Race Equity Report: Technical Appendix

Prepared for the 9^{th} Circuit Solicitor's Office

September 28, 2021

Effects of Filtering on Sample Size

The Ninth Circuit Solicitor's Office provides administrative data on all warrants referred to the office from all Charleston County arresting agencies from 2015 onwards. For this report, the data has been filtered to include only Black and white men given that they make up the vast majority of cases. Cases are also limited to those disposed of before the start of the COVID pandemic (March 2020). Finally, we create our unit of observation by combining a defendant's cases where the cases have the same arrest date or are disposed of within 5 days of one another. This grouping is a result of conversations with solicitors that explained that such cases and charges are prosecuted as a whole. The table below shows how these choices affect the overall sample size.

Filter Applied	**No. of Warrants**	**No. of Cases**	**No. of Cases per Report**
Limit sample by race to Black and white	51,741	35,022	26,446
Limit sample by gender to Male	43,292	28,818	21,194
Remove arrests post-Covid (March 2020)	34,664	23,151	17,457
Remove all currently open cases	29,672	20,107	15,350
Remove Dispositions post-Covid (March 2020)	24,727	16,895	12,983
Remove cases with data quality issues	24,652	16,846	12,950

Racial Differences in Important Dimensions

Table 1 illustrates that across almost every control there are salient differences between Black and white males in our sample. This is important to recognize as our main set of results compare hypothetical "similarly situated" individuals. In reality, Black males are younger, come from poorer neighborhoods, are more likely to live in state, have longer criminal histories, have more charges per case, and are charged with crimes that carry longer potential sentences. While it is important to control for these characteristics in the pursuit of identifying racial bias within the system, one must acknowledge that racial bias may also help generate some of the differences documented in Table 1.

	(1) Black	(2) White	(3) Difference
Demographics:			
Age (years)	32.9	35.6	-2.7***
Median HH Income ($1K)	30.9	36.0	-5.1***
Residence out of state (%)	2.1	6.8	-4.7***
Criminal History (% in each bin):			
No prior convictions	43.3	69.7	-26.4***
1	12.3	9.6	2.7***
2	9.3	6.5	2.8***
3	7.4	3.6	3.8***
4	6.0	2.3	3.6***
5+	21.7	8.2	13.5***
Number of Charges (% in each bin):			
Single charge	56.7	68.3	-11.6***
2	20.5	17.7	2.8***
3	9.5	6.5	3.0***
4	5.0	3.2	1.8***
5+ charges	8.2	4.3	3.9***
Severity:			
Severity of top arrest charge (days)	2088.9	1471.6	617.2***
Severity of top disposed charge (days)	1240.7	852.1	388.6***
Arrest Agency (% from each):			
NCPD	39.4	24.2	15.2***
CPD	30.7	28.7	2.0**
CCSO	20.4	22.7	-2.2***
MPPD	6.1	17.2	-11.1***
Other	3.4	7.3	-3.9***
Observations	8,241	4,708	12,949

Table 1: Balance table showing the average characteristics of Black and white males in our sample. The first (or second) column presents the mean within Black (or white) individuals in our sample. The third column presents the difference in means where *,**,*** represent statistical significance at the conventional 10%, 5%, and 1% levels respectively.

Unit of Observation for Time to Dismissal Analysis

While looking at disparities in dismissal rates is important, we believe a somewhat overlooked dimension of the process is the time it takes to receive a dismissal. For this analysis we look at the average time it takes to get a prosecutorial dismissal. As documented in the main body of the report comparing the average Black and white individuals without controlling for the number and type of charges in a case and the individual's criminal history, reveals even larger racial disparities. We find that the average Black individual waits an additional 44 days (or 13%) for a prosecutorial dismissal. To avoid placing too much weight onto dismissals of multiple charges we keep only unique "time to dismissal" measurements at the person-case level. For example, imagine a person is arrested with 3 charges in 2017 and has 1 dismissed in 15 days. This person is then released on bail subsequently re-arrested in 2018 on 2 new charges, and waits 400 days to have the 2 of the 4 pending charges (2 from 2017 arrest and 2 for 2018 arrest) dismissed. In our analysis this person would contribute 15 days (for the first dismissal) and 400 days (for the second dismissal) to the overall average time to dismissal.

Number of Warrants by Dismissal Reason

The table below shows the count of dismissed warrants by the reason for the dismissal. Warrants are counted individually as each warrant is reviewed at an individual basis and warrants on the same case may be dismissed for different reasons.

Dismissal Reason	**No. of Warrants Black**	**No. of Warrants White**
Discretionary Dismissals sub-total	**919**	**474**
Co-defendant Accepted Responsibility	234	48
Prosecutorial Discretion	459	226
Request Of Investigating Officer	100	72
Request Of Victim	112	97
Restitution Made	14	31
Evidence Dismissals sub-total	**3466**	**1265**
Defendant Deceased	175	128
Defendant Not Competent to Stand Trial	74	10
Deported by ICE	0	1
Dismissed At Preliminary Hearing	695	366
Duplicate Charge	39	25
Elements Not Met	109	51
Insufficient Evidence to Convict	1285	409
Judicial Dismissal	4	4
No Billed By Grand Jury	22	12
No Discovery Received	6	0
Not Guilty By Reason Of Insanity on Other Charges	2	0
Officer Misconduct	38	3
Transferred For Federal Prosecution	562	61
Unable To Locate Vic/Wit/Officer	200	69
Victim Uncooperative/Recant	255	126

Estimated Equations

The majority of the preceding analysis utilized logistic regression. Logistic regression takes in a binary dependant variable and estimates the marginal contributions of each control has probability that the dependant variable is equal to 1. While one could use Ordinary Least Squares (OLS) to estimate these marginal contributions logistic regression has the attractive property that it is constrained to never predict a probability over 1 or under 0, unlike OLS which is unconstrained. After arrest and booking prosecutors have a myriad of options available to them. Prosecutor's first decide to either: 1) dismiss some or all the charges in the case; 2) increase or decrease the severity of charges; or 3) accept all the charges submitted by the police department. To investigate these decisions we first create binary indicators, Y, for each of these choices and then estimate the following probability using a logistic model, where Y represents the dependant variable.

$$Pr\big(Y_i|Black_i, X_i\big) = \frac{e^{(\alpha+\beta Black_i+\boldsymbol{\theta X_i}+\epsilon_i)}}{1+e^{(\alpha+\beta Black_i+\boldsymbol{\theta X_i}+\epsilon_i)}} \tag{1}$$

Where $Black_i$ is an indicator for if the defendant is Black. We include a vector of controls $\boldsymbol{X}_i$ which contains, indicators for the number of prior convictions, the number of concurrent counts, if the defendant is from out of state, the arresting agency, the prosecutor in charge of the case, as well as the defendants age, the severity of the top charge, and the median household income of the defendants zip code of residence.[1] After estimation we use each model to produce predicted probabilities of a defendant with identical characteristics $\boldsymbol{X}$ except race. Therefore we are left with two predicted probabilities, one where $Black_i = 1$, $\hat{Pr}\big(Y = 1|Black_i = 1\big)$, and one where $Black_i = 0$, $\hat{Pr}\big(Y = 1|Black_i = 0\big)$. The difference between these probabilities represents the racial disparity *ceteris paribus* (i.e. differences that can not be explained by any of the included controls). Said another way the difference

[1] To avoid bins with small sample sizes we group the number of prior convictions and number of charges in a case over the 90^{th} percentile value into 1 bin. We also group all arrests not made by North Charleston PD, Charleston PD, Charleston County SO, or Mount Pleasant PD into a catch all "other" arresting agency.

is the difference in treatment between two defendants that have identical characteristics $\boldsymbol{X}$. This is an important point as within our sample Black and white defendants are dramatically different along almost every dimension measure by $\boldsymbol{X}$. This motivates why we also included the raw (or "uncontrolled") racial disparities as well for comparison.

Tables 2-6 present the raw racial disparity (column 1), as well as the estimated impact of all controls overall (column 2) and by crime type (columns 3-) for each of the following decisions: 2) full case prosecutorial dismissals; 3) plea-dismissals of at least 1 charge; 4) an increase in the top charge severity from arrest to disposition; 5) a decrease in the top charge severity from arrest to disposition; 6) a custodial sentence for at least 1 charge in the case. Each coefficient represents the odds ratio for each control. A value > 1 (< 1) indicates the variable increases (decreases) the odds of an even happening. For example, an odds ratio, β, of 2 in front of *Black* would indicate that Black defendants are twice as likely to receive a decision compared to White defendants *ceteris paribus* (with identical $\boldsymbol{X}$).

Regression Output

VARIABLES	(1) Raw	(2) All	(3) Dv	(4) Drugs	(5) Guns	(6) Other	(7) Person	(8) Property	(9) Traffic
Black = 1	1.131**	1.176**	1.269	0.972	1.156	6.435**	1.299+	1.042	1.134
	(0.0518)	(0.0600)	(0.189)	(0.0891)	(0.257)	(2.405)	(0.188)	(0.124)	(0.305)
Age (years)		1.000	1.002	1.004	1.004	1.038**	0.989*	1.005	0.992
		(0.00208)	(0.00617)	(0.00392)	(0.00815)	(0.0120)	(0.00517)	(0.00511)	(0.00919)
Median HH Income (log)		1.120	1.272	0.853	0.835	1.799	1.184	1.777**	1.420
		(0.0899)	(0.316)	(0.122)	(0.243)	(1.013)	(0.239)	(0.340)	(0.570)
Severity of top arrest charge		1.000**	1.000+	1.000*	1.001**	1.000	1.000*	1.000	0.999+
		(8.19e-06)	(9.98e-05)	(4.12e-05)	(0.000172)	(0.000193)	(1.15e-05)	(3.51e-05)	(0.000268)
No. of prior convictions = 1		0.940	0.867	0.892	1.394	0.216*	1.059	0.745	1.656
		(0.0706)	(0.199)	(0.119)	(0.322)	(0.156)	(0.202)	(0.153)	(0.528)
No. of prior convictions = 2		1.105	0.925	1.131	1.340	0.0492**	1.309	0.931	1.395
		(0.0933)	(0.228)	(0.158)	(0.406)	(0.0488)	(0.299)	(0.201)	(0.542)
No. of prior convictions = 3		1.194+	0.913	1.312+	1.312	0.904	1.509	0.979	0.431
		(0.115)	(0.293)	(0.205)	(0.426)	(0.630)	(0.381)	(0.257)	(0.278)
No. of prior convictions = 4		1.132	1.199	1.171	2.351*	0.778	1.553	0.699	0.142
		(0.124)	(0.363)	(0.209)	(0.872)	(0.464)	(0.493)	(0.209)	(0.171)
No. of prior convictions = 5		1.057	1.341	1.082	0.926	3.565+	1.760+	0.580+	0.625
		(0.127)	(0.446)	(0.233)	(0.524)	(2.385)	(0.556)	(0.184)	(0.526)
No. of prior convictions = 6		1.054	0.723	1.044	3.060*	1.398	1.185	0.739	
		(0.153)	(0.313)	(0.251)	(1.616)	(1.178)	(0.479)	(0.279)	
No. of prior convictions = 7		0.857+	1.047	1.071	1.205	0.816	0.966	0.548**	1.144
		(0.0770)	(0.297)	(0.166)	(0.541)	(0.393)	(0.253)	(0.104)	(0.567)
No. of charges in case = 2		0.482**	0.175**	0.542**	0.426**	0.477+	0.496**	0.508**	0.330**
		(0.0308)	(0.0592)	(0.0606)	(0.0862)	(0.188)	(0.0801)	(0.0798)	(0.124)
No. of charges in case = 3		0.385**	0.175*	0.557**	0.262**	0.371	0.247**	0.198**	0.700
		(0.0374)	(0.153)	(0.0802)	(0.0874)	(0.269)	(0.0618)	(0.0568)	(0.343)
No. of charges in case = 4		0.233**		0.399**	0.0941**	0.0766*	0.171**	0.137**	0.200
		(0.0371)		(0.0901)	(0.0598)	(0.0878)	(0.0599)	(0.0645)	(0.243)
No. of charges in case = 5		0.256**	0**	0.308**	0.270*	0.485	0.128**	0.177**	
		(0.0319)	(0)	(0.0548)	(0.146)	(0.443)	(0.0393)	(0.0620)	
Residence out of state = 1		1.031	0.603	0.920	0.921	1.530	1.090	1.092	1.668
		(0.132)	(0.274)	(0.210)	(0.461)	(1.053)	(0.366)	(0.316)	(0.898)
Observations	12,949	12,736	1,244	4,195	1,137	457	1,655	2,740	985
Pseudo R2	0.000558	0.0501	0.108	0.0546	0.0992	0.228	0.107	0.0845	0.129
Pros. FE		✓	✓	✓	✓	✓	✓	✓	✓
Police Dept. FE		✓	✓	✓	✓	✓	✓	✓	✓

Robust Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Table 2: This table shows the racial disparity in full case dismissals overall and by crime type. The reported coefficients are odds ratios. A value > 1 (< 1) indicates the variable increases (decreases) the odds of a dismissal. For example, an odds ratio of 2 in front of Black would indicate that Black defendants are twice as likely to receive a dismissal compared to White defendants.

VARIABLES	(1) Raw	(2) All	(3) Dv	(4) Drugs	(5) Guns	(6) Other	(7) Person	(8) Property	(9) Traffic
Black = 1	1.006	0.942	0.920	1.063	2.059*	0.474	0.724	0.842	0.699
	(0.0620)	(0.0692)	(0.447)	(0.142)	(0.749)	(0.287)	(0.150)	(0.125)	(0.249)
Age (years)		1.003	1.007	1.007	0.998	0.977	1.004	1.000	1.015
		(0.00321)	(0.0193)	(0.00624)	(0.0137)	(0.0225)	(0.00748)	(0.00660)	(0.0158)
Median HH Income (log)		1.101	1.181	1.184	0.710	8.749*	1.045	1.011	0.853
		(0.121)	(0.893)	(0.227)	(0.328)	(7.847)	(0.287)	(0.245)	(0.428)
Severity of top arrest charge		1.000**	1.000	1.000*	1.000	1.001+	1.000*	1.000	1.000
		(9.07e-06)	(0.000216)	(5.19e-05)	(0.000306)	(0.000408)	(1.24e-05)	(3.16e-05)	(0.000193)
No. of prior convictions = 1		1.038	0.431	1.133	2.017*	0.574	0.881	0.995	0.917
		(0.107)	(0.250)	(0.195)	(0.701)	(0.616)	(0.245)	(0.256)	(0.417)
No. of prior convictions = 2		0.807+	1.427	0.964	0.647	2.865	0.574*	0.507*	0.590
		(0.0886)	(0.910)	(0.175)	(0.273)	(1.938)	(0.156)	(0.146)	(0.311)
No. of prior convictions = 3		0.710**	1.740	0.697+	0.744	0.682	0.505*	0.434*	1.412
		(0.0908)	(1.647)	(0.141)	(0.340)	(0.713)	(0.167)	(0.159)	(0.949)
No. of prior convictions = 4		0.628**	0.138+	0.741	0.297*	0.475	0.572	0.692	0.604
		(0.0936)	(0.150)	(0.180)	(0.183)	(0.643)	(0.209)	(0.257)	(0.611)
No. of prior convictions = 5		0.847	0.388	1.017	0.258	4.113	1.012	0.625	1.415
		(0.133)	(0.316)	(0.270)	(0.229)	(3.795)	(0.444)	(0.222)	(1.041)
No. of prior convictions = 6		0.672*	0.547	0.897	0.207*	0.524	0.475	0.670	0.312
		(0.111)	(0.562)	(0.243)	(0.143)	(0.441)	(0.217)	(0.260)	(0.285)
No. of prior convictions = 7		0.833+	0.479	0.629*	0.348+	1.066	0.784	1.220	2.936+
		(0.0924)	(0.341)	(0.129)	(0.207)	(1.251)	(0.225)	(0.253)	(1.765)
No. of charges in case = 3		1.911**	1.029	2.070**	2.712**	5.241*	1.619*	2.256**	5.243**
		(0.148)	(0.625)	(0.272)	(0.825)	(3.432)	(0.329)	(0.385)	(2.519)
No. of charges in case = 4		3.462**	12.64**	3.732**	2.810*	13.36**	2.598**	5.007**	4.890*
		(0.354)	(12.09)	(0.675)	(1.208)	(10.94)	(0.615)	(1.111)	(3.402)
No. of charges in case = 5		5.289**	1.835e+07**	7.148**	5.366**	7.570+	5.211**	6.263**	4.745
		(0.497)	(1.016e+07)	(1.148)	(2.769)	(8.570)	(1.222)	(1.243)	(5.142)
Residence out of state = 1		0.939		1.513	1.272	3.949	0.355	0.620	0.876
		(0.202)		(0.579)	(0.995)	(3.897)	(0.224)	(0.264)	(0.930)
Observations	5,063	4,998	168	1,832	418	166	843	1,155	269
Pseudo R2	1.19e-06	0.101	0.182	0.130	0.137	0.328	0.136	0.158	0.158
Pros. FE		✓	✓	✓	✓	✓	✓	✓	✓
Police Dept. FE		✓	✓	✓	✓	✓	✓	✓	✓

Robust Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Table 3: This table shows the racial disparity in receiving at least 1 plea dismissal in a case, overall and by crime type. The reported coefficients are odds ratios. A value > 1 (< 1) indicates the variable increases (decreases) the odds of a plea dismissal. For example, an odds ratio of 2 in front of Black would indicate that Black defendants are twice as likely to receive at least 1 charge plea dismissal compared to White defendants.

VARIABLES	(1) Raw	(2) All	(3) Dv	(4) Drugs	(5) Other	(6) Person	(7) Property	(8) Traffic
Black = 1	1.617**	1.097	1.042	1.122	0	1.721	0.797	1.316
	(0.170)	(0.134)	(0.997)	(0.195)	(0)	(1.033)	(0.222)	(0.819)
Age (years)		1.003	1.060	1.005	0.00134	1.014	1.004	1.008
		(0.00475)	(0.0547)	(0.00632)	(0)	(0.0275)	(0.0115)	(0.0214)
Median HH Income (log)		0.741+	7.651+	0.576*	1.656e+93	0.241	0.714	0.633
		(0.129)	(8.998)	(0.141)	(0)	(0.274)	(0.310)	(0.500)
Severity of top arrest charge		1.000**	0.999**	1.000**	0.828	0.999**	0.999**	0.997**
		(3.81e-05)	(0.000512)	(7.38e-05)	(0)	(0.000259)	(0.000179)	(0.00116)
No. of prior convictions = 1		1.452*	3.270	1.496+		1.010	1.093	8.051*
		(0.268)	(6.481)	(0.356)		(0.765)	(0.547)	(6.549)
No. of prior convictions = 2		1.866**	72.71**	2.233**	1.001e+22	1.107	0.764	2.585
		(0.351)	(91.52)	(0.521)	(0)	(0.788)	(0.477)	(2.846)
No. of prior convictions = 3		3.403**	38.03**	4.289**		3.367	1.573	18.40**
		(0.644)	(43.79)	(1.037)		(2.838)	(1.039)	(15.44)
No. of prior convictions = 4		3.833**		3.647**		1.526	2.708+	21.42**
		(0.766)		(0.973)		(1.640)	(1.391)	(18.55)
No. of prior convictions = 5		3.531**	31.31*	5.959**		3.760	0.810	
		(0.768)	(46.14)	(1.688)		(3.282)	(0.621)	
No. of prior convictions = 6		3.964**		6.721**	3.606e+83		1.842	
		(0.920)		(2.061)	(0)		(1.368)	
No. of prior convictions = 7		3.857**		7.365**	3.431e+83	0.323	1.857+	24.07**
		(0.638)		(1.633)	(0)	(0.371)	(0.668)	(24.98)
No. of charges in case = 2		1.726**	5.950+	1.846**	2.038e+15	5.497*	1.636	0.982
		(0.232)	(6.257)	(0.339)	(0)	(4.227)	(0.531)	(0.779)
No. of charges in case = 3		2.336**	86.13**	1.925**		16.10**	2.141*	3.472
		(0.383)	(110.7)	(0.436)		(15.00)	(0.783)	(3.135)
No. of charges in case = 4		3.930**		4.730**	2.387e+122	25.63*	2.351+	36.77**
		(0.725)		(1.206)	(0)	(42.09)	(1.087)	(42.59)
No. of charges in case = 5		4.337**	46.96**	4.152**	2.415e+45	174.3**	2.801*	
		(0.705)	(61.88)	(0.918)	(0)	(229.4)	(1.143)	
Residence out of state = 1		2.454**	54.05**	1.739	5.076e+17	6.717+	1.644	5.117
		(0.671)	(68.84)	(0.745)	(0)	(7.067)	(0.908)	(5.817)
Observations	9,099	8,733	454	2,873	52	600	1,640	360
Pseudo R2	0.00587	0.160	0.451	0.184	1	0.343	0.148	0.257
Pros. FE		✓	✓	✓	✓	✓	✓	✓
Police Dept. FE		✓	✓	✓	✓	✓	✓	✓

Robust Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Table 4: This table shows the racial disparity in the probability of receiving a more severe top charge at disposition than what was booked at arrest. We look at these differences overall and by crime type. The reported coefficients are odds ratios. A value > 1 (< 1) indicates the variable increases (decreases) the odds of a dismissal. For example, an odds ratio of 2 in front of Black would indicate that Black defendants are twice as likely to receive a more severe top charge at disposition compared to White defendants.

VARIABLES	(1) Raw	(2) All	(3) Dv	(4) Drugs	(5) Guns	(6) Other	(7) Person	(8) Property	(9) Traffic
Black = 1	1.061	1.064	1.340	0.967	0.949	1.207	1.044	1.652**	0.548**
	(0.0463)	(0.0537)	(0.256)	(0.0937)	(0.293)	(0.360)	(0.165)	(0.185)	(0.0990)
Age (years)		0.999	0.993	0.990*	1.014	0.997	1.007	0.994	1.002
		(0.00209)	(0.00816)	(0.00408)	(0.0121)	(0.0122)	(0.00600)	(0.00465)	(0.00725)
Median HH Income (log)		1.109	1.161	1.152	0.684	2.180	0.838	1.293	1.481
		(0.0876)	(0.331)	(0.171)	(0.285)	(1.033)	(0.199)	(0.234)	(0.403)
Severity of top arrest charge		1.000**	1.001**	1.001**	1.003**	1.001**	1.000**	1.000**	1.000*
		(3.22e-05)	(0.000137)	(7.38e-05)	(0.000288)	(0.000278)	(2.09e-05)	(4.24e-05)	(0.000139)
No. of prior convictions = 1		0.976	1.146	0.991	0.698	3.079**	1.023	0.804	0.616*
		(0.0724)	(0.343)	(0.132)	(0.236)	(1.174)	(0.237)	(0.145)	(0.150)
No. of prior convictions = 2		0.905	0.829	0.929	0.471*	2.121	0.959	0.778	0.393**
		(0.0763)	(0.253)	(0.137)	(0.179)	(1.049)	(0.234)	(0.164)	(0.134)
No. of prior convictions = 3		0.839+	0.966	0.648*	2.681	1.126	0.759	0.804	0.417*
		(0.0837)	(0.419)	(0.116)	(1.707)	(0.638)	(0.236)	(0.196)	(0.160)
No. of prior convictions = 4		0.571**	0.919	0.499**	0.549	1.498	0.424*	0.480**	0.359*
		(0.0648)	(0.382)	(0.100)	(0.306)	(1.099)	(0.144)	(0.131)	(0.179)
No. of prior convictions = 5		0.757*	0.616	0.761	0.552	5.419+	1.113	0.488*	0.477
		(0.0953)	(0.265)	(0.184)	(0.329)	(4.732)	(0.475)	(0.144)	(0.251)
No. of prior convictions = 6		0.494**	0.466	0.523*	0.823	0.173*	0.525	0.421**	0.118*
		(0.0713)	(0.218)	(0.138)	(0.514)	(0.125)	(0.233)	(0.136)	(0.128)
No. of prior convictions = 7		0.541**	0.422*	0.481**	1.390	0.400	0.746	0.448**	0.199**
		(0.0461)	(0.146)	(0.0822)	(0.622)	(0.261)	(0.187)	(0.0725)	(0.0915)
No. of charges in case = 2		1.580**	0.857	1.139	2.933**	1.650	2.056**	1.421**	1.588*
		(0.0945)	(0.218)	(0.128)	(0.765)	(0.528)	(0.396)	(0.192)	(0.329)
No. of charges in case = 3		1.421**	0.662	0.984	4.371**	1.315	1.538+	1.099	1.260
		(0.118)	(0.407)	(0.149)	(1.767)	(0.690)	(0.353)	(0.182)	(0.497)
No. of charges in case = 4		1.205+	1.474	0.606**	1.825	2.156	1.312	0.774	0.491
		(0.130)	(1.044)	(0.118)	(0.906)	(1.251)	(0.364)	(0.185)	(0.273)
No. of charges in case = 5		1.152	0.630	0.467**	3.468*	6.870*	1.902*	0.840	0.167
		(0.114)	(0.524)	(0.0766)	(1.891)	(5.156)	(0.479)	(0.165)	(0.340)
Residence out of state = 1		1.037	1.450	0.663	1.364	6.906*	1.033	1.457	0.487+
		(0.134)	(0.738)	(0.177)	(0.901)	(6.097)	(0.381)	(0.392)	(0.208)
Observations	9,099	8,986	734	2,993	695	375	1,157	2,126	814
Pseudo R2	0.000145	0.0972	0.129	0.152	0.365	0.238	0.0890	0.171	0.157
Pros. FE		✓	✓	✓	✓	✓	✓	✓	✓
Police Dept. FE		✓	✓	✓	✓	✓	✓	✓	✓

Robust Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Table 5: This table shows the racial disparity in the probability of receiving a less severe top charge at disposition than what was booked at arrest. We look at these differences overall and by crime type. The reported coefficients are odds ratios. A value > 1 (< 1) indicates the variable increases (decreases) the odds of a dismissal. For example, an odds ratio of 2 in front of Black would indicate that Black defendants are twice as likely to receive a less severe top charge at disposition compared to White defendants.

VARIABLES	(1) Raw	(2) All	(3) Dv	(4) Drugs	(5) Guns	(6) Other	(7) Person	(8) Property	(9) Traffic
Black = 1	1.558**	1.023	1.547	1.026	0.612+	1.210	1.068	0.843	0.923
	(0.0726)	(0.0603)	(0.413)	(0.108)	(0.167)	(0.441)	(0.208)	(0.104)	(0.223)
Age (years)		1.018**	1.022+	1.020**	1.007	1.045**	1.018*	1.024**	1.025**
		(0.00251)	(0.0116)	(0.00477)	(0.0117)	(0.0165)	(0.00808)	(0.00540)	(0.00883)
Median HH Income (log)		0.679**	0.518	0.639**	0.680	0.700	0.434*	0.821	1.040
		(0.0629)	(0.224)	(0.105)	(0.257)	(0.376)	(0.144)	(0.160)	(0.369)
Severity of top arrest charge		1.000**	1.000	1.000	1.000	1.000+	1.000**	1.000	1.000**
		(1.26e-05)	(0.000124)	(3.45e-05)	(0.000108)	(5.93e-05)	(2.30e-05)	(3.65e-05)	(0.000136)
No. of prior convictions = 1		1.766**	1.846	1.744**	2.363**	1.411	1.190	2.391**	2.328*
		(0.151)	(0.720)	(0.254)	(0.721)	(0.839)	(0.323)	(0.515)	(0.771)
No. of prior convictions = 2		1.566**	1.075	1.561**	2.223*	1.044	2.295*	1.505	1.921
		(0.163)	(0.466)	(0.259)	(0.881)	(0.506)	(0.829)	(0.377)	(0.847)
No. of prior convictions = 3		2.012**	1.726	2.435**	1.594	1.743	1.986*	1.883*	1.607
		(0.243)	(0.970)	(0.534)	(0.815)	(0.965)	(0.665)	(0.495)	(0.723)
No. of prior convictions = 4		1.918**	0.840	1.887**	5.167**	0.717	2.114	2.497**	1.560
		(0.276)	(0.463)	(0.433)	(3.171)	(0.607)	(1.102)	(0.853)	(0.858)
No. of prior convictions = 5		2.557**	3.549	2.657**	0.909		4.939*	2.440**	3.344+
		(0.426)	(2.752)	(0.721)	(0.649)		(3.209)	(0.765)	(2.147)
No. of prior convictions = 6		1.843**	0.351+	2.561**	4.066+		3.702*	1.325	1.581
		(0.346)	(0.214)	(0.890)	(2.991)		(2.187)	(0.490)	(1.474)
No. of prior convictions = 7		2.117**	0.821	2.359**	1.260	2.903	3.949**	2.244**	0.947
		(0.227)	(0.475)	(0.464)	(0.848)	(2.952)	(1.639)	(0.416)	(0.489)
No. of charges in case = 2		1.661**	1.181	1.847**	1.593+	1.334	1.502+	1.780**	1.471
		(0.114)	(0.381)	(0.223)	(0.395)	(0.535)	(0.361)	(0.275)	(0.429)
No. of charges in case = 3		2.457**	1.688	2.748**	1.895+	5.881**	2.167*	3.320**	1.770
		(0.247)	(1.075)	(0.456)	(0.715)	(3.978)	(0.677)	(0.741)	(0.674)
No. of charges in case = 4		3.738**	1.086	5.926**	2.515+	0.660	5.794**	2.858**	2.573
		(0.558)	(0.980)	(1.441)	(1.348)	(0.557)	(2.844)	(0.834)	(1.903)
No. of charges in case = 5		5.815**		7.949**	2.201	24.91**	9.168**	4.254**	6.733
		(0.840)		(1.864)	(1.284)	(27.12)	(4.153)	(1.150)	(8.890)
Residence out of state = 1		1.297+	0.919	1.181	0.768	0.414	0.880	2.283*	5.466**
		(0.179)	(0.514)	(0.270)	(0.452)	(0.352)	(0.384)	(0.770)	(3.541)
Observations	8,723	8,510	491	2,808	655	367	1,002	1,949	751
Pseudo R2	0.00808	0.206	0.206	0.239	0.224	0.340	0.275	0.169	0.345
Pros. FE		✓	✓	✓	✓	✓	✓	✓	✓
Police Dept. FE		✓	✓	✓	✓	✓	✓	✓	✓

Robust Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Table 6: This table shows the racial disparity in probability of at least 1 custodial charge overall and by crime type. The reported coefficients are odds ratios. A value > 1 (< 1) indicates the variable increases (decreases) the odds of a dismissal. For example, an odds ratio of 2 in front of Black would indicate that Black defendants are twice as likely to receive at least 1 custodial charge compared to White defendants.