

Analysis of Hispanic-White Differences in Traffic Stops and Searches in Wilmington, NC, 2002-2013

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Table 1. Overview of the Data

Data Subsets	Observations
Total stops	154,261
-2014	8,227
-Passengers	3,362
-Checkpoint stops	168
Stops for analysis	142,714
Searches	6,909

Search Rate = 4.84

Figure 1. Number of Traffic Stops per Year

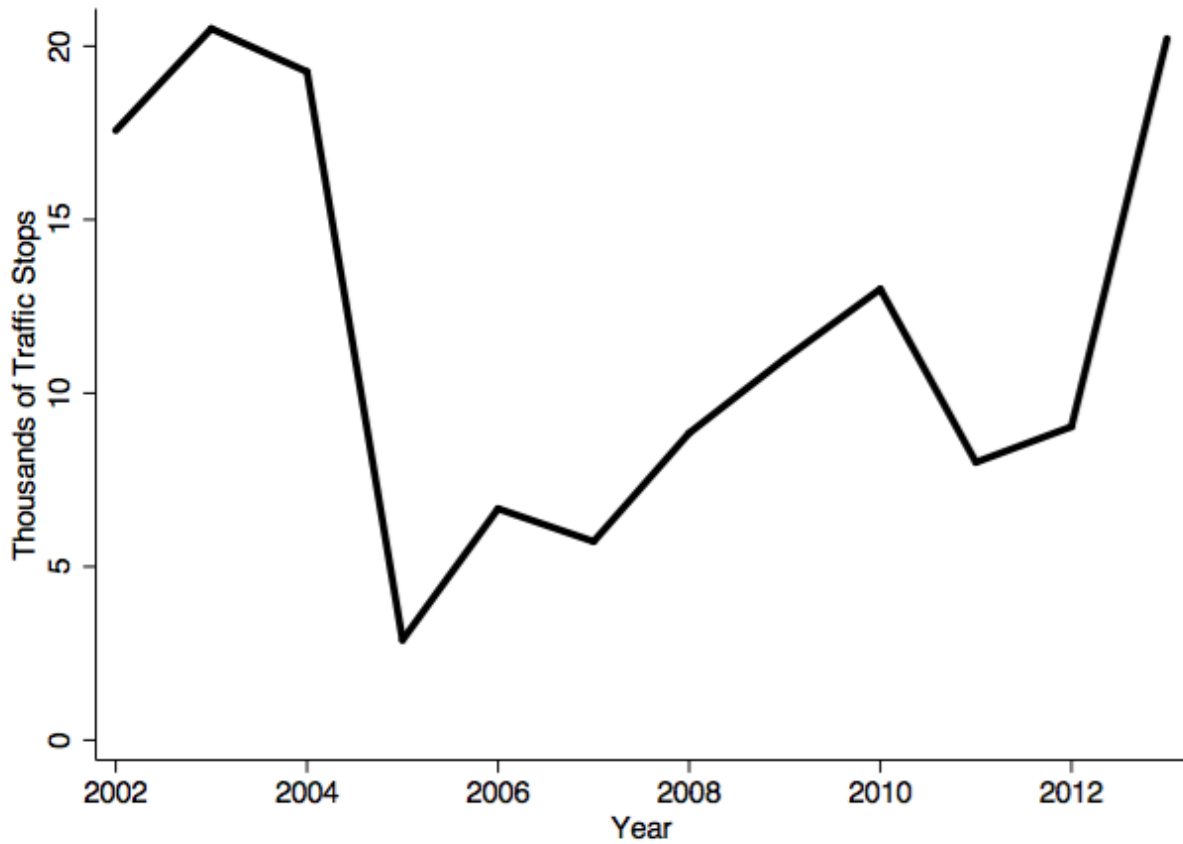


Figure 2. Ethnic Composition of Traffic Stops by Year

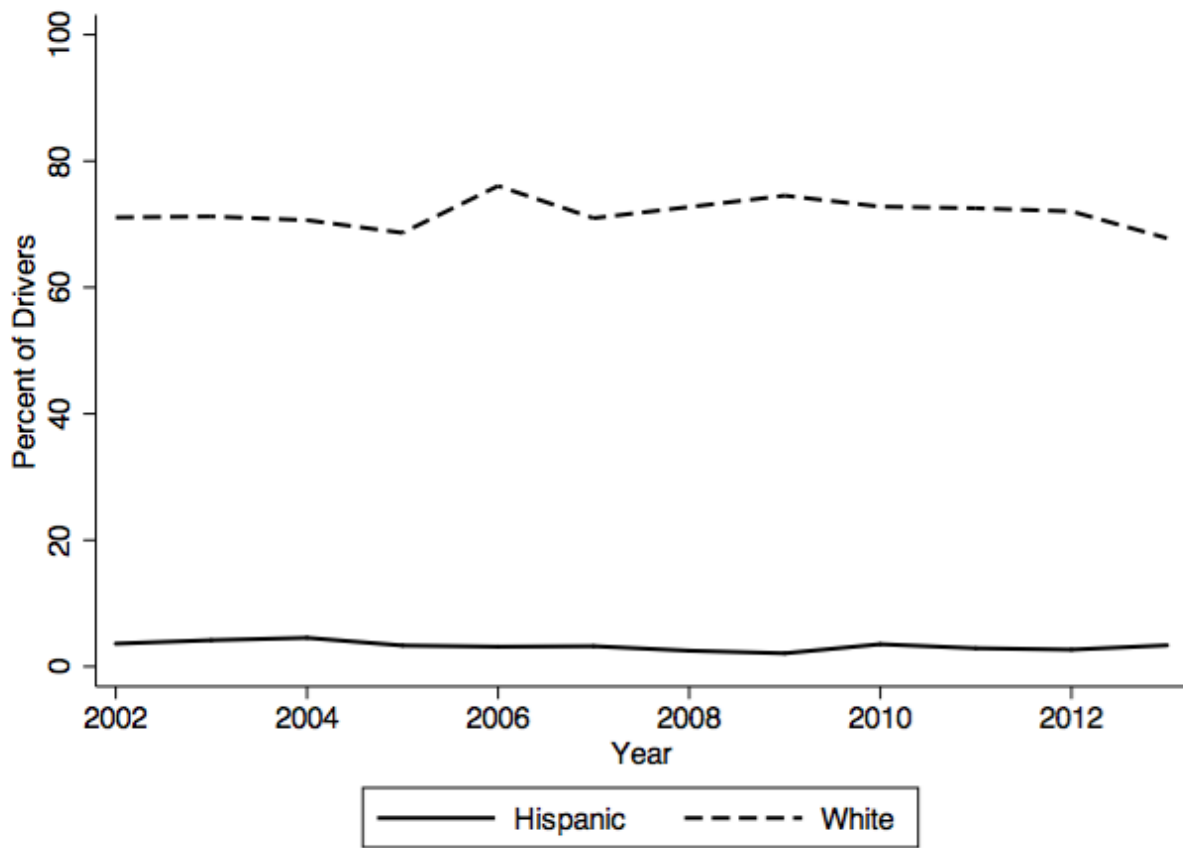


Table 2. Ethnic Composition of Traffic Stops by Purpose, Drivers

Purpose	Number	Percent	
		White	Hispanic
Total Stops	142,714	73.97	3.44
Speed Limit	55,173	80.85	2.87
Stop Light/Sign	9,378	74.33	3.60
Driving Impaired	1,198	81.37	9.93
Safe Movement	9,392	74.17	4.16
Vehicle Equipment	15,583	60.84	4.55
Vehicle Regulatory	34,126	71.11	2.94
Seat Belt	6,977	74.27	2.06
Investigation	4,435	59.57	5.91
Other Vehicle	6,452	68.42	5.61

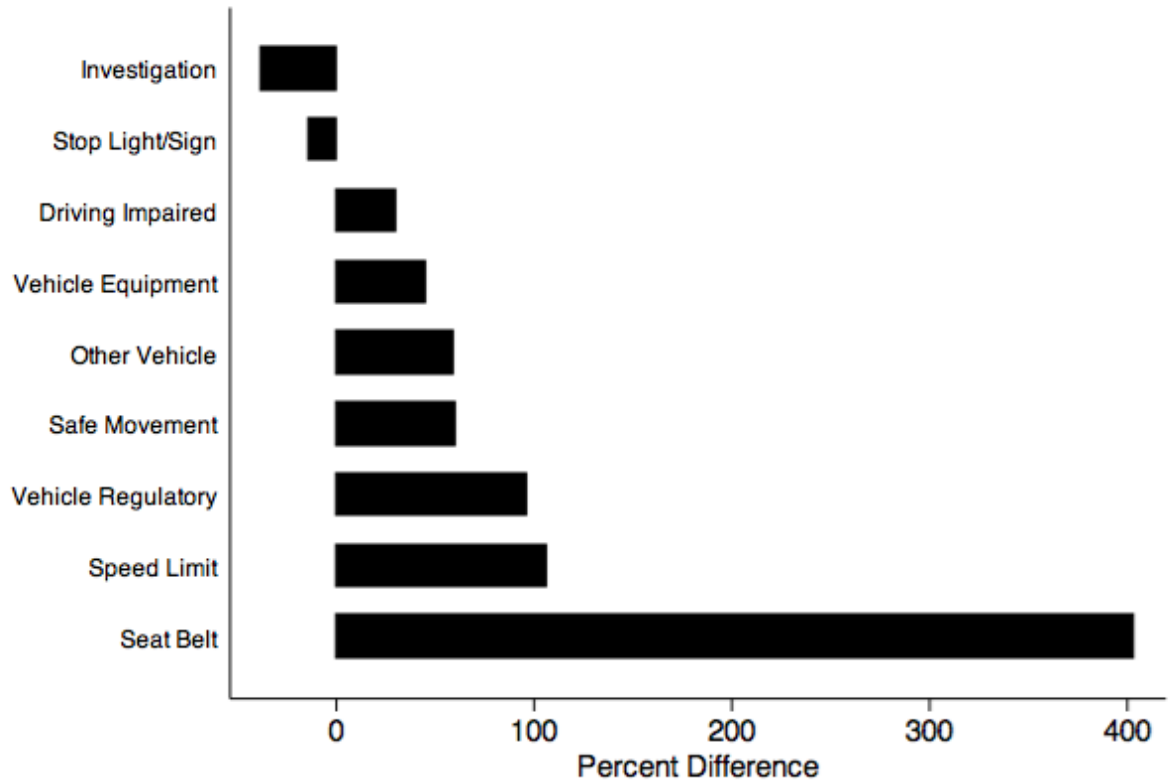
Note: Includes only drivers. Excludes 168 checkpoint stops. Excludes 3,362 passengers.

Table 3. Percent Searched by Ethnicity and Purpose of Stop

Purpose	Number	% Total	% White	% His.	Ratio
					His.:White
Total Stops	142,714	-	73.97	3.44	-
Total Searches	6,909	4.84	3.51	7.08	2.02
Speed Limit	55,173	1.96	1.56	3.22	2.06
Stop Light/Sign	9,378	3.76	2.74	2.37	0.86
Driving Impaired	1,198	39.15	40.09	52.10	1.30
Safe Movement	9,392	7.22	6.38	10.23	1.60
Vehicle Equipment	15,583	7.96	5.72	8.32	1.45
Vehicle Regulatory	34,126	4.29	2.73	5.37	1.97
Seat Belt	6,977	4.10	2.07	10.42	5.03
Investigation	4,435	20.27	18.99	11.83	0.62
Other Vehicle	6,452	6.77	4.85	7.73	1.59

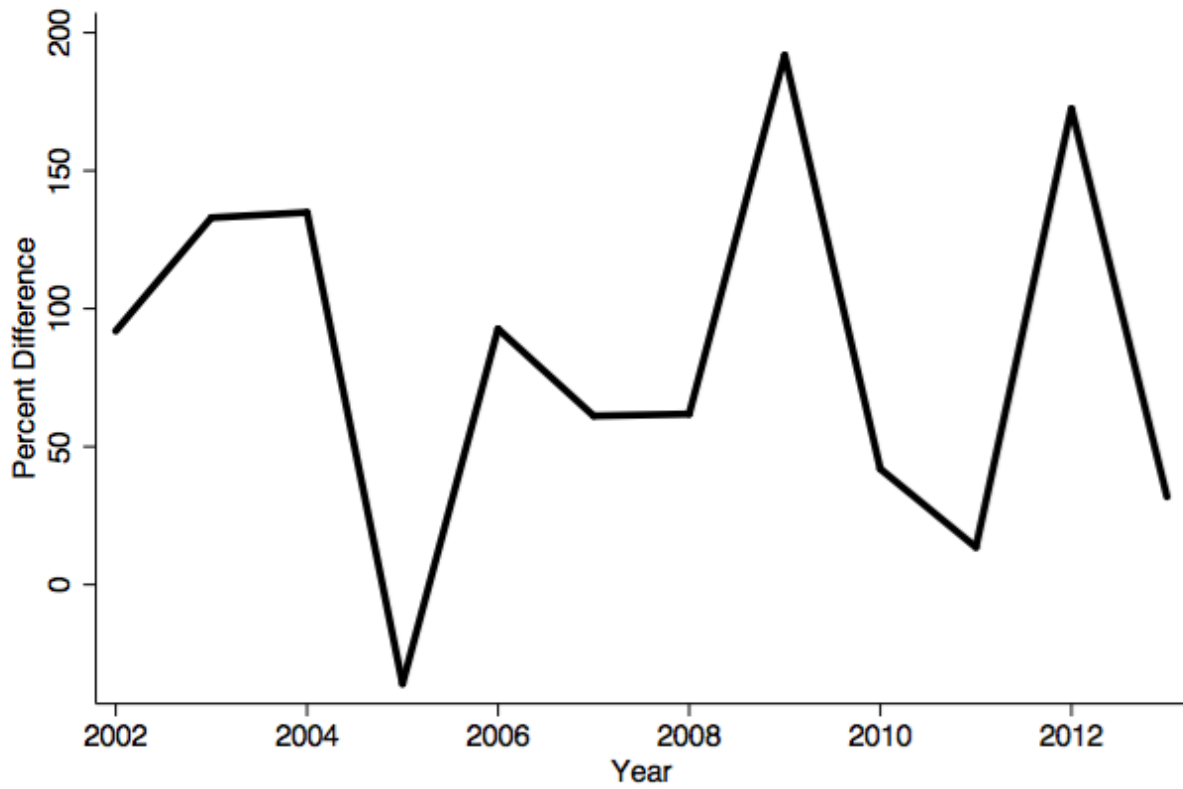
Note: See the appendix for this same table broken down for Men and Women.

Figure 3. Difference in Likelihood of Being Searched, by Ethnicity and Type of Stop



The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by purpose of stop.

Figure 4. Ethnic Differences in the Likelihood of Search



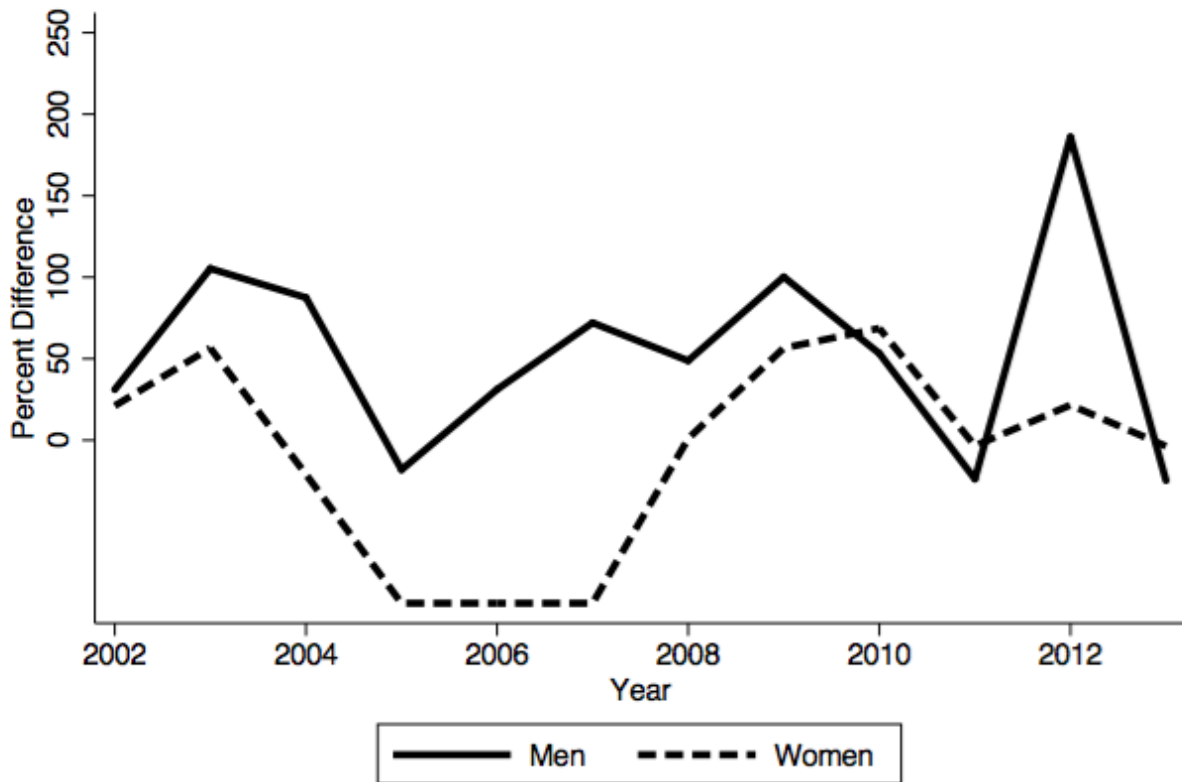
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites.

Figure 5. Ethnic Differences in the Likelihood of Search by Gender



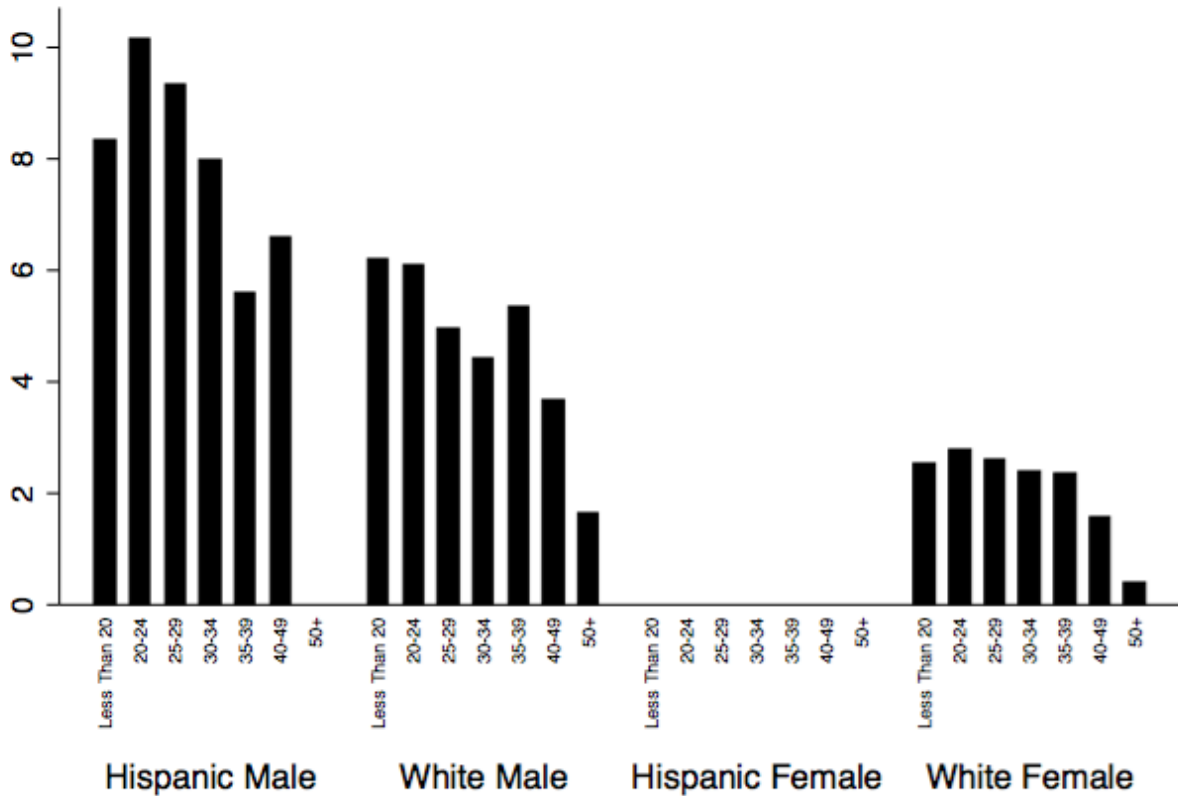
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by gender.

Figure 6. Ethnic Differences in the Likelihood of Search by Gender, for Drivers Under 30



The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by gender for motorists under 30.

Figure 7. Search Rates by Ethnicity, Gender, and Age Group



Based on 142,714 traffic stops from 2002 through 2013, and 6,909 searches. Overall rate of search: 4.84 percent.
 No data are presented for categories with fewer than 10 searches.

Figure 8. Number of Stops, by Ethnicity and Gender

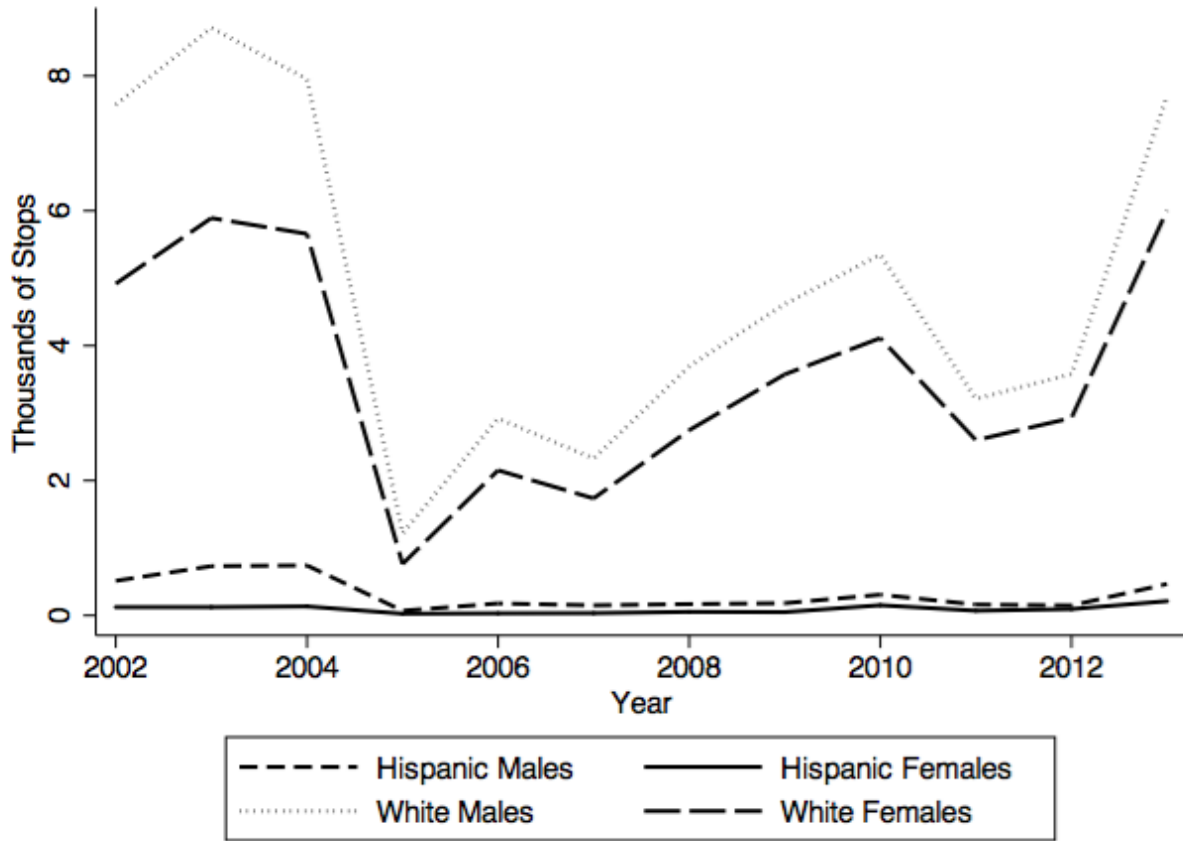


Figure 9. Percent of Stops Resulting in a Search, by Ethnicity and Gender

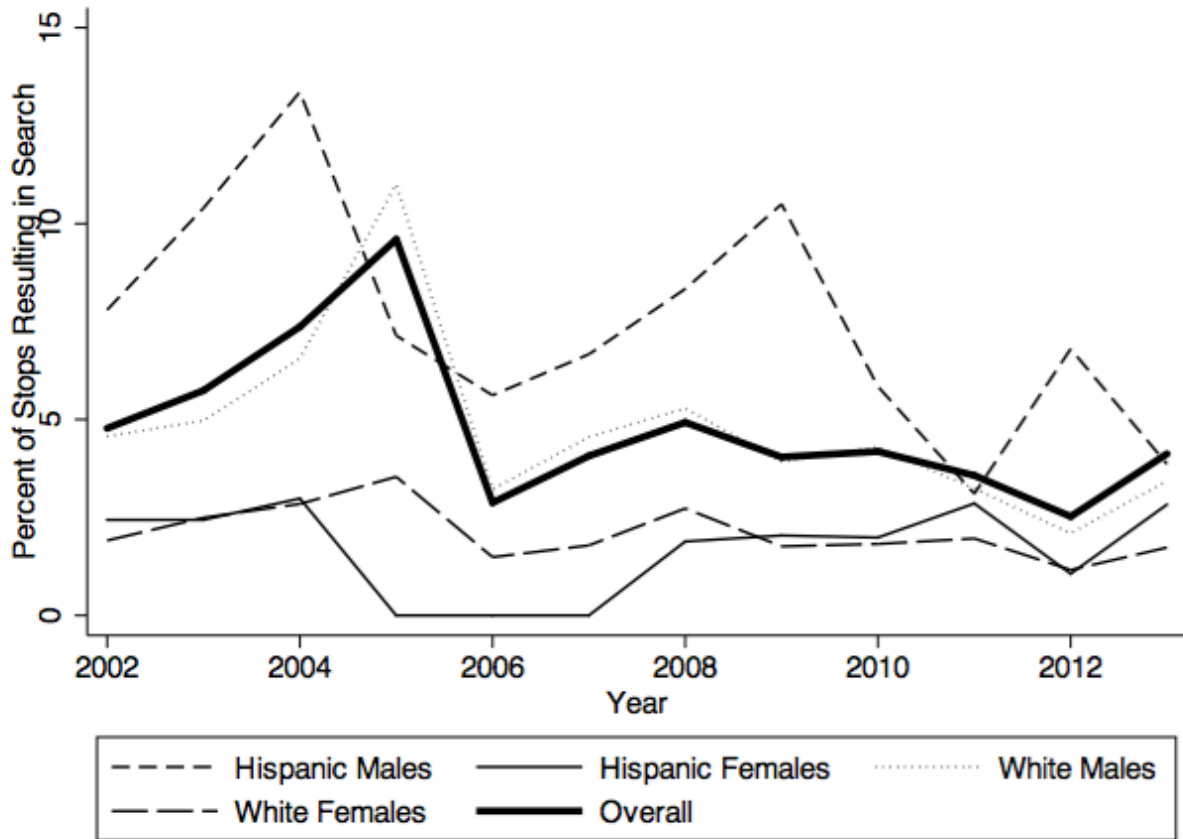


Table 4. Type of Search by Ethnicity

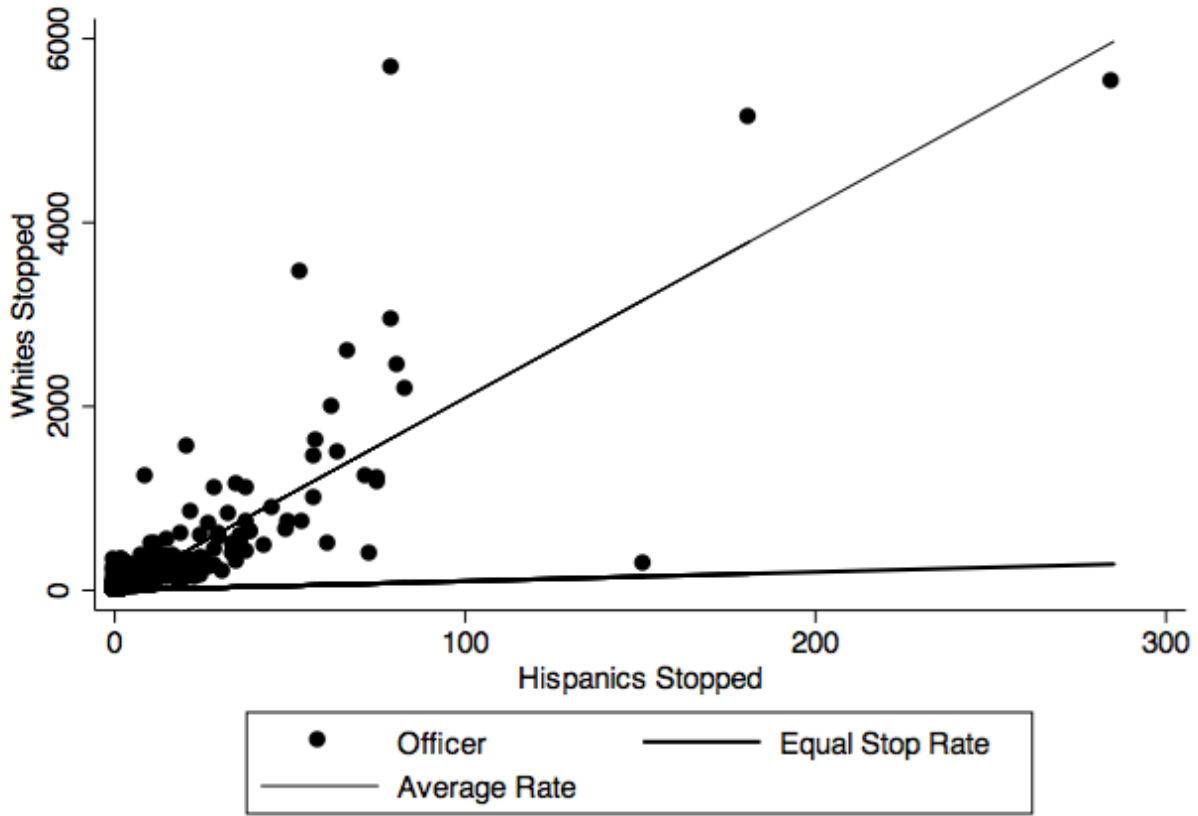
Search Type	Number	% Total	% White	% His.	Ratio
					His.:White
Total Stops	142,714	-	73.97	3.44	-
Total Searches	6,909	4.84	3.51	7.08	2.02
Consent	3,045	2.13	1.57	2.40	1.53
Search Warrant	27	0.02	0.01	0.06	6.00
Probable Cause	640	0.45	0.21	0.37	1.76
Incident to Arrest	3,061	2.14	1.68	4.07	2.42
Protective Frisk	136	0.10	0.04	0.18	4.50

Note: See the appendix for this same table separately for Men and Women.

Table 5. Distribution of Officer IDs by Stop

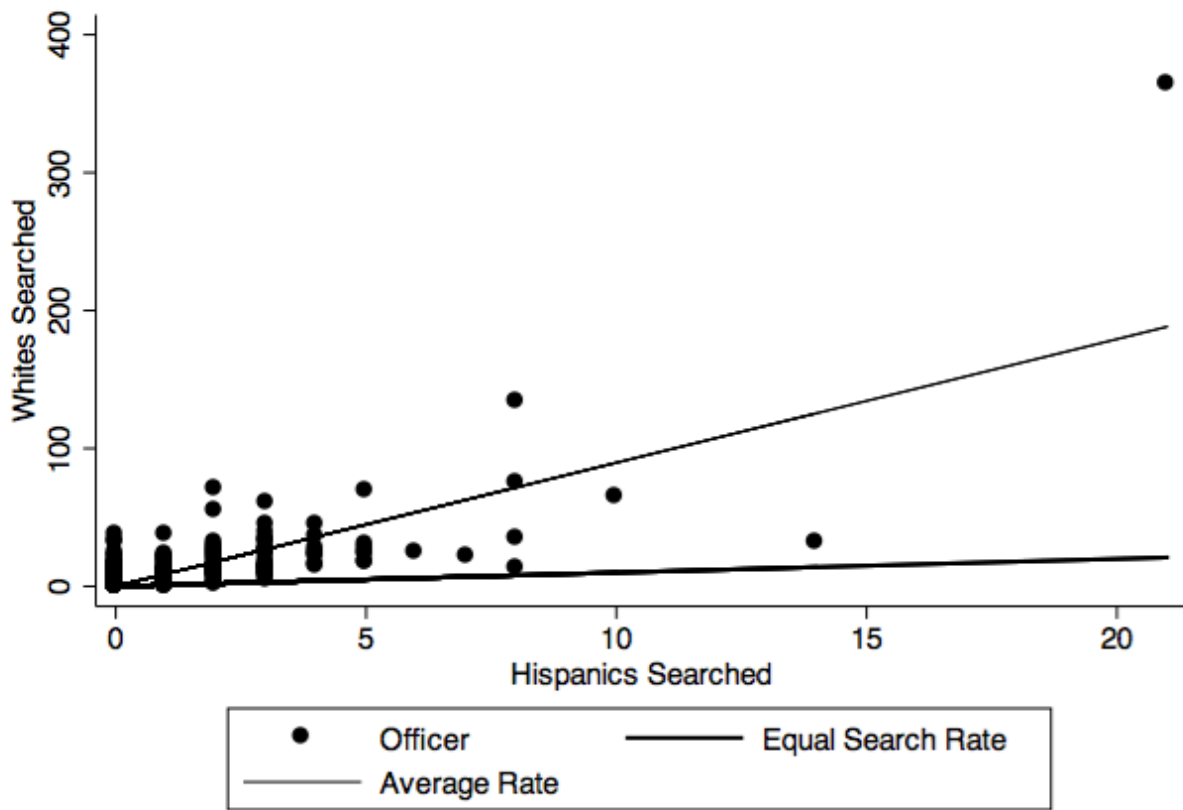
Number of Stops	Officers w/ this many Stops	Percent of Officers	Cumulative Percent	Percent of Stops	Cumulative Percent
1	337	35.47	35.47	0.24	0.24
2 – 10	181	19.05	54.52	0.50	0.74
11 - 100	183	19.26	73.78	5.45	6.19
101 – 1,000	223	23.47	97.25	48.42	54.61
1,001 +	26	2.74	100.00	45.39	100.00
Total	950	100	-	100	-

Figure 10. Number of Hispanic and White Motorists Stopped, by Officer



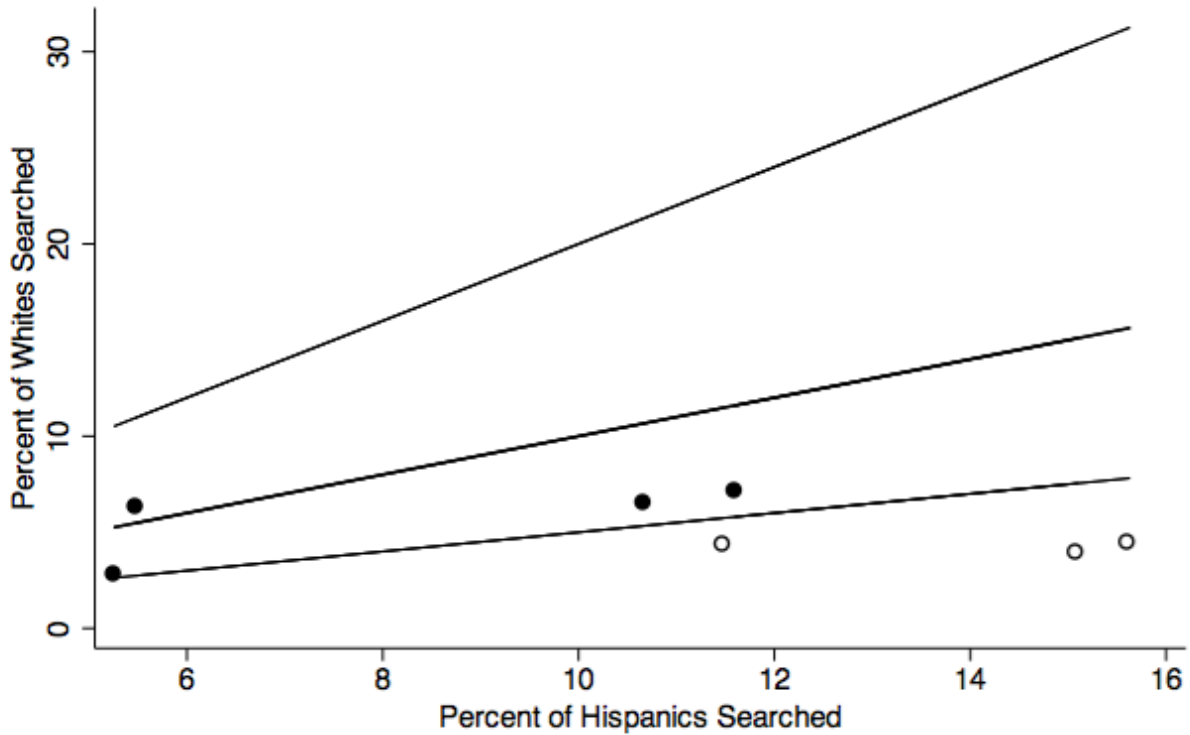
On average, officers stop 20.94 Whites for each Hispanic stopped.

Figure 11. Number of Hispanic and White Motorists Searched, by Officer



On average, officers search 8.97 Whites for each Hispanic searched.

Figure 12. Percent of White and Hispanic Drivers Searched, by Officer



Includes 7 officers with a minimum of 50 White stops, 50 Hispanic stops, and a search rate above the department average of 4.84 for either ethnicity. The hollow circles indicate high disparity officers. 0 officers search Whites at more than twice the rate that they search Hispanics. 3 officers search Hispanics at more than twice the rate that they search Whites.

Appendix

Table A1. Ethnic Composition of Traffic Stops by Purpose, Passengers

Purpose	Number	Percent	
		White	Hispanic
Total Stops	3,361	43.94	5.06
Speed Limit	303	52.19	1.98
Stop Light/Sign	184	44.13	2.72
Driving Impaired	119	80.43	22.69
Safe Movement	259	53.47	5.41
Vehicle Equipment	713	36.18	4.63
Vehicle Regulatory	760	39.94	4.47
Seat Belt	167	37.66	7.78
Investigation	596	47.29	4.19
Other Vehicle	260	40.08	5.00

Table A2. Percent of Men Searched by Ethnicity and Purpose of Stop

Purpose	Number	% Total	% White	% His.	Ratio
					His.:White
Total Stops	84,307	-	73.11	4.52	-
Total Searches	5,568	6.60	4.56	8.50	1.86
Speed Limit	30,639	2.79	2.11	3.80	1.80
Stop Light/Sign	5,677	4.99	3.44	2.34	0.68
Driving Impaired	832	41.95	42.63	54.63	1.28
Safe Movement	5,993	8.84	7.44	11.39	1.53
Vehicle Equipment	9,394	10.41	7.26	9.68	1.33
Vehicle Regulatory	19,460	6.13	3.67	7.07	1.93
Seat Belt	4,589	5.62	2.66	12.28	4.62
Investigation	3,055	23.40	21.57	13.15	0.61
Other Vehicle	4,128	8.50	5.87	9.62	1.64

Table A3. Percent of Women Searched by Ethnicity and Purpose of Stop

Purpose	Number	% Total	% White	% His.	Ratio
					His.:White
Total Stops	58,407	-	75.17	1.88	-
Total Searches	1,341	2.30	2.08	2.18	1.05
Speed Limit	24,534	0.92	0.89	1.34	1.51
Stop Light/Sign	3,701	1.89	1.72	2.44	1.42
Driving Impaired	366	32.79	35.39	27.27	0.77
Safe Movement	3,399	4.35	4.67	5.33	1.14
Vehicle Equipment	5,649	3.65	3.19	2.84	0.89
Vehicle Regulatory	14,666	1.86	1.50	0.74	0.49
Seat Belt	2,388	1.17	0.96	3.33	3.47
Investigation	1,380	13.33	13.75	6.12	0.45
Other Vehicle	2,324	3.70	3.23	-	-

Table A4. Type of Search by Ethnicity: Men

Search Type	Number	% Total	% White	% His.	Ratio His.:White
Total Stops	84,307	-	73.11	4.52	-
Total Searches	5,568	6.60	4.56	8.50	1.86
Consent	2,535	3.01	2.13	2.86	1.34
Search Warrant	20	0.02	0.02	0.08	4.00
Probable Cause	537	0.64	0.30	0.39	1.30
Incident to Arrest	2,352	2.79	2.05	4.96	2.42
Protective Frisk	124	0.15	0.06	0.21	3.50

Table A5. Type of Search by Ethnicity: Women

Search Type	Number	% Total	% White	% His.	Ratio His.:White
Total Stops	58,407	-	75.17	1.88	-
Total Searches	1,341	2.30	2.08	2.18	1.05
Consent	510	0.87	0.80	0.82	1.03
Search Warrant	7	0.01	0.01	-	-
Probable Cause	103	0.18	0.09	0.27	3.00
Incident to Arrest	709	1.21	1.17	1.00	0.85
Protective Frisk	12	0.02	0.01	0.09	9.00

Figure A6. Stops by Day of the Week

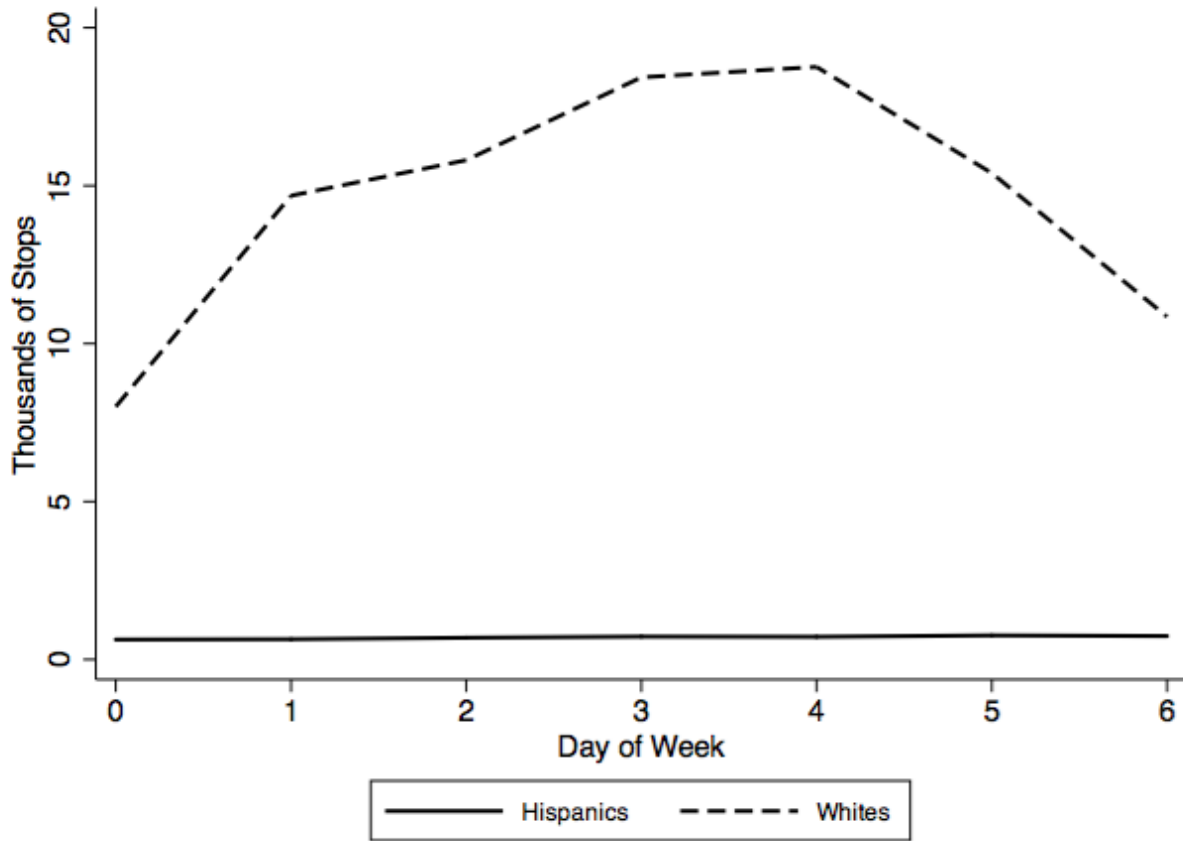


Figure A7. Searches by Day of the Week

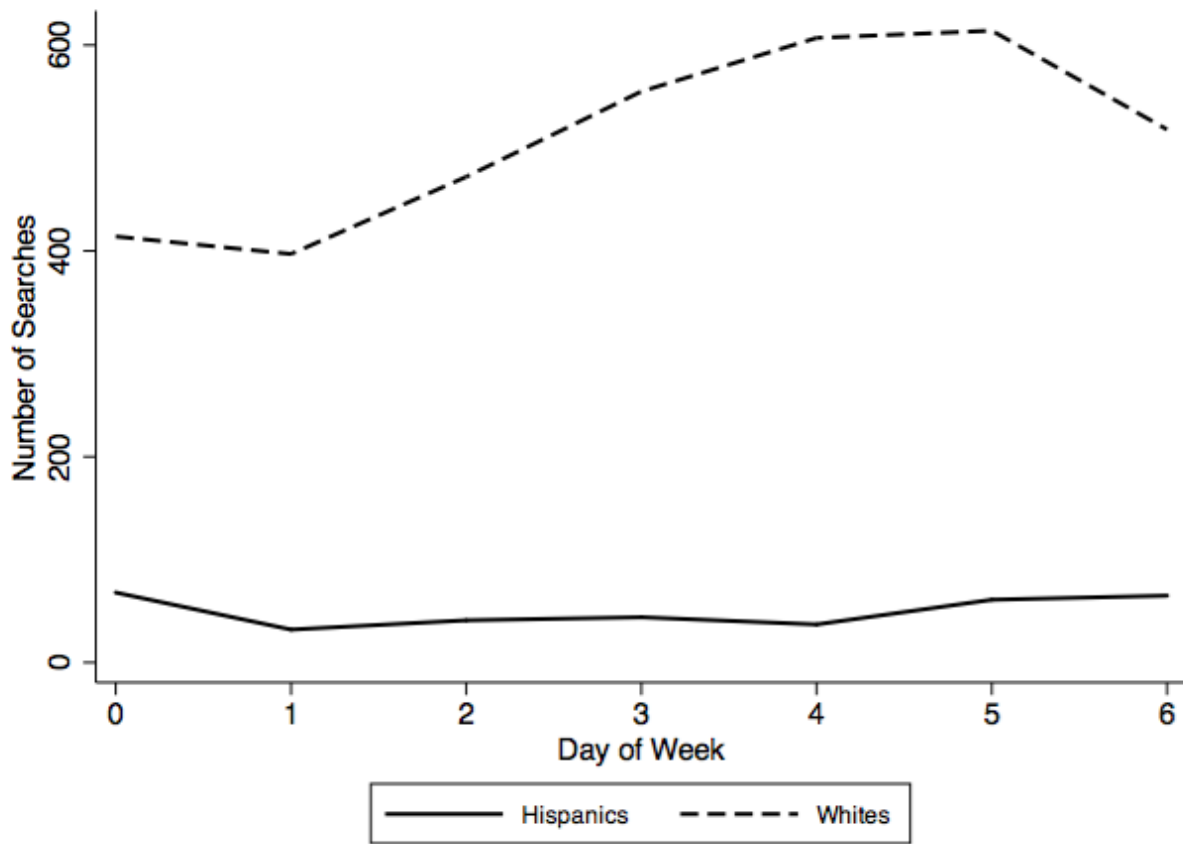
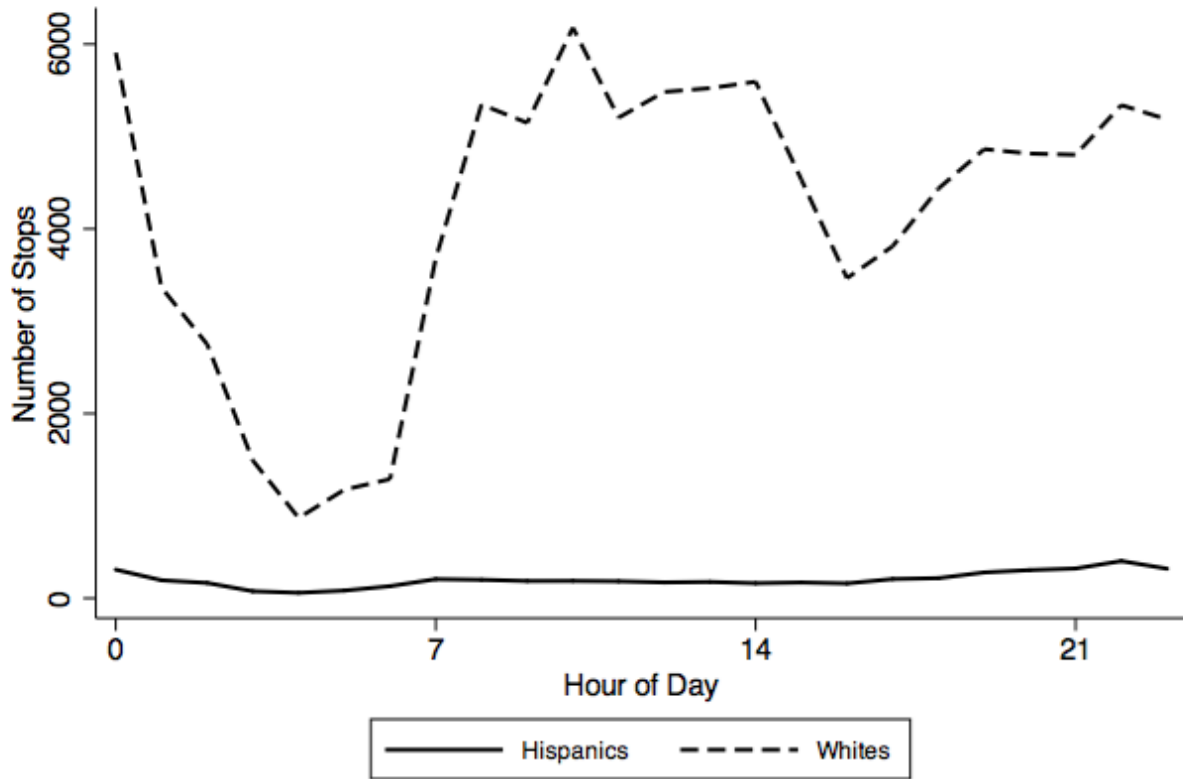
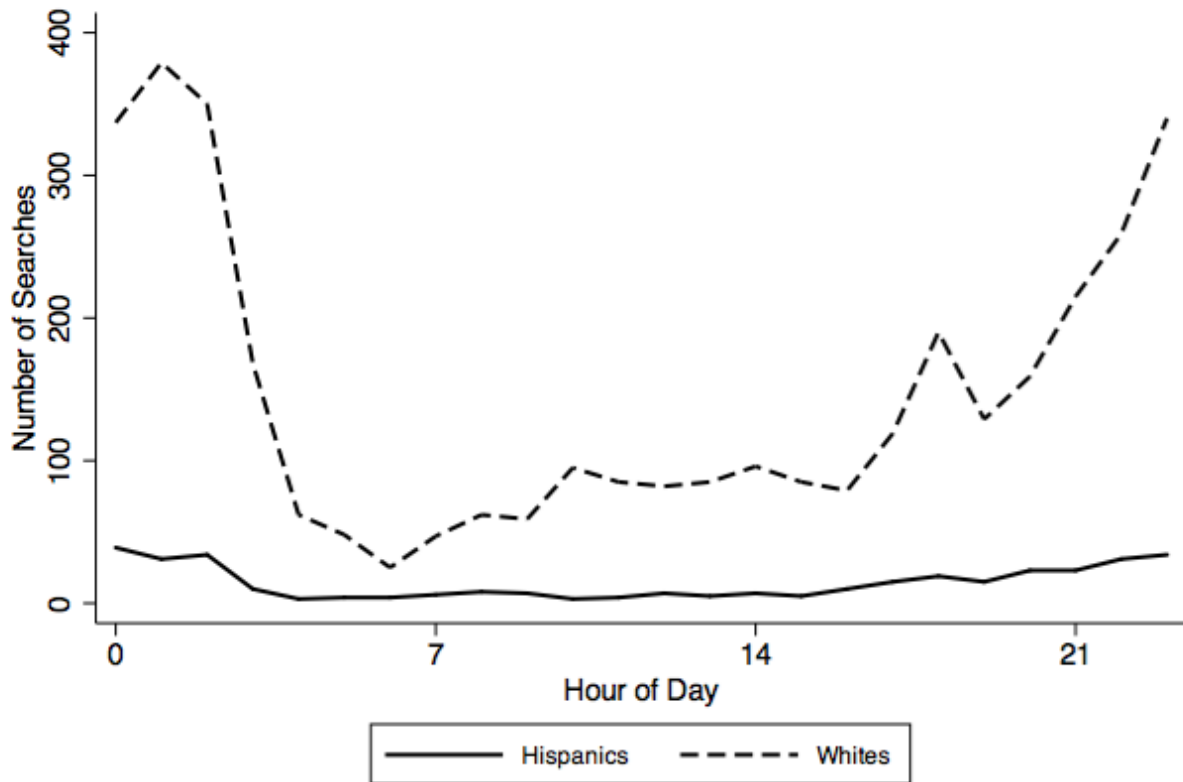


Figure A8. Stops by Hour of the Day



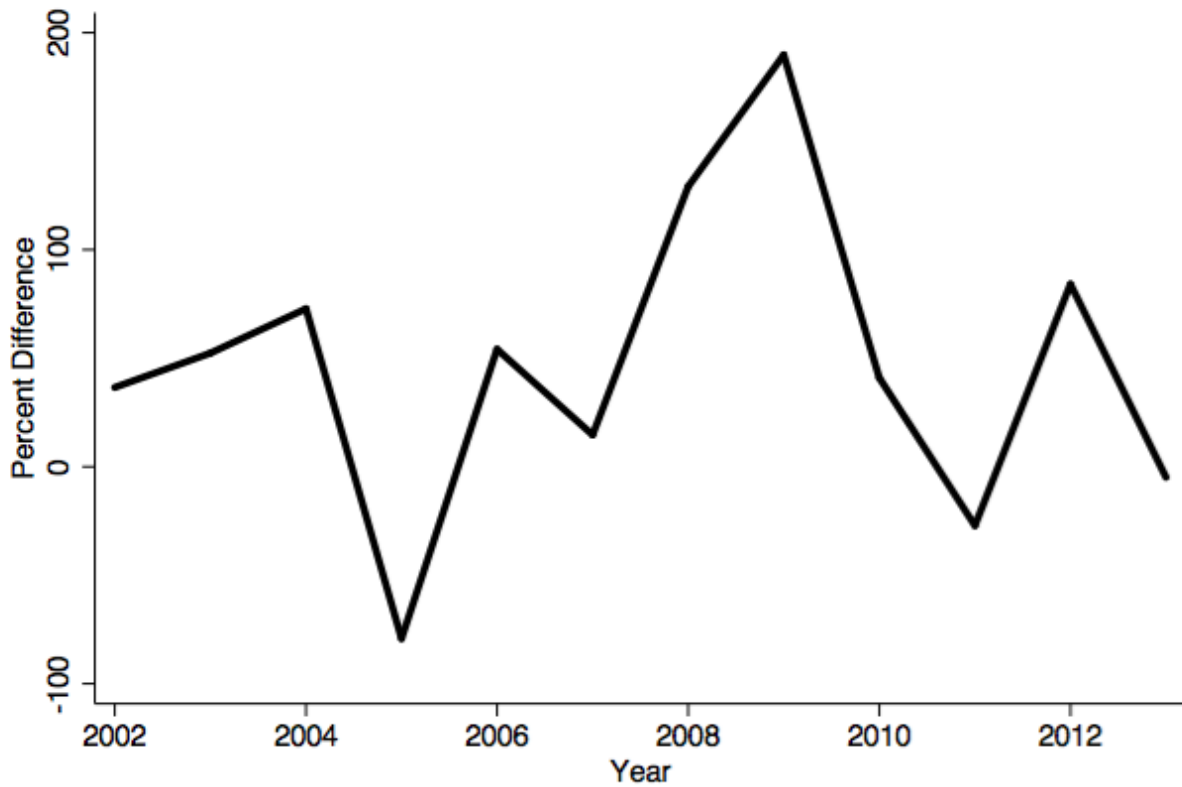
The figure excludes cases where the hour and minute was exactly 0:00. These cases were presumed to be missing data.

Figure A9. Searches by Hour of the Day



The figure excludes cases where the hour and minute was exactly 0:00. These cases were presumed to be missing data.

Figure A10. Ethnic Differences in the Likelihood of Search: Consent Searches Only



The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites; consent searches only.

Table A6. Likelihood of Finding Contraband Given a Search, by Ethnicity

Contraband	Number	% Total	% White	% His.
Yes	1,247	18.05	18.00	11.49
No	5,662	81.95	82.00	88.51
Total	6,909	100.00	100.00	100.00

Table A7. Differential Outcomes by Whether or not a Search Occurs

Ethnicity	Search Occur	N	No Action	Verbal Warning	Written Warning	Citation Issued	Arrest	Total
								100.0
White	No	98,353	1.71	13.26	22.32	61.95	0.76	100.0
Hispanic	No	4,566	1.95	11.96	14.13	69.86	2.10	100.0
Total	No	135,805	2.12	15.12	22.11	59.72	0.93	100.0
White	Yes	3,577	2.60	9.06	7.49	30.56	50.29	100.0
Hispanic	Yes	348	1.15	6.32	3.16	28.45	60.92	100.0
Total	Yes	6,909	2.85	10.22	7.37	32.23	47.33	100.0