21.6%		3,099	22.8%	•	7,552	55.6%			
Gender	13,583	100.0%	100.0%	2,932	21.6%	100.0%	3,099	22.8%	100.0%	7,552	55.6%	100.0%	360.696	***
Male	9,533	100.0%	70.2%	2,226	23.4%	75.9%	2,278	23.9%	73.5%	5,029	52.8%	66.6%		
Female	3,656	100.0%	26.9%	706	19.3%	24.1%	821	22.5%	26.5%	2,129	58.2%	28.2%		
Not Reported	394	100.0%	2.9%	0	0.0%	0.0%	0	0.0%	0.0%	394	100.0%	5.2%		
Age at Referral Category	13,583	100.0%	100.0%	2,932	21.6%	100.0%	3,099	22.8%	100.0%	7,552	55.6%	100.0%	143.317	***
7	12	100.0%	0.1%	0	0.0%	0.0%	0	0.0%	0.0%	12	100.0%	0.2%		
8	22	100.0%	0.2%	4	18.2%	0.1%	1	4.5%	0.0%	17	77.3%	0.2%		
9	37	100.0%	0.3%	7	18.9%	0.2%	1	2.7%	0.0%	29	78.4%	0.4%		
10	66	100.0%	0.5%	7	10.6%	0.2%	7	10.6%	0.2%	52	78.8%	0.7%		
11	194	100.0%	1.4%	36	18.6%	1.2%	40	20.6%	1.3%	118	60.8%	1.6%		
12	477	100.0%	3.5%	103	21.6%	3.5%	99	20.8%	3.2%	275	57.7%	3.6%		
13	1,011	100.0%	7.4%	229	22.7%	7.8%	221	21.9%	7.1%	561	55.5%	7.4%		
14	1,652	100.0%	12.2%	398	24.1%	13.6%	393	23.8%	12.7%	861	52.1%	11.4%		
15	2,484	100.0%	18.3%	582	23.4%	19.8%	625	25.2%	20.2%	1,277	51.4%	16.9%		
16	3,175	100.0%	23.4%	737	23.2%	25.1%	663	20.9%	21.4%	1,775	55.9%	23.5%		
17	4,163	100.0%	30.6%	766	18.4%	26.1%	998	24.0%	32.2%	2,399	57.6%	31.8%		
18+	249	100.0%	1.8%	63	25.3%	2.1%	48	19.3%	1.5%	138	55.4%	1.8%		
Not Reported	41	100.0%	0.3%	0	0.0%	0.0%	3	7.3%	0.1%	38	92.7%	0.5%		
	Count	Mean	Std. Dev.	Range										
Age at Referral	13,583	15.43	1.78	42									220.679	***
Court Region	13,583	100.0%	100.0%	2,932	21.6%	100.0%	3,099	22.8%	100.0%	7,552	55.6%	100.0%	602.634	***
Region 1	3,991	100.0%	29.4%	1,285	32.2%	43.8%	739	18.5%	23.8%	1,967	49.3%	26.0%		
Region 2	2,503	100.0%	18.4%	495	19.8%	16.9%	707	28.2%	22.8%	1,301	52.0%	17.2%		
Region 3	6,034	100.0%	44.4%	1,092	18.1%	37.2%	1,263	20.9%	40.8%	3,679	61.0%	48.7%		
Region 4	1,055	100.0%	7.8%	60	5.7%	2.0%	390	37.0%	12.6%	605	57.3%	8.0%		
Manner of Entry	13,583	100.0%	100.0%	2,932	21.6%	100.0%	3,099	22.8%	100.0%	7,552	55.6%	100.0%	390.774	·**
Summons (Non-Arrest)	6,788	100.0%	50.0%	1,058	15.6%	36.1%	1,432	21.1%	46.2%	4,298	63.3%	56.9%		
Arrest	6,786	100.0%	50.0%	1,873	27.6%	63.9%	1,664	24.5%	53.7%	3,249	47.9%	43.0%		
Not Reported	9	100.0%	0.1%	1	11.1%	0.0%	3	33.3%	0.1%	5	55.6%	0.1%		
Total Charges (Referral)	13,583	100.0%	100.0%	2,932	21.6%	100.0%	3,099	22.8%	100.0%	7,552	55.6%	100.0%	100.466	5 ***
1	7,316	100.0%	53.9%	1,448	19.8%	49.4%	1,587	21.7%	51.2%	4,281	58.5%	56.7%		
2	3,511	100.0%	25.8%	790	22.5%	26.9%	808	23.0%	26.1%	1,913	54.5%	25.3%		
3	1,578	100.0%	11.6%	384	24.3%	13.1%	407	25.8%	13.1%	787	49.9%	10.4%		
	589	100.0%	4.3%	154	26.1%	5.3%	141	23.9%	4.5%	294	49.9%	3.9%		
4	209	100.070	4.370	134	20.170	5.5%	141	25.9%	4.3/0	254	43.370	5.9%		

Table 2. Descriptive Statistics and Chi-Square Results for Youth, Offense, and Other Characteristics by Ethnicity

		Total		His	panic or La	atino	Non-F	lispanic or	Latino	Not Rep	oorted / N	ot Known		
Independent Variables	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Chi Square	Sig. (p)
	Count	Mean	Std. Dev.	Range										
Total Charges (Referral)	13,583	1.87	1.55	45									64.597	NS
Lead Offense Severity	13,583	100.0%	100.0%	2,932	21.6%	100.0%	3,099	22.8%	100.0%	7,552	55.6%	100.0%	132.888	***
Misdemeanor	8,883	100.0%	65.4%	1,738	19.6%	59.3%	1,931	21.7%	62.3%	5,214	58.7%	69.0%		
Felony	4,442	100.0%	32.7%	1,148	25.8%	39.2%	1,118	25.2%	36.1%	2,176	49.0%	28.8%		
Civil Infraction	194	100.0%	1.4%	34	17.5%	1.2%	30	15.5%	1.0%	130	67.0%	1.7%		
Other / Not Available	64	100.0%	0.5%	12	18.8%	0.4%	20	31.3%	0.6%	32	50.0%	0.4%		
Lead Offense Category	13,583	100.0%	100.0%	2,932	21.6%	100.0%	3,099	22.8%	100.0%	7,552	55.6%	100.0%	184.968	***
Person	4,286	100.0%	31.6%	1,040	24.3%	35.5%	1,041	24.3%	33.6%	2,205	51.4%	29.2%		
Property	4,209	100.0%	31.0%	911	21.6%	31.1%	974	23.1%	31.4%	2,324	55.2%	30.8%		
Motor Vehicle	1,201	100.0%	8.8%	200	16.7%	6.8%	235	19.6%	7.6%	766	63.8%	10.1%		
Public Order	1,018	100.0%	7.5%	240	23.6%	8.2%	229	22.5%	7.4%	549	53.9%	7.3%		
Other	1,004	100.0%	7.4%	251	25.0%	8.6%	234	23.3%	7.6%	519	51.7%	6.9%		
Drug / Alcohol	984	100.0%	7.2%	108	11.0%	3.7%	183	18.6%	5.9%	693	70.4%	9.2%		
Weapons	511	100.0%	3.8%	125	24.5%	4.3%	113	22.1%	3.6%	273	53.4%	3.6%		
Sex	370	100.0%	2.7%	57	15.4%	1.9%	90	24.3%	2.9%	223	60.3%	3.0%		
Use of Firearm Charges	13,583	100.0%	100.0%	2,932	21.6%	100.0%	3,099	22.8%	100.0%	7,552	55.6%	100.0%	13.955	***
None	13,493	100.0%	99.3%	2,900	21.5%	98.9%	3,075	22.8%	99.2%	7,518	55.7%	99.5%		
1 or More	90	100.0%	0.7%	32	35.6%	1.1%	24	26.7%	0.8%	34	37.8%	0.5%		
Prior Juvenile Charges	9,519	100.0%	100.0%	2,483	26.1%	100.0%	2,335	24.5%	100.0%	4,701	49.4%	100.0%	316.885	***
None	4,624	100.0%	48.6%	929	20.1%	37.4%	985	21.3%	42.2%	2,710	58.6%	57.6%		
1 or More	4,895	100.0%	51.4%	1,554	31.7%	62.6%	1,350	27.6%	57.8%	1,991	40.7%	42.4%		
Subsequent Juvenile Charges	9,519	100.0%	100.0%	2,483	26.1%	100.0%	2,335	24.5%	100.0%	4,701	49.4%	100.0%	193.507	***
None	7,805	100.0%	82.0%	1,884	24.1%	75.9%	1,807	23.2%	77.4%	4,114	52.7%	87.5%		
1 or More	1,714	100.0%	18.0%	599	34.9%	24.1%	528	30.8%	22.6%	587	34.2%	12.5%		
Any Type of Detention	6,425	100.0%	100.0%	1,838	28.6%	100.0%	1,659	25.8%	100.0%	2,928	45.6%	100.0%	114.571	***
Never Held or Detained	4,186			1,044	24.9%		1,044	24.9%		2,098	50.1%		11-1.0/1	•
Held or Detained	2,239			794	35.5%		615	27.5%		830	37.1%			
ricia di Detaillea	۷,۷33	100.070	34.070	734	33.3/0	43.2/0	013	21.3/0	37.1/0	630	37.1/0	20.3/0		

Table 2. Descriptive Statistics and Chi-Square Results for Youth, Offense, and Other Characteristics by Ethnicity

		Total		His	panic or La	atino	Non-H	lispanic or	Latino	Not Rep	orted / No	ot Known		
Independent Variables	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Count	Row % (Across)	Column % (Within)	Chi Square	Sig. (p)
Detained With Bail Conditions	6,425	100.0%	100.0%	1,838	28.6%	100.0%	1,659	25.8%	100.0%	2,928	45.6%	100.0%	32.420	***
Not Held with Bail Conditions	5,155	100.0%	80.2%	1,410	27.4%	76.7%	1,309	25.4%	78.9%	2,436	47.3%	83.2%		
Held with Bail Conditions	1,270	100.0%	19.8%	428	33.7%	23.3%	350	27.6%	21.1%	492	38.7%	16.8%		
Detained Without Bail Conditions	6,425	100.0%	100.0%	1,838	28.6%	100.0%	1,659	25.8%	100.0%	2,928	45.6%	100.0%	85.213	***
Not Held without Bail Conditions	5,466	100.0%	85.1%	1,446	26.5%	78.7%	1,437	26.3%	86.6%	2,583	47.3%	88.2%		
Held without Bail Conditions	959	100.0%	14.9%	392	40.9%	21.3%	222	23.1%	13.4%	345	36.0%	11.8%		
Detained on Other Conditions	6,425	100.0%	100.0%	1,838	28.6%	100.0%	1,659	25.8%	100.0%	2,928	45.6%	100.0%	21.750) ***
Not Held on Other Conditions	6,154	100.0%	95.8%	1,762	28.6%	95.9%	1,558	25.3%	93.9%	2,834	46.1%	96.8%		
Held on Other Conditions	271	100.0%	4.2%	76	28.0%	4.1%	101	37.3%	6.1%	94	34.7%	3.2%		

Table 3. Descriptive Statistics and Chi Square Results for Decision Points by Race

	T	·-I	14/1-	•• -	Black or	African	Other	Race /	Not Rep	orted /		
Decision Points (Dependent Variables)	Tot	tai	Wh	ite	Amer	ican	Multi-	Race	Not Kr	nown		
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Chi Square	Sig. (p)
Decision to Issue a Delinquency Petition	13,583	100.0%	5,465	100.0%	2,719	100.0%	135	100.0%	5,264	100.0%	141.804	***
No Petition Issued	3,997	29.4%	1,589	29.1%	578	21.3%	38	28.1%	1,792	34.0%		
Petition Issued	9,586	70.6%	3,876	70.9%	2,141	78.7%	97	71.9%	3,472	66.0%		
Decision to Hold an Arraignment	9,519	100.0%	3,862	100.0%	2,137	100.0%	100	100.0%	3,420	100.0%	61.589	***
No Arraignment Held	2,263	23.8%	895	23.2%	398	18.6%	22	22.0%	948	27.7%		
Arraignment Held	7,256	76.2%	2,967	76.8%	1,739	81.4%	78	78.0%	2,472	72.3%		
Initial Bail Decision	7,057	100.0%	2,881	100.0%	1,691	100.0%	77	100.0%	2,408	100.0%	132.695	***
Not Held	5,810	82.3%	2,535	88.0%	1,269	75.0%	68	88.3%	1,938	80.5%		
Held with / without Bail Conditions	1,247	17.7%	346	12.0%	422	25.0%	9	11.7%	470	19.5%		
Initial Disposition	6,425	100.0%	2,621	100.0%	1,538	100.0%	68	100.0%	2,198	100.0%	50.322	***
Dismissal	3,246	50.5%	1,321	50.4%	778	50.6%	36	52.9%	1,111	50.5%	0.178	NS
Adjudicated Not Delinquent	70	1.1%	28	1.1%	10	0.7%	3	4.4%	29	1.3%	10.808	**
Continued Without a Finding / Filed With Consent	2,114	32.9%	927	35.4%	452	29.4%	25	36.8%	710	32.3%	16.637	***
Adjudicated Delinquent	995	15.5%	345	13.2%	298	19.4%	4	5.9%	348	15.8%	33.581	***
Initial Sanction	6,425	100.0%	2,621	100.0%	1,538	100.0%	68	100.0%	2,198	100.0%	54.951	***
No Sanction	3,316	51.6%	1,349	51.5%	788	51.2%	39	57.4%	1,140	51.9%		
Filed / Delinquency File	218	3.4%	85	3.2%	66	4.3%	4	5.9%	63	2.9%		
Probation	2,425	37.7%	1,047	39.9%	523	34.0%	24	35.3%	831	37.8%		
Committed to DYS	466	7.3%	140	5.3%	161	10.5%	1	1.5%	164	7.5%	41.393	***

Table 4. Descriptive Statistics and Chi Square Results for Decision Points by Ethnicity

	To	tal	Hispanic	or Latino	Non-His	panic or	Not Rep	orted /		
Decision Points (Dependent Variables)		Lai	пізрапіс	UI LALIIIU	Lat	ino	Not K	nown		
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Chi Square	Sig. (p)
Decision to Issue a Delinquency Petition	13,583	100.0%	2,932	100.0%	3,099	100.0%	7,552	100.0%	532.479	***
No Petition Issued	3,997	29.4%	443	15.1%	761	24.6%	2,793	37.0%		
Petition Issued	9,586	70.6%	2,489	84.9%	2,338	75.4%	4,759	63.0%		
Decision to Hold an Arraignment	9,519	100.0%	2,483	100.0%	2,335	100.0%	4,701	100.0%	283.336	***
No Arraignment Held	2,263	23.8%	367	14.8%	435	18.6%	1,461	31.1%		
Arraignment Held	7,256	76.2%	2,116	85.2%	1,900	81.4%	3,240	68.9%		
Initial Bail Decision	7,057	100.0%	2,055	100.0%	1,845	100.0%	3,157	100.0%	53.93	***
Not Held	5,810	82.3%	1,600	77.9%	1,504	81.5%	2,706	85.7%		
Held with / without Bail Conditions	1,247	17.7%	455	22.1%	341	18.5%	451	14.3%		
Initial Disposition	6,425	100.0%	1,838	100.0%	1,659	100.0%	2,928	100.0%	37.278	***
Dismissal	3,246	50.5%	898	48.9%	817	49.2%	1,531	52.3%	6.771	**
Adjudicated Not Delinquent	70	1.1%	21	1.1%	14	0.8%	35	1.2%	1.281	NS
Continued Without a Finding / Filed With Consent	2,114	32.9%	570	31.0%	555	33.5%	989	33.8%	4.219	NS
Adjudicated Delinquent	995	15.5%	349	19.0%	273	16.5%	373	12.7%	35.296	***
Initial Sanction	6,425	100.0%	1,838	100.0%	1,659	100.0%	2,928	100.0%	34.766	***
No Sanction	3,316	51.6%	919	50.0%	831	50.1%	1,566	53.5%		
Filed / Delinquency File	218	3.4%	64	3.5%	67	4.0%	87	3.0%		
Probation	2,425	37.7%	674	36.7%	644	38.8%	1,107	37.8%		
Committed to DYS	466	7.3%	181	9.8%	117	7.1%	168	5.7%	28.488	***

Table 5. Relative Rates of Referral to Juvenile Court by Race and Ethnicity

Referral to Juvenile Court		ge 7 - 17 lation	Cor	ntact	Relative Rate	Relative
nerental to Juvenille court	Count	% of Total	Count	% of Total	(Per 1,000)	Rate Index
White	693,406	79.8%	5,465	40.2%	7.88	1.00
Black or African American	104,251	12.0%	2,719	20.0%	26.08	3.31
Other Race / Multi-Race	-	-	135	1.0%	-	
Not Reported / Not Known	-	-	5,264	38.8%	-	
Total	868,688	100.0%	13,583	100.0%	15.64	1.98
Hispanic	145,091	16.7%	2,932	21.6%	20.21	2.56
Non-Hispanic	723,597	83.3%	3,099	22.8%	4.28	0.54
Not Reported / Not Known	-		7,552	55.6%	-	-
Total	868,688	100.0%	13,583	100.0%	15.64	1.98

Table 6. Relative Rates of Issuance of Petition by Race and Ethnicity

Issuance of a Delinquent Petition		erral Iation	Cor	ntact	Relative Rate	Relative
issuance of a Definiquent Petition	Count	% of Total	Count	% of Total	(Per 100)	Rate Index
White	5,465	40.2%	3,876	40.4%	70.92	1.00
Black or African American	2,719	20.0%	2,141	22.3%	78.74	1.11
Other Race / Multi-Race	135	1.0%	97	1.0%	71.85	1.01
Not Reported / Not Known	5,264	38.8%	3,472	36.2%	65.96	0.93
Total	13,583	100.0%	9,586	100.0%	70.57	1.00
Hispanic	2,932	21.6%	2,489	26.0%	84.89	1.20
Non-Hispanic	3,099	22.8%	2,338	24.4%	75.44	1.06
Not Reported / Not Known	7,552	55.6%	4,759	49.6%	63.02	0.89
Total	13,583	100.0%	9,586	100.0%	70.57	1.00

Table 7. Relative Rates of Arraignment by Race and Ethnicity

Arraignment	_	erral Ilation	Cor	ntact	Relative Rate	Relative
Arraignment	Count	% of Total	Count	% of Total	(Per 100)	Rate Index
White	5,465	40.2%	2,967	40.9%	54.29	1.00
Black or African American	2,719	20.0%	1,739	24.0%	63.96	1.18
Other / Multi Race	135	1.0%	78	1.1%	57.78	1.06
Not Reported / Not Known	5,264	38.8%	2,472	34.1%	46.96	0.86
Total	13,583	100.0%	7,256	100.0%	53.42	0.98
Hispanic	2,932	21.6%	2,116	29.2%	72.17	1.33
Non-Hispanic	3,099	22.8%	1,900	26.2%	61.31	1.13
Not Reported / Not Known	7,552	55.6%	3,240	44.7%	42.90	0.79
Total	13,583	100.0%	7,256	100.0%	53.42	0.98

Table 8. Relative Rates of Detention by Race and Ethnicity

Detention		ioned Ilation	Cor	ntact	Relative Rate	Relative
betention	Count	% of Total	Count	% of Total	(Per 100)	Rate Index
White	3,876	40.4%	346	27.7%	8.93	1.00
Black or African American	2,141	22.3%	422	33.8%	19.71	2.21
Other Race / Multi Race	97	1.0%	9	0.7%	9.28	1.04
Not Reported / Not Known	3,472	36.2%	470	37.7%	13.54	1.52
Total	9,586	100.0%	1,247	100.0%	13.01	1.46
Hispanic	2,489	26.0%	455	36.5%	18.28	2.05
Non-Hispanic	2,338	24.4%	341	27.3%	14.59	1.63
Not Reported / Not Known	4,759	49.6%	451	36.2%	9.48	1.06
Total	9,586	100.0%	1,247	100.0%	13.01	1.46

Table 9. Relative Rates of Initial Adjudicated Delinquent by Race and Ethnicity

Adjudicated Delinguent		ioned Ilation	Cor	ntact	Relative Rate	Relative	
Aujuuleateu beiinquent	Count	% of Total	Count	% of Total	(Per 100)	Rate Index	
White	3,876	40.4%	345	34.7%	8.90	1.00	
Black or African American	2,141	22.3%	298	29.9%	13.92	1.56	
Other Race / Multi Race	97	1.0%	4	0.4%	4.12	0.46	
Not Reported / Not Known	3,472	36.2%	348	35.0%	10.02	1.13	
Total	9,586	100.0%	995	100.0%	10.38	1.17	
Hispanic	2,489	26.0%	349	35.1%	14.02	1.58	
Non-Hispanic	2,338	24.4%	273	27.4%	11.68	1.31	
Not Reported / Not Known	4,759	49.6%	373	37.5%	7.84	0.88	
Total	9,586	100.0%	995	100.0%	10.38	1.17	

Table 10. Relative Rates of Initial Commitment to DYS by Race and Ethnicity

	Adjud	dicated					
Constitution DVC		quent	Cor	ntact	Relative Rate	Relative	
Committed to DYS	Рори	ılation			(Per 100)	Rate Index	
	Count	% of Total	Count	% of Total			
White	345	34.7%	140	30.0%	40.58	1.00	
Black or African American	298	29.9%	161	34.5%	54.03	1.33	
Other Race / Multi Race	4	0.4%	1	0.2%	25.00	0.62	
Not Reported / Not Known	348	35.0%	164	35.2%	47.13	1.16	
Total	995	100.0%	466	100.0%	46.83	1.15	
Hispanic	349	35.1%	181	38.8%	51.86	1.28	
Non-Hispanic	273	27.4%	117	25.1%	42.86	1.06	
Not Reported / Not Known	373	37.5%	168	36.1%	45.04	1.11	
Total	995	100.0%	466	100.0%	46.83	1.15	

					Depender	nt variables					
Regression Variables		To Issue a P (N = 13,8		To Hold Arraignm (N = 9,5	an nent	To Detair Arraignm (N = 7,0	ent	To Adjudicate Delinquent (N = 6,425)			
Ca	se type for contact point	Application for Complaint		Delinquency		Delinque	ncy	Delinquer	Delinquency		
Nominal Variables and Coding			Percent	Count	Percent	Count	Percent	Count	Percent		
Youth Characteristics											
Race - White	Reference variable	5,465	40.2%	3,862	40.6%	2,881	40.8%	2,621	40.8%		
Race - Black or African American		2,719	20.0%	2,137	22.4%	1,691	24.0%	1,538	23.9%		
Race - Other Race / Multi-Race		135	1.0%	100	1.1%	77	1.1%	68	1.1%		
Race - Not Reported / Not Known	Reference variable	5,264 7,552	38.8% 55.6%	3,420 4,701	35.9% 49.4%	2,408 3,157	34.1% 44.7%	2,198 2,928	34.2% 45.6%		
Ethnicity - Not Reported / Not Known Ethnicity - Hispanic or Latino	Reference variable	2,932	21.6%	2,483	26.1%	2,055	29.1%	1,838	28.6%		
Ethnicity - Non-Hispanic or Latino		3,099	22.8%	2,335	24.5%	1,845	26.1%	1,659	25.8%		
Gender - Male	Reference variable	9,533	70.2%	7,019	73.7%	5,428	76.9%	4,958	77.2%		
Gender - Female		3,656	26.9%	2,390	25.1%	1,624	23.0%	1,462	22.8%		
Gender - Not Reported		394	2.9%	110	1.2%	5	0.1%	5	0.1%		
		M=15.43									
Age at Referral	Continuous variable	SD=1.78									
		Range=7-49									
4				M=15.50		M=15.53					
Age at Petition	Continuous variable			SD=1.68		SD=1.60					
				Range=7-46		Range=9-46		NA-1C 17			
Age at Initial Disposition	Continuous variable							M=16.17 SD=1.59			
Age at Initial Disposition	Continuous variable							Range=10-46			
Offense Characteristics								Nange-10 40			
Court Region - Region 1	Reference variable	3,991	29.4%	3,363	35.3%	2,424	34.3%	2,156	33.6%		
Court Region - Region 2		2,503	18.4%	1,620	17.0%	1,160	16.4%	1,070	16.7%		
		6,034	44.4%	3,892	40.9%	3,036	43.0%	2,801	43.6%		
Court Region - Region 3		•		•		•		-			
Court Region - Region 4		1,055	7.8%	644	6.8%	437	6.2%	398	6.2%		
Manner of Entry - Summons	Reference variable	6,788	50.0%	2,773	29.1%	1,760	24.9%	1,602	24.9%		
Manner of Entry - Arrest		6,786	50.0%	6,746	70.9%	5,297	75.1%	4,823	75.1%		
Manner of Entry - Not Reported / Not Know	'n	9	0.1%	0	0.0%	0	0.0%	0	0.0%		
		M=1.87		M=1.99							
Total Charges	Continuous variable	SD=1.55		SD=1.67							
rotal enanges	continuous variable	Range=1-46		Range=1-46							
Lead Offense Severity - Misdemeanor	Reference variable	8,883	65.4%	5,551	58.3%	3,804	53.9%	3,457	53.8%		
Lead Offense Severity - Felony		4,442	32.7%	3,843	40.4%	3,166	44.9%	2,886	44.9%		
Lead Offense Severity - Civil Infraction		194	1.4%	79	0.8%	48	0.7%	44	0.7%		
Lead Offense Severity -		64	0.5%	46	0.5%	39	0.6%	38	0.6%		
Other / Not Available											
Lead Offense Category - Person	Reference variable	4,286	31.6%	3,188	33.5%	2,656	37.6%	2,410	37.5%		
Lead Offense Category - Property		4,209	31.0%	3,050	32.0%	2,100	29.8%	1,924	29.9%		
Lead Offense Category - Motor Vehicle Lead Offense Category - Public Order		1,201 1,018	8.8% 7.5%	608 773	6.4% 8.1%	421 525	6.0% 7.4%	396 471	6.2% 7.3%		
Lead Offense Category - Public Order Lead Offense Category - Other		1,018	7.3%	636	6.7%	475	6.7%	436	6.8%		
Lead Offense Category - Other Lead Offense Category - Drug / Alcohol		984	7.4%	594	6.2%	339	4.8%	313	4.9%		
Lead Offense Category - Weapons		511	3.8%	351	3.7%	283	4.0%	268	4.2%		
Lead Offense Category - Sex		370	2.7%	319	3.4%	258	3.7%	207	3.2%		
Use of Firearm Charges - None	Reference variable	13,493	99.3%	9,415	98.9%	6,957	98.6%	6,333	98.6%		
Use of Firearm Charges - 1 or more		90	0.7%	104	1.1%	100	1.4%	92	1.4%		
Other Characteristics		30	2.,,0	254	,5	250	2	32			
Prior Juvenile Charges - None	Reference variable			4,624	48.6%	2,779	39.4%	2,475	38.5%		
Prior Juvenile Charges - 1 or more				4,895	51.4%	4,278	60.6%	3,950	61.5%		
Subsequent Juvenile Charges - None	Reference variable			7,805	82.0%	5,343	75.7%	4,712	73.3%		
Subsequent Juvenile Charges - 1 or more				1714	18.0%	1,714	24.3%	1,713	26.7%		

		Dependent variables										
Regression Variables			te a Petition To Hold an = 13,853) Arraignment (N = 9,519)		nment	To Detain at Arraignment (N = 7,057) Delinquency		To Adjudicate Delinquent (N = 6,425) Delinquency				
Case	Case type for contact point		tion for plaint	Delinquency								
Nominal Variables and Coding		Count	Percent	Count	Percent	Count	Percent	Count	Percent			
Other Characteristics (continued)												
Any Type of Detention - Held or Detained	Reference variable							2,239	34.8%			
Any Type of Detention - Never Held or Detained								4,186	65.2%			
During the Pendency of the Case - Not Held With Bail Conditions	Reference variable							5,155	80.2%			
During the Pendency of the Case - Held With Bail Conditions								1,270	19.8%			
During the Pendency of the Case - Held Without Bail Conditions	Reference variable							5,466	85.1%			
During the Pendency of the Case - Not Held Without Bail Conditions								959	14.9%			
During the Pendency of the Case - Not Held on Other Conditions	Reference variable							6,154	95.8%			
During the Pendency of the Case - Held on Other Conditions								271	4.2%			

Effect of the Independent Variable on a Decision Point		To Issue a Petition To Hold an Arraignment						on (Dependent variables)					
		(N = 13,583)			(N = 9,519)			To Detain at Arraignment (N = 7.057)			To Adjudicate Delinquent		
		-	<u>– 13,363)</u> Odds			Odds			Odds		-	N = 6,425) Odds	
Independent variable	Reference Variable	Coefficient	Ratio	Sig. (p)	Coefficient	Ratio	Sig. (p)	Coefficient	Ratio	Sig. (p)	Coefficient	Ratio (Exp S	ig. (p)
		(B)	(Exp B)	- 0 11-7	(B)	(Exp B)	- 0 (1-7	(B)	(Exp B)	- 0 (1-7	(B)	В)	O (1-7
Youth Characteristics													
Race - Black or African American	White	0.422	1.526	***	0.030	1.030	NS	0.499	1.646	***	0.065	1.067	NS
Race - Other Race / Multi-Race	White	-0.076	0.927	NS	0.140	1.150	NS	-0.220	0.803	NS NS	-1.087	0.337	**
Race - Not Reported / Not Known	White	-0.355	0.701	***	-0.143	0.866	, *	0.256	1.292	***	0.009	1.009	NS
Ethnicity - Hispanic or Latino	Not Reported / Not Known	0.900	2.460	***	0.519	1.680	***	* 0.387	1.473	***	0.139	1.149	NS
Ethnicity - Non-Hispanic or Latino	Not Reported / Not Known	0.304	1.355	***	0.265	1.304	. ***	0.148	1.159	NS	0.033	1.034	NS
Gender - Female	Male	-0.131	0.878	**	-0.153	0.858	**	-0.228	0.796	**	-0.580	0.560	***
Gender - Not Reported	Male	-0.937	0.392	***	-3.234	0.039	***	1.020	2.774	NS.	1.310	3.706	NS
Age at Referral		-0.003	0.997	NS.	,								
Age at Petition					0.046	1.047	**	0.133	1.143	***	:		
Age at Initial Disposition											0.081	1.084	***
Offense Characteristics													
Manner of Entry - Arrest	Summons	21.602	2.407E+09) NS	0.496	1.643	***	1.637	5.139	***	-0.021	0.979	NS
Manner of Entry - Not Reported / Not Known	Summons	-20.996	0.000	NS									
Total Charges		0.115	1.122	***	0.288	1.334	***	0.091	1.095	***	0.128	1.137	***
Lead Offense Severity - Felony	Misdemeanor	0.293	1.341	***	0.790	2.203	***	0.352	1.422	***	0.339	1.403	***
Lead Offense Severity - Civil Infraction	Misdemeanor	-0.386	0.680	**	-0.619	0.538	**	0.296	1.344	NS.	0.122	1.129	NS
Lead Offense Severity - Other / Not Available	Misdemeanor	0.132	1.141	. NS	0.916	2.498	**	0.482	1.619) NS	0.621	1.860	NS
Lead Offense Category - Property	Person	-0.095	0.909	NS	-1.310	0.270	***	-0.789	0.454	***	0.208	1.231	**
Lead Offense Category - Motor Vehicle	Person	-0.243	0.784	. **	-0.591	0.554	***	-1.039	0.354	***	-0.049	0.952	NS
Lead Offense Category - Public Order	Person	0.222	1.248	*	-0.831	0.436	***	-1.010	0.364	***	0.494	1.639	***
Lead Offense Category - Other	Person	-0.012	0.988	NS.	-0.774	0.461	***	-0.203	0.817	' NS	0.417	1.518	***
Lead Offense Category - Drug / Alcohol	Person	0.006	1.006	NS.	-1.144	0.318	***	-0.464	0.628	***	0.313	1.367	*
Lead Offense Category - Weapons	Person	-0.193	0.825	NS	-0.487	0.614	***	-0.034	0.966	, NS	0.289	1.335	NS
Lead Offense Category - Sex	Person	0.246	1.278	NS.	-0.479	0.619	***	-0.999	0.368	***	1.061	2.889	***
Use of Firearm Charges - 1 or more	None	0.442	1.556	NS NS	0.957	2.603	NS	2.192	8.953	***	0.683	1.980	**
Court Region - Region 2	Region 1	-2.447	0.087	***	-0.659	0.517	***	0.467	1.595	***	-0.035	0.965	NS
Court Region - Region 3	Region 1	-1.464	0.231	***	0.189	1.208	***	-0.046	0.955	, NS	-0.013	0.988	NS
Court Region - Region 4	Region 1	-1.093	0.335	***	-0.169	0.844	NS	0.078	1.082	. NS	0.238	1.269	NS
Other Characteristics													
Prior Juvenile Charges - 1 or more	None				1.588	4.895	***	1.000	2.719	***	1.244	3.471	***
Subsequent Juvenile Charges - 1 or more	None				19.998	4.843E+08	NS NS	5			0.136	1.146	NS
Any Type of Detention - Never Held or Detained	Held/ Detained										-1.103	0.332	***
During the Pendency of the Case -	Not Held With Bail										0.283	1.327	NS
Held With Bail Conditions	Conditions										0.283	1.34/	INS
During the Pendency of the Case - Held Without Bail Conditions	Not Held Without Bail Conditions										-0.158	0.854	NS
During the Pendency of the Case - Held on Other Conditions	Not Held on Other Conditions										0.422	1.526	*