

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

Mahari Bailey, et al.,	:	
Plaintiffs	:	C.A. No. 10-5952
	:	
v.	:	
	:	
City of Philadelphia, et al.,	:	
Defendants	:	

**PLAINTIFFS’ NINTH REPORT TO COURT AND MONITOR
ON STOP AND FRISK PRACTICES: FOURTEENTH AMENDMENT ISSUES**

Racial Analysis of Stop and Frisk Practices: January-June, 2018

I. Introduction

This section sets forth a statistical analysis of the “Stop and Frisk” practices of the PPD for the first half of 2018, conducted by plaintiffs’ expert, Professor David Abrams. The benchmarks used in this analysis are those set forth in a revised Benchmark Memorandum agreed to by the parties in 2016, with certain changes and additions stipulated as of April 18, 2018.

In creating benchmarks to measure compliance of the PPD with the terms of the Agreement, we considered several criteria. First, the benchmarks are designed to be straightforward in terms of computation and interpretation. Second, they are designed to measure characteristics at the core of the Agreement, namely compliance with the Fourteenth Amendment. Third, they consider other potential explanations for patterns in the data beyond suspect race. The benchmarks are based on those discussed and used in *NAACP v. City of Philadelphia*, academic literature on the topic, and in other litigation. *See, e.g., Floyd v. City of New York*, 959 F. Supp. 2d 540 (S.D.N.Y. 2013).

As noted, the benchmarks have been amended as result of discussions between the parties and their respective experts. First, we have eliminated duplicate entries from the random sample, described in Table 1 and elsewhere.¹ Second, to account for the possibility that stops of “groups” could impact the results, we have allowed for the potential for characteristics of group members to be correlated (clustered standard errors at the group level). Third, to update the demographic and economic data, we contracted with Penn Cartography to produce new data from the most recently available (2016) American Community Survey data. Fourth, to properly account for the uncertainty of estimating stop rates in PSA’s with small racial populations, these regressions are weighted by race-specific population size. Fifth, we have taken into account the effect of potential spillovers from adjacent PSA areas. Overall, these new steps and analyses did not alter our substantive findings.

II. Summary of the Racial Aspects of the Stop and Frisk Data

We examined data from Q1 and Q2 2018 pedestrian stops. As in prior years, a random sample of the stops was drawn by the Philadelphia Police Department for legal analysis for stop and frisk sufficiency by the plaintiffs and the City. In this report, we largely focus on an analysis of this randomly selected sample (Table 1), but we also include a description of the full array of stops (Table 2) at the PSA-race level, to better assess the overall stop rate. (Table 5).

¹In future reports, the City will eliminate all duplicate entries in the random sample that the parties use for analysis. We also screen the stop data to eliminate those which are not pedestrian stops (e.g., arrests made on probable cause or encounters with civilians for health or safety reasons) as well as those that occur in the airport, which has no residential population.

The sample dataset (Table 1) includes 3,963 total pedestrian stops and the full data set has 40,524.² This reflects a 27% decline total stops relative to the first half of 2017. We note, however, that even with the continuing decline in stops, Philadelphia's overall and per capita stop rates remain higher than those in New York and other major cities.

The mean detainee age is 33 and 87% of detainees are male. The likelihood of being stopped rises sharply in the late teens and early 20's (Figure 1), and there are higher rates of criminal conduct at this age. 71% of stopped pedestrians were Black, two percentage points higher than in the first half of 2017.

The data is subdivided into 65 Police Service Areas (PSA's). See Table 2 for PSA-level summary statistics.³ There were an average of 458 stops of Black pedestrians per PSA in the first half of 2018, compared with 111 White stops, and 54 of Latinos. The decline in pedestrian stops was not shared equally by race. Stops of Black pedestrians decreased by 24%, while the White pedestrian decline was 39%, and the Latino pedestrian decline was 25% (all relative to 2017). We also compute the citywide stop rate by race per 10,000 residents of the same race: for Q1 and Q2 of 2018 this was 445 for Blacks, 132 for Whites and 181 for Latinos.

In Section III, *infra*, we use a regression framework to determine whether factors other than race may account for the racial disparities. The control variables include demographic, economic, and crime factors. The employment rate varies substantially

²The number of stops and other characteristics in both the random sample and the full data set for the first two quarters of 2018 are slightly different from those set forth in our Fourth Amendment analysis (Plaintiff's Ninth Report to the Court, Fourth Amendment, filed November 20, 2018). These differences result primarily from the de-duplication procedure, but do not affect the analysis or results presented in these Reports.

³ PSA 77 (the airport) is omitted because it has no residential population.

across PSA's. The variation in racial composition is even greater, with the Black residential share ranging from 3% to 98% (Table 2). To account for higher crime rates among juvenile and young adult males, we control for the share of males in the 15 to 24 age range in some regression specifications. This rate also varies widely, from 3 to 23 percent, with a mean of 7%. Crime rates can impact stop rates and thus we control for them using three different measures: violent crime, property crime and overall Part 1 crimes. Crime rates vary by more than a factor of 10 across Philadelphia and thus it is important to include these controls.

Table 3 provides a breakdown of stop, frisk and arrest rates by race in the randomly selected sample. As noted, Blacks account for 71% of stops, Latinos account for 9%, and Whites for 20%. Minorities account for an even higher share of individuals frisked, of which 78% are Black, 10% Latino and 13% White. This racial composition is very similar to that of the previous four years. About 1 in 5.5 stops of Black pedestrians result in a frisk, but the rate is only 1 in 8.4 for Whites. The difference is not as great for arrests, with an arrest of a Black detained resulting from 10.7 stops on average, while for Whites it takes 9.7 stops. The arrest rate for Latinos is substantially higher, with 1 arrest resulting from every 7.6 stops.

The number of stops varies substantially by district, with the 24th, which includes Port Richmond, with the largest number, accounting for 13.1% of the total (Figure 2). The fewest stops were in the 7th Police District, in Northeast Philadelphia, accounting for under 1% of all stops.

III. Benchmark Applications

A. Stops, Census and Regression Analysis

1. Census and Stop Data

The question of whether race is impermissibly used as a factor in the decision to stop and frisk cannot be answered by a simple comparison of stop and frisk rates to census data. Even if stop and frisk rates relative to the same-race residential population vary by race, there could be non-racial explanations for the disparities. However, the stop rates relative to census data is the appropriate starting point before moving on to more sophisticated analyses that take into account non-racial factors that may explain differences. As set forth in Tables 2 and 3, the base stop rate by race in comparison to the census population is as follows:

Black stops=71%; Black census=44%

White stops=20%; White census=35%

Latino stops=9%; Latino census=12%

The next analysis is a cross-PSA comparison of stop rates by Black/Minority population share. A racial disparity in stops should be expected based on differences in population composition. It is possible to examine variation in the share of Black and Latino stops by PSA, as reported in Tables 4A and 4B, respectively. Each row in the tables represents a PSA (column 1) and the tables are sorted by the Black or Latino share of the population in the district, as reflected in column 2. The third column reports the share of stops that are of Black/Latino pedestrians and the fourth is the ratio of Black/Latino stops to Black/Latino population share. In 100% of the PSAs Blacks account for a higher share of stops than they do of the population (column 4); in several

PSA's, they are stopped at a rate over five times their share of the population. For example, in PSA 91 (which includes Center City, west of Broad), the population is only 5% Black, but 60% of stops were of Blacks. In PSA 12, the population is 3% Black and 58% of stops were of Blacks. By contrast, in the PSA 192 (Overbrook and other parts of West Philadelphia), where Blacks make up 96% of the population, the ratio of Black stops to Black population was close to a 1:1 ratio.

This trend of a vastly inflated minority stop rate in heavily White locations can be seen visually in Figure 3. If the ratio of minority stops were independent of PSA minority share, the points should form a horizontal line. The fact that the points in the left end of the figure (heavily White PSA's) have much higher Black stop ratios, reinforces the results from Table 4A.

The last two columns in Tables 4A and 4B report characteristics based on the census population of the PSA, not just minorities. Column 5 reports total stops per capita and Column 6, the violent crime rate in the PSA (violent crimes per 10,000 residents). Figure 4 visually displays the relationship between overall stop rate and Black population share. It shows that areas with a greater Black population share experience a higher stop rate than those with a lower share. Of course, regression analysis is necessary to determine whether the violent crime rates or other differences in these PSA's explains the extent of the differences.

2. Multivariate Regression Analysis

To address non-racial influences, we move to a multivariate regression analysis. This approach is more robust than a comparison of averages because it examines the relationship among multiple variables simultaneously. To determine the impact of

suspect race on the likelihood of a stop or frisk, we control for factors that include the demographic makeup and crime rate of the neighborhood.

First, we add data collected from the U.S. Census as well as data on reported crimes by PSA from the Philadelphia Police Department. We begin by examining differences in overall stop rates by race in Table 5. This Table (and Tables 6, 8, 9 and 11) share the same format: each column in the Table reports results from a separate regression that identifies the relationship between the variables listed in the first column and the dependent variable, which is the title of the table. For example, the regression that is reported in column 2 can be written as:

$$(1) \quad StopRate = \alpha + \beta_1 Black + \beta_2 Latino + \beta_3 Male + \beta_4 Age + \epsilon$$

Stop Rate is the number of stops in the sample examined per 10,000 residents of the same race in a district and *Black* is coded 0 if the detainee is White and 1 if the detainee is Black. Similarly, *Latino* is coded 1 if the detainee is Latino and zero otherwise.⁴ *Male* is coded 1 for men and 0 for women. *Age* is the detainee's age in years. By including four variables in the equation, this regression can better isolate the impact of race and Latino identity on the likelihood of being stopped, even if sex or age are important factors affecting the stop rate.

The coefficient on *Black* found in column 2 is 361.9, which means that in the full dataset about 362 more Black individuals were stopped than White individuals for every 10,000 same-race residents of a PSA. To put the magnitude of this racial difference in perspective, note that the average stop rate for Whites is 418 per 10,000 same-race PSA residents. A measure of precision of the estimate – the standard error - is reported in

⁴ If a detainee is both Black and Latino, we designate Black.

parentheses below the coefficient. The double stars on the standard error indicates that this result is statistically significant at better than the 1% level. This means that there is less than a 1% chance that the difference in stop rates between Blacks and Whites is zero.

There may be reasons other than race that minorities are stopped at higher rates. For example, if minorities tend to be younger on average, since more crime is committed by younger individuals, one might expect a higher stop rate for minorities. We control for this factor (as in equation 1 above) and others relevant to this issue. Column 3 adds controls for the PSA racial composition and Column 4 adds the PSA employment rate and the share of the male population between age 15 and 24 years of age. Even after adding these controls, the coefficient on Detainee Black (243.2) is still statistically significantly different from zero and large in magnitude.

Columns 5-7 add different controls for PSA crime rates. The crime rates are based on crimes reported to the police (not arrests) in 2017. It is preferable to use lagged crime because current crime levels could be influenced by policing policies. In each case, PSA's with higher crime rates have more stops, but controlling for crime rates does not affect the influence of detainee race on stop rate.

The final column (8) reproduces column 7, with an additional econometric safeguard that controls for other potential differences across districts ("district fixed effects"). A comparison between columns 7 and 8 shows that the coefficients on Black and Latino are not greatly impacted by this addition. The regressions allow for potential correlations in the errors within a district (clustering standard errors at the district level). All of the regressions were run with the addition of district fixed effects, and the results were not materially changed.

Additional specification checks (some of which were suggested by the expert for the City) were run to insure the robustness of the results. Instead of using stop rate as the outcome, the number of stops was also examined. The results from these regressions were consistent with those reported. While the number of stops per PSA is large enough that an ordinary least squares (OLS) regression is appropriate, we also made use of a negative binomial regression, which is appropriate for use with count data. Again, the results were consistent with those reported.

Table 6 is analogous to Table 5, but it reports the results of a regression of the incidence of pedestrian frisks (rather than stops) on detainee race and various controls. Rather than aggregating data to the PSA-race level, the data in Table 6 is at the stop level and controls for the quarter of the year. In each regression, the coefficient on Detainee Black is statistically significantly different from zero and ranges from about 0.074 – 0.088. The preferred estimate is .074 which may be found in column 8 and controls for demographic, economic, and crime variables, as well as district fixed effects. This means the frisk rate for Black detainees is 7.4 percentage points higher than for Whites, once controlling for the array of variables described above. Since the frisk rate for Whites is 13%, this means Black detainees are over 50% more likely to be frisked than Whites detainees. This result is statistically significant at the 1% level. It is robust to the array of alternative specifications described above for the stop rate regressions.

There are several other interesting results reflected in Table 6. Latinos are also more likely than Whites to be frisked (*see* second row) and the rate is slightly lower than that of Black detainees. Results for age and gender are also statistically significant. An extra decade of age decreases likelihood of frisk by about 3.5 percentage points and

male detainees are far more likely to be frisked than females. Overall, in assessing data as to frisks, and controlling for non-racial factors, there is a substantially higher frisk rate for minorities.

B. Reasonable Suspicion for Stops and Frisks: Racial Analysis

As the Plaintiffs' Ninth Report (Fourth Amendment Analysis) demonstrates, a substantial number of the pedestrian stops still do not meet the reasonable suspicion standard. Table 7 shows that the share of stops without reasonable suspicion is at 15% for Whites, 19% for Latinos and 16% for Blacks. The average of 16% of unfounded stops is an improvement of 5 percentage points over the first half of 2017 and is 17 percentage points lower than in 2015, but still shows that 1 in 6 stops of pedestrians is without reasonable suspicion.

The share of frisks made without reasonable suspicion is far higher, at 30%, even with a decline of 11 percentage points over the first half of 2017, and a decrease of 26 percentage points from 2015. It is still the case that almost 1 out of every 3 frisks in Philadelphia is legally unfounded.

The unfounded rate is highest for minorities, making up 36% of Latino frisks and 30% for Blacks, whereas the rate for Whites, while still high at 22%, is less than that for minorities. As with stop rates and frisks, regressions are necessary to control for potentially confounding factors. Table 8 reports results from such regressions, with each column representing a separate regression where the dependent variable is whether there was reasonable suspicion for the stop. In most of the columns the coefficient on Detainee Black is between -.012 and -.016, but given the relatively small data set, these results are not statistically significant at the 95 percent confidence level. The results for

Latino detainees are larger in magnitude, ranging between -.043 and -.051, but for the same reason are not statistically significant at the 95 percent confidence level. The only demographic variable that is statistically significant impact at 95% confidence or higher is age, with older detainees more likely to be stopped with reasonable suspicion. Thus, while the magnitude of the racial disparities in unfounded stop rates is large and may well be due to racial considerations, we lack the statistical power to conclusively rule out the possibility that these results might be due to chance.

Table 9 is similar to Table 8 and describes regressions of the rate of reasonable suspicion, but now for a frisk rather than a stop. The coefficient on Detainee Black covers a wide range, but as in Table 8, none of these coefficients are statistically significant at the 95 percent confidence level. The same is true for Latino detainees. As with stops, the disparities in unfounded frisk rates are large and may well be the result of racial bias, but we lack the statistical power to rule out the possibility that this finding might be due to chance.

C. Hit-Rate Analysis

An important measure of the propriety of stops and particularly of frisks is the rate at which they lead to the discovery of contraband, and particularly weapons, since frisks are permitted only where the officer reasonably believes that the suspect is armed and dangerous. Moreover, seizures of weapons are often cited as justification for a robust stop and frisk program. The rates of discovery of contraband from frisks are reported in Table 10 where contraband is categorized as firearms, drugs, or other (e.g., small amounts of cash).

As we have documented in our Ninth Report, Fourth Amendment Analysis, Table

10 reports an overall detection rate for firearms that is extremely low, with only 1 in 72 pedestrian frisks yielding a firearm. Drugs were the most commonly detected type of contraband, found in 1 of every 31 frisks. Overall, contraband was found in about 9% of all frisks.

Table 11 is a more sophisticated approach to the firearms hit-rate analysis. The regressions report the rate of discovery of a firearm in pedestrian frisks. Again, the results are not statistically insignificant at the 95% confidence level, as there were only slightly more than 700 frisks in the data base. This suggests that the full dataset may be more useful than the sample to understand the impact of race on contraband hit-rates. These results are presented in Table 12, which examines 6,030 frisks in Q1 and Q2 of 2018, of which 9.1% resulted in the recovery of some kind of contraband or evidence (the type is not categorized in the full data). Hit rates for blacks are 9.0% while they are 8.4% for Whites. Even given the larger data set, with a low level of contraband finds, once control variables are added, these differences are not statistically significant.

IV. Conclusion

We have examined the relationship of race to stop and frisk practices from multiple perspectives, following standard statistical protocols. Our most significant finding is that using regression analysis, there is strong evidence that the large differences in stop and frisk rates by race in Philadelphia are not explained by non-racial factors. To the contrary, the data show statistically significant racial disparities that in almost all respects are not explainable by non-racial factors. We will await the City's response to this Report before going further in suggesting necessary remedial measures to ensure that racial bias, whether explicit or implicit, does not impact the decision to stop or frisk pedestrians in Philadelphia.

Respectfully submitted,

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Figure 1

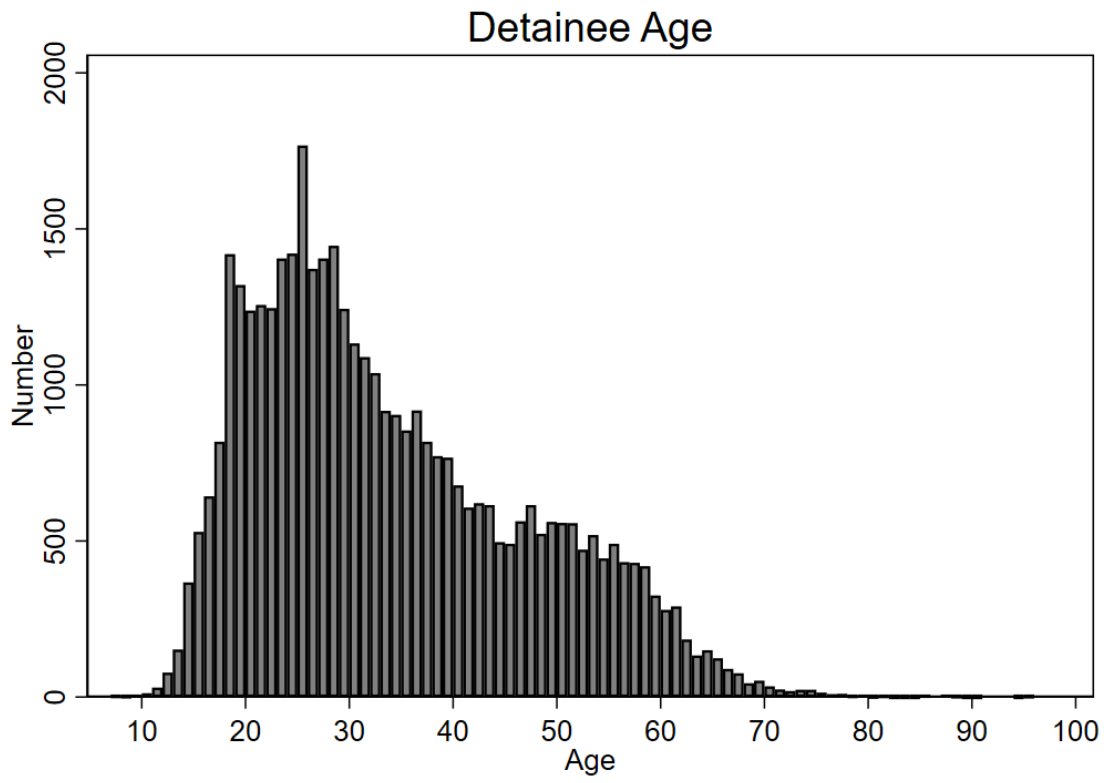


Figure 2

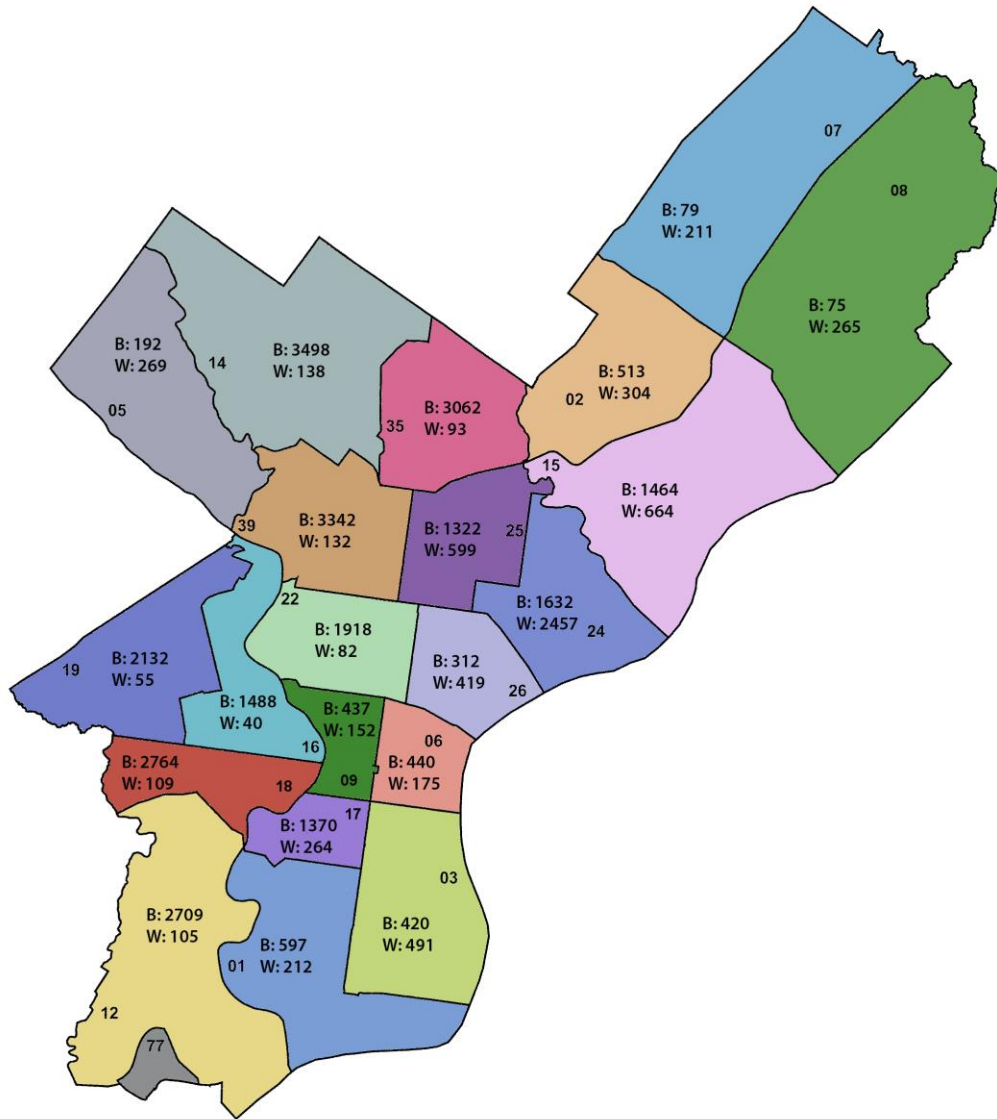


Figure 3

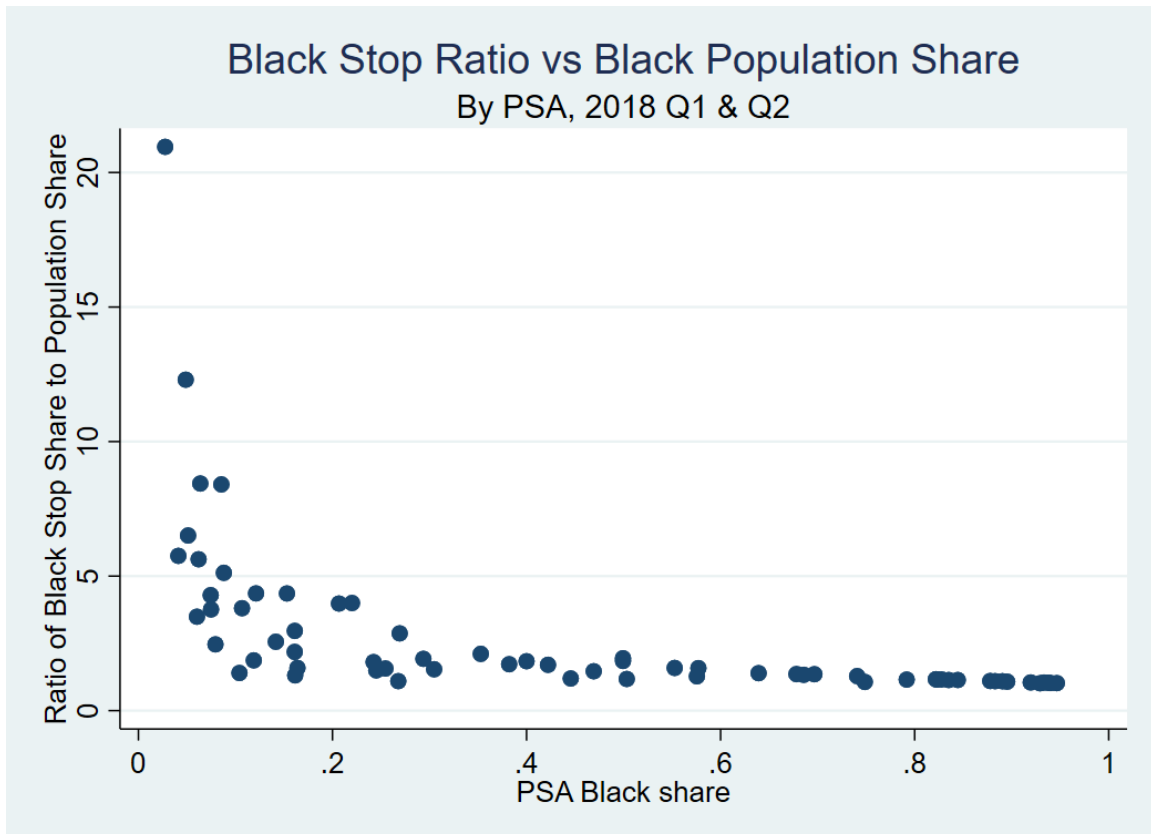


Figure 4

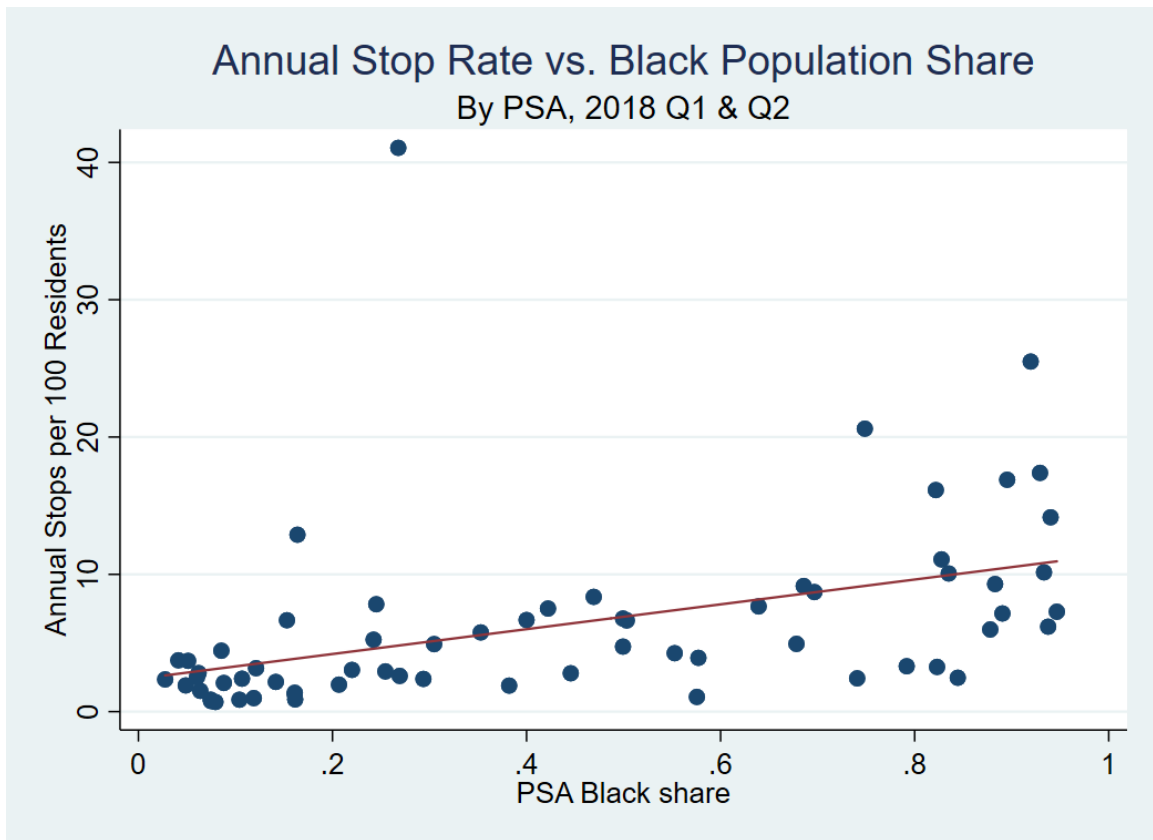


Table 1

2018 Q1 & Q2 Random Sample Summary Statistics

VARIABLES	(1) Mean	(2) N
Reasonable Suspicion for stop?	84%	3963
Individual Frisked	18%	3961
Reasonable Suspicion for frisk?	70%	725
Search Made	13.4%	3961
Arrest Made	9.9%	3961
Evidence or Contraband Found	3.9%	3961
Firearm Found	0.45%	3961
Drugs Found	1.8%	3961
Detainee Age	33.5	3957
Detainee Male	87%	3961
Detainee Black	71%	3906
Detainee Latino	10.5%	3963

Table includes summary statistics from 2018 Q1 & Q2 random sample, excluding observations incorrectly coded as stops.

Table 2**2018 Q1 & Q2 PSA-Level All Stops Summary Statistics**

VARIABLES	(1) Mean	(2) Median	(3) SD	(4) Min	(5) Max	(6) Obs
Stop of Black Pedestrian	458	252	461	18	1711	65
Stop of White Pedestrian	111	55	232	7.0	1806	65
Stop of Hispanic Pedestrian	54	11	142	0.0	916	65
Stops per 10,000 Black Residents	531	428	446	54	2290	65
Stops per 10,000 White Residents	418	98	862	19	5693	65
Stops per 10,000 Hispanic Residents	190	94	281	0	1379	65
Detainee Age	33.5	33.4	2.8	26.8	40.8	65
Detainee Male	85%	86%	5%	72%	93%	65
PSA Population	21740	20113	9009	6940	43886	65
PSA Black share	44%	38%	32%	2.8%	95%	65
PSA White share	35%	31%	29%	1.0%	87%	65
PSA Latino share	12%	5%	17%	0.9%	75%	65
PSA Asian share	6.3%	4.7%	5.5%	0.09%	23%	65
Employment Rate	93%	92%	3%	83%	98%	65
Male population under 24	7%	7%	4%	3%	23%	65
Violent Crime Rate (per 10k residents)	265	234	141	57	751	65
Property Crime Rate (per 10k residents)	476	452	207	147	1310	65
Drug Crime Rate (per 10k residents)	69	37	138	2.2	1049	65
UCR Part 1 Crime Rate (per 10k residents)	637	623	277	172	1581	65

Table includes PSA-level summary statistics from 2018 Q1 & Q2 all stops, excluding PSA 77 (airport)

Table 3

Counts by Race in Random Sample, 2018 Q1 & Q2

	Black	Latino	White	Total
Stops	2772	371	777	3920
Stop Share	71%	9%	20%	100%
Frisks	556	69	92	717
Frisk Share	78%	10%	13%	100%
Stops/Frisk	5.0	5.4	8.4	5.5
Searches	359	64	104	527
Stops/Search	7.7	5.8	7.5	7.4
Arrests	259	49	80	388
Stops/Arrest	10.7	7.6	9.7	10.1
Contraband or Evidence	116	19	18	153
Frisks/Contraband	4.8	3.6	5.1	4.7

Table 4A

PSA-Level Statistics, Black Stops 2018 Q1 & Q2

PSA	PSA Black share	Black Share of Stops	Ratio of Black Stop Share to Population Share	Total Stops per 100 Residents	Violent Crime Rate (per 10k residents)
222	95%	97%	1.02	7.3	495
181	94%	96%	1.03	14.2	355
141	94%	97%	1.04	6.2	235
192	93%	98%	1.05	10.1	435
392	93%	95%	1.02	17.4	751
393	92%	96%	1.05	25.5	569
142	90%	96%	1.08	16.9	395
124	89%	97%	1.09	7.2	342
162	88%	97%	1.10	9.3	336
353	88%	97%	1.10	6.0	266
191	84%	96%	1.14	2.5	210
123	84%	95%	1.14	10.1	365
182	83%	96%	1.16	11.1	359
224	82%	95%	1.16	3.3	423
122	82%	96%	1.17	16.1	372
121	79%	91%	1.15	3.3	197
172	75%	80%	1.07	20.6	449
193	74%	95%	1.28	2.4	224
221	70%	94%	1.36	8.7	494
352	69%	91%	1.33	9.1	277
351	68%	92%	1.36	4.9	181
173	64%	89%	1.39	7.7	234
223	58%	91%	1.58	3.9	450
144	58%	74%	1.28	1.1	124
391	55%	88%	1.59	4.3	307
251	50%	59%	1.18	6.6	268
161	50%	97%	1.95	6.8	248
143	50%	92%	1.85	4.7	168
254	47%	69%	1.46	8.4	497
21	45%	53%	1.20	2.8	178
151	42%	72%	1.70	7.5	358
61	40%	73%	1.84	6.7	312

Table 4A, continued
PSA-Level Statistics, Black Stops 2018 Q1 & Q2

PSA	PSA Black share	Black Share of Stops	Ratio of Black Stop Share to Population Share	Total Stops per 100 Residents	Violent Crime Rate (per 10k residents)
22	38%	66%	1.73	1.9	136
11	35%	74%	2.11	5.8	180
261	30%	47%	1.54	4.9	317
152	29%	57%	1.93	2.4	243
171	27%	77%	2.87	2.6	129
242	27%	29%	1.10	41.1	488
262	25%	40%	1.57	2.9	196
241	25%	37%	1.50	7.8	288
252	24%	44%	1.80	5.2	347
183	22%	88%	4.00	3.0	141
93	21%	82%	3.98	2.0	134
253	16%	26%	1.59	12.9	358
81	16%	21%	1.31	0.9	161
53	16%	48%	2.96	1.4	97
23	16%	35%	2.18	1.3	113
62	15%	67%	4.36	6.7	409
153	14%	36%	2.56	2.2	195
31	12%	53%	4.36	3.2	138
71	12%	22%	1.87	1.0	66
32	11%	41%	3.81	2.4	184
82	10%	15%	1.40	0.9	101
51	9%	45%	5.12	2.1	110
92	9%	72%	8.41	4.4	374
72	8%	20%	2.46	0.7	57
83	7%	28%	3.76	0.8	115
73	7%	32%	4.29	0.9	67
63	6%	54%	8.44	1.5	233
33	6%	35%	5.63	2.8	176
243	6%	21%	3.49	2.5	215
52	5%	33%	6.51	3.7	133
91	5%	60%	12.30	1.9	151
263	4%	24%	5.75	3.7	183
12	3%	58%	21.0	2.3	118

Table 4B
PSA-Level Statistics, Latino Stops 2018 Q1 & Q2

PSA	PSA Latino share	Latino Share of Stops	Ratio of Latino Stop Share to Population Share	Total Stops per 100 Residents	Violent Crime Rate (per 10k residents)
253	75%	47%	0.63	12.9	358
252	60%	37%	0.61	5.2	347
261	59%	29%	0.49	4.9	317
242	54%	24%	0.44	41.1	488
241	53%	23%	0.43	7.8	288
254	49%	23%	0.46	8.4	497
251	46%	27%	0.58	6.6	268
262	29%	21%	0.71	2.9	196
22	25%	14%	0.54	1.9	136
152	24%	13%	0.52	2.4	243
21	23%	18%	0.80	2.8	178
151	23%	9%	0.41	7.5	358
352	19%	6%	0.32	9.1	277
23	15%	16%	1.08	1.3	113
33	14%	12%	0.88	2.8	176
263	13%	11%	0.87	3.7	183
153	12%	10%	0.82	2.2	195
243	11%	14%	1.32	2.5	215
32	10%	10%	1.01	2.4	184
351	9%	4%	0.49	4.9	181
81	8%	9%	1.20	0.9	161
31	8%	8%	1.03	3.2	138
61	7%	5%	0.64	6.7	312
93	7%	4%	0.57	2.0	134
72	7%	9%	1.30	0.7	57
62	7%	5%	0.78	6.7	409
82	7%	6%	0.95	0.9	101
221	6%	1%	0.21	8.7	494
91	6%	4%	0.62	1.9	151
83	6%	5%	0.88	0.8	115
71	5%	5%	0.92	1.0	66
183	5%	2%	0.31	3.0	141

Table 4B, continued
PSA-Level Statistics, Latino Stops 2018 Q1 & Q2

PSA	PSA Latino share	Latino Share of Stops	Ratio of Latino Stop Share to Population Share	Total Stops per 100 Residents	Violent Crime Rate (per 10k residents)
173	5%	2%	0.35	7.7	234
92	5%	3%	0.57	4.4	374
63	4%	6%	1.29	1.5	233
171	4%	2%	0.44	2.6	129
223	4%	1%	0.30	3.9	450
52	4%	2%	0.54	3.7	133
51	4%	3%	0.86	2.1	110
12	4%	0%	0.00	2.3	118
11	4%	2%	0.51	5.8	180
144	3%	2%	0.57	1.1	124
391	3%	2%	0.45	4.3	307
121	3%	1%	0.22	3.3	197
73	3%	8%	2.39	0.9	67
53	3%	13%	3.93	1.4	97
161	3%	0%	0.11	6.8	248
224	3%	1%	0.33	3.3	423
192	3%	1%	0.19	10.1	435
123	3%	1%	0.46	10.1	365
143	3%	0%	0.19	4.7	168
222	2%	0%	0.18	7.3	495
122	2%	1%	0.26	16.1	372
172	2%	1%	0.61	20.6	449
124	2%	0%	0.25	7.2	342
393	2%	2%	0.88	25.5	569
353	2%	1%	0.67	6.0	266
191	2%	0%	0.14	2.5	210
193	2%	0%	0.21	2.4	224
182	1%	1%	0.72	11.1	359
392	1%	2%	1.64	17.4	751
162	1%	1%	0.42	9.3	336
181	1%	1%	1.17	14.2	355
141	1%	0%	0.46	6.2	235
142	1%	1%	1.51	16.9	395

Table 5
Stop Rate per 10,000 Residents

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Detainee Black	313.7 (48.42)**	361.9 (55.50)**	233.6 (77.39)**	243.2 (76.16)**	246.5 (72.65)**	248.6 (73.60)**	235.9 (71.63)**	213.4 (74.47)**
Detainee Latino	49.66 (22.74)*	114.0 (47.07)*	-140.7 (153.2)	-130.8 (153.1)	-130.9 (146.0)	-127.7 (147.8)	-142.3 (146.8)	-166.8 (143.8)
Detainee Male		80.30 (356.5)	63.22 (331.2)	46.83 (370.2)	-376.0 (468.1)	-302.7 (427.8)	-244.8 (423.0)	-748.0 (757.5)
Detainee Age		16.15 (8.093)	13.07 (8.167)	15.05 (7.997)	8.303 (7.928)	10.36 (8.089)	7.384 (7.003)	-5.356 (9.452)
PSA Asian share			-401.0 (406.5)	-529.2 (462.5)	-260.2 (363.5)	-377.2 (377.9)	32.27 (361.2)	-899.2 (909.2)
PSA Black share			249.7 (99.25)*	50.82 (150.9)	4.061 (134.9)	66.58 (149.2)	-209.4 (137.4)	-322.2 (299.8)
PSA Latino share			916.6 (468.5)	563.8 (334.4)	512.5 (342.1)	581.2 (364.3)	344.4 (283.7)	663.8 (449.0)
Male population under 24				-155.9 (806.6)	-605.9 (845.5)	-506.1 (836.9)	-529.0 (829.0)	1,001 (1,478)
Employment Rate				-2,867 (1,594)	-2,241 (1,357)	-2,505 (1,448)	-1,534 (1,130)	-366.0 (2,050)
UCR Part 1 Crime Rate (per 10k residents)					0.472 (0.169)*			
Property Crime Rate (per 10k residents)						0.437 (0.168)*		
Violent Crime Rate (per 10k residents)							1.486 (0.435)**	2.398 (0.748)**
Constant	131.5 (45.90)**	-511.2 (409.5)	-496.2 (374.6)	2,242 (1,792)	2,015 (1,531)	2,177 (1,614)	1,285 (1,342)	806.9 (2,225)
District Fixed Effect	No	No	No	No	No	No	No	Yes
Observations	195	194	194	194	194	194	194	194
R-squared	0.145	0.162	0.269	0.288	0.348	0.318	0.401	0.525

Standard errors in parentheses clustered at district level. ** p<0.01, * p<0.05

Table 6
Frisk

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Detainee Black	0.088 (0.021)**	0.070 (0.021)**	0.085 (0.017)**	0.079 (0.017)**	0.079 (0.017)**	0.079 (0.018)**	0.079 (0.017)**	0.074 (0.018)**
Detainee Latino	0.092 (0.026)**	0.072 (0.025)**	0.069 (0.027)*	0.067 (0.026)*	0.067 (0.026)*	0.067 (0.026)*	0.067 (0.026)*	0.062 (0.028)*
Detainee Male		0.12 (0.017)**	0.12 (0.018)**	0.13 (0.020)**	0.13 (0.020)**	0.13 (0.020)**	0.13 (0.020)**	0.13 (0.021)**
Detainee Age		-0.0035 (0.00043)**	-0.0035 (0.00042)**	-0.0035 (0.00046)**	-0.0035 (0.00047)**	-0.0035 (0.00047)**	-0.0035 (0.00047)**	-0.0035 (0.00047)**
PSA Asian share			-0.17 (0.16)	-0.24 (0.19)	-0.24 (0.18)	-0.24 (0.19)	-0.26 (0.17)	-0.32 (0.22)
PSA Black share			-0.055 (0.030)	-0.056 (0.054)	-0.056 (0.054)	-0.055 (0.056)	-0.051 (0.056)	-0.012 (0.12)
PSA Latino share			-0.0057 (0.042)	-0.0026 (0.092)	-0.0026 (0.092)	-0.00039 (0.091)	0.0013 (0.096)	0.19 (0.051)**
Male population under 24				0.61 (0.49)	0.61 (0.47)	0.60 (0.46)	0.62 (0.49)	0.10 (0.23)
Employment Rate				0.28 (0.56)	0.28 (0.56)	0.28 (0.57)	0.25 (0.56)	0.25 (0.91)
UCR Part 1 Crime Rate (per 10k residents)					-1.6e-06 (0.000043)			
Property Crime Rate (per 10k residents)						0.000014 (0.000053)		
Violent Crime Rate (per 10k residents)							-0.000029 (0.000098)	-0.00022 (0.00011)*
Constant	0.099 (0.013)**	0.13 (0.019)**	0.15 (0.030)**	-0.14 (0.54)	-0.14 (0.54)	-0.15 (0.55)	-0.11 (0.54)	-0.056 (0.89)
District Fixed Effect	No	No	No	No	No	No	No	Yes
Observations	3,904	3,896	3,896	3,896	3,896	3,896	3,896	3,896
R-squared	0.010	0.036	0.037	0.040	0.040	0.040	0.040	0.056

Standard errors in parentheses clustered at district level. ** p<0.01, * p<0.05

Table 7

Reasonable Suspicion by Race in Random Sample, 2018 Q1 & Q2

	Black	Latino	White	Total
Stops	2772	371	777	3920
Reasonable Suspicion	2324	300	664	3288
Share of Stops without Reasonable Suspicion	16%	19%	15%	16%
Frisks	556	69	92	717
Reasonable Suspicion	388	44	72	504
Share of Frisks without Reasonable Suspicion	30%	36%	22%	30%

Table 8

Reasonable Suspicion for Stop

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Detainee Black	-0.016 (0.021)	-0.012 (0.021)	-0.013 (0.021)	-0.014 (0.021)	-0.013 (0.021)	-0.013 (0.021)	-0.014 (0.021)	-0.013 (0.020)
Detainee Latino	-0.048 (0.027)	-0.043 (0.029)	-0.051 (0.034)	-0.050 (0.034)	-0.050 (0.034)	-0.050 (0.034)	-0.051 (0.034)	-0.045 (0.034)
Detainee Male		-0.015 (0.019)	-0.015 (0.018)	-0.014 (0.018)	-0.014 (0.018)	-0.014 (0.018)	-0.014 (0.018)	-0.013 (0.018)
Detainee Age		0.0011 (0.00040)*	0.0011 (0.00037)**	0.0011 (0.00038)**	0.0011 (0.00040)**	0.0011 (0.00040)**	0.0011 (0.00039)**	0.0012 (0.00040)**
PSA Asian share			-0.33 (0.12)*	-0.35 (0.12)**	-0.36 (0.13)*	-0.36 (0.13)*	-0.38 (0.13)**	-0.37 (0.22)
PSA Black share			-0.0099 (0.032)	-0.029 (0.034)	-0.027 (0.035)	-0.033 (0.035)	-0.018 (0.036)	0.028 (0.10)
PSA Latino share			0.0026 (0.058)	-0.029 (0.076)	-0.029 (0.077)	-0.036 (0.076)	-0.022 (0.079)	-0.049 (0.12)
Male population under 24				0.16 (0.29)	0.20 (0.25)	0.21 (0.24)	0.19 (0.26)	0.13 (0.29)
Employment Rate				-0.18 (0.35)	-0.21 (0.36)	-0.20 (0.37)	-0.22 (0.35)	0.17 (0.71)
UCR Part 1 Crime Rate (per 10k residents)					-0.000026 (0.000023)			
Property Crime Rate (per 10k residents)						-0.000042 (0.000031)		
Viloent Crime Rate (per 10k residents)							-0.000053 (0.000051)	-0.000025 (0.00012)
Constant	0.86 (0.019)**	0.83 (0.020)**	0.86 (0.026)**	1.03 (0.33)**	1.06 (0.35)**	1.06 (0.35)**	1.07 (0.33)**	0.69 (0.68)
District Fixed Effect	No	No	No	No	No	No	No	Yes
Observations	3,906	3,898	3,898	3,898	3,898	3,898	3,898	3,898
R-squared	0.002	0.003	0.005	0.005	0.006	0.006	0.006	0.011

Standard errors in parentheses clustered at district level. ** p<0.01, * p<0.05

Table 9

Reasonable Suspicion for Frisk

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Detainee Black	-0.056 (0.042)	-0.049 (0.042)	-0.049 (0.049)	-0.038 (0.046)	-0.036 (0.046)	-0.034 (0.047)	-0.040 (0.045)	-0.041 (0.046)
Detainee Latino	-0.089 (0.050)	-0.084 (0.051)	-0.044 (0.054)	-0.041 (0.055)	-0.035 (0.060)	-0.034 (0.060)	-0.039 (0.059)	-0.031 (0.065)
Detainee Male		-0.038 (0.059)	-0.033 (0.057)	-0.036 (0.058)	-0.036 (0.058)	-0.037 (0.058)	-0.034 (0.058)	-0.023 (0.059)
Detainee Age		0.0011 (0.0011)	0.00092 (0.0010)	0.00100 (0.0010)	0.0013 (0.0011)	0.0013 (0.0011)	0.0013 (0.0011)	0.0011 (0.0012)
PSA Asian share			-1.16 (0.33)**	-1.01 (0.34)**	-1.13 (0.38)**	-1.08 (0.37)**	-1.19 (0.38)**	-1.63 (0.57)*
PSA Black share			-0.14 (0.073)	-0.069 (0.060)	-0.072 (0.071)	-0.091 (0.075)	-0.028 (0.069)	-0.11 (0.13)
PSA Latino share			-0.29 (0.069)**	-0.21 (0.056)**	-0.24 (0.058)**	-0.26 (0.063)**	-0.20 (0.056)**	-0.22 (0.13)
Male population under 24				-1.29 (0.56)*	-0.99 (0.41)*	-1.00 (0.41)*	-1.08 (0.45)*	-0.96 (0.60)
Employment Rate				0.19 (0.48)	0.041 (0.46)	0.088 (0.46)	-0.041 (0.48)	0.13 (1.38)
UCR Part 1 Crime Rate (per 10k residents)					-0.00011 (0.000064)			
Property Crime Rate (per 10k residents)						-0.00015 (0.000083)		
Viloent Crime Rate (per 10k residents)							-0.00025 (0.00015)	-0.00011 (0.00028)
Constant	0.76 (0.033)**	0.76 (0.072)**	0.93 (0.076)**	0.79 (0.43)	0.99 (0.41)*	0.95 (0.40)*	1.05 (0.43)*	0.90 (1.29)
District Fixed Effect	No	No	No	No	No	No	No	Yes
Observations	716	714	714	714	714	714	714	714
R-squared	0.003	0.005	0.017	0.027	0.030	0.029	0.030	0.040

Standard errors in parentheses clustered at district level. ** p<0.01, * p<0.05

Table 10

Contraband by Race in Random Sample, 2018 Q1 & Q2

	Black	Latino	White	Total
Frisks	556	69	92	717
Firearm	8	2	0	10
Drugs	15	3	5	23
Any	46	8	10	64
Frisks/Firearm	70	35	∞	72
Frisks/Drugs	37	23	18	31
Frisks/Any	12	9	9	11

Table 11

Firearm Recovered

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Detainee Black	0.0078 (0.0073)	0.0051 (0.0066)	0.0062 (0.010)	0.0073 (0.011)	0.0074 (0.011)	0.0076 (0.011)	0.0073 (0.010)	0.0036 (0.011)
Detainee Latino	0.015 (0.014)	0.013 (0.015)	0.0092 (0.014)	0.0090 (0.014)	0.0093 (0.014)	0.0095 (0.014)	0.0091 (0.014)	0.0029 (0.015)
Detainee Male		0.012 (0.0035)**	0.012 (0.0033)**	0.012 (0.0035)**	0.012 (0.0036)**	0.012 (0.0036)**	0.012 (0.0036)**	0.013 (0.0045)**
Detainee Age		-0.00051 (0.00027)	-0.00049 (0.00027)	-0.00051 (0.00029)	-0.00050 (0.00026)	-0.00049 (0.00027)	-0.00050 (0.00027)	-0.00044 (0.00026)
PSA Asian share			0.027 (0.11)	0.044 (0.12)	0.039 (0.12)	0.040 (0.12)	0.037 (0.13)	0.24 (0.16)
PSA Black share			0.0025 (0.018)	0.021 (0.018)	0.021 (0.017)	0.020 (0.017)	0.023 (0.020)	0.012 (0.071)
PSA Latino share			0.018 (0.013)	0.046 (0.029)	0.045 (0.026)	0.044 (0.025)	0.047 (0.030)	0.055 (0.063)
Male population under 24				-0.15 (0.051)**	-0.14 (0.053)*	-0.13 (0.049)*	-0.14 (0.057)*	-0.23 (0.14)
Employment Rate				0.19 (0.25)	0.18 (0.24)	0.18 (0.24)	0.18 (0.23)	-0.36 (0.57)
UCR Part 1 Crime Rate (per 10k residents)					-4.8e-06 (0.000015)			
Property Crime Rate (per 10k residents)						-8.7e-06 (0.000020)		
Viloent Crime Rate (per 10k residents)							-9.8e-06 (0.000038)	-0.00014 (0.00010)
Constant	0.0069 (0.0084)	0.013 (0.0089)	0.0062 (0.018)	-0.17 (0.24)	-0.16 (0.22)	-0.16 (0.22)	-0.16 (0.21)	0.37 (0.58)
District Fixed Effect	No	No	No	No	No	No	No	Yes
Observations	716	714	714	714	714	714	714	714
R-squared	0.001	0.005	0.005	0.007	0.008	0.008	0.007	0.026

Standard errors in parentheses clustered at district level. ** p<0.01, * p<0.05

Table 12

Contraband Recovered

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Detainee Black	0.0068 (0.011)	0.0054 (0.011)	0.018 (0.012)	0.021 (0.012)	0.021 (0.012)	0.021 (0.012)	0.021 (0.012)	0.023 (0.012)
Detainee Latino	0.018 (0.016)	0.017 (0.015)	0.015 (0.017)	0.018 (0.017)	0.017 (0.017)	0.018 (0.017)	0.018 (0.017)	0.019 (0.016)
Detainee Male		-0.0068 (0.021)	-0.0059 (0.021)	-0.0068 (0.021)	-0.0070 (0.021)	-0.0069 (0.021)	-0.0072 (0.021)	-0.0064 (0.021)
Detainee Age		-0.00042 (0.00030)	-0.00044 (0.00029)	-0.00041 (0.00029)	-0.00042 (0.00029)	-0.00041 (0.00030)	-0.00043 (0.00029)	-0.00043 (0.00030)
PSA Asian share			-0.12 (0.15)	-0.11 (0.14)	-0.092 (0.14)	-0.11 (0.14)	-0.065 (0.14)	-0.28 (0.16)
PSA Black share			-0.046 (0.026)	-0.052 (0.026)	-0.052 (0.026)	-0.052 (0.025)*	-0.064 (0.027)*	-0.055 (0.063)
PSA Latino share			-0.0099 (0.033)	-0.020 (0.038)	-0.019 (0.038)	-0.019 (0.036)	-0.028 (0.040)	-0.027 (0.093)
Male population under 24				-0.23 (0.11)	-0.25 (0.11)*	-0.23 (0.12)	-0.25 (0.10)*	0.0059 (0.14)
Employment Rate				-0.17 (0.16)	-0.15 (0.16)	-0.16 (0.16)	-0.12 (0.15)	-0.43 (0.49)
UCR Part 1 Crime Rate (per 10k residents)					0.000014 (0.000020)			
Property Crime Rate (per 10k residents)						4.2e-06 (0.000031)		
Viloent Crime Rate (per 10k residents)							0.000062 (0.000036)	0.000019 (0.00010)
Constant	0.093 (0.011)**	0.11 (0.022)**	0.14 (0.023)**	0.31 (0.15)	0.28 (0.15)	0.30 (0.15)	0.25 (0.15)	0.54 (0.49)
District Fixed Effect	No	No	No	No	No	No	No	Yes
Observations	6,030	6,016	6,016	6,016	6,016	6,016	6,016	6,016
R-squared	0.001	0.002	0.003	0.004	0.004	0.004	0.004	0.010

Standard errors in parentheses clustered at district level. ** p<0.01, * p<0.05

