

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

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Table 1. Overview of the Data

Data Subsets	Observations
Total stops	95,114
-2014	4,748
-Passengers	0
-Checkpoint stops	0
Stops for analysis	87,393
Searches	3,770

Search Rate = 4.32

Figure 1. Number of Traffic Stops per Year

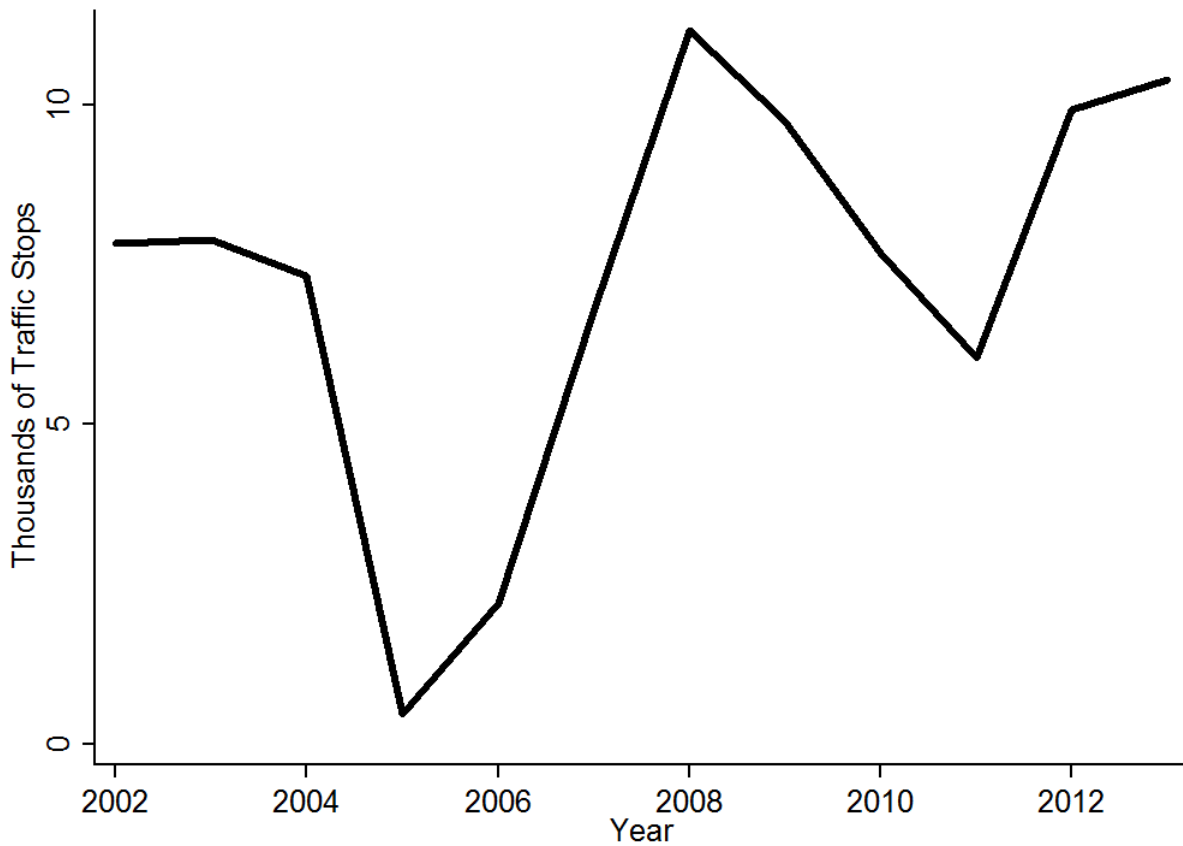


Figure 2. Ethnic Composition of Traffic Stops by Year

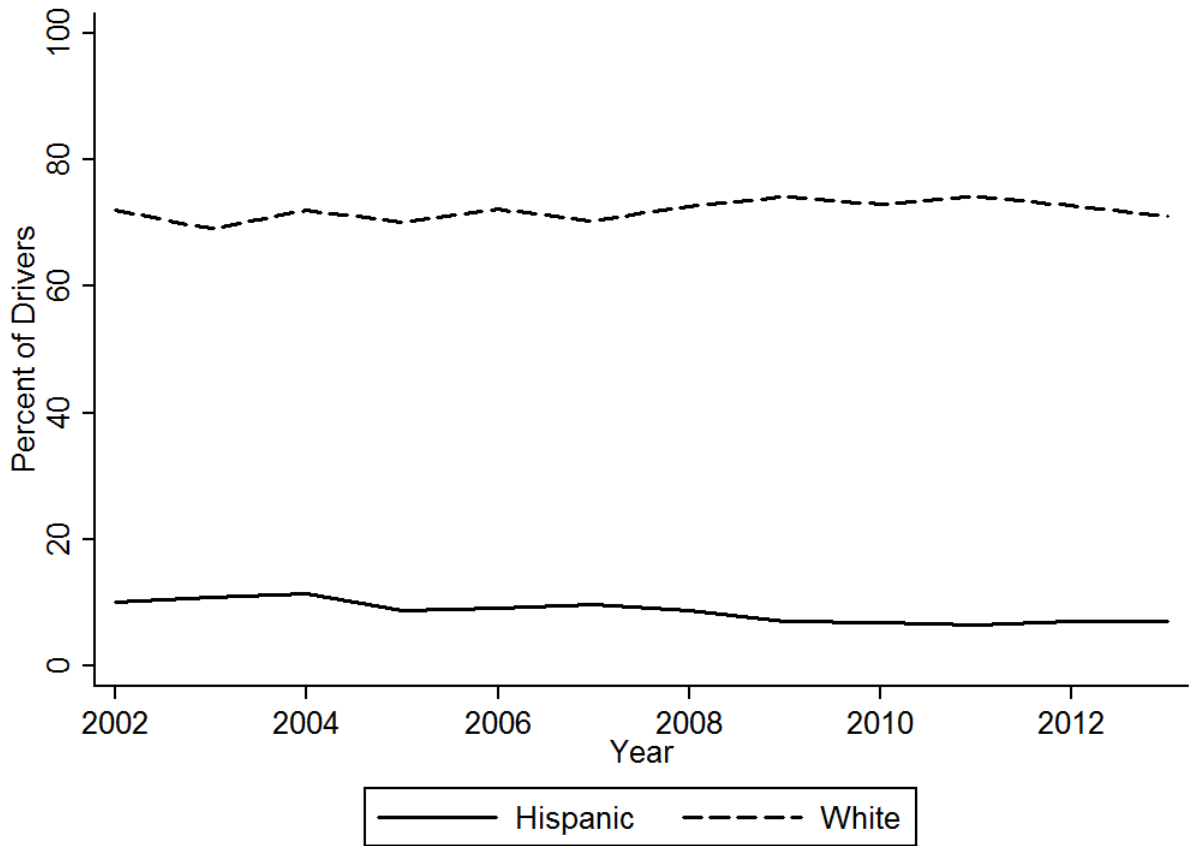


Table 2. Ethnic Composition of Traffic Stops by Purpose, Drivers

Purpose	Number	Percent	
		White	Hispanic
Total Stops	87,393	78.80	8.43
Speed Limit	29,297	82.67	7.01
Stop Light/Sign	8,561	78.04	8.66
Driving Impaired	631	80.49	15.53
Safe Movement	6,746	81.58	9.47
Vehicle Equipment	12,119	75.60	10.91
Vehicle Regulatory	13,662	77.92	6.58
Seat Belt	5,343	77.99	6.12
Investigation	5,752	70.25	12.17
Other Vehicle	5,282	73.57	11.19

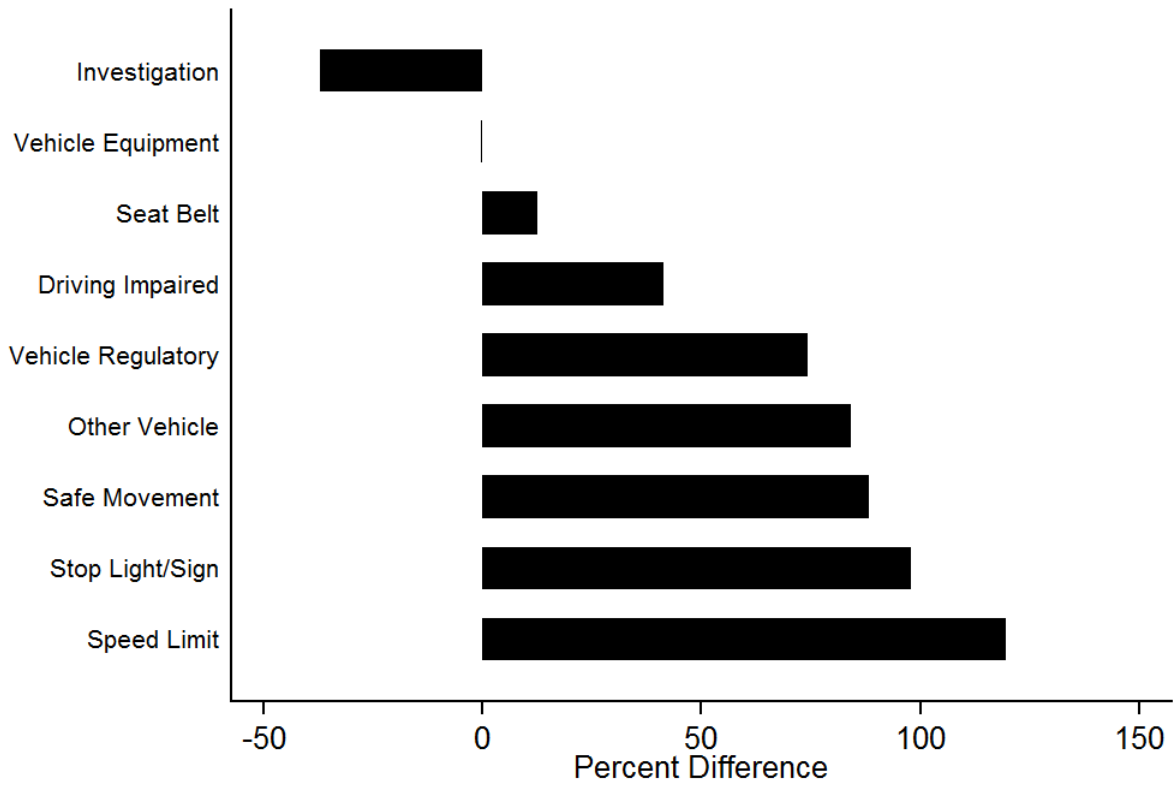
Note: Includes only drivers. Excludes 0 checkpoint stops. Excludes 0 passengers.

Table 3. Percent Searched by Ethnicity and Purpose of Stop

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	87,393	-	78.80	8.43	-
Total Searches	3,779	4.32	3.47	5.74	1.65
Speed Limit	29,297	1.69	1.27	2.78	2.19
Stop Light/Sign	8,561	2.83	2.11	4.18	1.98
Driving Impaired	631	39.30	36.83	52.04	1.41
Safe Movement	6,746	6.42	5.32	10.02	1.88
Vehicle Equipment	12,119	4.78	4.25	4.24	1.00
Vehicle Regulatory	13,662	3.67	2.94	5.12	1.74
Seat Belt	5,343	2.71	2.17	2.45	1.13
Investigation	5,752	13.49	12.93	8.14	0.63
Other Vehicle	5,282	6.78	4.87	8.97	1.84

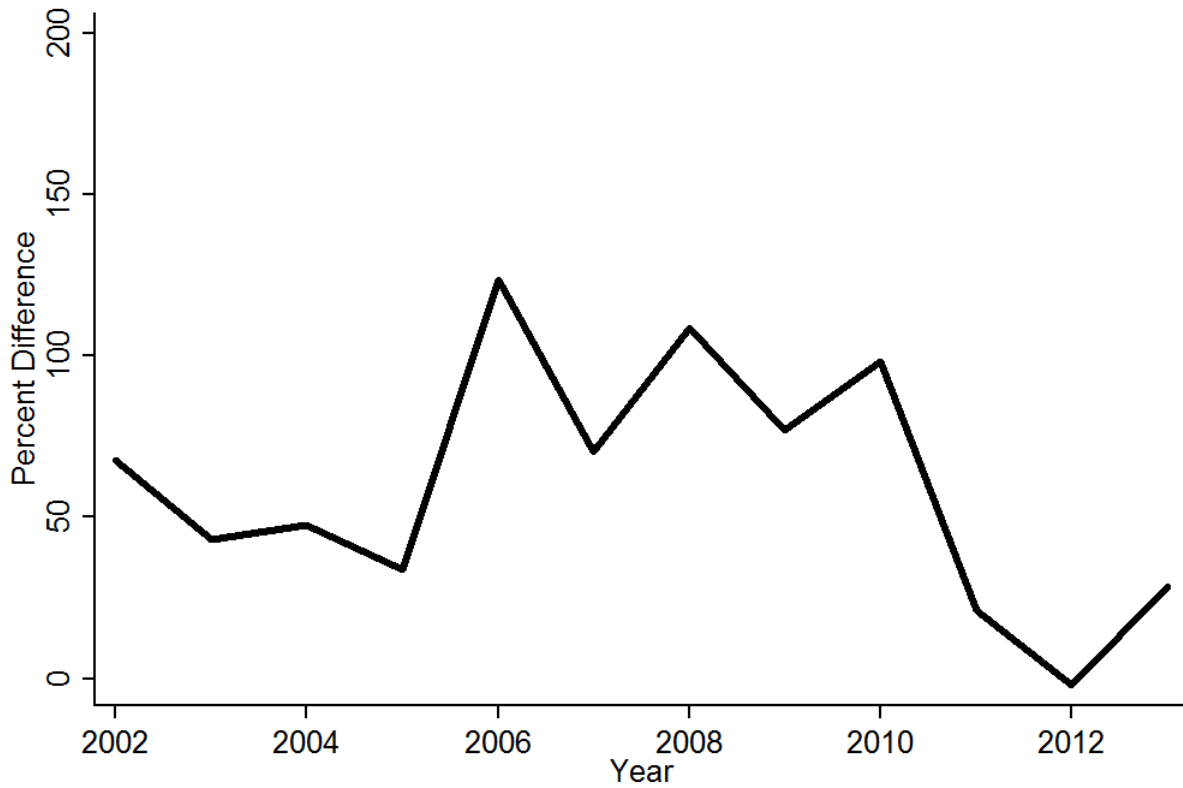
Note: See the appendix for this same table broken down for Men and Women.

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



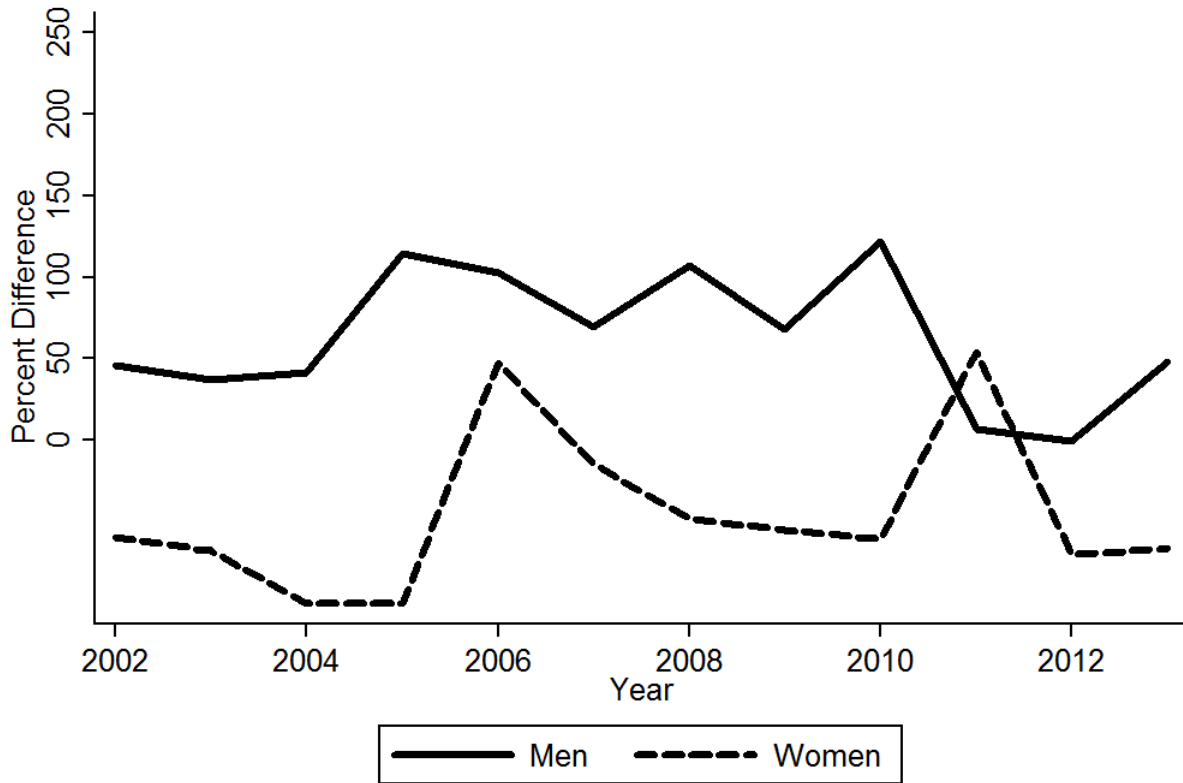
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by purpose of stop.

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



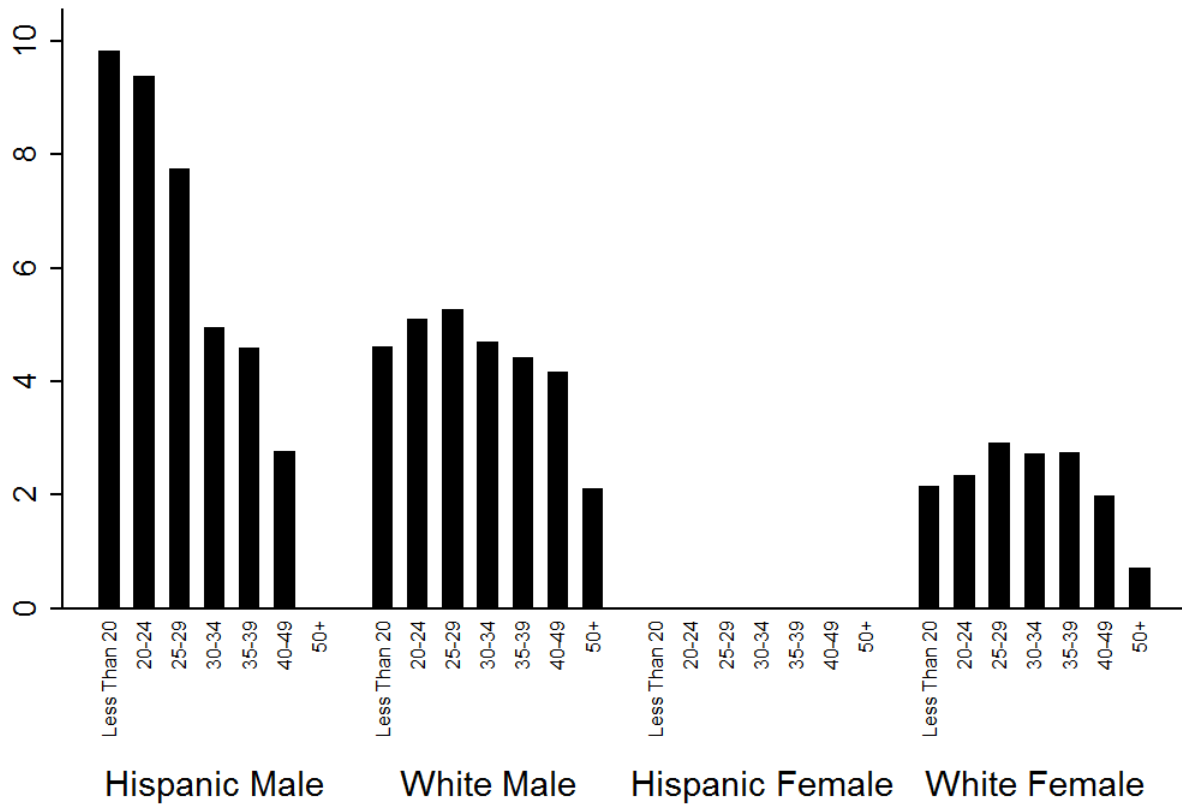
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by gender.

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 87,393 traffic stops from 2002 through 2013, and 3,770 searches. Overall rate of search: 4.32 percent.
 No data are presented for categories with fewer than 10 searches.

Figure 8. Number of Stops, by Ethnicity and Gender

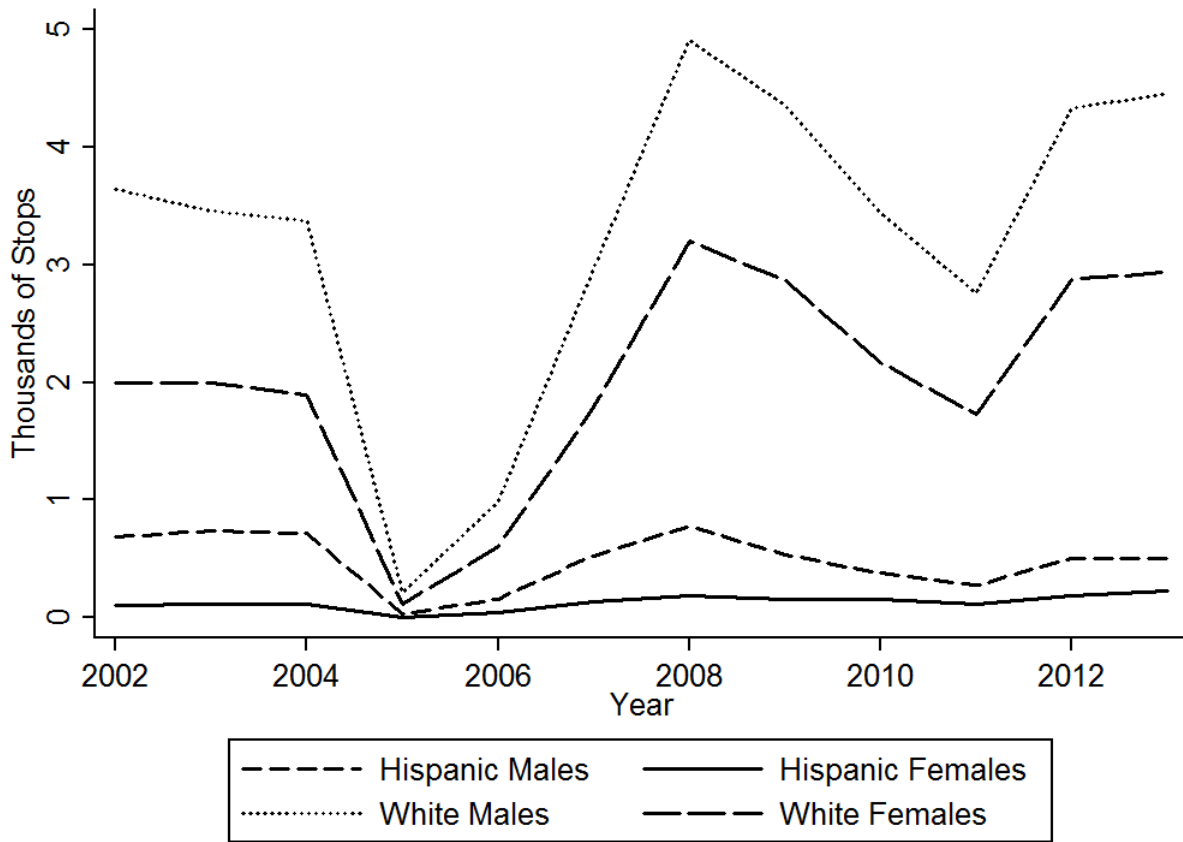


Figure 9. Percent of Stops Resulting in a Search, by Ethnicity and Gender

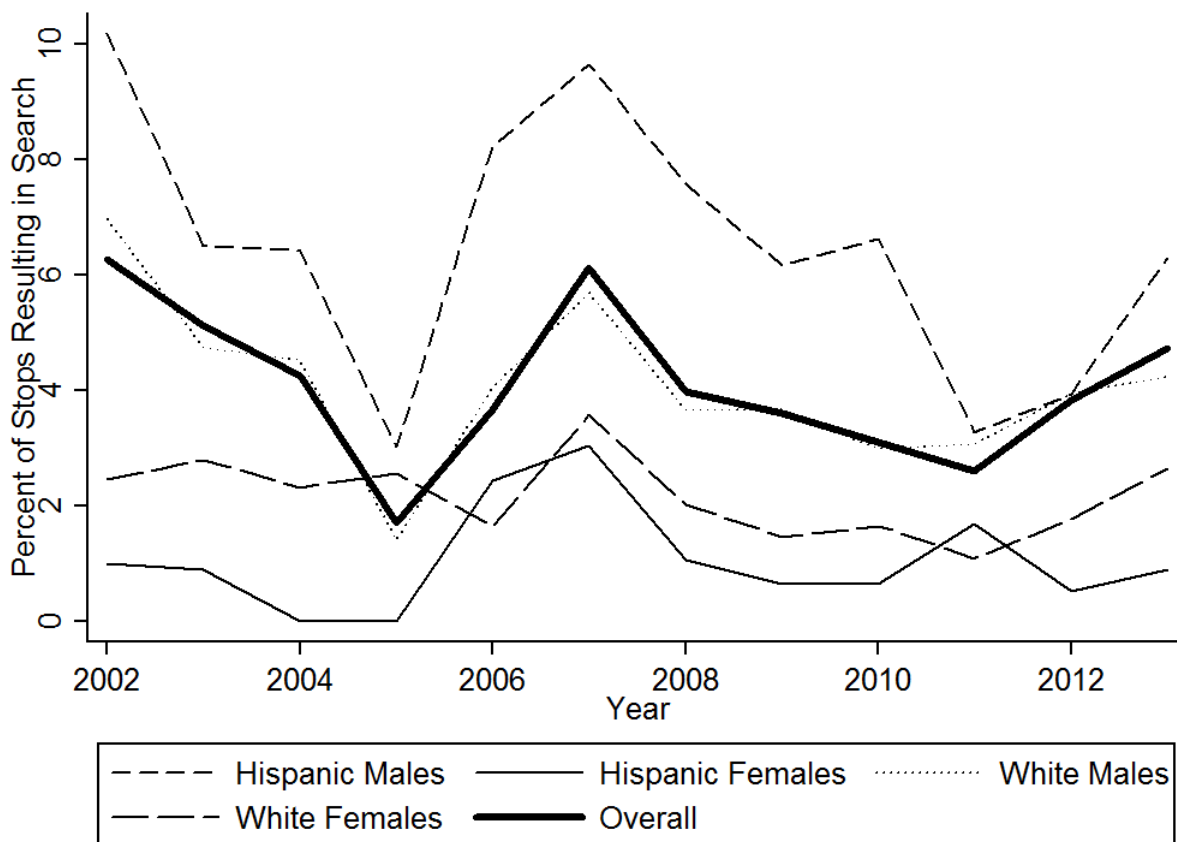


Table 4. Type of Search by Ethnicity

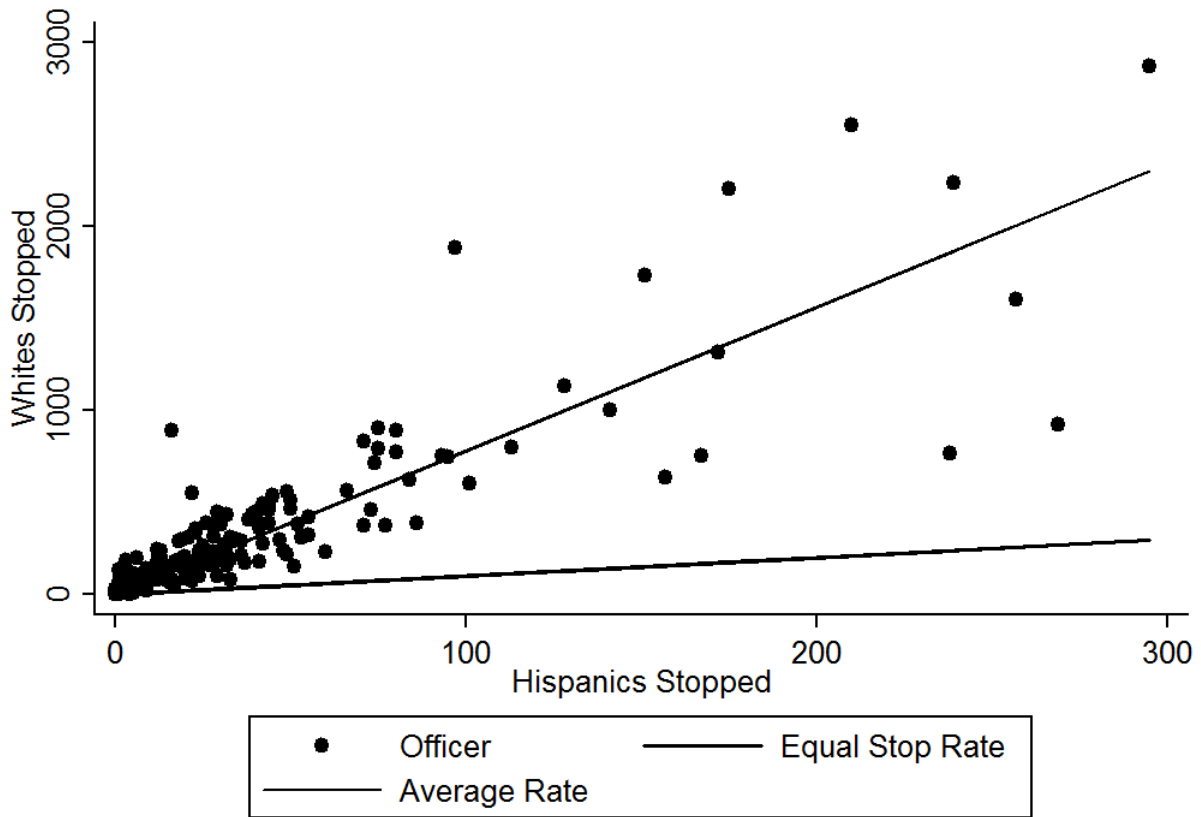
Search Type	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	87,393	-	78.80	8.43	-
Total Searches	3,779	4.32	3.47	5.74	1.65
Consent	1,859	2.13	1.81	2.21	1.22
Search Warrant	11	0.01	0.01	0.01	1.00
Probable Cause	849	0.97	0.73	0.91	1.25
Incident to Arrest	1,010	1.16	0.89	2.39	2.69
Protective Frisk	50	0.06	0.03	0.22	7.33

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	498	58.25	58.25	0.57	0.57
2 – 10	139	16.26	74.50	0.54	1.11
11 - 100	65	7.60	82.11	3.18	4.29
101 – 1,000	131	15.32	97.43	52.26	56.55
1,001 +	22	2.57	100.00	43.46	100.00
Total	855	100	-	100	-

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



On average, officers stop 7.80 Whites for each Hispanic stopped.

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

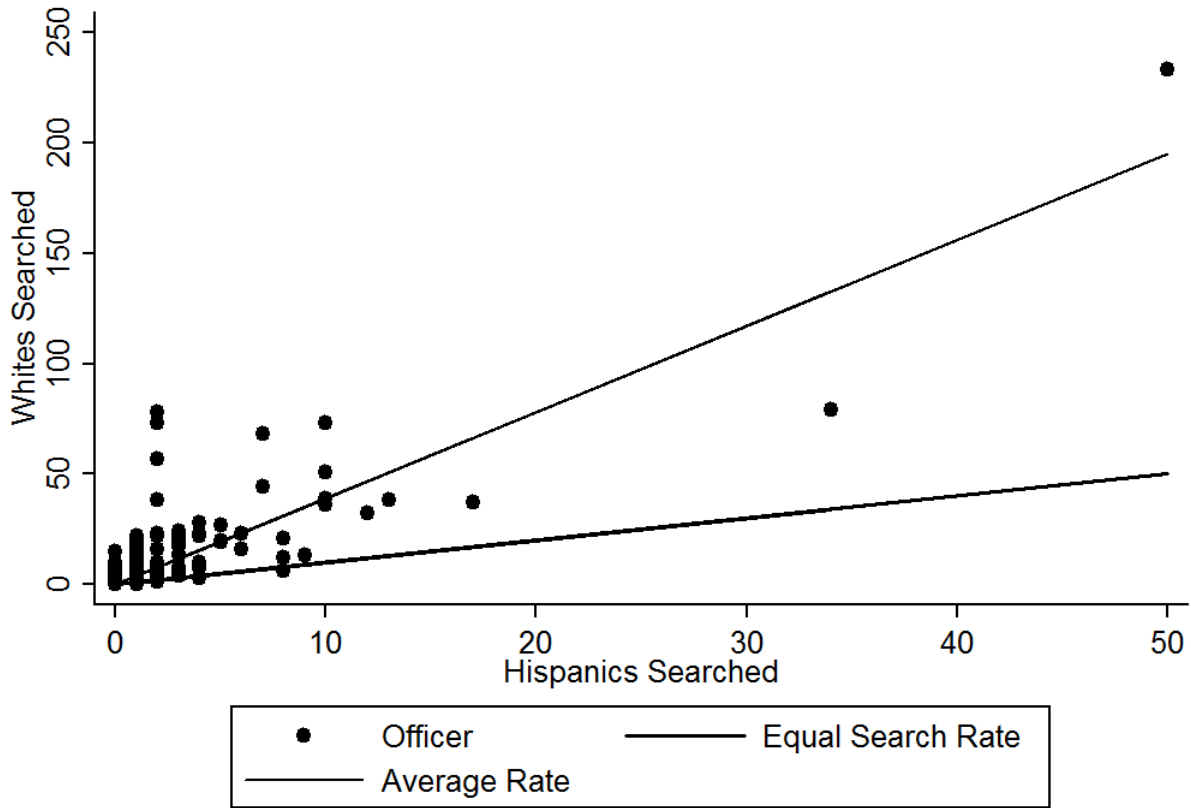
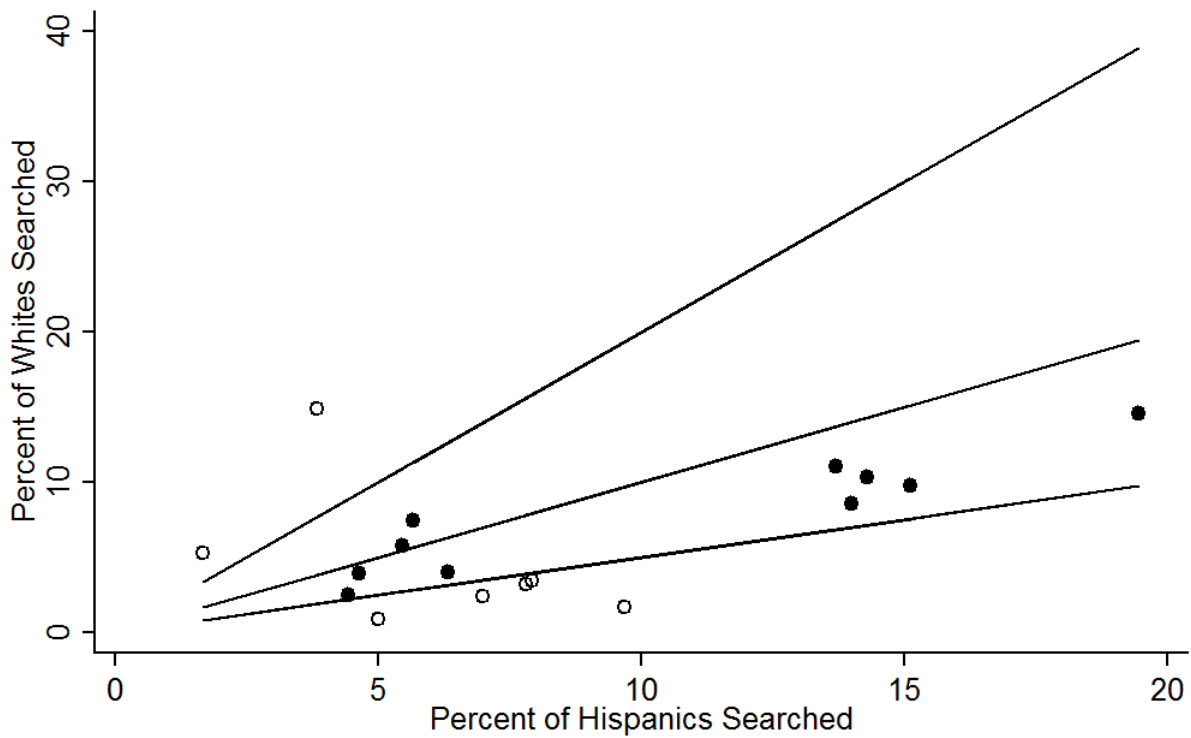


Figure 12. Percent of White and Hispanic Drivers Searched, by Officer



Includes 17 officers with a minimum of 50 White stops, 50 Hispanic stops, and a search rate above the department average of 4.32 for either ethnicity. The hollow circles indicate high disparity officers. 2 officers search Whites at more than twice the rate that they search Hispanics. 5 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	3,097	56.76	8.81
Speed Limit	310	60.56	8.39
Stop Light/Sign	207	53.48	9.66
Driving Impaired	68	73.08	23.53
Safe Movement	341	60.20	10.85
Vehicle Equipment	545	59.11	9.36
Vehicle Regulatory	418	57.11	7.42
Seat Belt	156	51.70	5.77
Investigation	739	54.02	5.82
Other Vehicle	313	53.11	12.78

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

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	55,737	-	77.92	10.48	-
Total Searches	3,073	5.51	4.30	6.97	1.62
Speed Limit	16,799	2.42	1.77	3.61	2.04
Stop Light/Sign	5,338	3.84	2.83	5.34	1.89
Driving Impaired	497	41.05	38.41	53.68	1.40
Safe Movement	4,814	7.42	5.92	11.52	1.95
Vehicle Equipment	8,441	5.54	4.76	4.92	1.03
Vehicle Regulatory	8,011	5.02	4.04	6.39	1.58
Seat Belt	3,789	2.96	2.14	2.76	1.29
Investigation	4,202	14.56	13.55	9.03	0.67
Other Vehicle	3,846	7.98	5.38	10.39	1.93

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

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	31,656	-	80.24	4.84	-
Total Searches	706	2.23	2.14	1.05	0.49
Speed Limit	12,498	0.72	0.64	0.38	0.59
Stop Light/Sign	3,223	1.15	1.00	-	-
Driving Impaired	134	32.84	32.46	-	-
Safe Movement	1,932	3.93	3.95	3.39	0.86
Vehicle Equipment	3,678	3.02	3.15	0.89	0.28
Vehicle Regulatory	5,651	1.77	1.49	1.33	0.89
Seat Belt	1,554	2.12	2.26	1.37	0.61
Investigation	1,550	10.58	11.50	3.54	0.31
Other Vehicle	1,436	3.55	3.71	-	-

Table A4. Type of Search by Ethnicity: Men

Search Type	Number	% Total	% White	% Hispanic	Ratio Hispanic:White
Total Stops	55,737	-	77.92	10.48	-
Total Searches	3,073	5.51	4.30	6.97	1.62
Consent	1,495	2.68	2.21	2.69	1.22
Search Warrant	8	0.01	0.01	0.02	2.00
Probable Cause	704	1.26	0.94	1.06	1.13
Incident to Arrest	821	1.47	1.11	2.96	2.67
Protective Frisk	45	0.08	0.04	0.24	6.00

Table A5. Type of Search by Ethnicity: Women

Search Type	Number	% Total	% White	% Hispanic	Ratio Hispanic:White
Total Stops	31,656	-	80.24	4.84	-
Total Searches	706	2.23	2.14	1.05	0.49
Consent	365	1.15	1.17	0.39	0.33
Search Warrant	3	0.01	0.01	-	-
Probable Cause	145	0.46	0.41	0.33	0.80
Incident to Arrest	189	0.60	0.55	0.20	0.36
Protective Frisk	5	0.02	0.01	0.13	13.00

Figure A1. Stops by Day of the Week

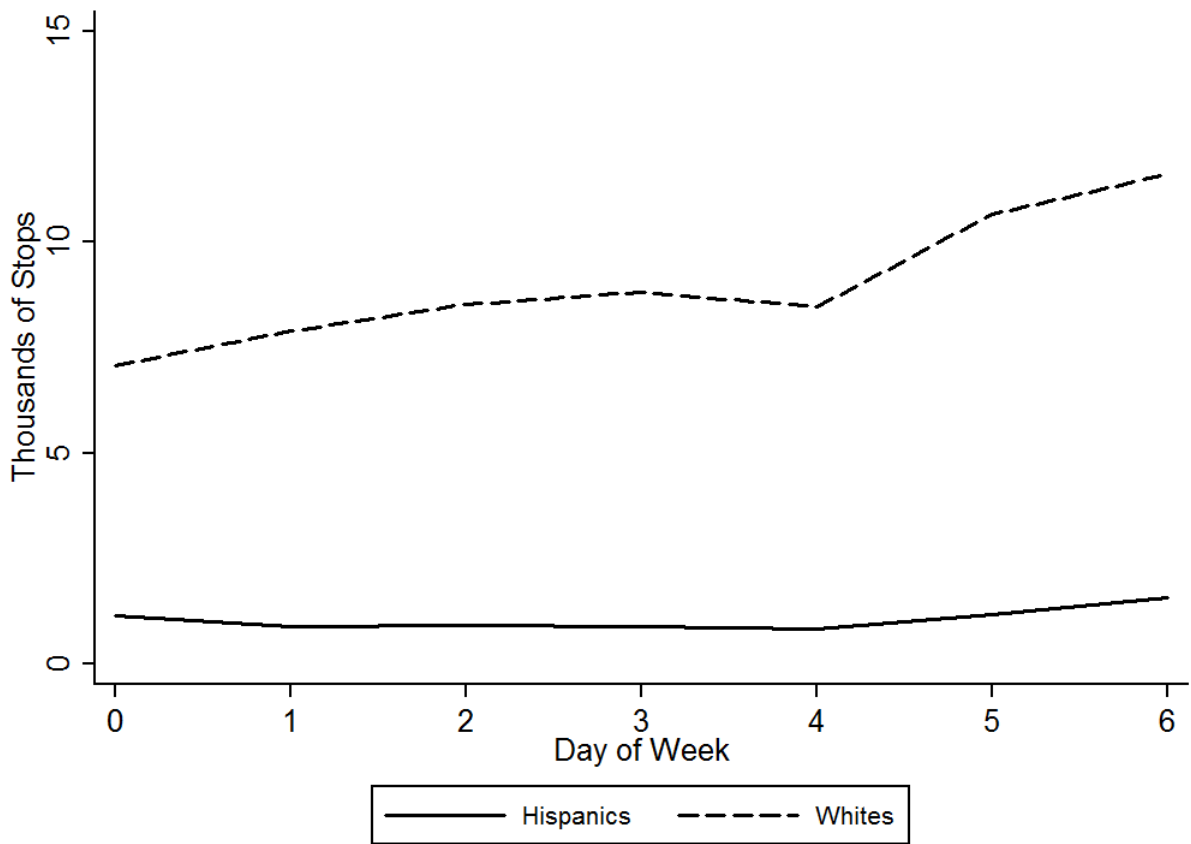


Figure A2. Searches by Day of the Week

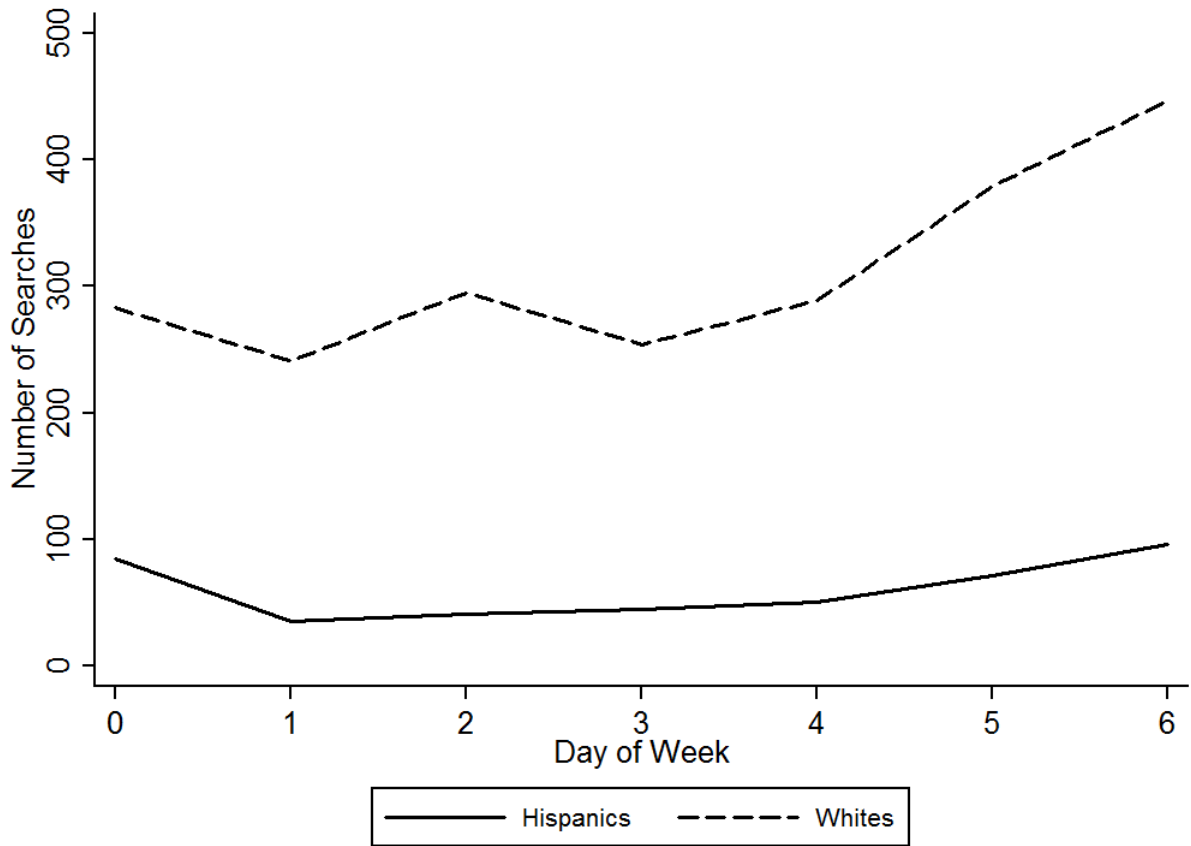
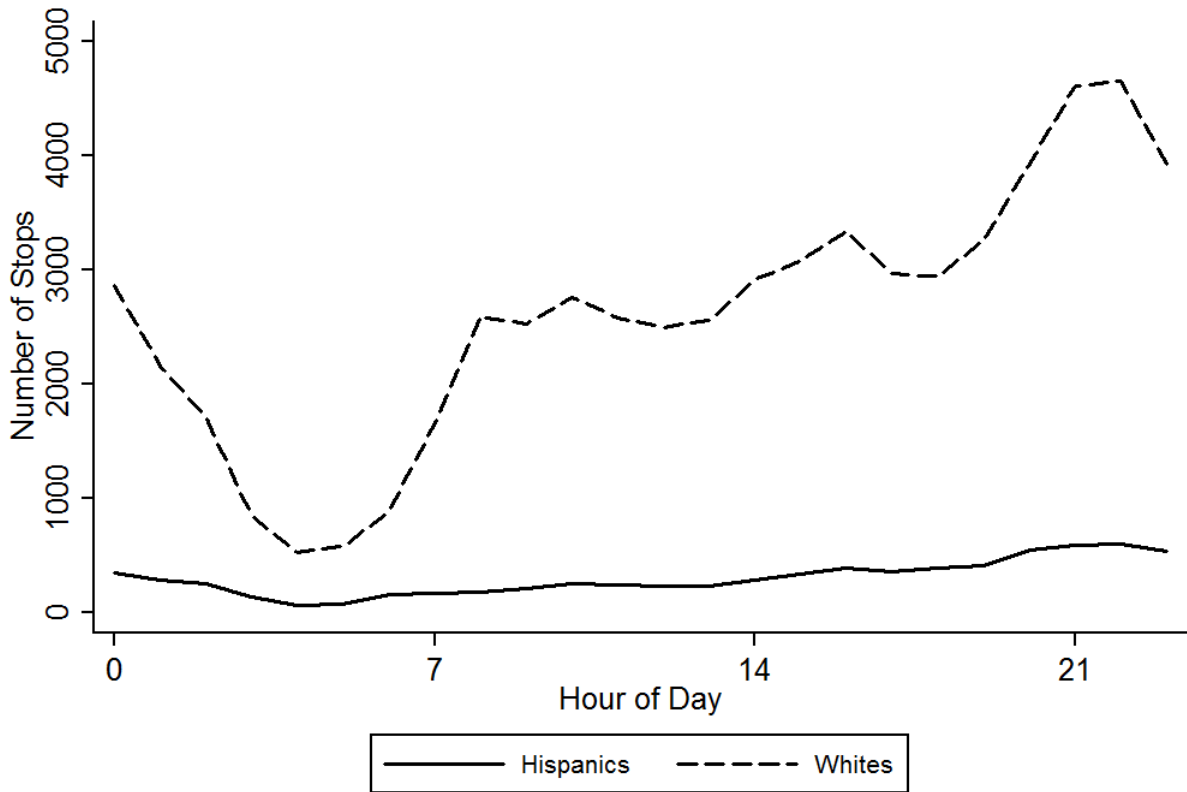
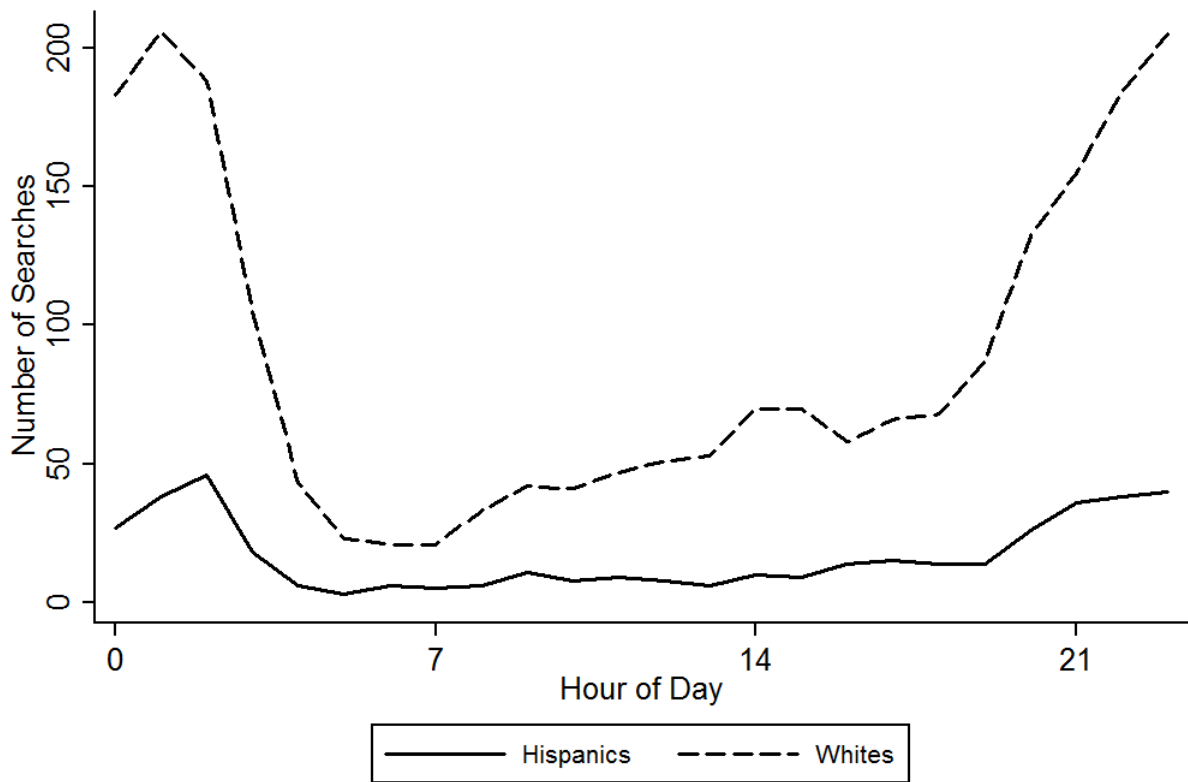


Figure A3. Stops by Hour of the Day



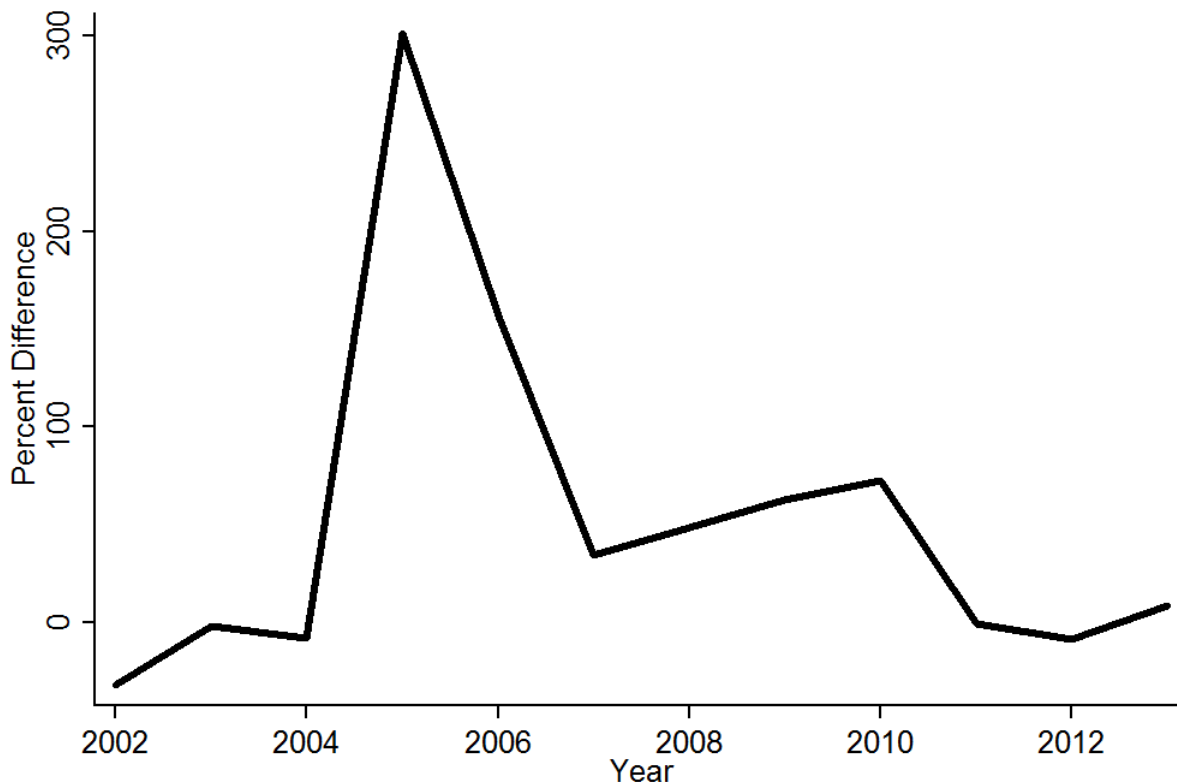
The figure excludes cases where the hour and minute was exactly 0:00. These cases were presumed to be missing data.

Figure A4. 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 A5. 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	% Hispanic
Yes	893	23.63	26.60	10.40
No	2,886	76.37	73.40	89.60
Total	3,779	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
Hispanic	No	6,947	2.81	22.64	3.76	69.80	0.99	100.0
Total	No	83,614	3.42	31.26	5.84	58.87	0.61	100.0
White	Yes	2,188	2.93	15.08	2.83	41.41	37.75	100.0
Hispanic	Yes	423	1.89	6.62	3.07	40.66	47.75	100.0
Total	Yes	3,779	2.73	13.73	3.02	42.95	37.58	100.0