

Suspect Citizens

What 20 Million Traffic Stops Tells Us about Policing and Race

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Our book was based on analyses of every traffic stop in North Carolina from 2002 through the end of 2016. In this document, we replicate every figure and table used in the book using data through the end of 2020. For full descriptions of each of the tables and figures, please see the original book. Results here are identical but now updated with over 24,000,000 observations.

We first present all the tables, then the figures. All are reported in the order they were presented in the book.

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Table 2.1. Frequency of Stop Purposes by Race

Purpose	<u>All Drivers</u>		<u>White Drivers</u>		<u>Black Drivers</u>		<u>Hispanic Drivers</u>	
	# of Stops	of Stops	# of Stops	of Stops	# of Stops	of Stops	# of Stops	of Stops
Safety	12,861,373	52.63	7,756,362	55.88	3,703,289	47.23	921,082	47.51
Speed Limit	10,083,739	41.26	6,231,198	44.89	2,830,186	36.09	645,570	33.30
Stop Light/Sign	1,199,328	4.91	656,309	4.73	393,490	5.02	101,041	5.21
Driving Impaired	195,346	0.80	109,605	0.79	45,637	0.58	34,326	1.77
Safe Movement	1,382,960	5.66	759,250	5.47	433,976	5.53	140,145	7.23
Investigatory	11,245,155	46.01	5,982,547	43.10	4,043,431	51.73	933,088	48.13
Vehicle Equipment	2,246,455	9.19	1,106,168	7.97	887,437	11.32	194,633	10.04
Vehicle Regulatory	4,274,880	17.49	2,174,594	15.67	1,722,067	21.96	286,304	14.77
Seat Belt	2,011,654	8.23	1,292,021	9.31	547,365	6.98	111,715	5.76
Investigation	1,579,668	6.46	844,682	6.09	498,457	6.36	194,953	10.06
Other Vehicle	1,132,498	4.63	565,082	4.07	388,105	4.95	145,483	7.50
Other	332,689	1.36	141,133	1.02	94,478	1.20	84,423	4.35
Checkpoint	332,689	1.36	141,133	1.02	94,478	1.20	84,423	4.35
Total Included Stops	24,439,217	100	13,880,032	100	7,841,198	100	1,938,593	100

Note: This table excludes passengers. We recode race and ethnicity as mutually exclusive categories, but the form lists them as separate variables. The “all drivers” columns include Native American, Asian, and drivers of other races.

Table 2.2. Driver Age and Sex

		Number	Percent
By Age:	Younger than 20	2,032,431	8.43
	20-29	8,064,202	33.45
	30-39	5,660,831	23.48
	40-49	4,221,573	17.51
	50 and Older	4,123,718	17.12
	<i>Total</i>	<i>24,105,755</i>	<i>100</i>
By Sex:	Male	15,282,603	63.40
	Female	8,823,913	36.60
	<i>Total</i>	<i>24,106,516</i>	<i>100</i>

Note: Includes only drivers. Excludes checkpoint stops. Differences in the N reflect observations where age or gender is missing.

Table 2.3. Driver Race and Ethnicity

Race	Ethnicity				Total	
	Hispanic		Not Hispanic		# of Stops	% of Stops
	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops
White	1,010,327	6.85	13,738,899	93.15	14,749,226	100
Black	24,189	0.31	7,746,720	99.69	7,770,909	100
Asian	5,404	1.80	295,427	98.20	300,831	100
Native American	2,556	1.38	182,190	98.62	184,746	100
Unknown	811,694	73.74	289,110	26.26	1,100,804	100
Total	1,854,170	7.69	22,252,346	92.31	24,106,516	100

Note: Includes only drivers. Excludes checkpoint stops.

Table 2.4. A Mutually Exclusive Race / Ethnicity Identifier

	Number	Percent
White, non-Hispanic	13,738,899	56.99
Black, non-Hispanic	7,746,720	32.14
Other, non-Hispanic	766,727	3.18
Hispanic	1,854,170	7.69
Total	20,532,589	100.00

Note: Includes only drivers. Excludes checkpoint stops.

Table 2.5. Stop Outcomes.

Outcome	<u>All Drivers</u>		<u>White Drivers</u>		<u>Black Drivers</u>		<u>Hispanic Drivers</u>	
	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops
Light	8,305,806	34.45	4,653,241	33.87	2,906,421	37.52	504,583	27.21
No Action	691,053	2.87	388,535	2.83	240,542	3.11	45,084	2.43
Verbal Warning	4,232,967	17.56	2,144,020	15.61	1,669,227	21.55	289,185	15.60
Written Warning	3,381,786	14.03	2,120,686	15.44	996,652	12.87	170,314	9.19
Expected	15,286,588	63.41	8,860,265	64.49	4,626,432	59.72	1,284,015	69.25
Citation Issued	15,286,588	63.41	8,860,265	64.49	4,626,432	59.72	1,284,015	69.25
Severe	514,122	2.13	225,393	1.64	213,867	2.76	65,572	3.54
Arrested	514,122	2.13	225,393	1.64	213,867	2.76	65,572	3.54
Total	24,106,516	100	13,738,899	100	7,746,720	100	1,854,170	100

Table 2.6. Number of Incidents Resulting in Force or Injury

	<u>All Drivers</u>		<u>White Drivers</u>		<u>Black Drivers</u>		<u>Hispanic Drivers</u>	
	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops
Encounter Violence	28,603	0.12	11,356	0.08	14,830	0.19	1,913	0.10
Engaged Force	15,246	0.06	6,853	0.05	6,817	0.09	1,266	0.07
Officer Injured	4,431	0.02	2,033	0.01	1,967	0.03	303	0.02
Driver Injured	5,590	0.02	2,439	0.02	2,499	0.03	531	0.03
Total Included Stops	24,106,516	--	13,738,899	--	7,746,720	--	1,854,170	--

Note: See note for Table 2.1.

Table 2.7. Searches by Type

Search Type	<u>All Drivers</u>		<u>White Drivers</u>		<u>Black Drivers</u>		<u>Hispanic Drivers</u>	
	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops
Consent	337,893	1.40	144,754	1.05	154,533	1.99	32,913	1.78
Search Warrant	1,790	0.01	782	0.01	767	0.01	201	0.01
Probable Cause	238,780	0.99	76,296	0.56	143,890	1.86	15,189	0.82
Incident to Arrest	228,387	0.95	99,906	0.73	91,390	1.18	33,280	1.79
Protective Frisk	24,512	0.10	9,495	0.07	11,727	0.15	832	0.04
Total Searches	831,362	3.45	278,791	2.03	325,335	4.20	84,415	4.55

Table 2.8. Searches by Basis of Search

Search Basis	<u>All Drivers</u>		<u>White Drivers</u>		<u>Black Drivers</u>		<u>Hispanic Drivers</u>	
	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops
Erratic Behavior	250,336	1.22	109,638	0.92	105,768	1.64	30,437	1.94
Observation of Suspected Contraband	146,003	0.71	55,398	0.47	77,040	1.19	11,308	0.72
Other Official Information	164,741	0.80	64,923	0.55	76,715	1.19	20,332	1.30
Suspicious Movement	89,157	0.43	32,928	0.28	46,258	0.72	8,814	0.56
Informant Tip	23,551	0.11	9,547	0.08	12,020	0.19	1,731	0.11
Witness Observation	15,842	0.08	6,344	0.05	7,520	0.12	1,713	0.11
Total Searches	689,630	3.36	278,778	2.35	325,321	5.05	74,335	4.74

Note: See note for Table 2.1.

Table 2.9. Who or What was Searched

Who or What	<u>All Drivers</u>		<u>White Drivers</u>		<u>Black Drivers</u>		<u>Hispanic Drivers</u>	
	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops
Vehicle	740,549	3.07	293,708	2.14	361,537	4.67	73,598	3.97
Driver	732,154	3.04	290,110	2.11	355,840	4.59	74,777	4.03
Passenger(s)	289,903	33.01	110,895	32.11	149,680	34.83	24,914	27.98
Personal Effects	416,582	1.73	177,615	1.29	192,947	2.49	39,254	2.12

Note: See note for Table 2.1. Multiple types of searches may occur in a given stop. We exclude passenger searches in the analysis

throughout the book. Passenger search percentages are listed as a share of all passengers in the dataset. As noted in the text, passengers are not listed in the form unless search, arrest, or citation follows the stop. This explains the high search rates.

Table 2.10. Passenger Demographics by Search Status

		<u>Not Searched</u>		<u>Searched</u>		Total
		Number	Percent	Number	Percent	
By Age:	Younger than 20	51,797	51.13	49,513	48.87	101,310
	20-29	272,815	65.59	143,106	34.41	415,921
	30-39	145,147	72.39	55,372	27.61	200,519
	40-49	77,797	73.48	28,078	26.52	105,875
	50 and older	40,738	76.01	12,856	23.99	53,594
By Sex:	Male	492,071	68.37	227,684	31.63	719,755
	Female	96,233	60.73	62,238	39.27	158,471
By Race:	White	280,815	68.34	130,080	31.66	410,895
	Black	281,117	65.17	150,244	34.83	431,361
	Native American	2,749	61.49	1,722	38.51	4,471
	Asian	3,812	71.37	1,529	28.63	5,341
	Unknown Race	19,820	75.72	6,354	24.28	26,174
By Ethnicity:	Hispanic	64,129	72.02	24,914	27.98	89,043
	Non-Hispanic	524,166	66.42	264,989	33.58	789,155
Total		588,313	66.99	289,929	33.01	878,242

Note: Totals sum to 100.00 percent across the rows. Passengers are included in the database only with adverse outcomes (e.g. search, arrest, or citation).

Table 2.11. Contraband

Search Type	<u>All Drivers</u>		<u>White Drivers</u>		<u>Black Drivers</u>		<u>Hispanic Drivers</u>	
	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops
Drugs	132,826	0.53	55,417	0.39	69,270	0.86	6,352	0.33
Alcohol	36,425	0.15	16,891	0.12	14,440	0.18	4,480	0.23
Money	36,849	0.15	14,536	0.1	19,583	0.24	2,204	0.11
Weapons	27,221	0.11	8,287	0.06	16,857	0.21	1,598	0.08
Other	86,744	0.35	35,097	0.25	44,124	0.55	6,349	0.33
Total Contraband	280,152	1.12	114,290	0.81	142,619	1.77	19,119	0.99

Note: See note in Table 2.1.

Table 2.12. Property Seized

Search Type	<u>All Drivers</u>		<u>White Drivers</u>		<u>Black Drivers</u>		<u>Hispanic Drivers</u>	
	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops	# of Stops	% of Stops
Motor Vehicle	23,499	0.10	8,761	0.06	11,775	0.15	2,585	0.14
Personal Property	81,455	0.34	31,451	0.23	43,995	0.57	4,846	0.26
Other Property	60,361	0.25	26,700	0.19	29,304	0.38	3,498	0.19

Note: See note in Table 2.1.

Table 3.1. Comparison of State Population to Traffic Stops, by Race, 2019

Race	<u>State Population</u>		<u>Traffic Stops</u>		Diff.	Percent	Stop	Stop Rate
	Number	Percent	Number	Percent		Diff.	Rate	Ratio
White	6,565,541	62.60	660,463	53.68	-8.92	-16.62	10.06	---
Black	2,328,355	22.20	463,647	37.68	15.48	41.09	19.91	1.98
Hispanic	1,027,832	9.80	106,325	8.64	-1.16	-13.41	10.34	1.03
Total	9,921,727	100	1,230,435	100	--	--	15.3	

Note: Population data from the US Census. Excludes individuals of other races. Stop Rate Ratios are compared to white drivers.

Table 3.2. Stop Rates by Race by Agency

	Mean	Mean	Mean	Mean	St.Dev	
	Population	Traffic	Stop	Stop Rate	Stop Rate	
Race	(2010)	Stops	Rate	Ratio	Ratio	N
Part A. Police Departments						
White	55,119	7,055	13.73%	--		495
Black	32,744	6,452	21.40%	1.60	0.66	495
Hispanic	11,664	1,322	12.75%	0.93	0.37	495
Total	105,944	14,823	14.21%	--		495
Part B. Sheriff's Departments						
White	48,526	923	1.71%	--	--	919
Black	8,197	406	5.03%	2.95	1.93	919
Hispanic	4,444	144	3.06%	1.82	1.56	919
Total	63,880	1,473	2.09%	--	--	919

Note: Stop Rate Ratios are the black or Hispanic search rate divided by the white search rate.

Note: Only agency-years where the local area had at least 25,000 people living in the area are included.

Table 3.3. Estimated Driving Habits by Race

	White	Black	Hispanic	BW Ratio	HW Ratio
Own a Car*	83%	53%	49%	.61	.59
Miles Driven per Year*	13,361	11,637	10,303	.87	.77
Driver**	91.1%	79.6%	79.7%	.87	.87
Mean Trips per Day**	2.2	1.8	1.8	.82	.82
Mean Miles Driven per Day**	31.5	25.5	26.1	.81	.83
Miles Driven per Year**	11,515	9,294	9,521	.81	.83

Note: * Results from the US DOT survey from 2009; ** results from AAA Foundation Survey from 2014-15. See Triplett et al. 2016, pp. 7, 11, 12, 14).

Table 4.1. Search Rates by Race, by Type of Search

Search Type	White	Black	Hispanic	B-W Ratio	H-W Ratio
Consent	1.05	1.99	1.78	1.89	1.68
Search Warrant	0.01	0.01	0.01	1.74	1.90
Probable Cause	0.56	1.86	0.82	3.34	1.48
Incident to Arrest	0.73	1.18	1.79	1.62	2.47
Protective Frisk	0.07	0.15	0.04	2.19	0.65
Total Searches	2.03	4.20	4.55	2.07	2.24

Note: data from Table 2.7.

Table 4.2. Search Rates by Race, by Stop Type

	White	Black	Hispanic	B-W Ratio	H-W Ratio
Safety Stops	0.93	1.44	2.08	1.55	2.24
Investigatory Stops	1.20	3.17	1.89	2.64	1.58
All Stops	2.13	4.61	3.98	2.16	1.87

Table 4.3. Differential Outcomes by Race

Outcome	White	Black	Hispanic	B-W Ratio	H-W Ratio
Light	33.87	37.52	27.21	1.11	0.80
Expected	64.49	59.72	69.25	0.93	1.07
Severe	1.64	2.76	3.54	1.68	2.16
Total	100	100	100	-	-

Note: Data from Table
2.5

Table 4.4. Predicting Outcomes of a Traffic Stop, 2002-2020

Variable	Light Outcome	Citation	Arrest	Search
Demographics				
Black	1.01(0.00)	0.97(0.00)	1.36(0.00)	1.99(0.00)
Hispanic	0.60(0.00)	1.63(0.00)	1.42(0.02)	1.01(0.00)
Other Race	1.02(0.00)	0.99(0.00)	0.71(0.02)	0.60(0.01)
Gender (Male)	0.89(0.00)	1.10(0.00)	1.52(0.01)	3.41(0.02)
Age	1.01(0.00)	0.99(0.00)	0.99(0.00)	0.97(0.00)
Search Occur				
Search Occur	0.63(0.00)	0.93(0.00)	8.69(0.08)	-
Contraband				
Contra. Found	0.17(0.00)	1.14(0.00)	6.59(0.06)	-
Stop Purpose				
<i>Safety</i>				
Speed Limit	-	-	-	-
Stop Light	2.49(0.00)	0.40(0.00)	1.30(0.02)	1.80(0.02)
Impaired	1.31(0.01)	0.09(0.00)	81.57(1.16)	36.50(0.39)
Movement	4.63(0.01)	0.21(0.00)	2.06(0.03)	3.14(0.02)
<i>Investigatory</i>				
Equipment	6.80(0.01)	0.15(0.00)	1.33(0.02)	2.69(0.02)
Regulatory	2.16(0.00)	0.46(0.00)	1.53(0.02)	2.18(0.01)
Seat Belt	1.09(0.00)	0.91(0.00)	1.41(0.03)	2.92(0.03)
Investigation	3.29(0.01)	0.27(0.00)	4.24(0.05)	7.12(0.05)
Other	2.16(0.00)	0.44(0.00)	2.68(0.04)	3.61(0.03)
Time				

Hour of Day	Included	Included	Included	Included
Day of Week	Included	Included	Included	Included
Fixed Effects				
Agency	Included	Included	Included	Included
Constant	0.69(0.01)	1.41(0.03)	0.00(0.00)	0.01(0.00)
N	8,151,710	8,151,710	8,151,710	8,151,710
Pseudo R²	0.11	0.11	0.32	0.16
Log Likelihood	-4,988,387	-5,009,190	-513,506	-1,310,603

Note: All coefficients are statistically significant at $p < .05$. Entries are odds-ratios, with standard errors in parenthesis. Non-Hispanics whites are the reference category. Speed limit violations are the reference category for stop purposes. Analysis is limited to stops made by the 25 police agencies with the greatest number of observations.

Table 5.1. Type of Contraband Found, by Type of Search

	N	All Searches	Consent	Probable Cause	Incident to Arrest	Protective Frisk	Warrant
Drugs	132,826	51.97	48.14	58.51	39.43	35.67	50.53
Alcohol	36,425	14.25	13.91	10.4	26.86	13.39	23.15
Money	36,849	14.42	14.15	15.21	12.75	10.07	17.10
Weapons	27,221	10.65	9.16	10.02	12.91	37.97	13.62
No amount recorded	62,168	24.32	27.16	23.44	22.75	20.94	14.98
Total	295,489	115.61	112.52	117.58	114.70	118.04	119.38

Note: Entries are column percentages. The totals are greater than 100 because searches occasionally uncover multiple types of contraband.

Table 5.2. Contraband Hit Rates, by Search Type

	N	% All Searches	% Consent	% Probable Cause	% Incident to Arrest	% Protective Frisk	% Warrant
Overall	2,255,576	33.48	25.50	58.30	19.37	17.83	39.00
Drugs	132,826	17.40	12.28	34.11	7.64	6.36	19.71
Alcohol	36,425	4.77	3.55	6.06	5.20	2.39	9.03
Money	36,849	4.83	3.61	8.87	2.47	1.80	6.67
Weapons	27,221	3.51	2.34	5.84	2.50	6.24	5.31
No amount recorded	62,168	8.14	6.93	13.67	4.41	3.73	5.84

Note: Police officers have conducted 689,657 searches and found contraband 199,725 times for an overall contraband hit rate of 28.96 percent. The number of times each type of contraband has been found exceeds the overall number because officers sometimes find more than one type of contraband from a single search.

Table 5.3. Police Actions Resulting from the Discovery of Contraband

Action	Type of Contraband					Total	
	Drugs	Alcohol	Weapons	Money	No amount recorded	N	%
No action	0.79	0.73	1.18	1.00	0.95	1,953	0.92
Verbal warning	4.95	6.53	5.63	7.26	11.78	16,083	7.57
Written warning	4.75	3.77	3.73	5.44	5.92	10,731	5.05
Citation	47.61	55.13	30.37	38.00	48.57	100,568	47.34
Arrest	41.9	33.84	59.09	48.3	32.78	83,113	39.12
Total Percent	100	100	100	100	100		100
N	115,822	24,841	21,653	31,350	52,355	212,448	52,355

Note: Entries are column percentages, summing to 100 percent for each contraband type. The table excludes 222,687 searches that took place “incident to arrest,” as in these cases the arrest precipitated the search, rather than the search determining the outcome.

Table 5.4. Arrest-Worthy Contraband Hit rates, by Search and Contraband Type

	Arrests	% All Searches	% Consent	% Probable Cause	% Protective Frisk	% Warrant
Overall	83,113	15.37	8.29	25.31	7.75	24.74
Drugs	48,532	8.98	4.76	11.74	3.05	14.7
Alcohol	8,407	1.55	0.89	6.02	0.98	2.39
Money	15,142	2.80	1.34	4.66	0.91	4.76
Weapons	12,794	2.37	1.02	4.37	2.85	3.97
No amount recorded	17,164	3.17	1.74	4.13	1.58	5.09

Note: Entries show the percent of drivers arrested after a given type of search and a given type of contraband found. For example, in the first row, 48,532 individuals were arrested for drugs; these represented 8.98 percent of all searches, 4.76 percent of all consent searches, and so on. The table excludes 222,687 searches that took place “incident to arrest,” as in these cases the arrest precipitated the search. More than one type of contraband may be found in a given search.

Table 5.5. Percentage of Searches that Result in Contraband

	Total Searches	% Total	% White	% Black	B-W Ratio
All Searches	689,657	28.96	30.45	30.13	0.99
Consent	285,414	25.5	29.95	23.20	0.77
Probable Cause	231,773	58.3	62.24	56.60	0.91
Incident to Arrest	222,687	19.37	19.84	20.79	1.05
Protective Frisk	21,774	17.83	17.09	20.30	1.19
Warrant	1,695	39.00	39.26	41.48	1.06

Table 5.6. Stops, Searches, Contraband Hits, and Arrests by Race

	White	Black	Hispanic	Total	B-W Ratio	H-W Ratio
Stops	13,738,899	7,746,720	1,854,170	23,339,789		
Searches	302,448	372,229	76,814	751,491		
Search and Contraband	103,774	130,671	17,446	251,891		
Contraband and Arrest	44,272	54,683	8,436	107,391		
Search Rate	2.20	4.80	4.14	3.22	2.18	1.88
Hit Rate	34.31	35.11	22.71	33.52	1.02	0.66
Hit-Arrest Rate	14.64	14.69	10.98	14.29	1.00	0.75

Note: Excludes searches incident to arrest. Search rate is per 100 stops. Hit rate and hit-arrest rate are per 100 searches.

Table 5.7. Predicting the Discovery of Contraband after Different Types of Search

Variable	Consent	Probable Cause	Arrest	Frisk
Demographics				
Black	0.78* (0.01)	0.71* (0.01)	1.03 (0.02)	0.74* (0.07)
Hispanic	0.48* (0.01)	0.62* (0.02)	0.57* (0.02)	0.44* (0.07)
Other Race	0.70* (0.04)	0.82* (0.06)	0.70* (0.06)	1.16 (0.39)
Gender	0.91* (0.01)	1.19* (0.02)	1.50*(0.04)	1.63* (0.23)
Age	0.99* (0.00)	0.99 (0.00)	0.99*(0.00)	0.99 (0.00)
Stop Purpose				
<i>Safety</i>				
Speed Limit	-	-	-	-
Stop Light	1.08* (0.03)	1.03 (0.04)	1.11* (0.05)	1.10 (0.22)
Impaired	1.37* (0.08)	0.57* (0.02)	1.14* (0.04)	1.28 (0.35)
Movement	1.10* (0.03)	1.04 (0.03)	1.27* (0.05)	1.11 (0.18)
<i>Investigatory</i>				
Equipment	1.02 (0.02)	0.98 (0.02)	1.22* (0.04)	1.17 (0.17)
Regulatory	0.93* (0.02)	0.88* (0.02)	0.92* (0.03)	0.83 (0.12)
Seat Belt	1.24* (0.04)	1.01 (0.04)	1.44* (0.08)	1.66* (0.33)
Investigation	1.28* (0.03)	1.07* (0.03)	1.55* (0.05)	1.09 (0.16)
Other	1.12* (0.03)	0.97 (0.03)	1.08 (0.04)	0.97 (0.18)
Time				
Hour of Day	Included	Included	Included	Included
Day of Week	Included	Included	Included	Included
N	162,196	90,336	102,237	8,348

* = p-value \leq 0.05

Note: Models use logistic regression with agency- and officer-level random effects. Coefficients are odd-ratios with standard errors in parentheses. Data is from the top-25 agencies.

Note: When extending the analysis for the Arrest model in Table 5.7 above, we could not use the same regression syntax because the optimizer could not reliably find the maximum of the log-likelihood function. Instead, we used the bobyqa optimization technique in R. In order to be sure that this small difference nonetheless produces equivalent results, we have replicated the original findings from the book in the table below with the original and revised syntax.

As published:		Using bobyqa Optimizer:	
Variable	Arrest	Variable	Arrest
Demographics		Demographics	
Black	1.02 (0.02)	Black	1.04 (0.02)
Hispanic	0.56* (0.01)	Hispanic	0.56* (0.02)
Other Race	0.68* (0.05)	Other Race	0.68* (0.06)
Gender	1.52* (0.03)	Gender	1.49* (0.04)
Age	0.98* (0.00)	Age	0.99* (0.00)
Stop Purpose		Stop Purpose	
<i>Safety</i>		<i>Safety</i>	
Speed Limit	-	Speed Limit	-
Stop Light	1.11* (0.05)	Stop Light	1.10* (0.05)
Impaired	1.15* (0.04)	Impaired	1.15* (0.04)
Movement	1.26* (0.04)	Movement	1.26* (0.04)
<i>Investigatory</i>		<i>Investigatory</i>	
Equipment	1.18* (0.04)	Equipment	1.21* (0.05)
Regulatory	0.90* (0.03)	Regulatory	0.90* (0.03)
Seat Belt	1.44* (0.08)	Seat Belt	1.44* (0.08)

Investigation	1.50* (0.05)	Investigation	1.52* (0.05)
Other	1.04 (0.04)	Other	1.04 (0.04)
Time		Time	
Hour of Day	Included	Hour of Day	Included
Day of Week	Included	Day of Week	Included
N	97,167	N	97,167

Table 6.1. High and Low Search Rate Agencies

Part A. High Search Rate Agencies

Agency Name	Total Stops	Search Rate
Rutherford County Sheriff's Office	11,965	18.58
Haywood County Sheriff's Office	17,848	17.73
Cleveland County Sheriff's Office	13,338	17.03
Burke County Sheriff's Office	12,494	12.61
Iredell County Sheriff's Office	39,943	12.61
Alamance County Sheriff's Office	48,706	12.47
Halifax County Sheriff's Office	22,391	12.32
Beaufort County Sheriff's Office	62,547	11.29
Lincolnton Police Department	13,303	11.13
Wilson County Sheriff's Office	23,543	11.06

Part B. Low Search Rate Agencies

Agency Name	Total Stops	Search Rate
SHP – Motor Carrier Enforcement Section	104,772	0.19
Belmont Police Department	10,066	0.55
NC State Highway Patrol	10,492,456	0.57
Fuquay-Varina Police Department	60,925	0.89
Elizabeth City Police Department	73,316	1.00
NC DMV, License and Theft Bureau	80,417	1.13
Mecklenburg County Sheriff's Office	25,398	1.13
Blowing Rock Police Department	21,342	1.26

Tarboro Police Department	51,503	1.32
UNC Chapel Hill University Police Department	38,753	1.40
<hr/>		
Total for the state	24 million	2.98

Table 7.1. White, Black, and Hispanic Traffic Stops Compared

A. Females	Numbers			Percents		
	White	Black	Hispanic	White	Black	Hispanic
Speed Limit	2,575,182	1,289,018	186,024	48.99	40.72	39.77
Stop Light / Sign	273,184	166,412	30,122	5.20	5.26	6.44
Driving Impaired	30,974	10,008	2,626	0.59	0.32	0.56
Safe Movement	277,136	159,232	32,582	5.27	5.03	6.97
Equipment	413,853	344,138	47,162	7.87	10.87	10.08
Regulatory	920,925	761,554	79,924	17.52	24.06	17.09
Seat Belt	365,201	174,927	22,472	6.95	5.53	4.80
Investigation	206,367	127,634	36,580	3.93	4.03	7.82
Other	193,570	132,570	30,268	3.68	4.19	6.47
Total	5,256,392	3,165,493	467,760	100	100	100

B. Males	Numbers			Percents		
	White	Black	Hispanic	White	Black	Hispanic
Speed Limit	3,865,380	1,673,535	496,434	43.28	34.15	33.93
Stop Light / Sign	406,938	244,248	75,177	4.56	4.98	5.14
Driving Impaired	80,314	36,581	32,279	0.90	0.75	2.21
Safe Movement	512,268	295,883	113,338	5.74	6.04	7.75
Equipment	738,955	586,023	155,773	8.27	11.96	10.65
Regulatory	1,328,059	1,028,383	217,030	14.87	20.98	14.83
Seat Belt	951,008	385,354	92,200	10.65	7.86	6.30
Investigation	662,476	384,810	162,694	7.42	7.85	11.12
Other	385,855	265,780	118,098	4.32	5.42	8.07
Total	8,931,253	4,900,597	1,463,023	100	100	100

Table 7.2. Relative Frequencies of White, Black, and Hispanic Stops, by Purpose

Stop Purpose	Ratio Compared to:			
	White Drivers	Black Drivers	White Drivers	Black Drivers
	Male	Male	Female	Female
Seat Belt	0.78	0.99	0.81	0.98
Speed Limit	1.13	1.03	1.24	1.22
Regulatory	2.45	2.96	0.95	1.78
Stop Light / Sign	1.35	1.28	1.32	1.38
Equipment	1.29	0.89	1.28	0.93
Safe Movement	1.00	0.71	0.98	0.71
Investigation	0.59	0.80	0.69	0.87
Other	1.50	1.42	1.99	1.94
Driving Impaired	1.87	1.49	1.76	1.55
Total	1.00	1.00	1.00	1.00

Note: The ratios in Table 7.2 are calculated by dividing the percentages in Table 7.1. In the first cell, 6.35 of Hispanic male drivers were stopped for Seat Belt Violations compared to 11.14 percent of white male drivers; that ratio is 0.57.

Table 7.3. Type of Search by Ethnicity

Search Type	Searches	% Searched of Total			H:W Ratio
		All Stops	White	Hispanic	
Consent	285,414	1.14	0.86	1.37	1.59
Probable Cause	231,773	0.93	0.52	0.76	1.46
Incident to Arrest	222,687	0.89	0.68	1.71	2.51
Protective Frisk	21,774	0.09	0.06	0.14	2.33
Search Warrant	1,695	0.01	0.01	0.01	1.00
Total Stops	24,217,434	-	14,187,645	1,930,783	-
Total Searches	76,343	3.06	2.13	3.98	1.87

Table 7.4. Percentage of Searches that Result in Contraband

	Contraband hits	% Total	% White	% Hispanic	H:W Ratio
All Searches	255,576	33.48	34.31	22.71	0.66
Consent	72,779	25.5	29.95	16.71	0.56
Probable Cause	135,125	58.3	62.24	54.08	0.87
Incident to Arrest	43,128	19.37	19.84	14.55	0.73
Protective Frisk	3,883	17.83	17.09	10.91	0.64
Warrant	661	39.00	39.26	27.51	0.70

Table 8.1. Summary Statistics of Traffic Stop Black-White Ratios

	Minimum	1st Qu.	Median	Mean	3rd Qu.	Maximum
Searches	0.17	1.36	1.76	1.93	2.24	9.90
Light Outcomes	0.53	0.93	1.00	1.01	1.08	1.75
Citations	0.62	0.92	0.99	0.98	1.04	1.38
Arrests	0.26	1.19	1.56	1.72	2.06	5.92
Investigatory Stops	0.83	1.08	1.17	1.18	1.27	1.96

Table 8.2. The Effect of Political Power on the Disparity of Traffic Stop Outcomes

	Searches	Light Outcome	Citation	Arrest
Political Power	-0.225** (0.102)	-0.039** (0.012)	0.033** (0.010)	-0.041 (0.067)
Investigatory Stops Ratio	0.929** (0.338)	0.148** (0.042)	-0.138** (0.032)	0.592** (0.278)
Log(Population)	0.101 (0.064)	0.016** (0.008)	-0.016** (0.006)	-0.027 (0.041)
Crime per 100	-0.001 (0.001)	-0.000 (0.000)	-0.000 (0.000)	-0.001 (0.001)
% Below Poverty	0.456 (1.089)	0.231* (0.132)	-0.125 (0.106)	1.403* (0.718)
Intercept	-0.165 (0.718)	0.647** (0.087)	1.327** (0.070)	1.156** (0.482)
R ² Within	0.01	0.01	0.02	0.000
R ² Between	0.14	0.24	0.27	0.097
R ² Overall	0.08	0.12	0.15	0.033
Num. obs.	497	497	497	497
Num. groups: City	86	86	86	86

Note: Entries are regression coefficients, with standard errors in parentheses.

Note: ** prob. < 0.05 * prob. < 0.10.

Table 8.3. Summary Statistics of Traffic Stop Black – White Rate Ratios

	Minimum	1st Qu.	Median	Mean	3rd Qu.	Maximum
Searches	0.28	1.06	1.34	1.53	1.78	11.26
Light Outcomes	0.55	0.90	0.97	0.98	1.03	1.86
Citations	0.31	0.93	1.02	1.06	1.17	2.90
Arrests	0.11	0.95	1.30	1.43	1.75	6.02
Investigatory Stops	0.64	1.02	1.11	1.13	1.21	1.98

Table 8.4. Predicting Disparities in Traffic Stops Outcomes, Sheriff's Departments

	Searches	Light Outcome	Citation	Arrest
Political Power	-0.152* (0.088)	-0.031** (0.015)	0.110** (0.033)	0.029 (0.071)
Investigatory Stops Ratio	0.385 (0.270)	0.093** (0.043)	0.020 (0.087)	0.014 (0.238)
Republican Sheriff	-0.064 (0.148)	0.000 (0.026)	-0.028 (0.055)	0.036 (0.120)
Log(Population)	-0.216** (0.102)	-0.029* (0.019)	0.060 (0.041)	-0.119 (0.080)
Intercept	3.464** (1.139)	1.187** (0.207)	0.408 (0.447)	2.694** (0.906)
R ² Within	0.012	0.002	0.002	0.004
R ² Between	0.062	0.158	0.210	0.050
R ² Overall	0.031	0.066	0.084	0.016
Num. obs.	334	334	334	334
Num. groups: County	66	66	66	66

Note: * indicates statistical significance at the 0.10 level and ** indicates statistical significance at the 0.05 level.

Table 9.1. Comparing Outcome Rate Ratios between All Stops and Safety Stops

Outcome	All Purposes	Safety Purposes	Difference	Percent Change
Light Outcome	1.40	1.22	-0.18	-12.86
Citation	0.85	0.90	0.05	5.88
Arrest	0.94	0.98	0.04	4.26
Search	2.16	1.81	-0.35	-16.20
<i>Total</i>	22,253,735	11,896,293	--	--

Note: Totals in the last row are of White and Black drivers only.

Table 9.2. Comparing Odds-Ratios from Logistic Regressions between All Stops and Safety-Related Stops

	All Stops	Safety Stops Only	Change in Odds	Pct. Change in Odds
Search	1.99 (0.00, 0.16)	1.68 (0.01, 0.38)	-0.31	-16
Light Outcome	1.01 (0.00, 0.11)	1.15 (0.02, 0.14)	0.14	14
Citation	0.97 (0.00, 0.11)	0.90 (0.02, 0.06)	-0.07	-7
Arrest	1.36 (0.00, 0.32)	1.00 (0.02, 0.19)	-0.36	-26
N	8,151,710	4,020,532		

Note: All coefficients are statistically significant at the 0.05 level.

Note: Entries in parentheses are the standard errors associated with the coefficient and then the R²s associated with each model.

Note: Each model includes fixed effects for agency, and only contains stops made by the top 25 agencies in North Carolina. The full models can be seen in the appendix to this chapter.

Table 9.3. The Effect of Written Consent Forms on Consent Search Rates in Three Cities

		Fayetteville	Durham	Chapel Hill
<i>Reforms</i>	Consent Search Ban	-16.84 (13.13)		
	Written Consent Form	-16.11 (10.55)	-31.68* (14.64)	-4.53* (2.39)
	Leadership Change	-28.88** (13.47)	-4.04 (51.94)	
<i>Controls</i>	Intercept	67.66** (11.89)	-0.28 (0.88)	5.72** (0.85)
	AR(1)	0.90** (0.04)	-0.40** (0.07)	0.40** (0.05)
	AR(2)		-0.11** (0.06)	0.01 (0.07)
	AR(3)		-0.22** (0.06)	-0.10 (0.07)
	AR(4)		-0.16** (0.06)	0.36** (0.06)
	MA(1)	-0.14** (0.06)		
	N	228	208	210
	Log Likelihood	-972.63	-915.88	-556.95

Note: ** prob. < 0.05. * prob. < 0.10.

Note: Standard errors are in parentheses below coefficient estimates.

Table 9.4. Probable Cause Search Rates

		Fayetteville	Durham	Chapel Hill
<i>Reforms</i>	Consent Search Ban	1.32 (13.22)		
	Written Consent Form	10.83 (7.22)	47.81** (7.26)	1.20 (9.40)
	Leadership Change	-16.19 (46.60)	-44.63** (6.14)	
<i>Controls</i>	Intercept	0.07 (0.47)	0.16 (0.15)	-0.10 (0.16)
	AR(1)	0.59** (0.08)	-0.08 (0.28)	
	AR(2)		0.15 (0.13)	
	AR(3)		0.16** (0.07)	
	MA(1)	-0.87** (0.07)	-0.50 (38.98)	-0.69** (0.05)
	MA(2)		-0.50 (19.55)	
	N	227	208	197
	Log Likelihood	-981.30	-863.12	-646.63

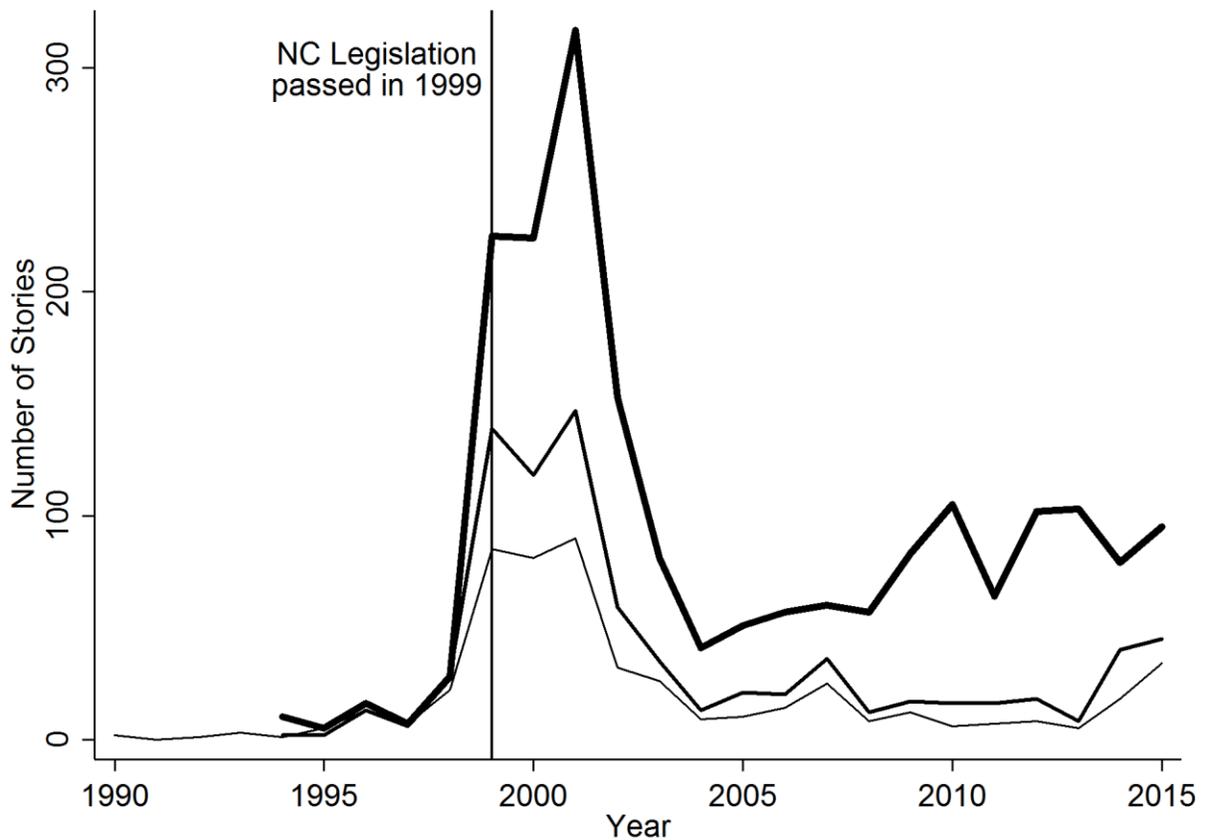
Note: see Table 9.3.

Table 9.5 Monthly Average Adjusted Calls for Service and Arrests by Policy Intervention

		Calls for Service	Arrests
<i>Reforms</i>	Consent Search Ban	3.77 (2.71)	20.24 (60.93)
	Written Consent Form	2.10 (3.51)	-8.88 (44.31)
	Leadership Change	5.50** (2.63)	-142.20** (46.10)
	Intercept	37.18** (3.45)	738.00** (17.81)
<i>Controls</i>	AR(1)	0.88** (0.19)	0.60** (0.08)
	MA(1)	-0.61** (0.23)	
	N	60	120
Log Likelihood		-168.77	-660.82

Note: See Table 9.3

Figure 2.1. Media Attention and Legislative Action on “Driving while Black”¹



(Note: This data / figure not updated.)

¹ Note: The three data series correspond to related searches using different keywords and newspapers. The thickest black line tracks hits from the following keywords: SUBJECT(“racial profiling” AND ((police) OR (“traffic stop”))); Newspapers used: Baltimore Sun, Los Angeles Times, Washington Post, New York Times, USA Today; 75 percent true hits. The middle line corresponds to the following keywords: ((racial w/5 disparit!) OR (racial w/5 profil!)) AND ((traffic w/5 police) OR (traffic w/5 stop) OR (“driving while black”) OR (“driving while brown”) OR (minority driv!)); Newspapers used: The Washington Post, The New York Times, The Los Angeles Times, the Baltimore Sun, and USA Today; 92 percent true hits. Finally, the thinnest bottom line uses: (SUBJECT(“racial profiling” AND (police OR “law enforcement”)) AND BODY((police AND “traffic stop”) OR “driving while black” OR “driving while brown”)) OR (SUBJECT(“race and racism”) AND BODY((police w/5 “traffic stop”) OR “driving while black” OR “driving while brown”)); Newspapers used: The Washington Post, The New York Times, The Los Angeles Times, and USA Today.; 92 percent true hits.

Figure 3.1. Traffic Stops by Year

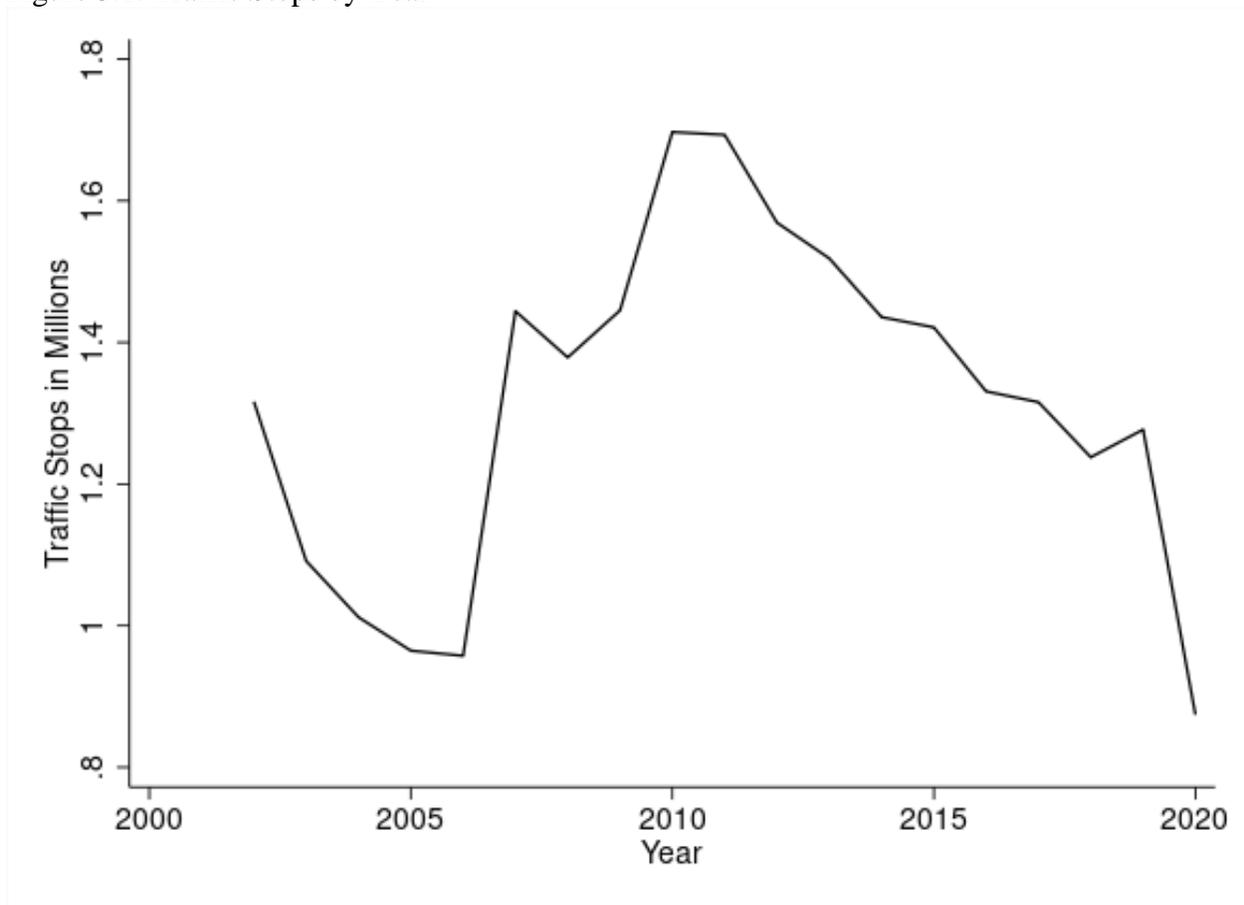


Figure 3.2. Racial Composition of Traffic Stops over Time

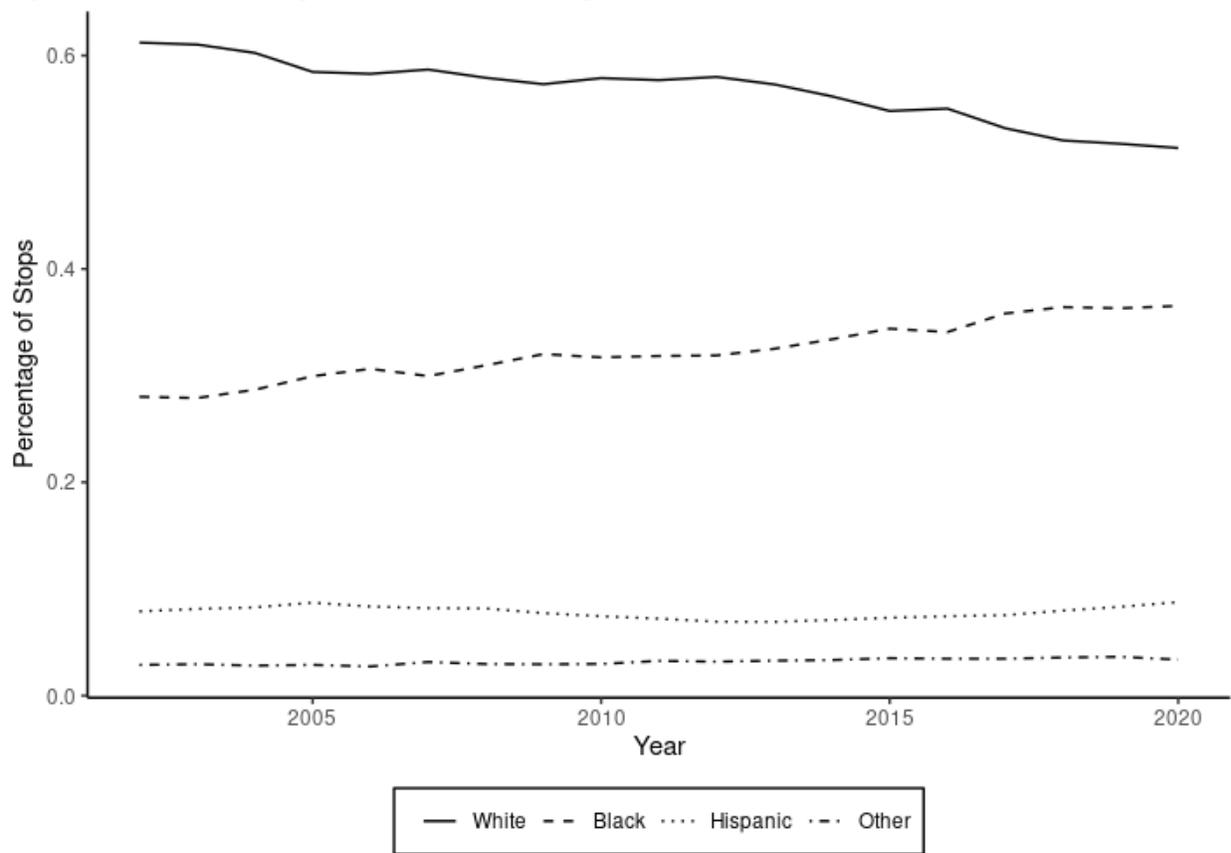
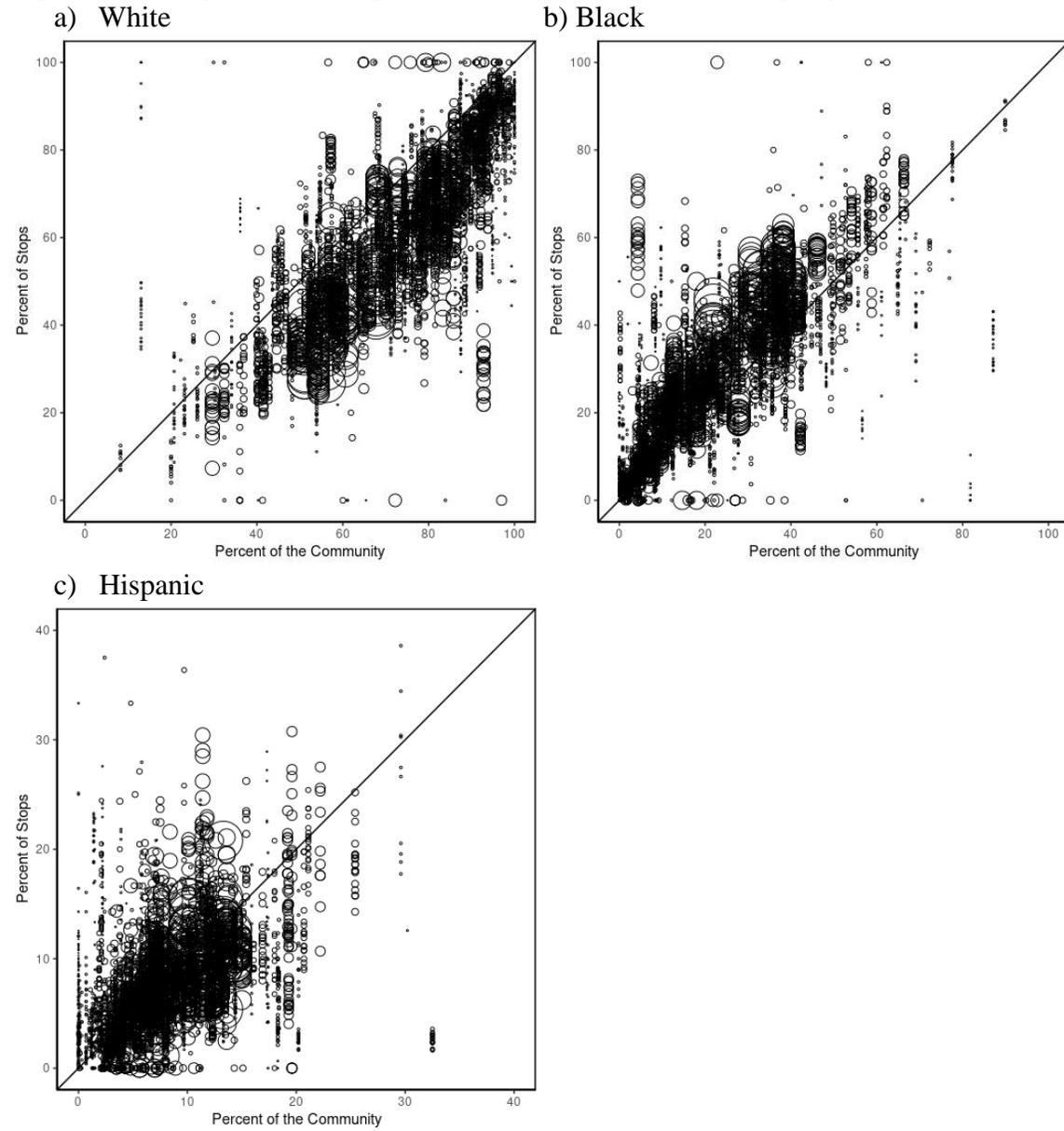


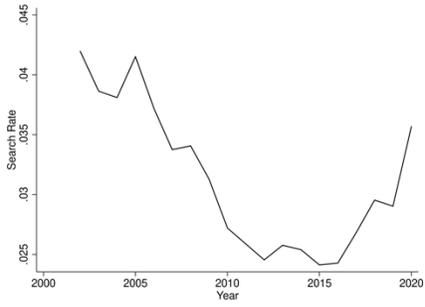
Figure 3.3. Comparison of Proportion of the Community and Stops by Race



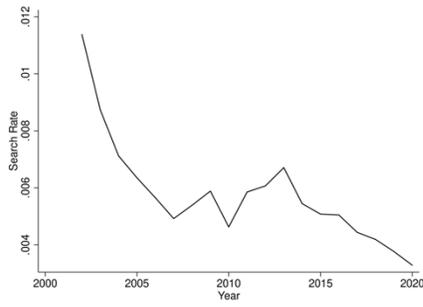
Note: N's: 4,071 for white, 4,071 for black, and 4,071 for Hispanic. N's refer to agency-years. We exclude 5 outlier observations from Figure 3.3c which make it difficult to see the remaining observations but do not change the interpretation of the plot.

Figure 4.1. Search Rates over Time

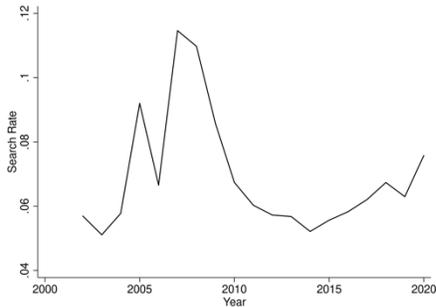
a. All Agencies



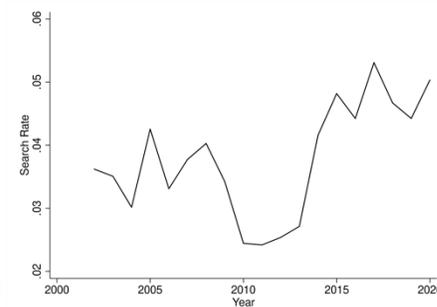
b. State Highway Patrol



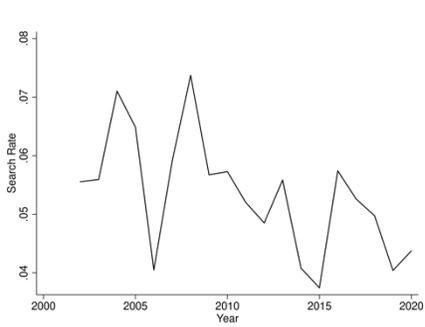
c. Charlotte



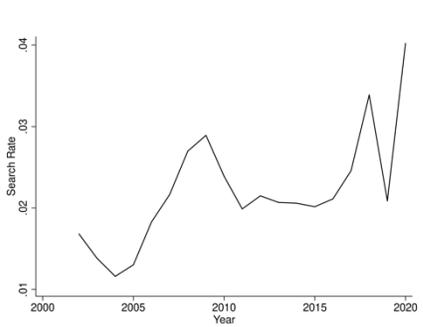
d. Raleigh



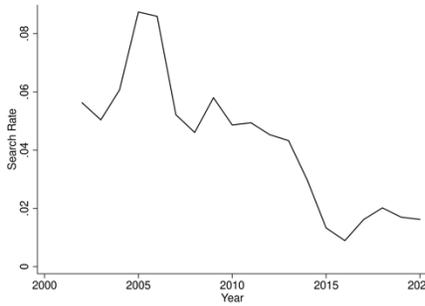
e. Greensboro



f. Winston-Salem



g. Fayetteville



h. Durham

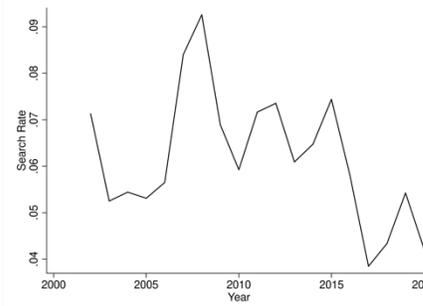


Figure 4.2. Search Rates by Hour of the Week

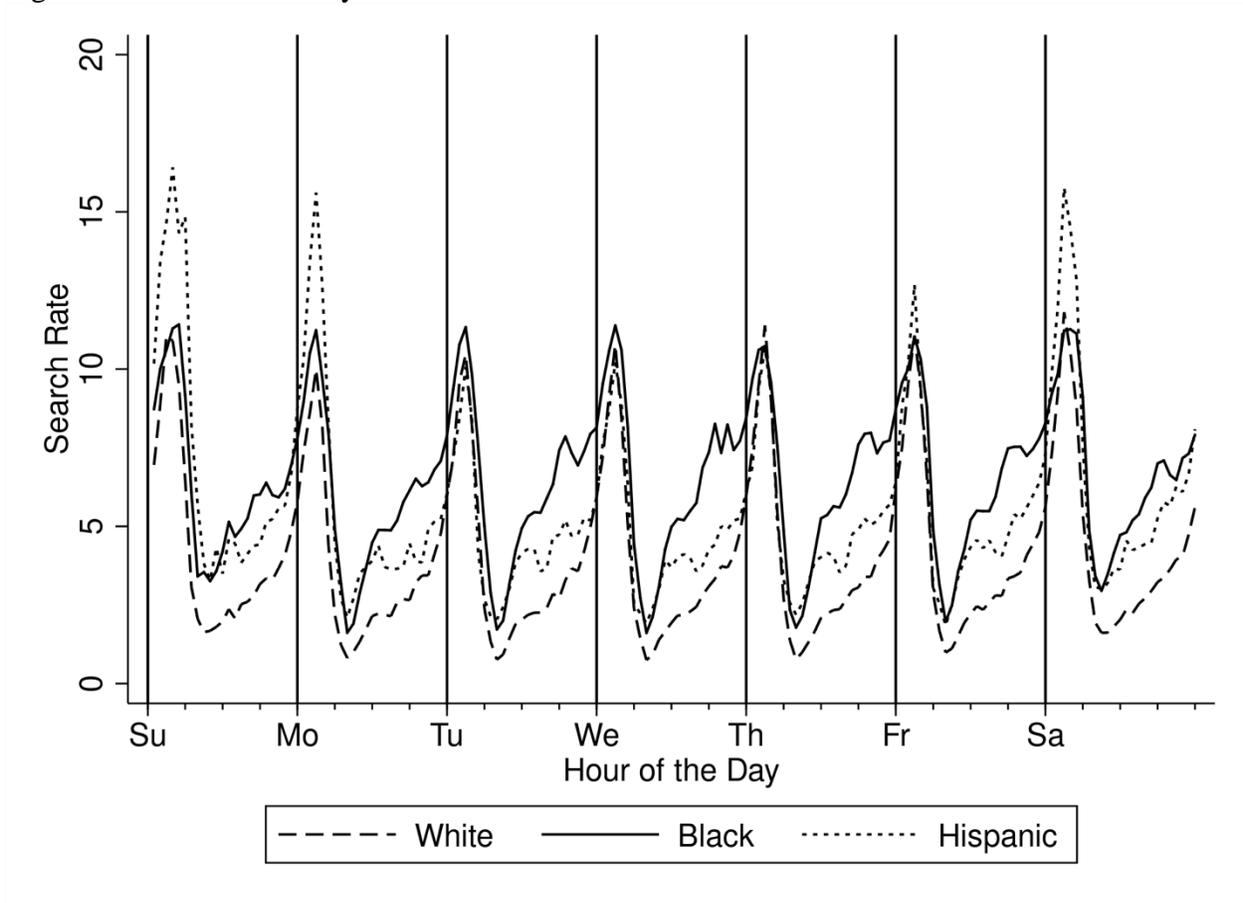
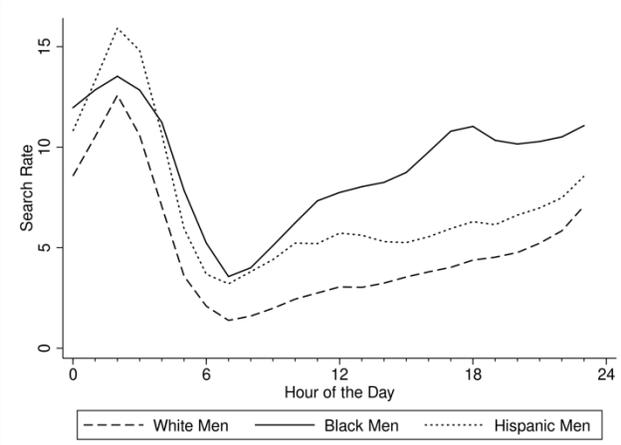


Figure 4.3. Search Rates by Hour of the Day
A. Males



B. Female

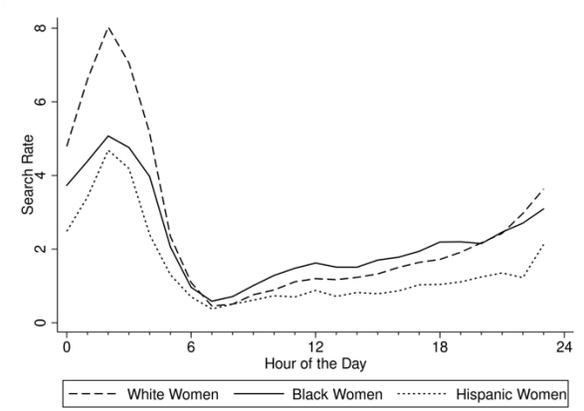
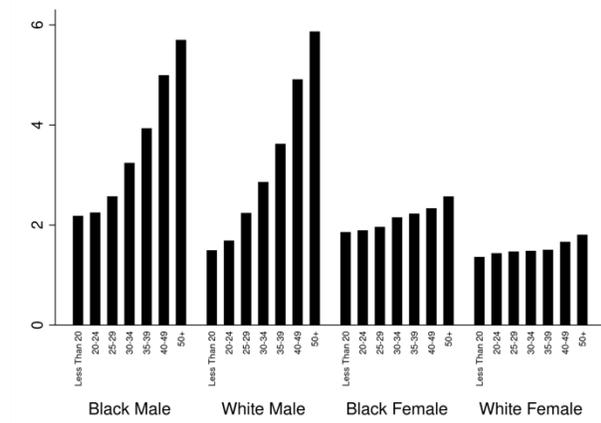
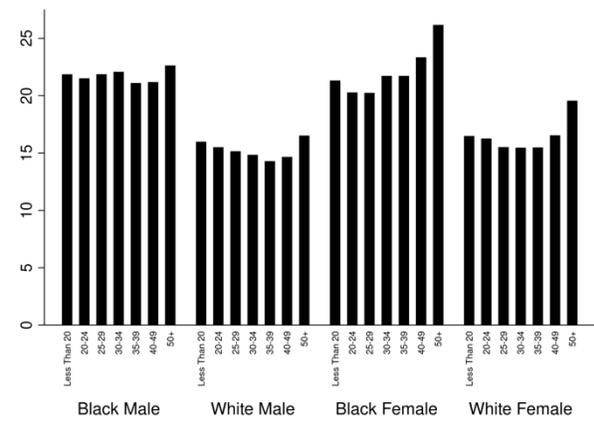


Figure 4.4. Outcome Rates by Race, Gender, and Age Group

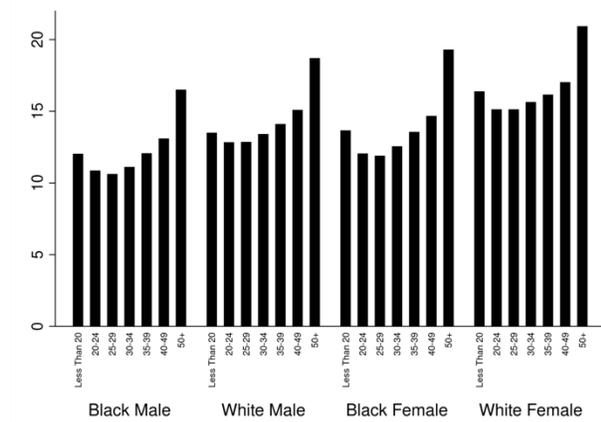
A) No Action



B) Verbal Warning



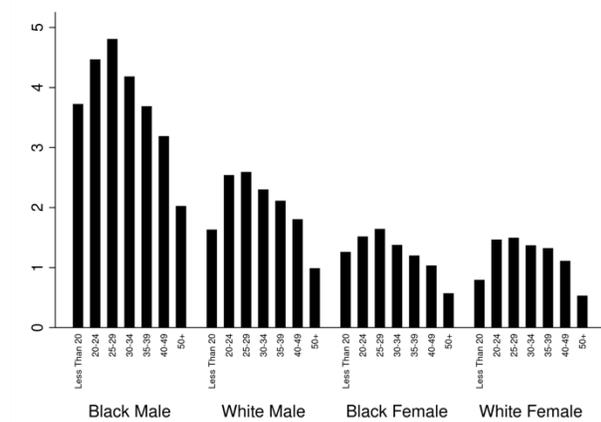
C) Written Warning



D) Citation



E) Search



F) Arrest

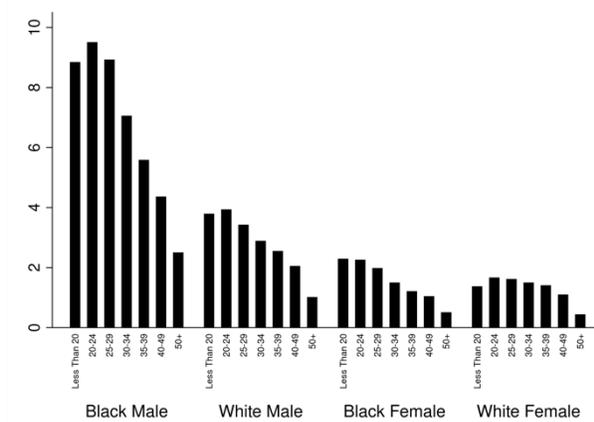
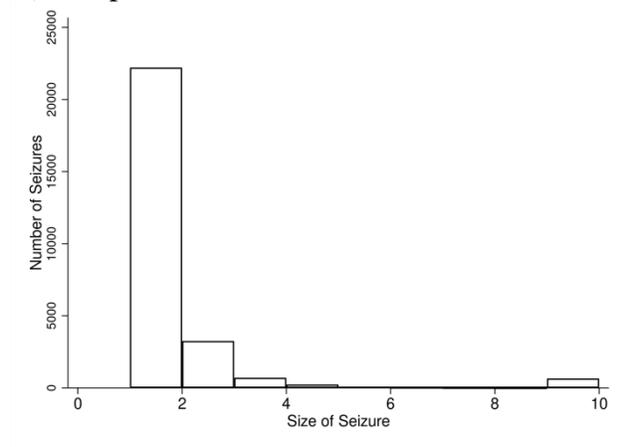
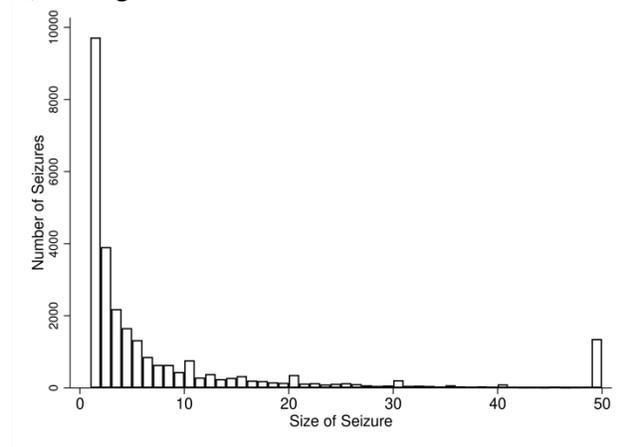


Figure 5.1. How Much Contraband is Found?

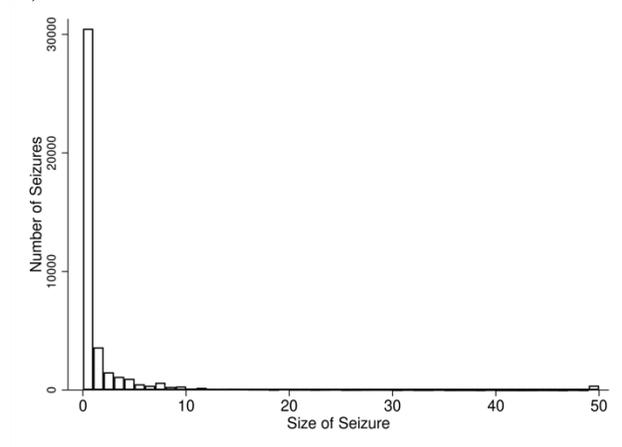
A) Weapons



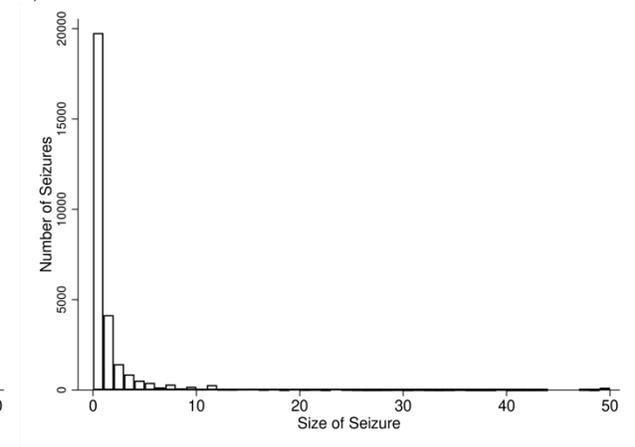
B) Dosages



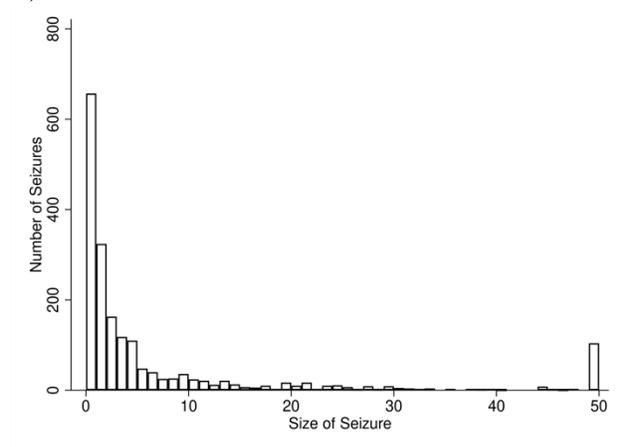
C) Ounces



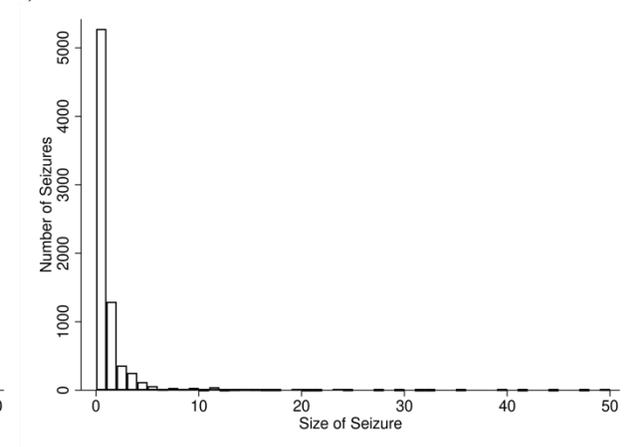
D) Pints



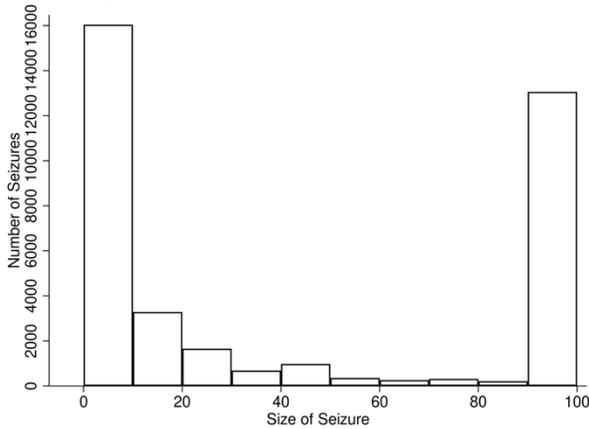
E) Pounds



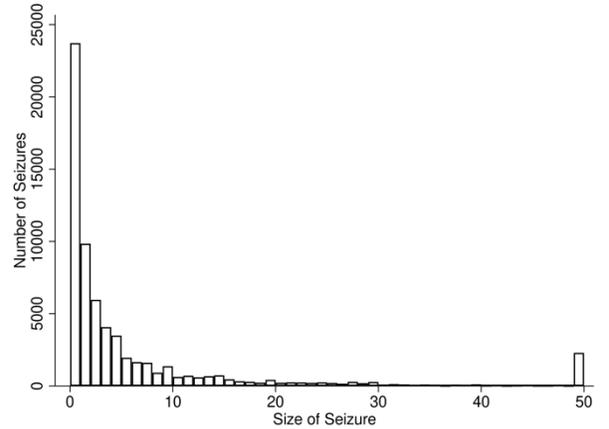
F) Gallons



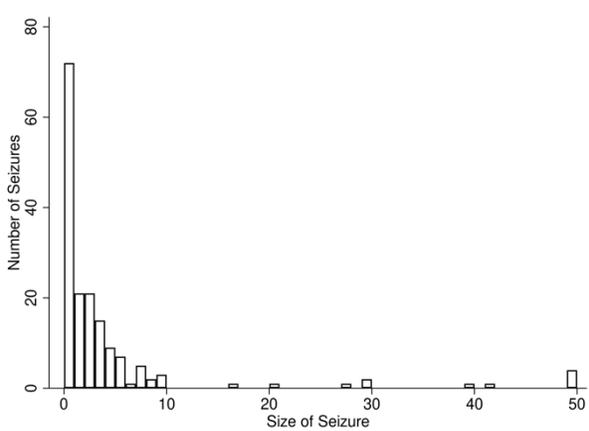
G) Money



H) Grams

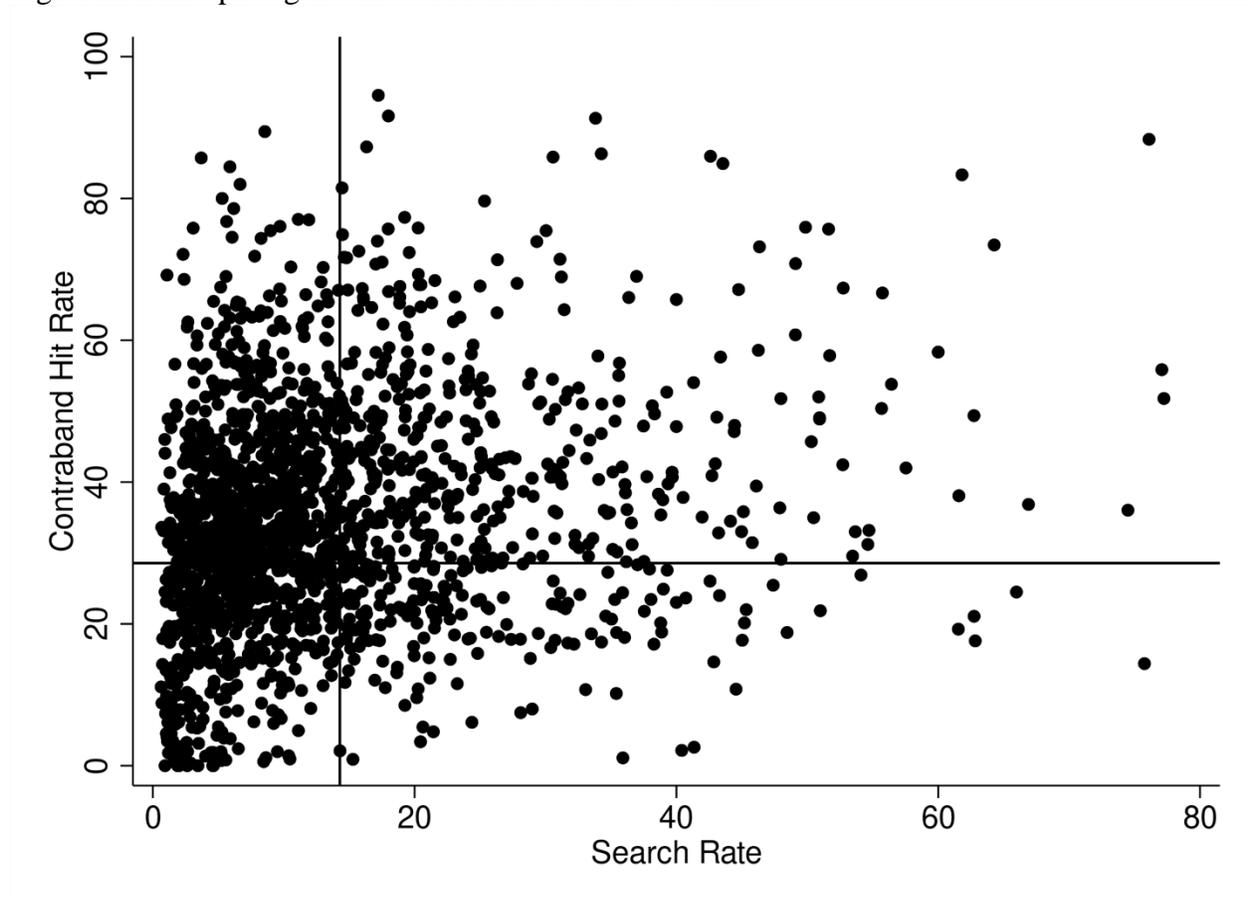


I) Kilos



Note: (A) Weapons were found as contraband in 27,221 stops. The median size of seizure is 1. Large values are clustered at 10. (B) Dosages were found as contraband in 28,012 stops. The median size of seizure is 3. Large values are clustered at 50. (C) Ounces were found as contraband in 41,775 stops. The median size of seizure is 1. Large values are clustered at 50. (D) Pints were found as contraband in 28,899 stops. The median size of seizure is 1. Large values are clustered at 50. (E) Pounds were found as contraband in 1,907 stops. The median size of seizure is 2. Large values are clustered at 50. (F) Gallons were found as contraband in 7,598 stops. The median size of seizure is 1. Large values are clustered at 50. (G) Money was found as contraband in 36,849 stops. The median size of seizure is 20. Large values are clustered at 100. (H) Grams were found as contraband in 65,723 stops. The median size of seizure is 2. Large values are clustered at 50. (I) Kilos were found as contraband in 167 stops. The median size of seizure is 2.

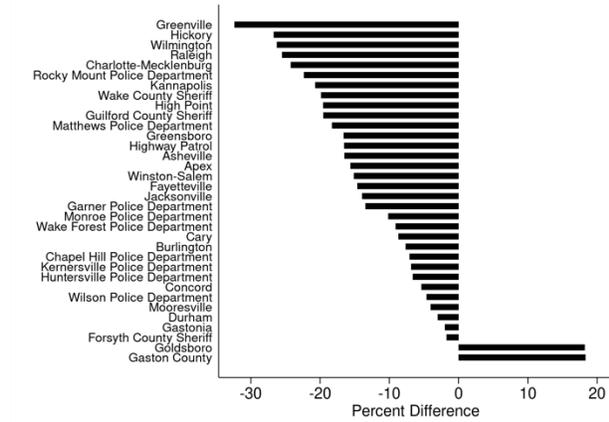
Figure 5.2. Comparing Officer-Level Search and Hit Rates



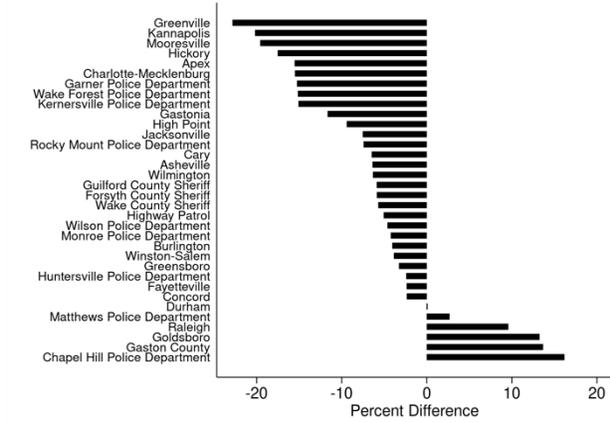
Note: based on the 1,721 police officers that searched at least 100 motorists. Correlation between searches and contraband hits is 0.198. Lines show median values.

Figure 5.3. Percent Difference in the Likelihood of Finding Contraband

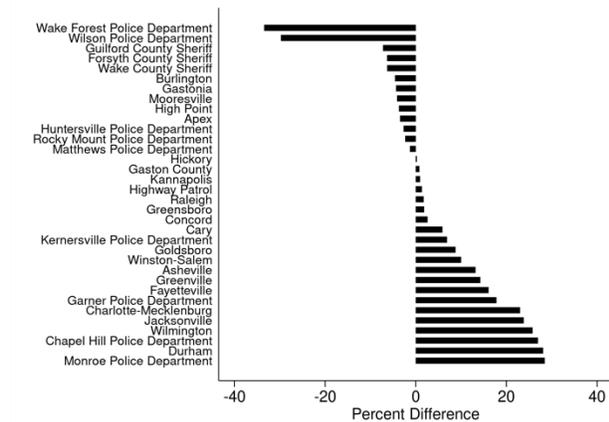
A) Consent



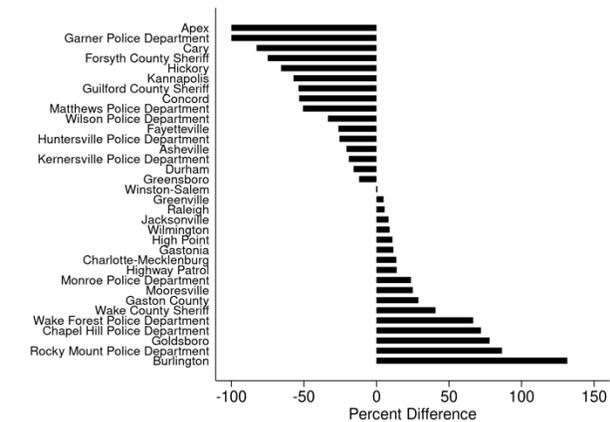
B) Probable Cause



C) Incident to Arrest



D) Protective Frisk



Note: figure shows the percent difference in the likelihood of finding contraband on black versus white motorists.

Figure 5.4. Percent Difference across Race in the Likelihood of Searches and Contraband
 A) Consent B) Probable Cause

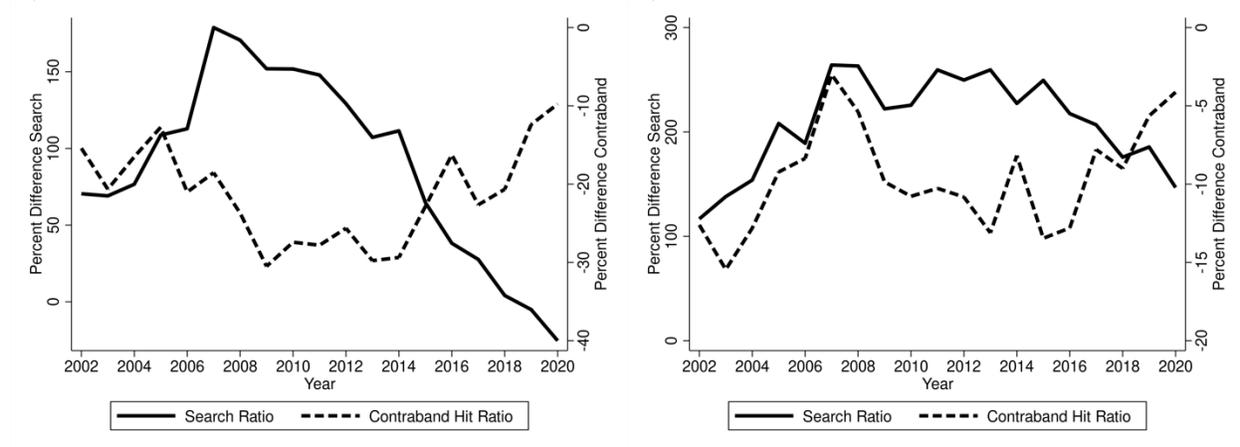
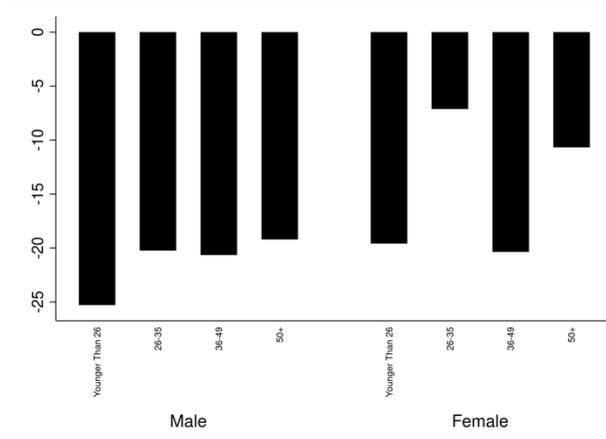
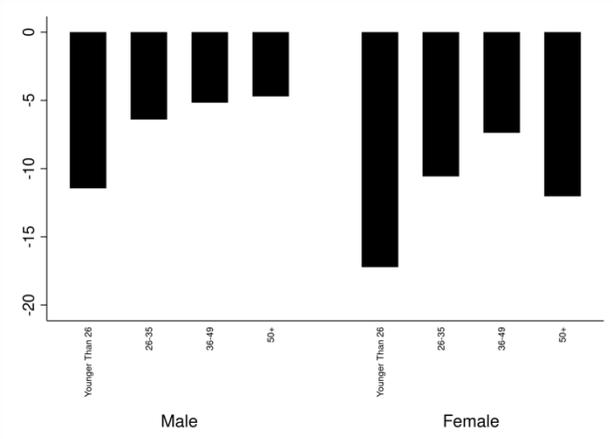


Figure 5.5. Percent Difference across Race in Likelihood of Finding Contraband, by Gender and Age

A) Consent



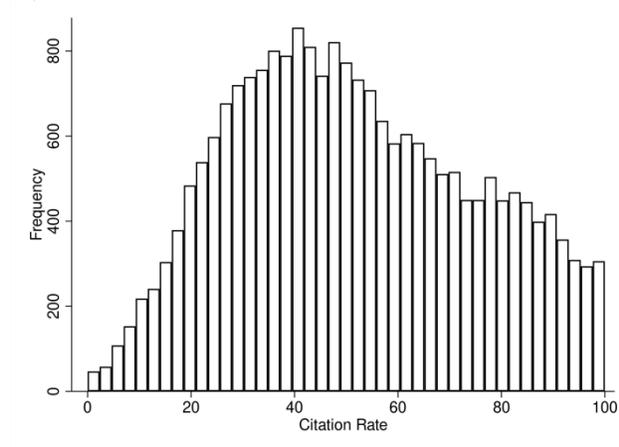
B) Probable Cause



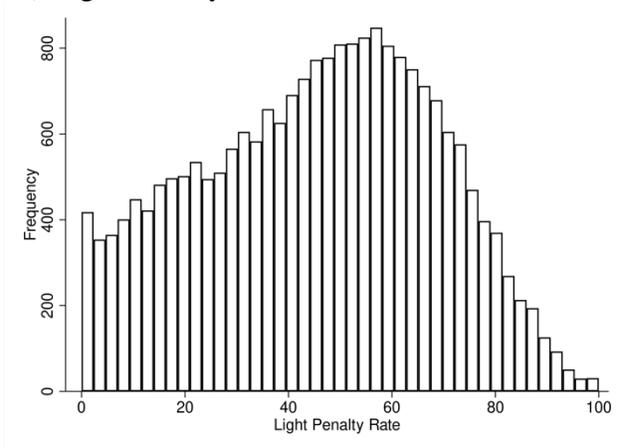
Note: figures show the percent difference in the likelihood of finding contraband after consent or probable cause searches on black versus white motorists of different genders and ages.

Figure 6.1. Distributions of Stop Outcomes, by Officer

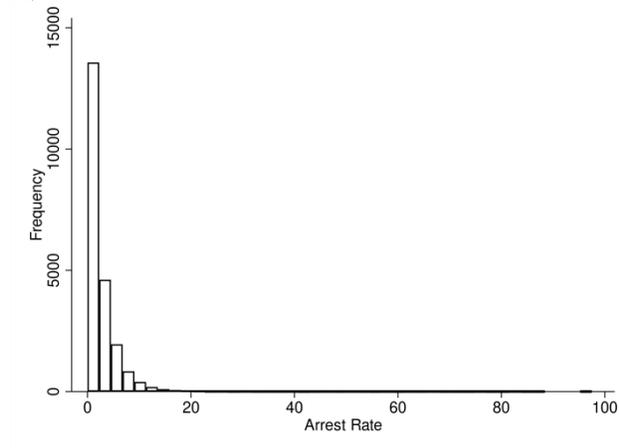
A) Citation Rates



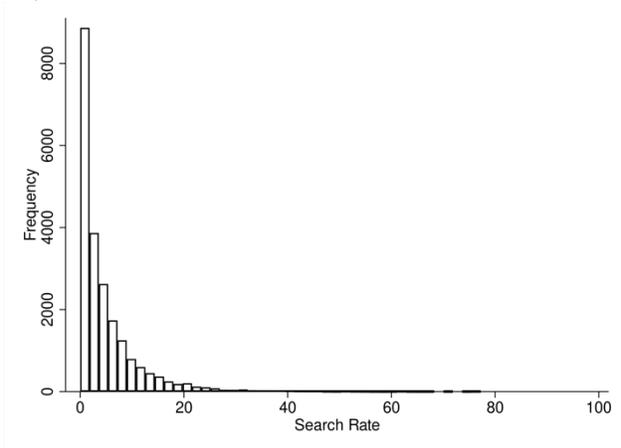
B) Light Penalty Rates



C) Arrest Rates

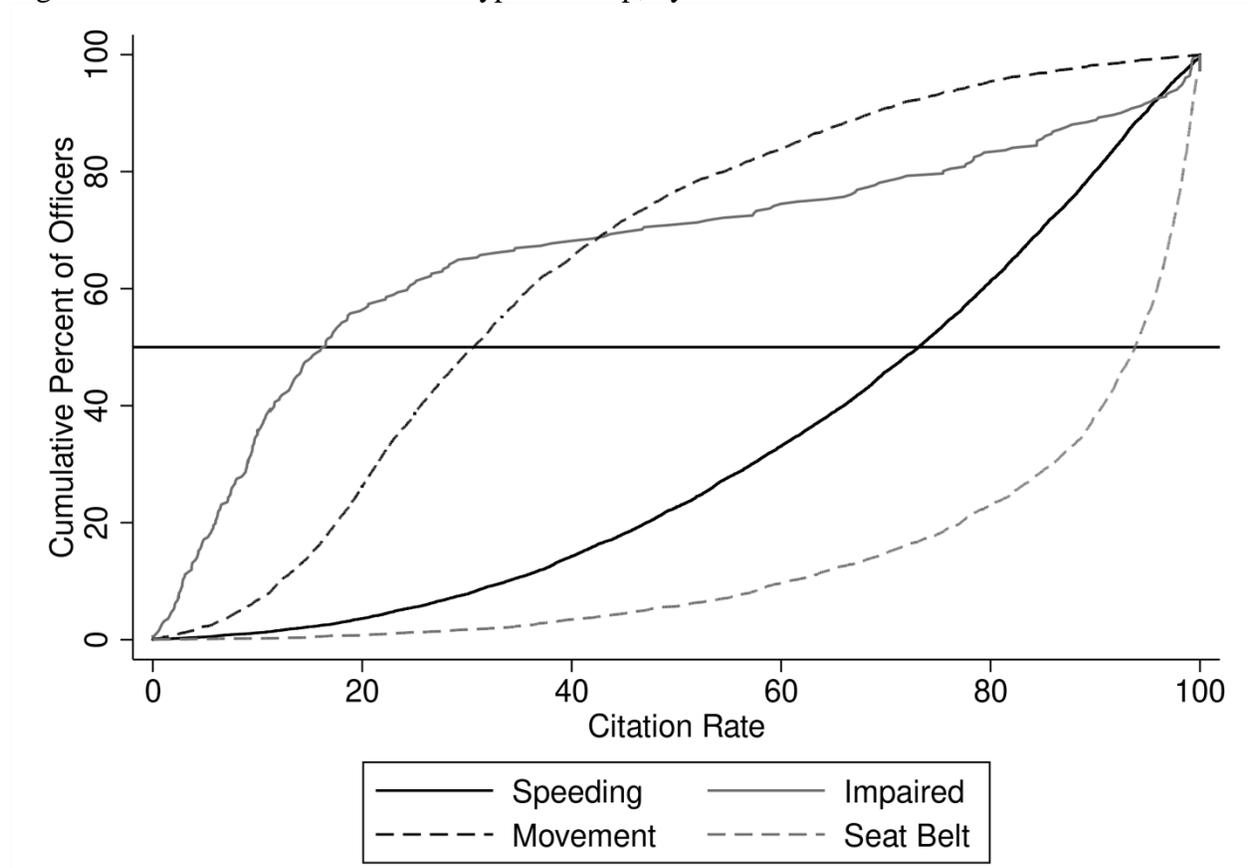


D) Search Rates



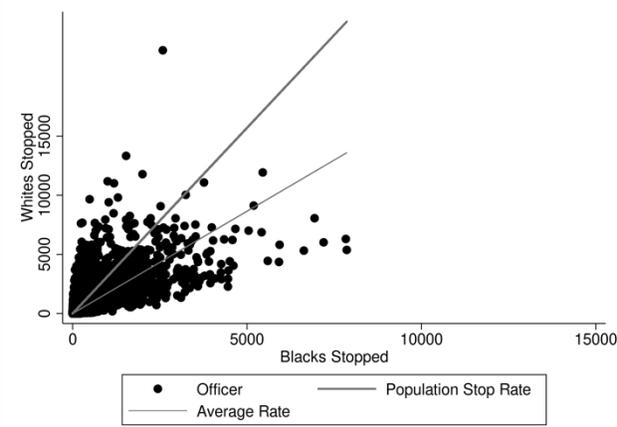
Note: Figures are based on the 20,887 officers who stopped at least 100 motorists.

Figure 6.2. Citation Rates for Four Types of Stop, by Officer

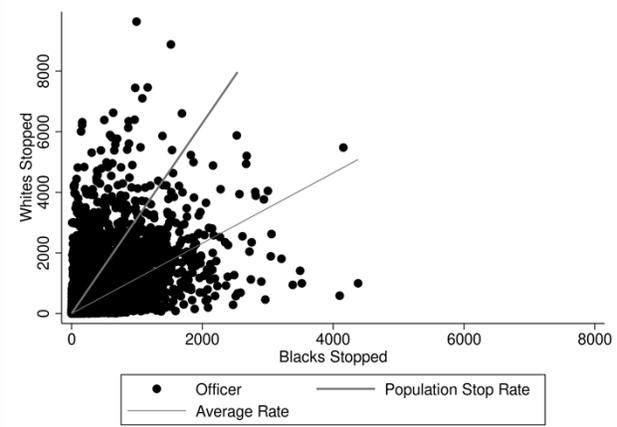


Note: Each density plot includes every officer who has stopped at least 100 drivers for the indicated purpose. The numbers included are 10,528 for speeding, 245 for driving impaired, 3,562 for safe movement, and 3,310 for seat belt violations.

Figure 6.3. Black and White Stops, by Officer
A) Safety



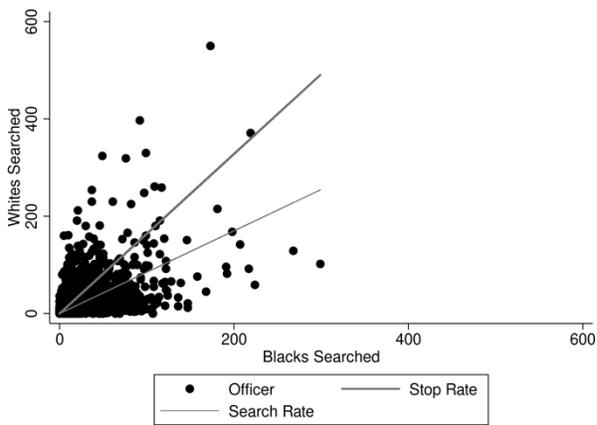
B) Investigatory



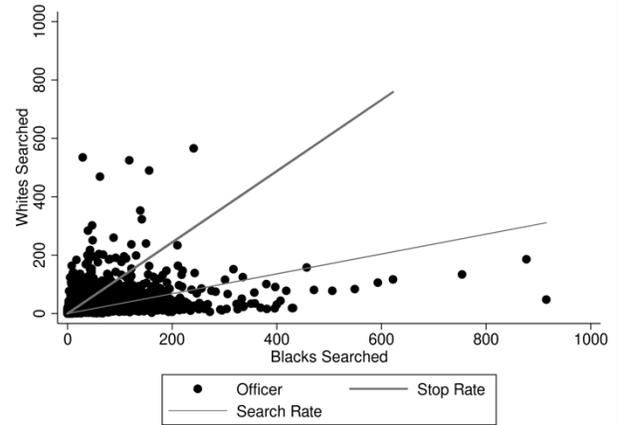
Note: Officers stop 1.64 whites for each black for safety stops and 1.23 whites for each black for investigatory stops. The population share is 3.14 whites for each black. N = 21,884 officers who stopped at least 100 motorists.

Figure 6.4. Black and White Searches, by Officer

A) Safety

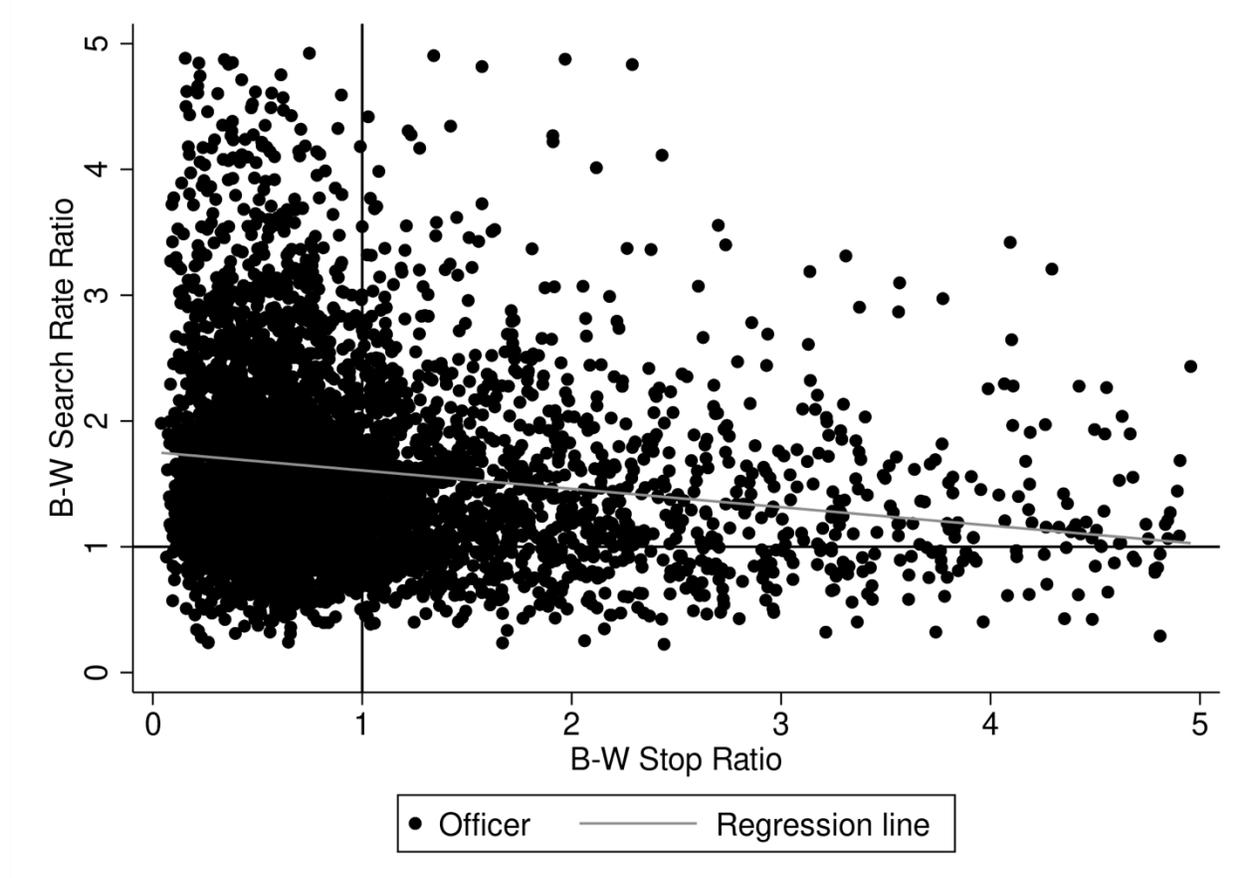


B) Investigatory



Note: Officers search 0.85 whites for each black after safety stops and 0.34 whites for each black after investigatory stops. $N = 4,822$ officers with at least 100 stops and a minimum of 10 searches of whites and 10 searches of blacks. The safety plot excludes one officer with greater than 800 searches of whites for visual clarity.

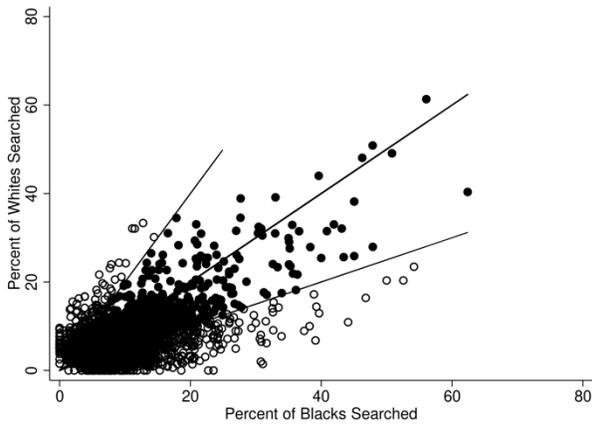
Figure 6.5. Black-white Stop and Search Ratios, by Officer



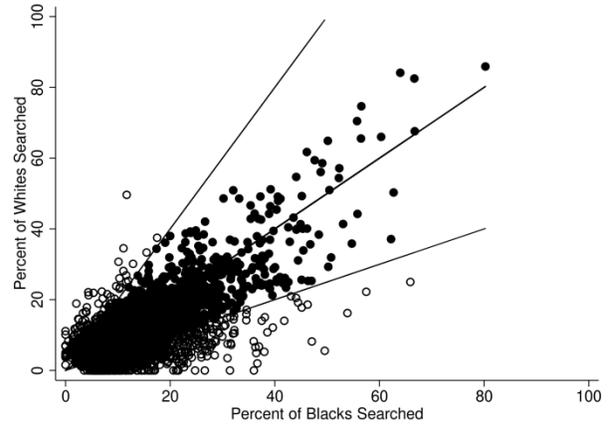
Note: Based on 4,620 officers with at least 100 stops and 10 searches of black and white motorists. Excludes 28 officers with B-W search ratios above 62 and 140 with stop ratios above 5 for the purposes of visual clarity. Including these outlying officers does not substantively change the results. Slope of regression line is statistically significant at -0.146 with an adjusted R-squared of 0.025.

Figure 6.6. High Disparity Officers

A) Safety



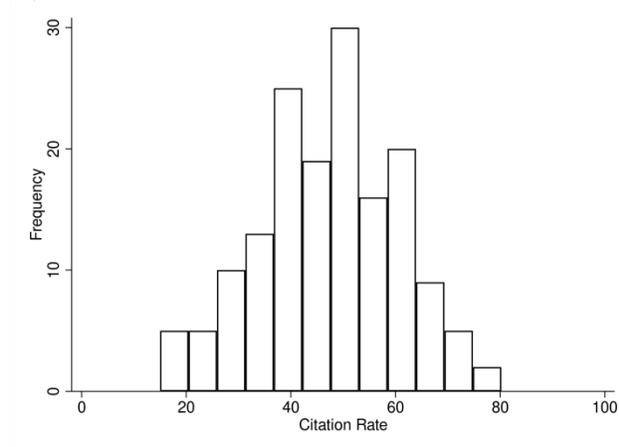
B) Investigatory



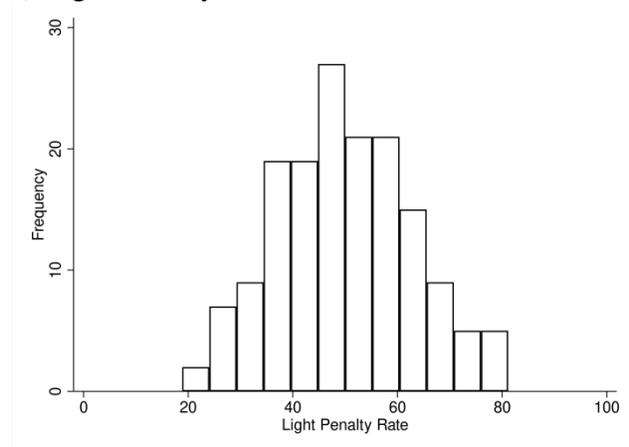
Note: Among safety stops, the figure includes 2,843 officers with a minimum of 50 white stops, 50 black stops, and a search rate above the state average of 3.73. The hollow circles indicate high disparity officers. Of these officers, 909 search blacks at more than twice the rate that they search whites; 218 officers search whites at more than twice the rate that they search blacks. For investigatory stops, the figure includes 2,969 officers with a minimum of 50 white stops, 50 black stops, and a search rate above the state average of 6.57. The hollow circles indicate high disparity officers. Of these officers, 767 search blacks at more than twice the rate that they search whites; 94 officers search whites at more than twice the rate that they search blacks. Because investigatory stops have higher search rates in general, the two parts of the figure are scaled differently.

Figure 6.7. Distribution of Search Rates, by Agency

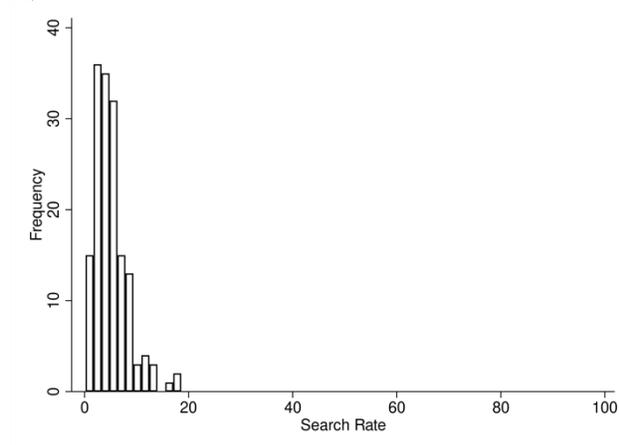
A) Citation Rate



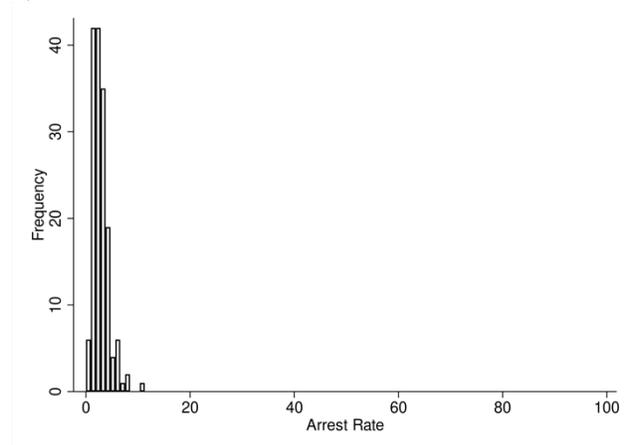
B) Light Penalty Rate



C) Search Rate



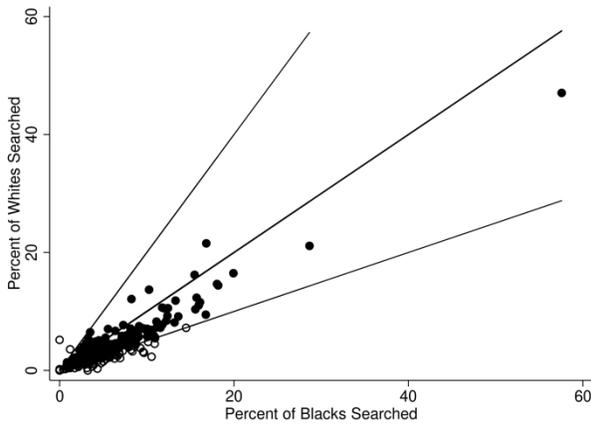
D) Arrest Rate



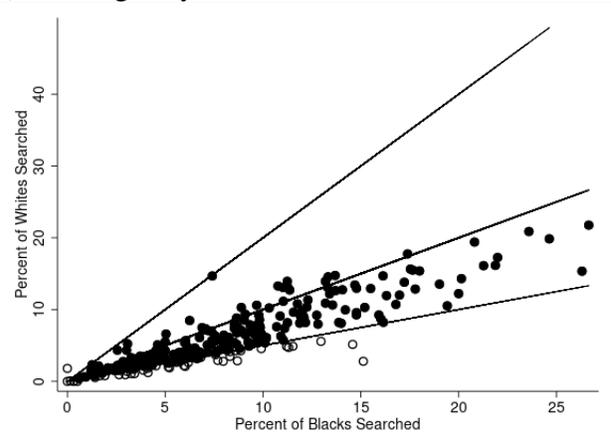
Note: based on the 159 agencies that stopped at least 10,000 motorists.

Figure 6.8. High Disparity Agencies

A) Safety

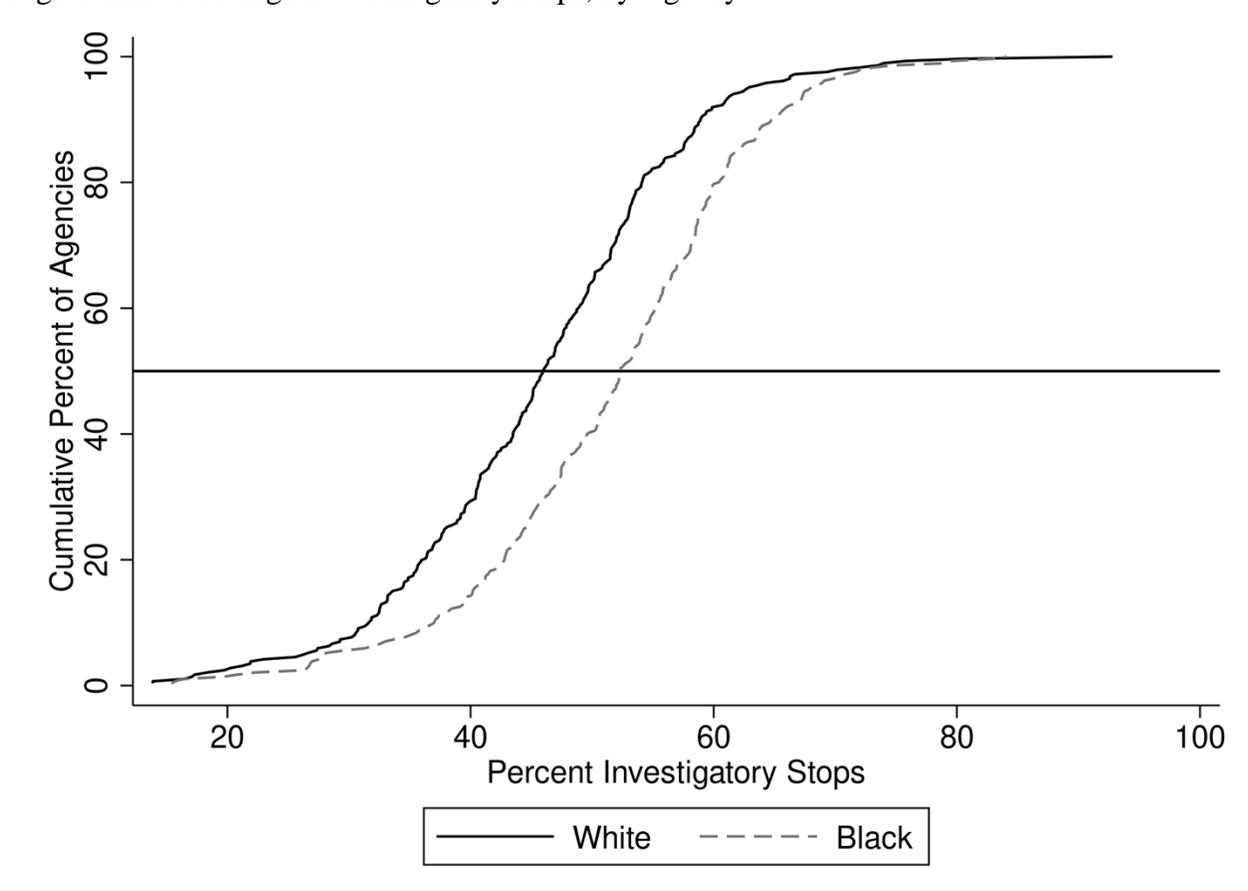


B) Investigatory



Note: For safety stops, the figure includes 267 agencies with a minimum of 50 white stops and 50 black stops. The hollow circles indicate high disparity agencies. Of these agencies, 68 search blacks at more than twice the rate that they search whites; 6 agencies search whites at more than twice the rate that they search blacks. For investigatory stops, the figure includes 265 agencies with a minimum of 50 white stops and 50 black stops. The hollow circles indicate high disparity agencies. Of these agencies, 43 search blacks at more than twice the rate that they search whites; 2 agencies search whites at more than twice the rate that they search blacks.

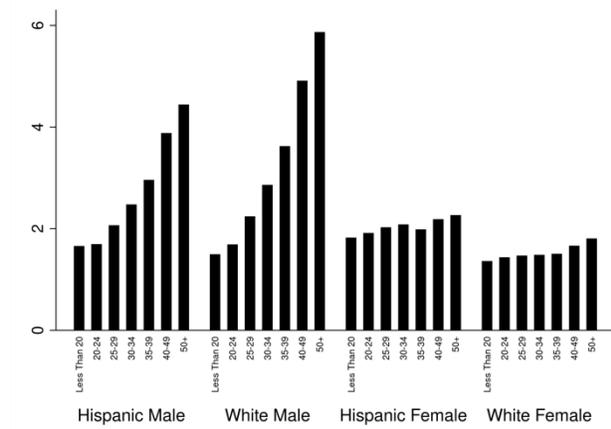
Figure 6.9. Percentage of Investigatory Stops, by Agency



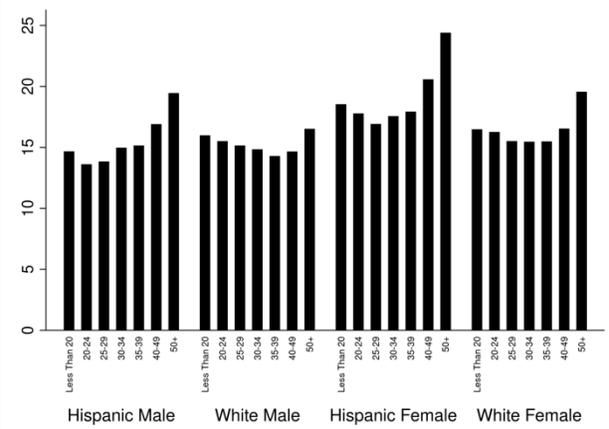
Note: based on the 286 agencies with a minimum of 50 stops of whites and 50 stops of blacks.

Figure 7.1. Outcome Rates by Ethnicity, Gender, and Age Group

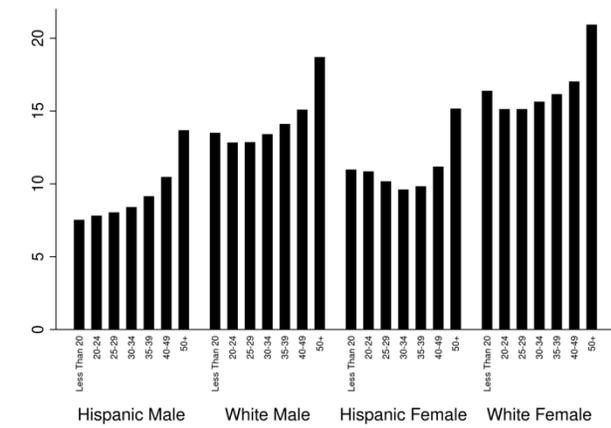
a) No action taken



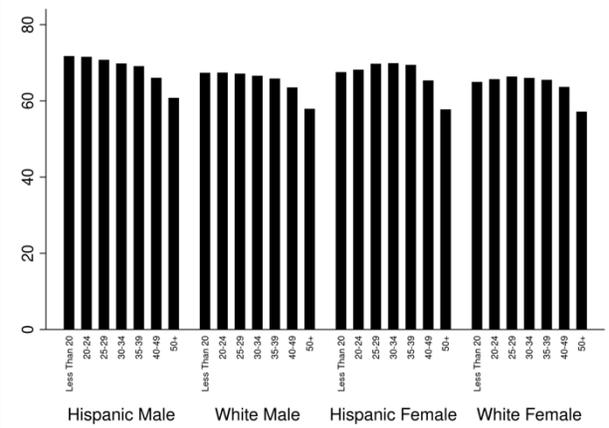
b) Verbal warning



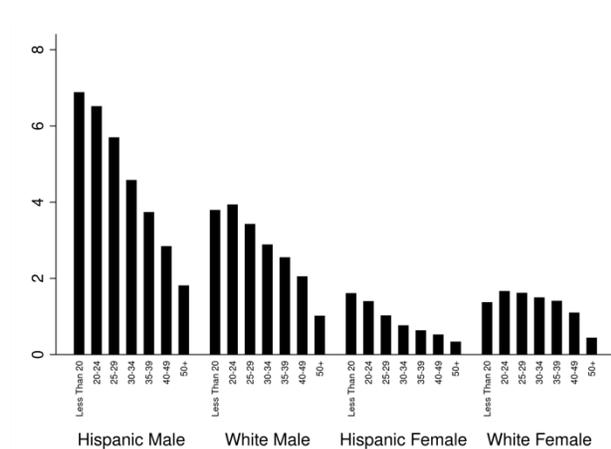
c) Written warning



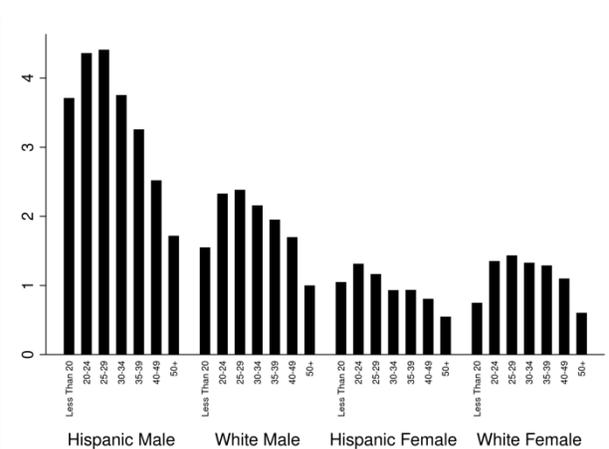
d) Citation



e) Search



f) Arrest



Note: Based on 707,772 instances of no action; 4,454,338 verbal warnings; 3,521,989 written warnings; 15,764,443 citations; 500,040 arrests; 763,343 searches.

Figure 7.2. Percent Difference in the Likelihood of Search and Contraband
 A) Consent
 B) Probable cause

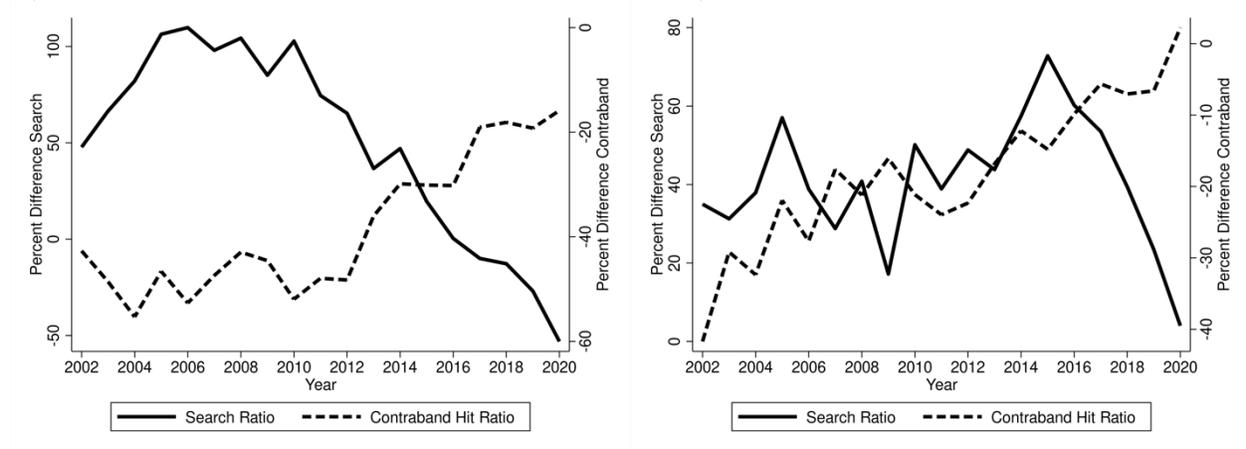
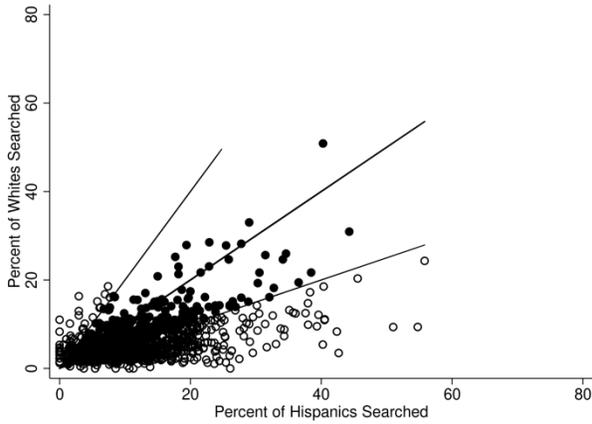
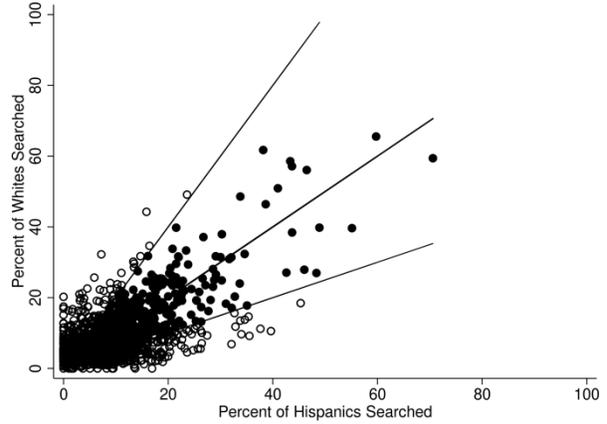


Figure 7.3. White and Hispanic Search Rates Compared

A) Safety



B) Investigatory



Note: The safety figure includes 982 officers with a minimum of 50 white stops, 50 Hispanic stops, and a search rate above the state average of 3.73. The hollow circles indicate high disparity officers. Of these officers, 458 search Hispanics at more than twice the rate that they search whites; 49 officers search whites at more than twice the rate that they search Hispanics. The investigatory figure includes 1,061 officers with a minimum of 50 white stops, 50 Hispanic stops, and a search rate above the state average of 6.57. The hollow circles indicate high disparity officers. Of these officers, 153 search Hispanics at more than twice the rate that they search whites; 174 officers search whites at more than twice the rate that they search Hispanics.

Figure 8.1. Black Political Power

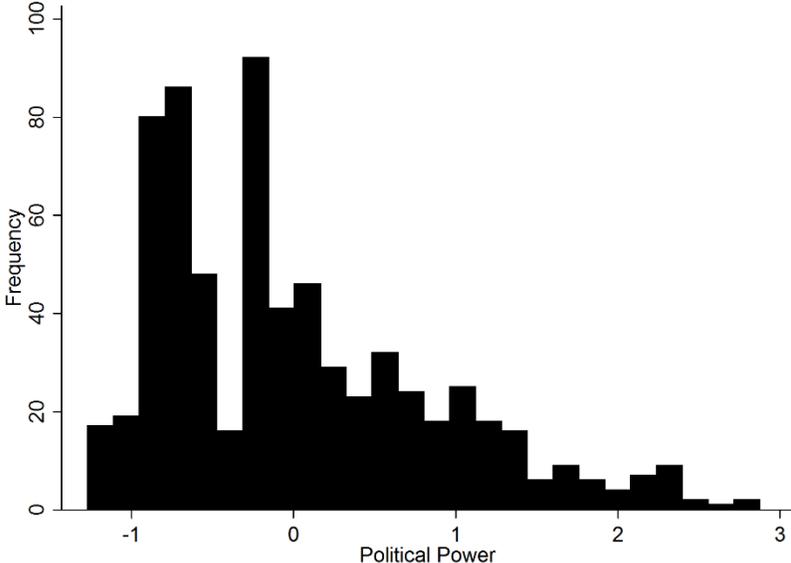
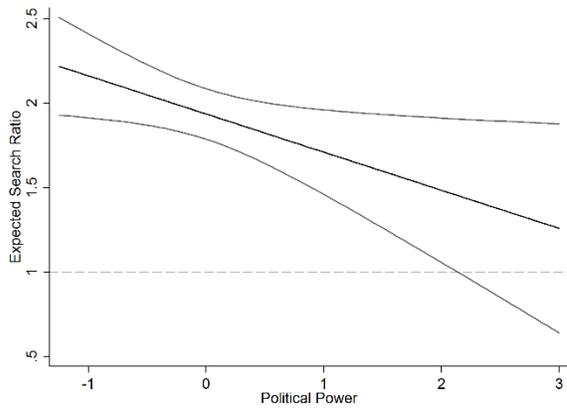
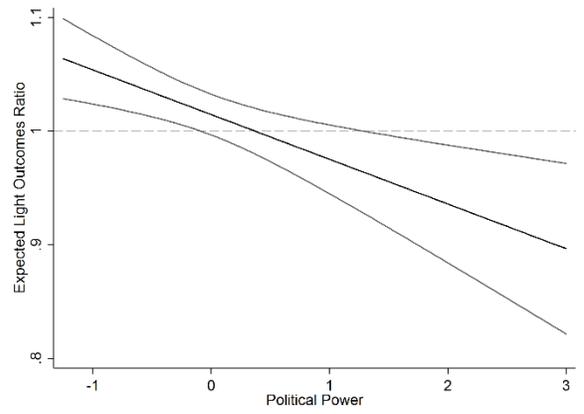


Figure 8.2. Effect of Black Political Power on Traffic Stop Outcomes

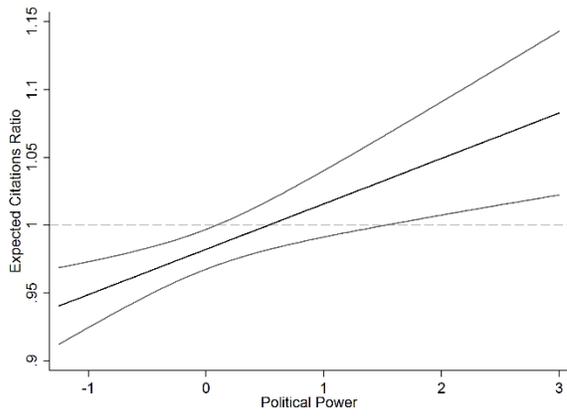
a. Searches



b. Light Outcomes



c. Citations



d. Arrests

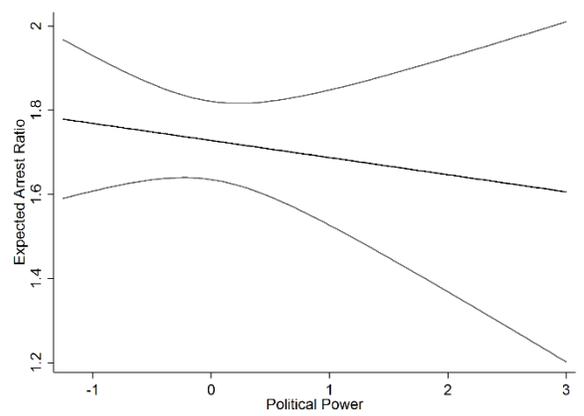
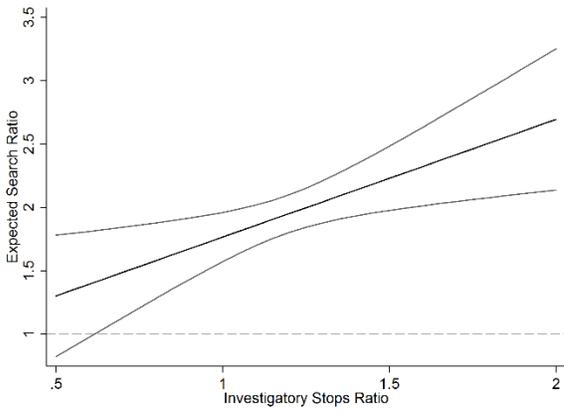
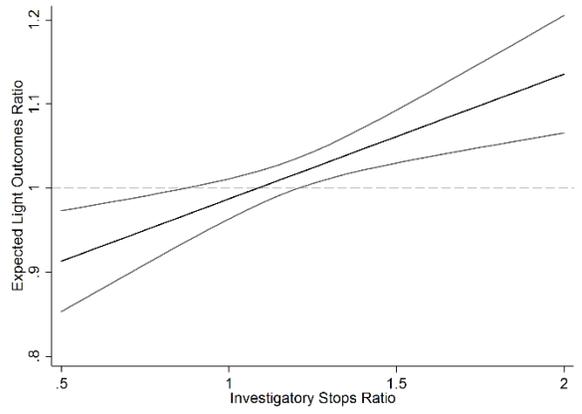


Figure 8.3. Effect of Investigatory Stops Ratio on Traffic Stop Outcomes

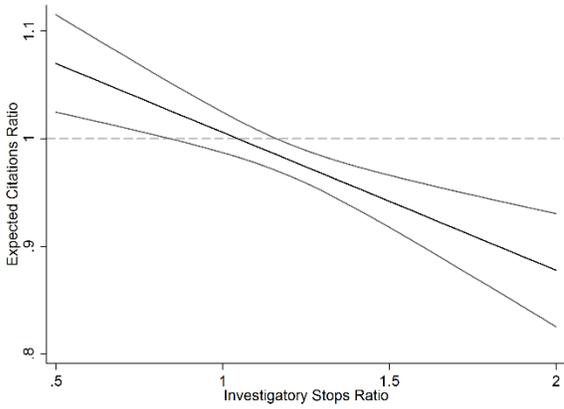
a. Searches



b. Light Outcomes



c. Citations



d. Arrests

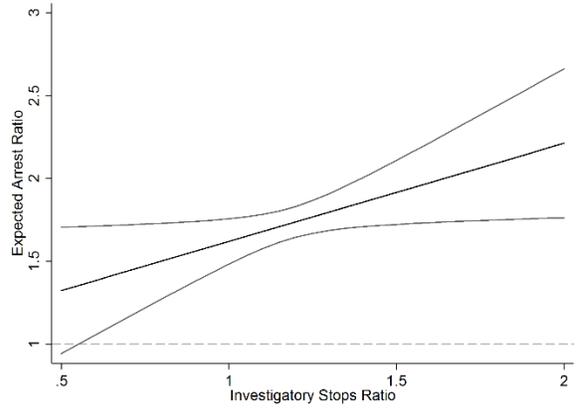


Figure 8.4. County Political Power Factor Scores

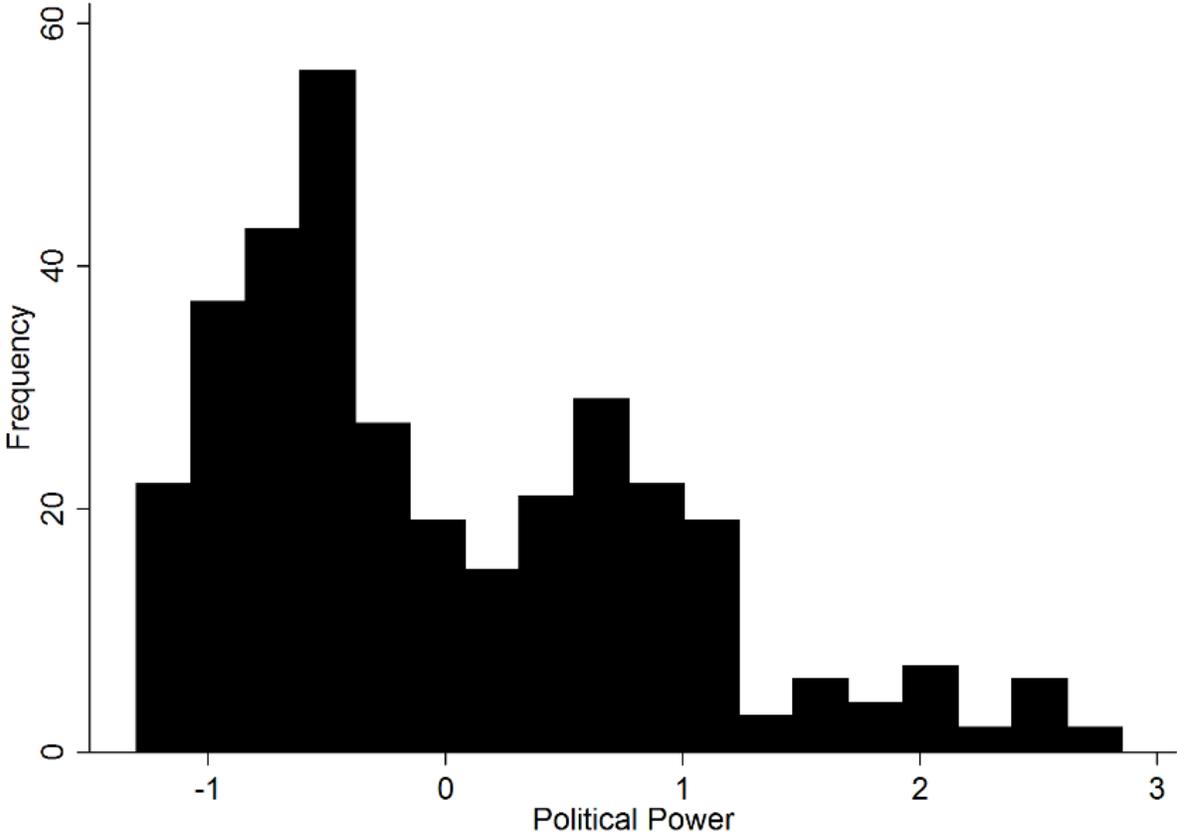
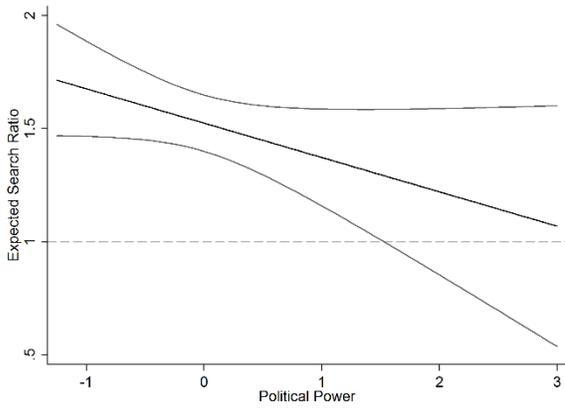
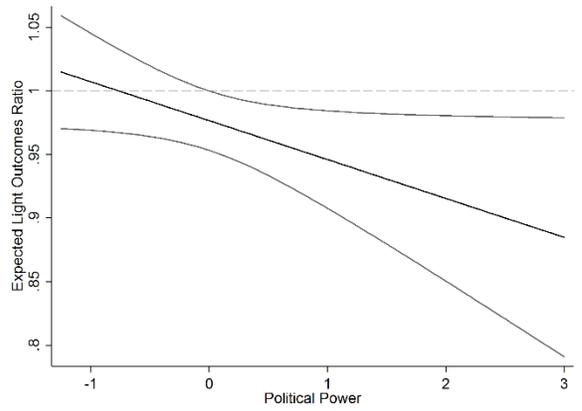


Figure 8.5. Effect of Black Political Power on Traffic Stop Outcomes (Sheriffs)

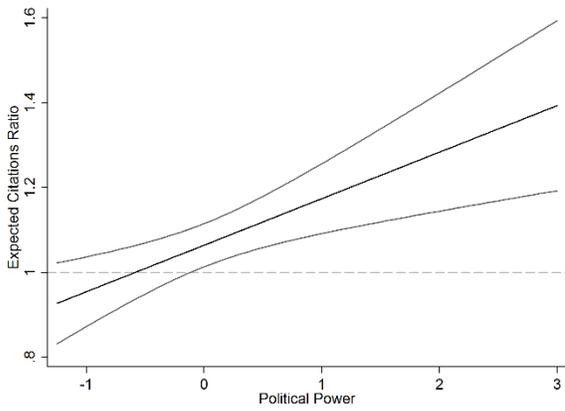
a. Searches



b. Light Outcomes



c. Citations



d. Arrests

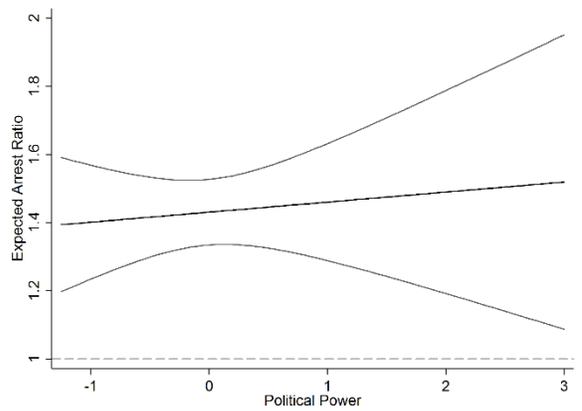
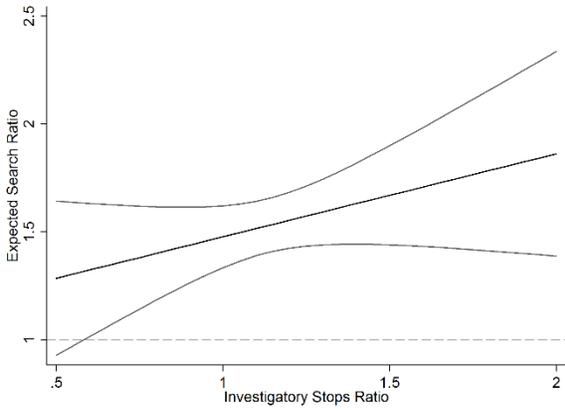
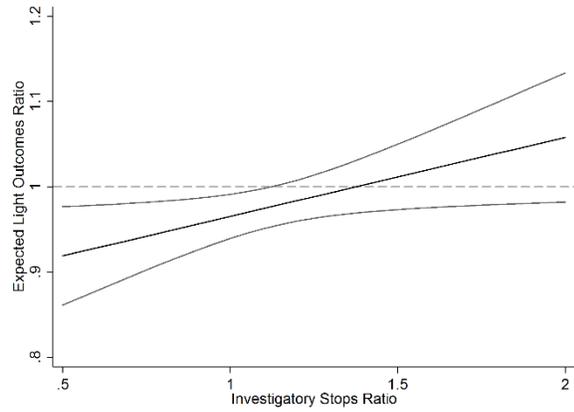


Figure 8.6. Effect of Investigatory Stops Ratio on Traffic Stop Outcomes (Sheriff's)

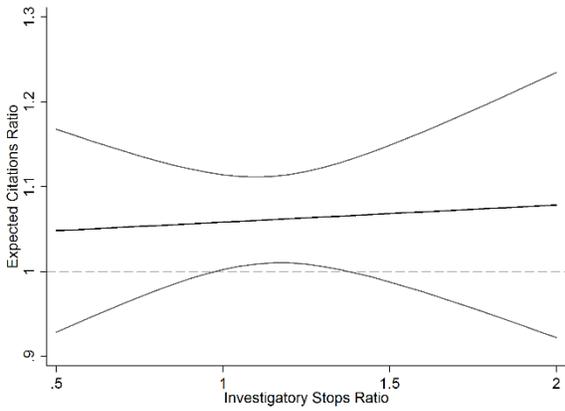
a. Searches



b. Light Outcomes



c. Citations



d. Arrests

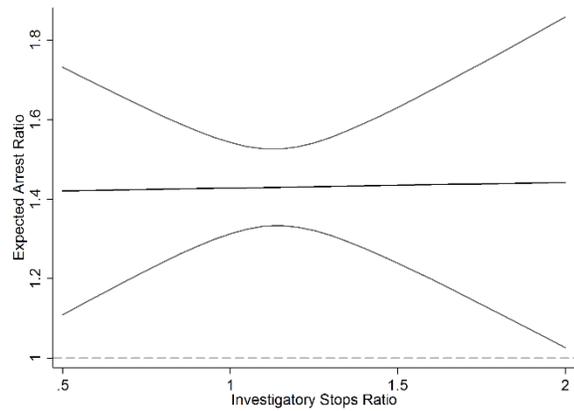
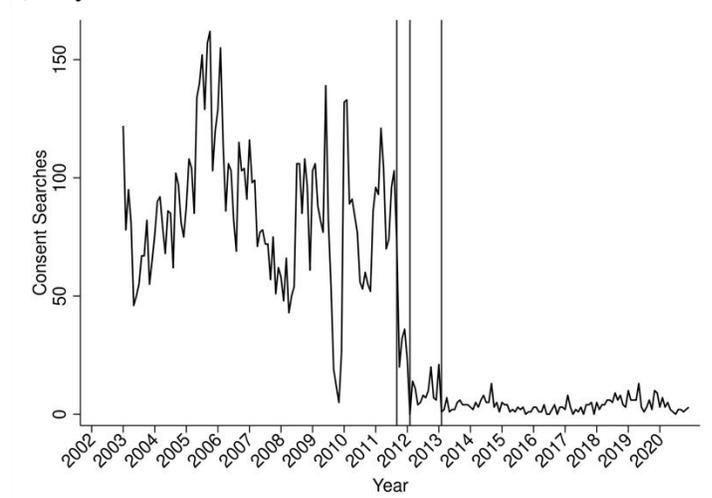
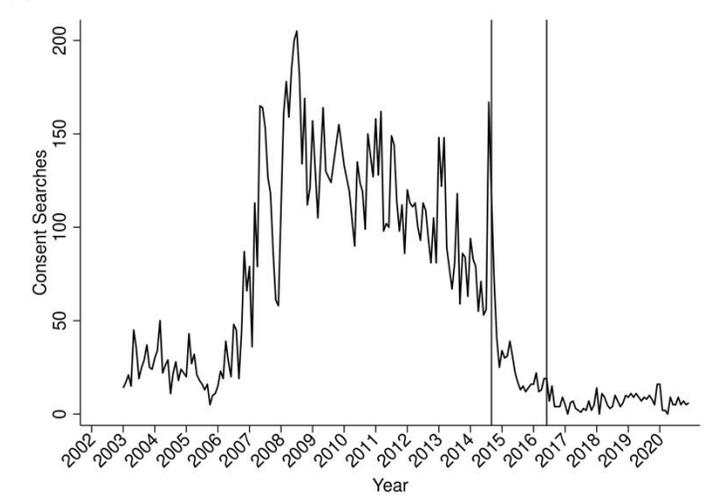


Figure 9.1. Consent Searches per Month in Three Cities

a) Fayetteville



b) Durham



c) Chapel Hill

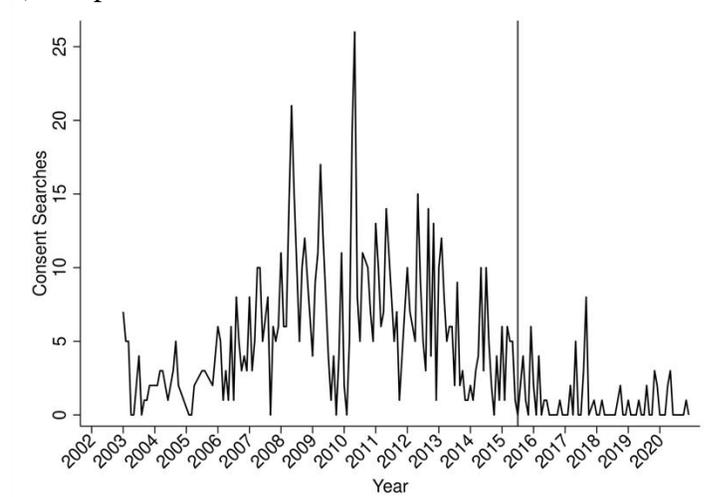
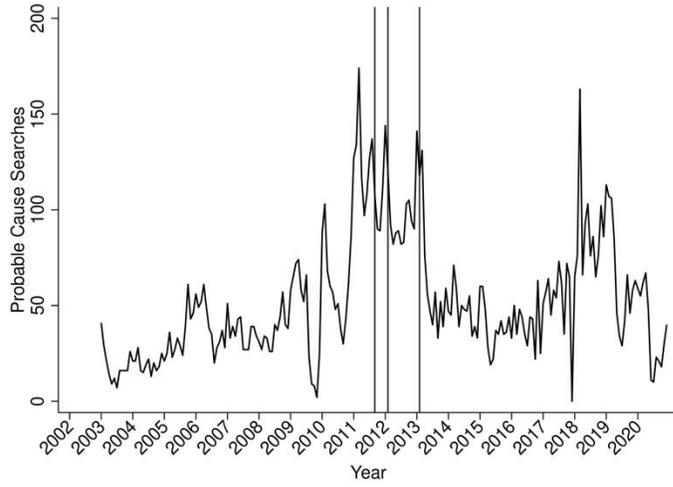
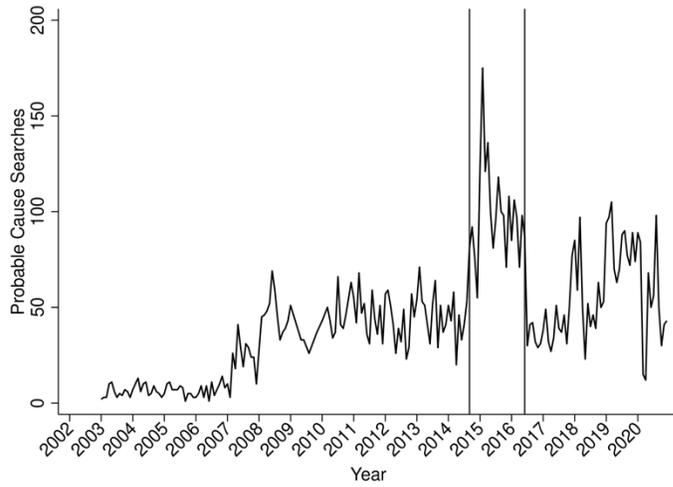


Figure 9.2. Probable Cause Searches per Month in Three Cities

a) Fayetteville



b) Durham



c) Chapel Hill

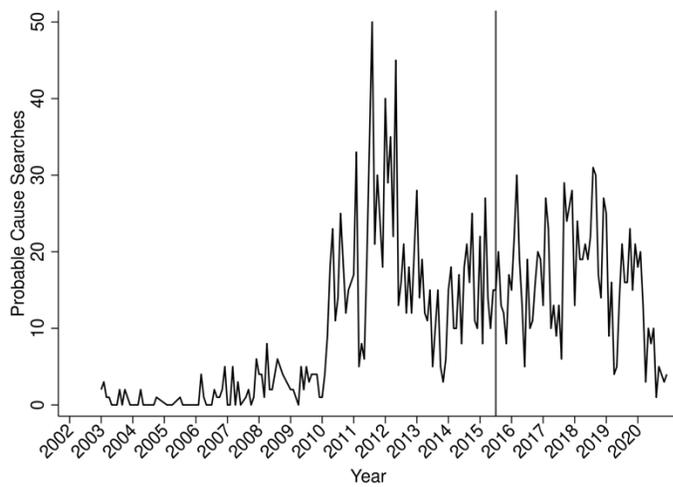
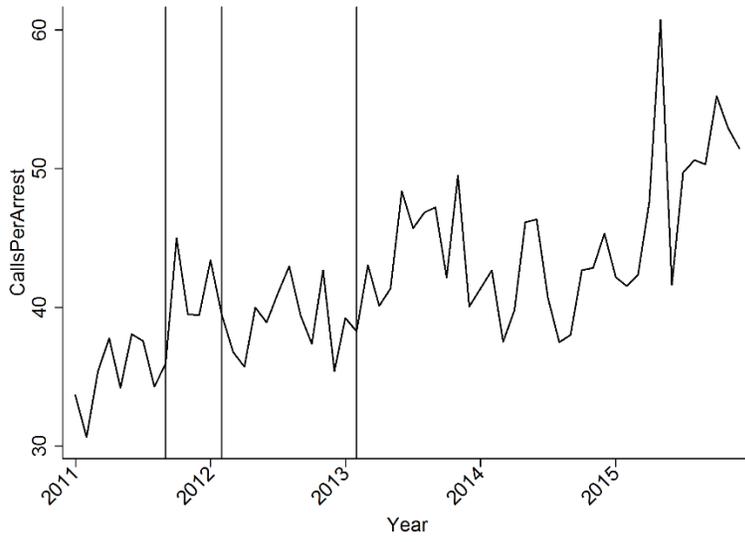


Figure 9.3. Frequency of Calls for Service (Adjusted for Crime) and Arrests

a) Adjusted Calls for Service



b) Arrests

