

# **Analysis of Hispanic-White Differences in Traffic Stops and Searches in Cary, NC, 2002-2013**

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Table 1. Overview of the Data

Data Subsets	Observations
Total stops	191,429
-2014	5,194
-Passengers	1,307
-Checkpoint stops	467
Stops for analysis	184,534
Searches	3,334

Search Rate = 1.81

Figure 1. Number of Traffic Stops per Year

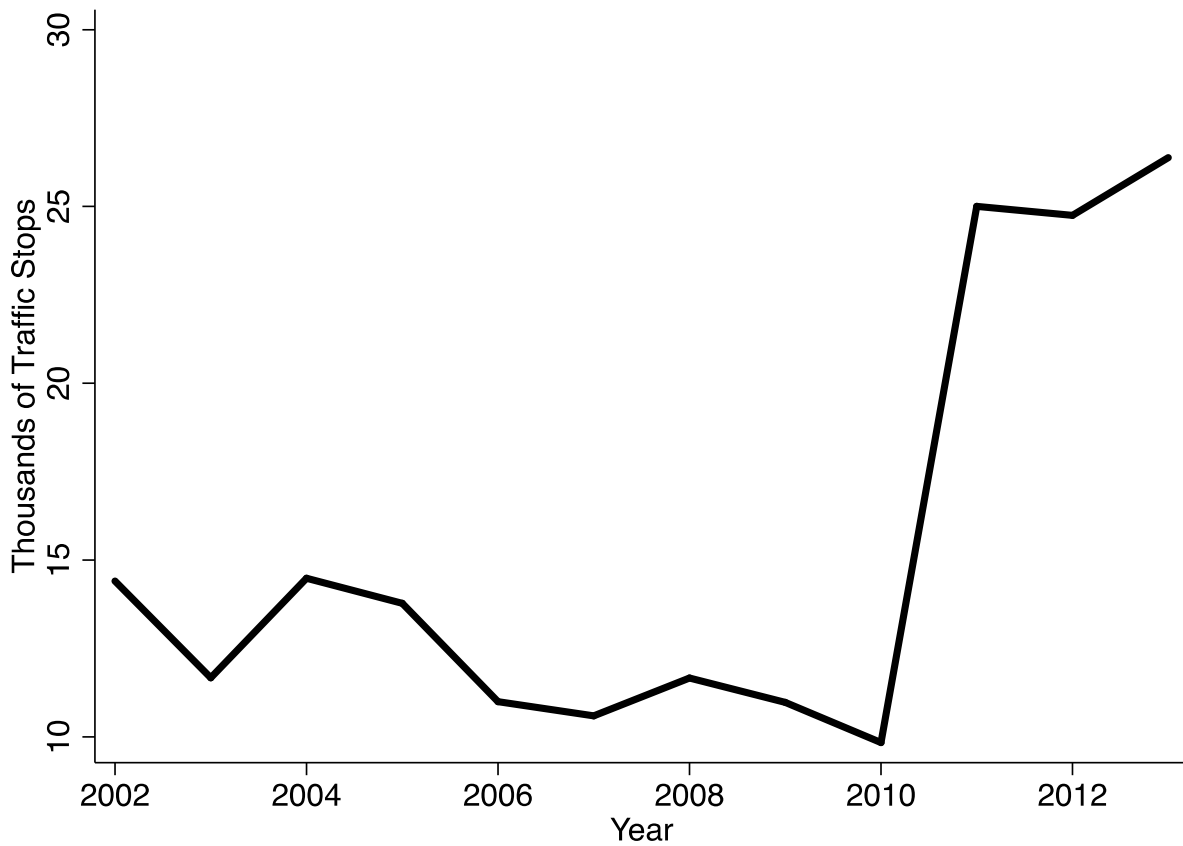


Figure 2. Ethnic Composition of Traffic Stops by Year

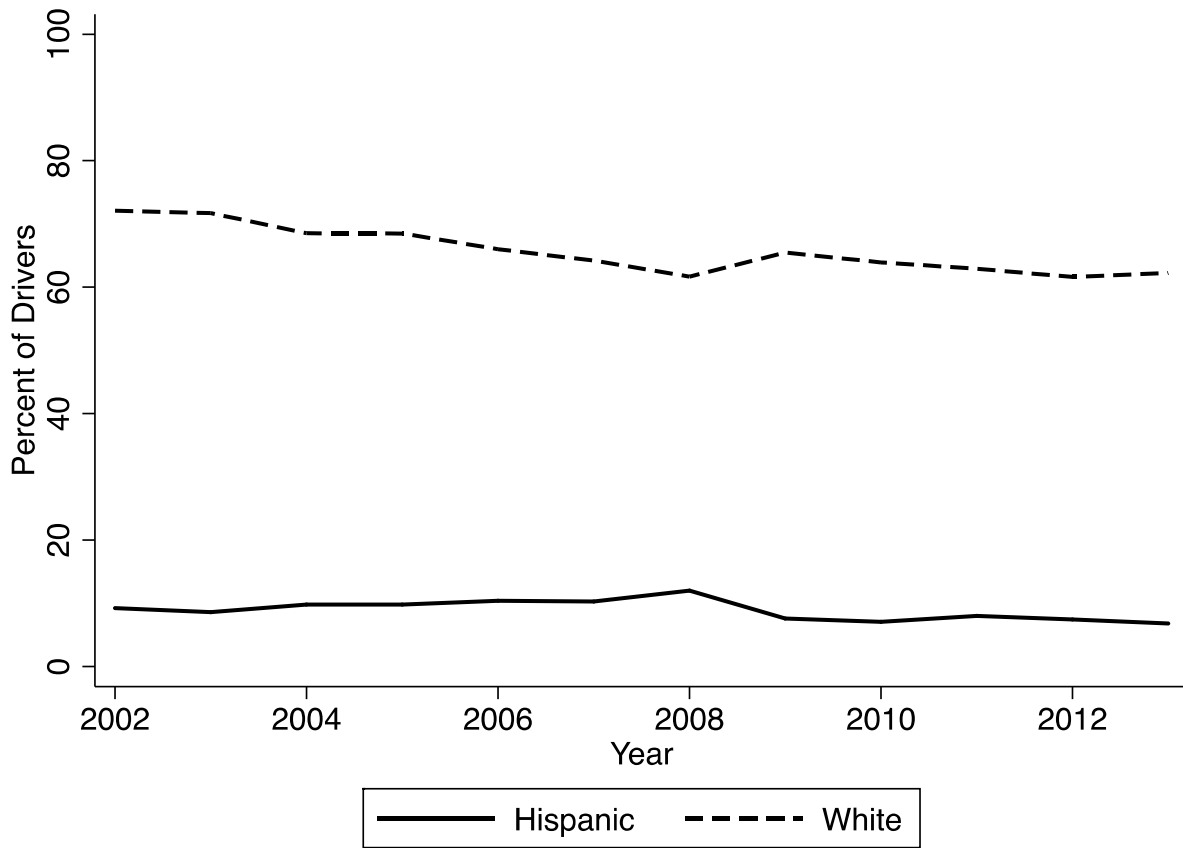


Table 2. Ethnic Composition of Traffic Stops by Purpose, Drivers

Purpose	Number	Percent	
		White	Hispanic
Total Stops	184,533	71.31	8.63
Speed Limit	77,846	73.06	6.34
Stop Light/Sign	13,297	70.19	9.17
Driving Impaired	1,696	72.44	20.64
Safe Movement	9,382	67.49	11.07
Vehicle Equipment	24,201	63.86	10.92
Vehicle Regulatory	38,374	72.82	7.08
Seat Belt	9,029	77.51	7.33
Investigation	4,679	64.83	29.15
Other Vehicle	6,029	69.75	16.50

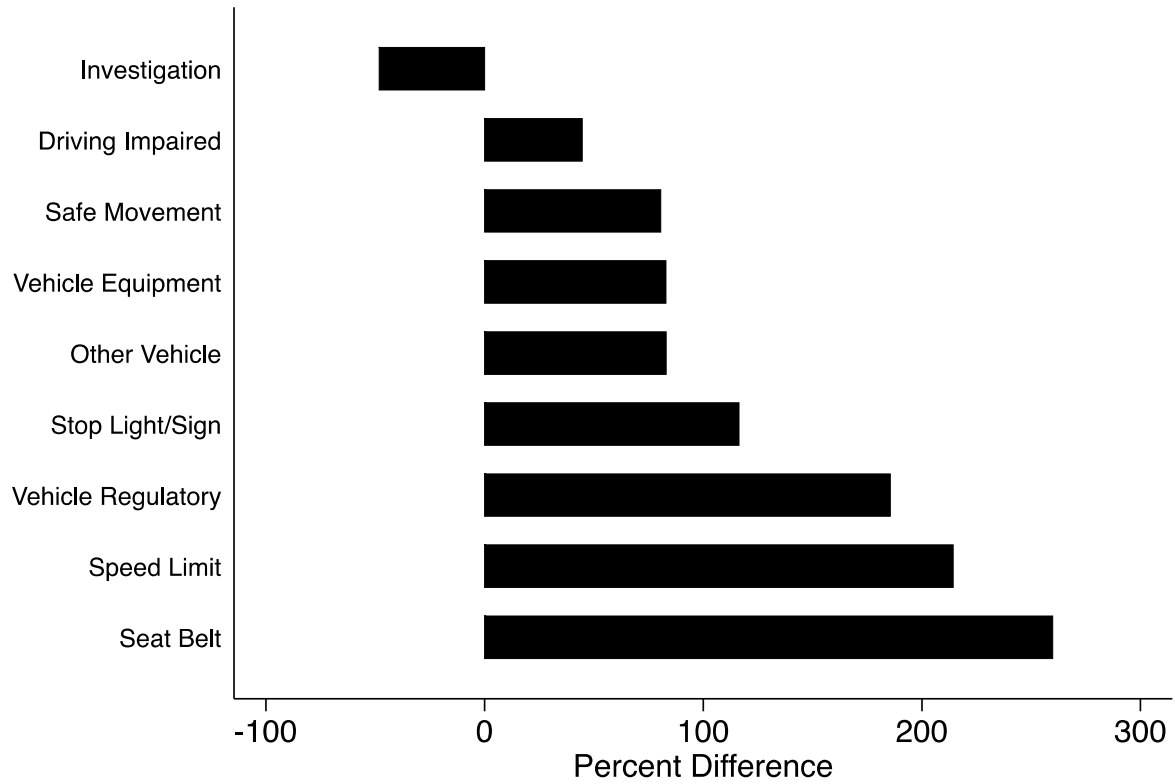
Note: Includes only drivers. Excludes 467 checkpoint stops. Excludes 1,307 passengers.

Table 3. Percent Searched by Ethnicity and Purpose of Stop

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	184,534	-	71.31	8.63	-
Total Searches	3,334	1.81	1.51	4.09	2.71
Speed Limit	77,846	0.93	0.79	2.47	3.13
Stop Light/Sign	13,297	1.16	1.06	2.30	2.17
Driving Impaired	1,696	28.66	28.82	41.71	1.45
Safe Movement	9,382	3.60	3.68	6.64	1.80
Vehicle Equipment	24,201	2.48	2.17	3.97	1.83
Vehicle Regulatory	38,374	1.20	0.89	2.54	2.85
Seat Belt	9,030	1.06	0.76	2.72	3.58
Investigation	4,679	6.52	7.49	3.89	0.52
Other Vehicle	6,029	2.77	2.25	4.12	1.83

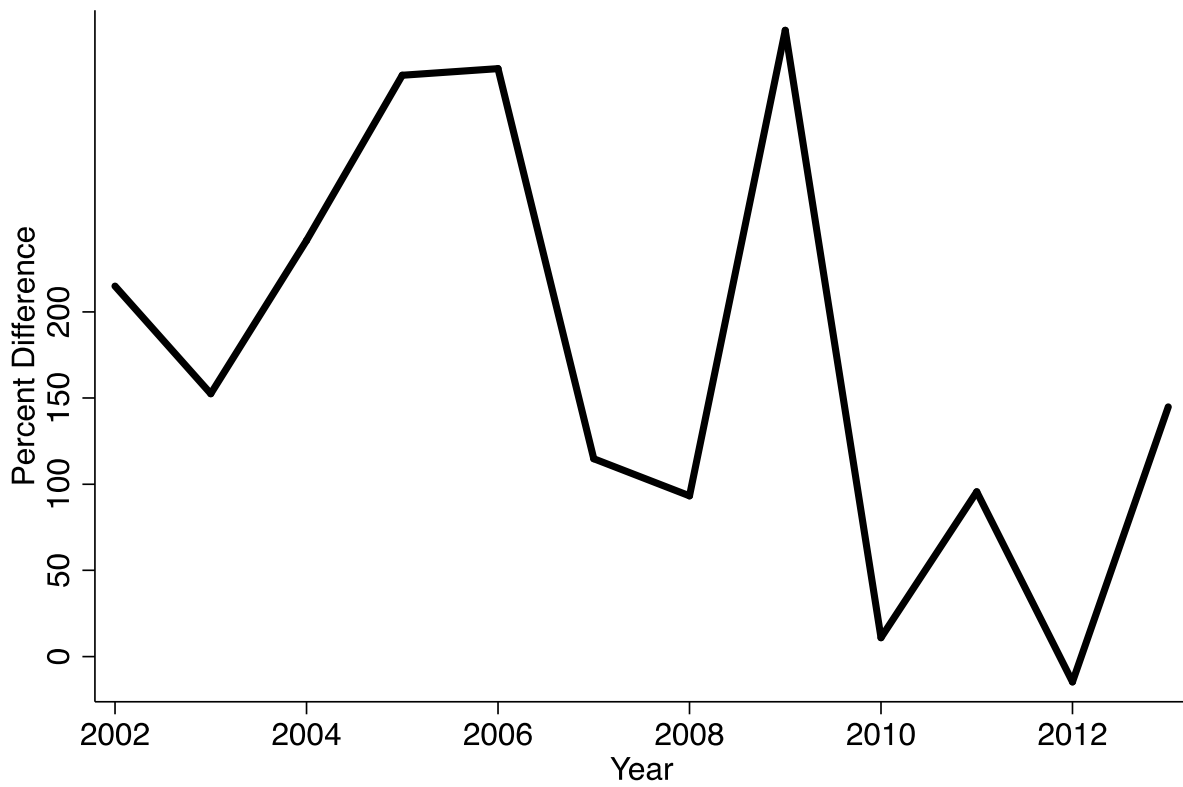
Note: See the appendix for this same table broken down for Men and Women.

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



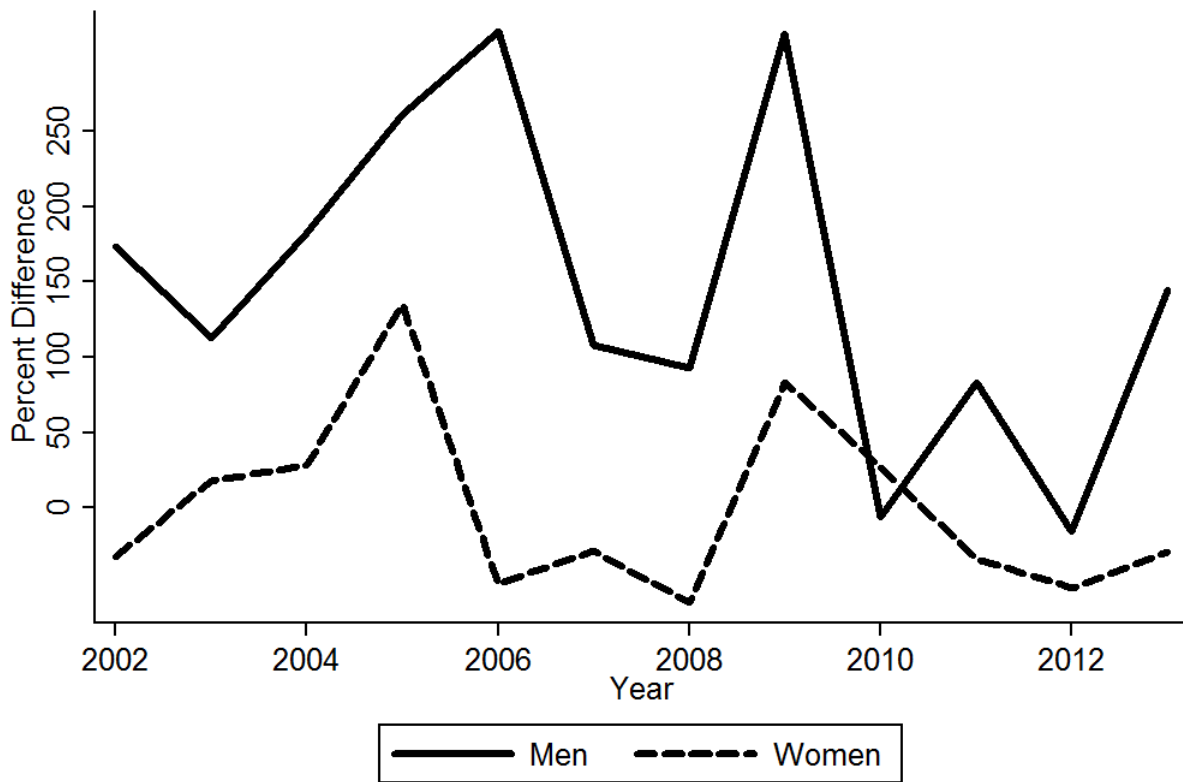
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by purpose of stop.

Figure 4. Ethnic Differences in the Likelihood of Search



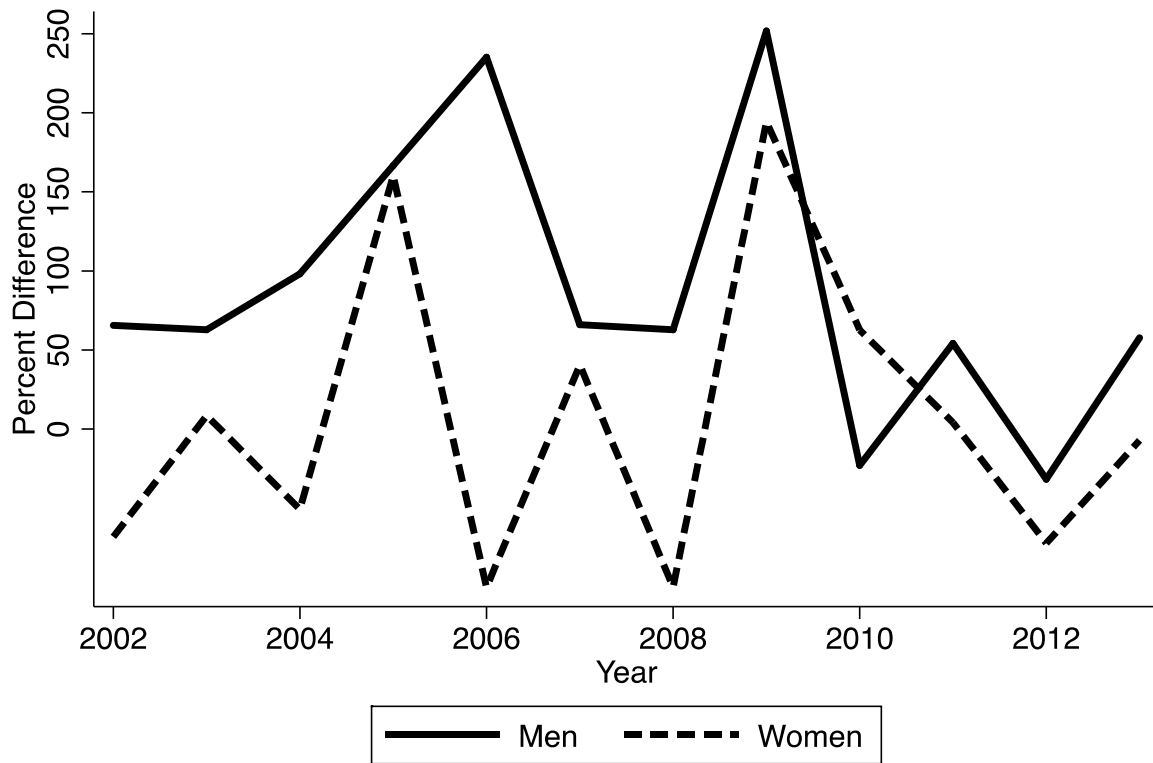
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites.

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.

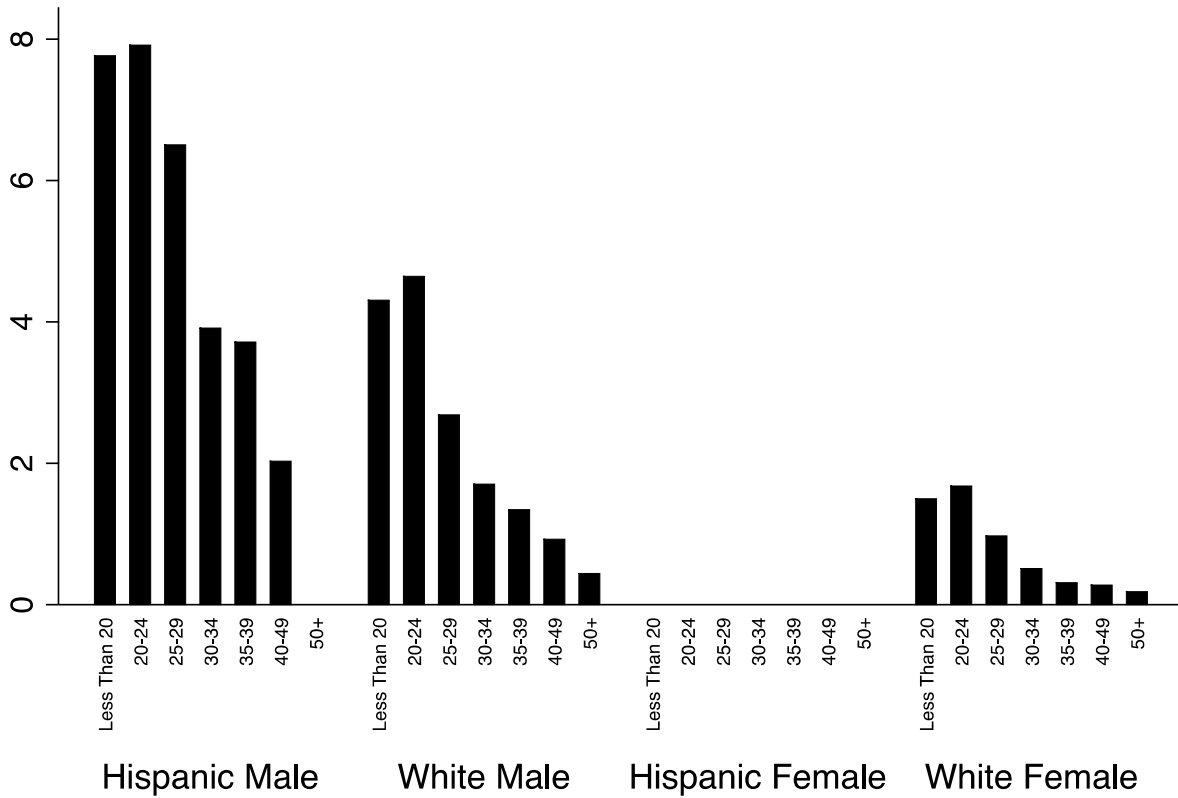
Figure 6. Ethnic Differences in the Likelihood of Search by Gender, for Drivers Under 30



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 184,534 traffic stops from 2002 through 2013, and 3,334 searches. Overall rate of search: 1.81 percent.  
No data are presented for categories with fewer than 10 searches.

Figure 8. Number of Stops, by Ethnicity and Gender

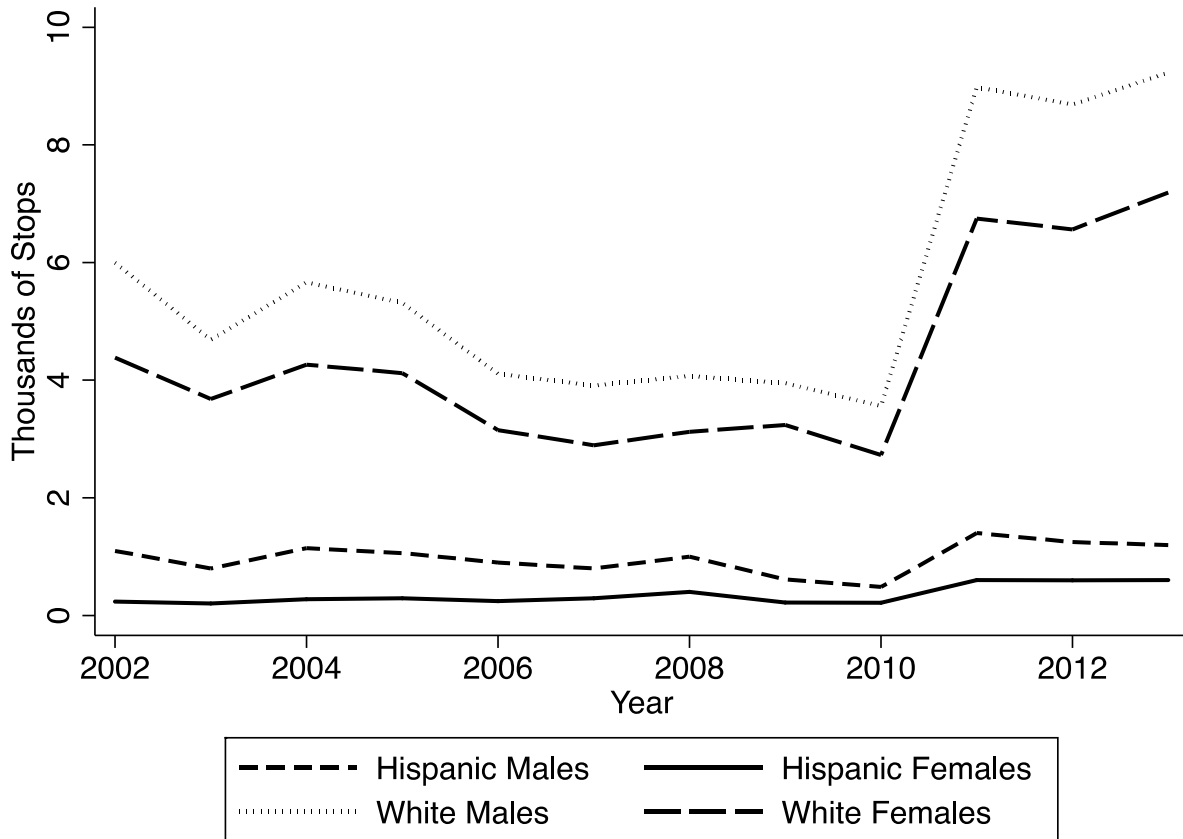


Figure 9. Percent of Stops Resulting in a Search, by Ethnicity and Gender

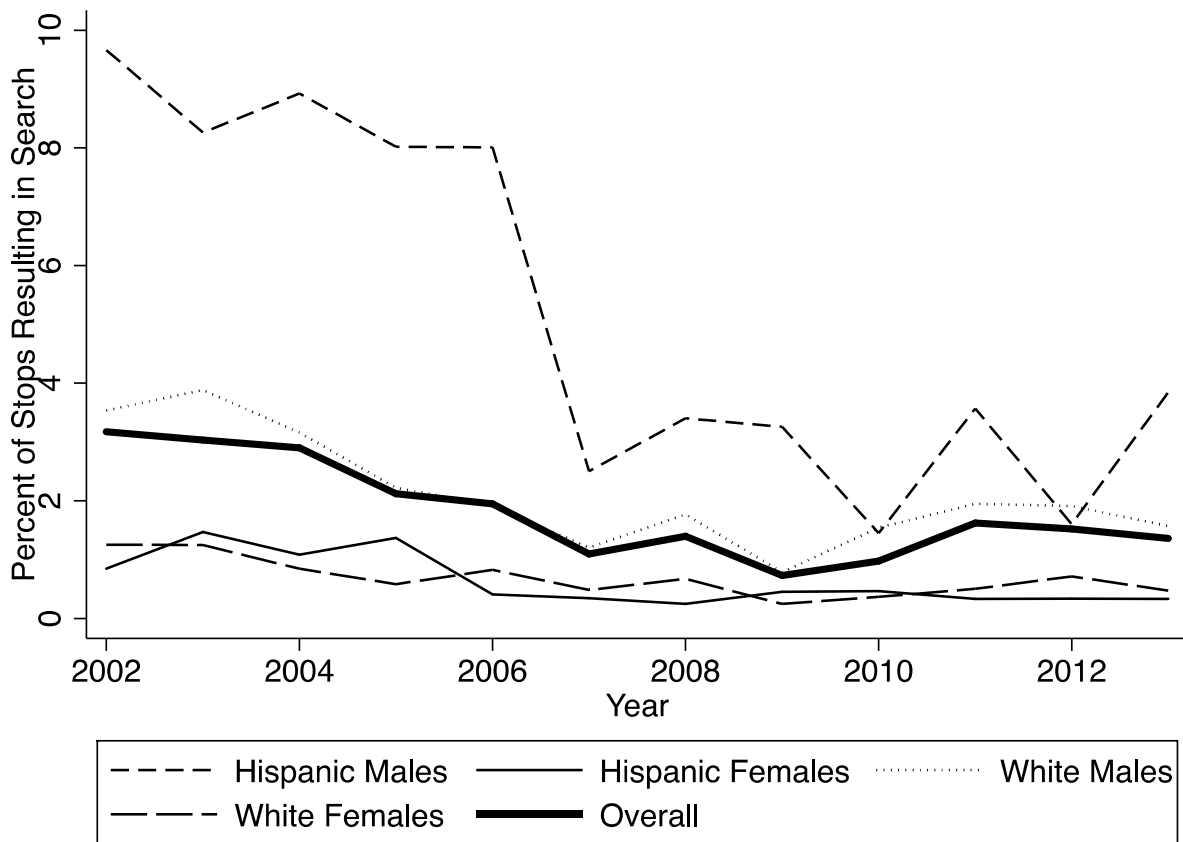


Table 4. Type of Search by Ethnicity

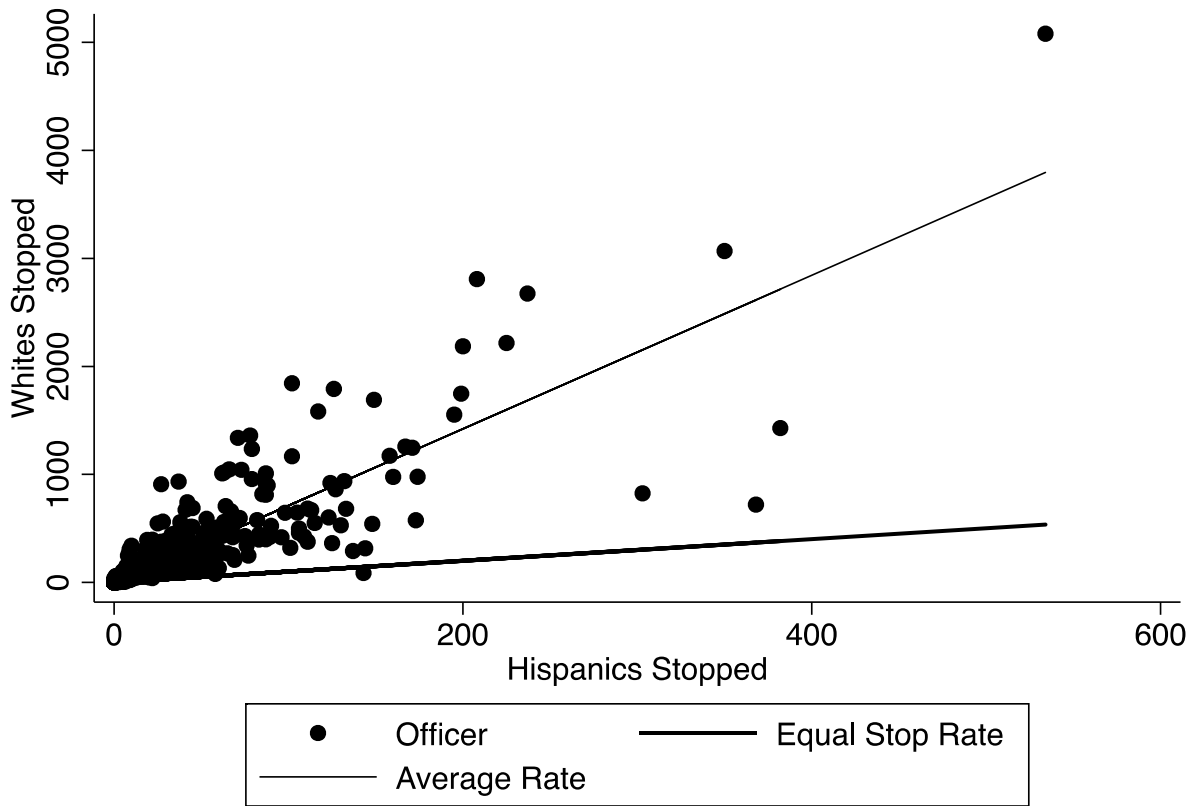
Search Type	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	184,534	-	71.31	8.63	-
Total Searches	3,334	1.81	1.51	4.09	2.71
Consent	1,256	0.68	0.58	1.31	2.26
Search Warrant	11	0.01	0.01	0.03	3.00
Probable Cause	589	0.32	0.26	0.39	1.50
Incident to Arrest	1,450	0.79	0.66	2.31	3.50
Protective Frisk	28	0.02	0.01	0.06	6.00

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

Table 5. Distribution of Officer IDs by Stop

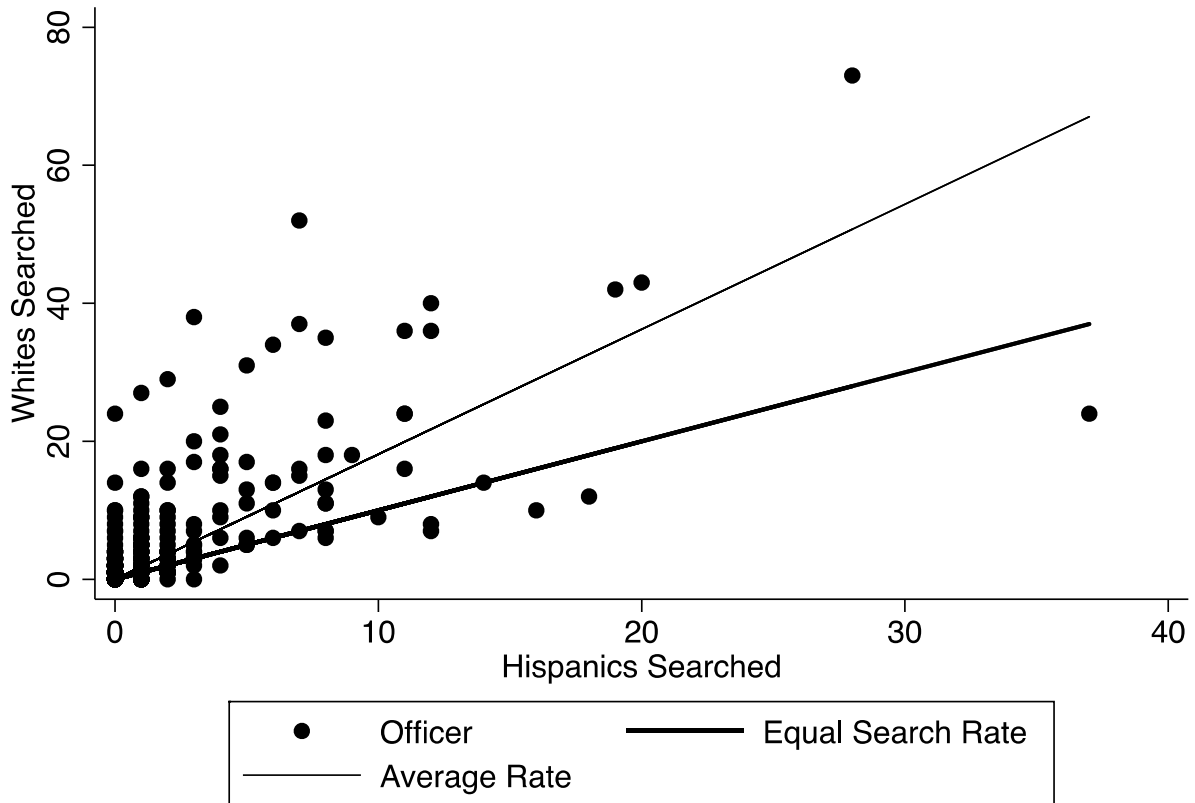
Number of Stops	Officers w/ this many Stops	Percent of Officers	Cumulative Percent	Percent of Stops	Cumulative Percent
1	277	32.98	32.98	0.15	0.15
2 – 10	159	18.93	51.91	0.37	0.52
11 - 100	144	17.14	69.05	3.39	3.91
101 – 1,000	210	25.00	94.05	45.04	48.95
1,001 +	50	5.95	100.00	51.05	100.00
Total	840	100	-	100	-

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



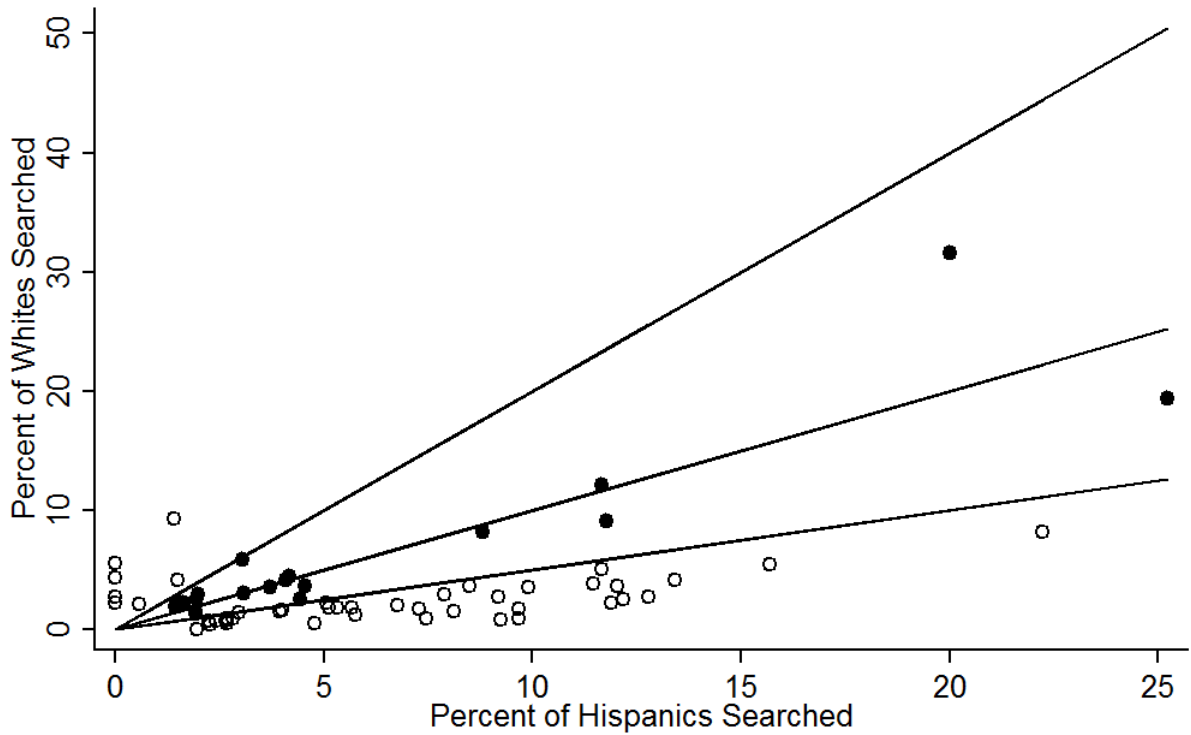
On average, officers stop 7.11 Whites for each Hispanic stopped.

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



On average, officers search 1.81 Whites for each Hispanic searched.

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



Includes 63 officers with a minimum of 50 White stops, 50 Hispanic stops, and a search rate above the department average of 1.81 for either ethnicity. The hollow circles indicate high disparity officers. 7 officers search Whites at more than twice the rate that they search Hispanics. 40 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	1,300	60.04	19.92
Speed Limit	206	58.19	14.08
Stop Light/Sign	61	40.74	11.48
Driving Impaired	121	76.92	35.54
Safe Movement	94	57.14	25.53
Vehicle Equipment	271	65.95	14.39
Vehicle Regulatory	170	59.56	20.00
Seat Belt	67	48.15	19.40
Investigation	234	58.33	17.95
Other Vehicle	76	60.04	36.84

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

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	107,881	-	70.89	10.88	0.15
Total Searches	2,825	2.62	2.14	5.35	2.50
Speed Limit	42,468	1.47	1.23	3.39	2.76
Stop Light/Sign	7,829	1.67	1.52	3.09	2.03
Driving Impaired	1,204	32.14	31.48	45.69	1.45
Safe Movement	5,849	4.68	4.71	8.51	1.81
Vehicle Equipment	15,540	3.36	2.92	4.83	1.65
Vehicle Regulatory	21,545	1.84	1.33	3.50	2.63
Seat Belt	6,210	1.27	0.79	3.51	4.44
Investigation	3,405	7.81	9.26	4.65	0.50
Other Vehicle	3,831	3.73	3.03	5.21	1.72

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

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	76,652	-	71.87	5.46	0.08
Total Searches	509	0.66	0.68	0.55	0.81
Speed Limit	35,378	0.29	0.27	0.40	1.48
Stop Light/Sign	5,468	0.42	0.46	0.29	0.63
Driving Impaired	492	20.12	23.99	8.11	0.34
Safe Movement	3,533	1.81	2.13	0.79	0.37
Vehicle Equipment	8,661	0.91	0.91	1.14	1.25
Vehicle Regulatory	16,829	0.37	0.35	0.25	0.71
Seat Belt	2,819	0.60	0.68	-	-
Investigation	1,274	3.06	3.40	0.75	0.22
Other Vehicle	2,198	1.09	1.07	-	-

Table A4. Type of Search by Ethnicity: Men

Search Type	Number	% Total	% White	% Hispanic	Ratio Hispanic:White
Total Stops	107,881	-	70.89	10.88	0.15
Total Searches	2,825	2.62	2.14	5.35	2.50
Consent	1,090	1.01	0.84	1.70	2.02
Search Warrant	11	0.01	0.01	0.03	3.00
Probable Cause	488	0.45	0.38	0.51	1.34
Incident to Arrest	1,211	1.12	0.90	3.04	3.38
Protective Frisk	25	0.02	0.02	0.07	3.50

Table A5. Type of Search by Ethnicity: Women

Search Type	Number	% Total	% White	% Hispanic	Ratio Hispanic:White
Total Stops	76,652	-	71.87	5.46	0.08
Total Searches	509	0.66	0.68	0.55	0.81
Consent	166	0.22	0.22	0.22	1.00
Search Warrant	-	-	-	-	-
Probable Cause	101	0.13	0.12	0.05	0.42
Incident to Arrest	239	0.31	0.34	0.26	0.76
Protective Frisk	3	-	-	0.02	-



Figure A1. Stops by Day of the Week

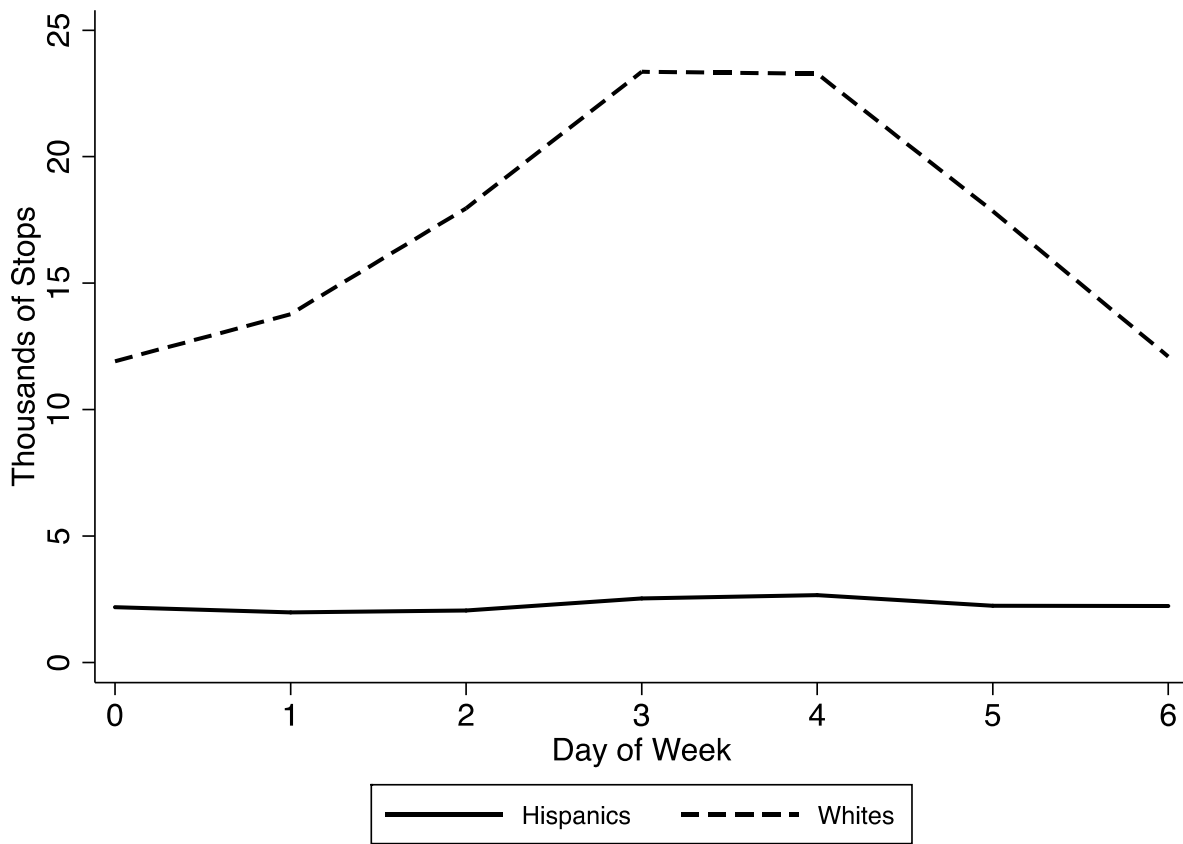


Figure A2. Searches by Day of the Week

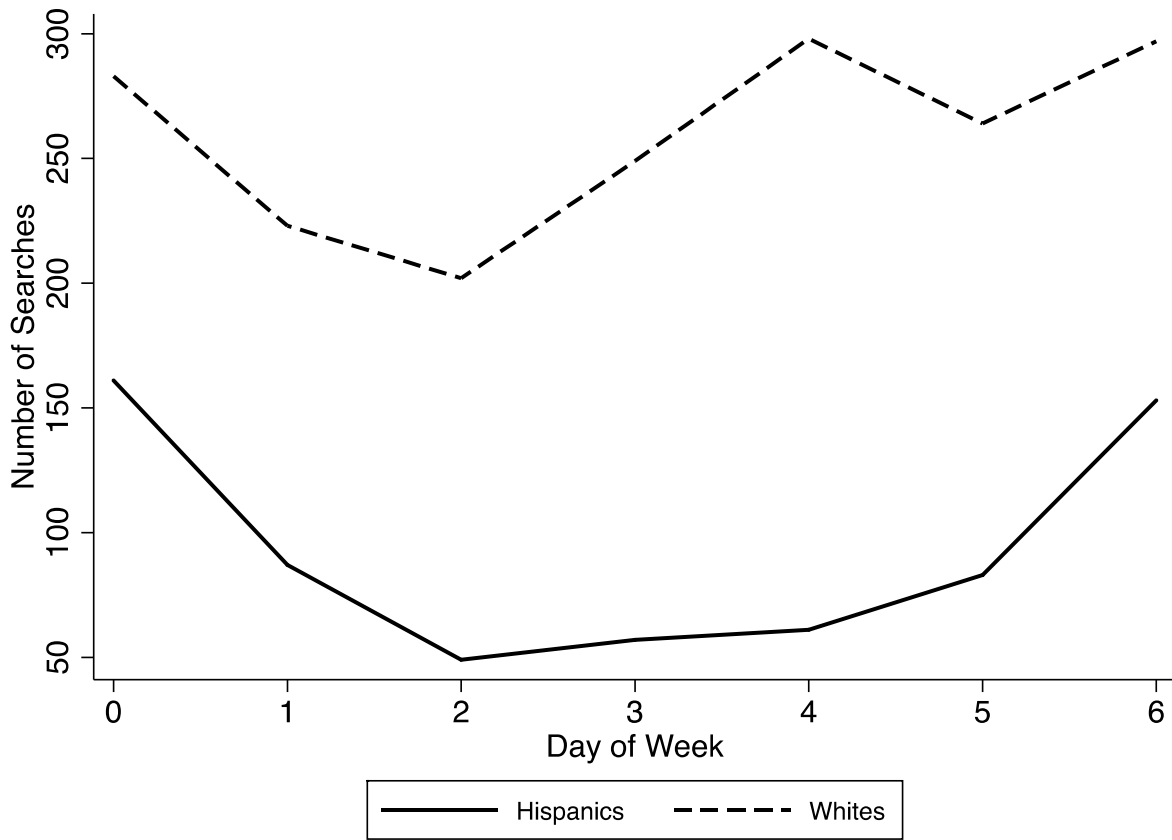
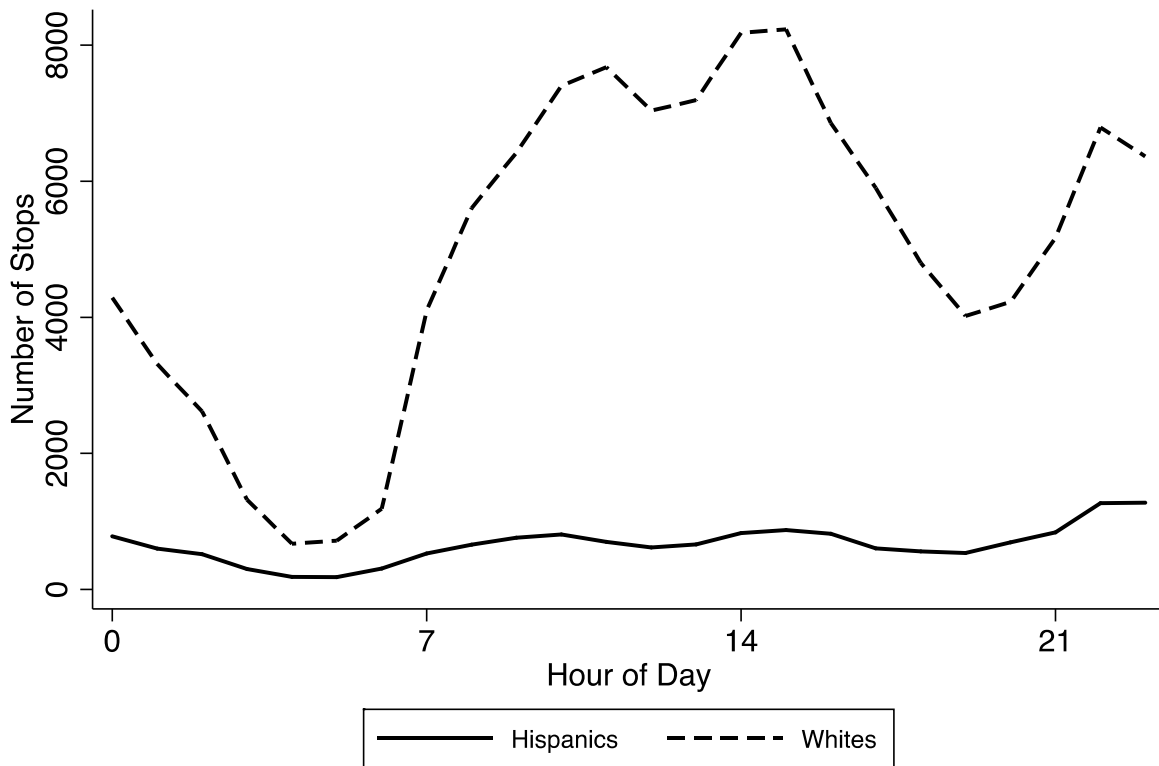
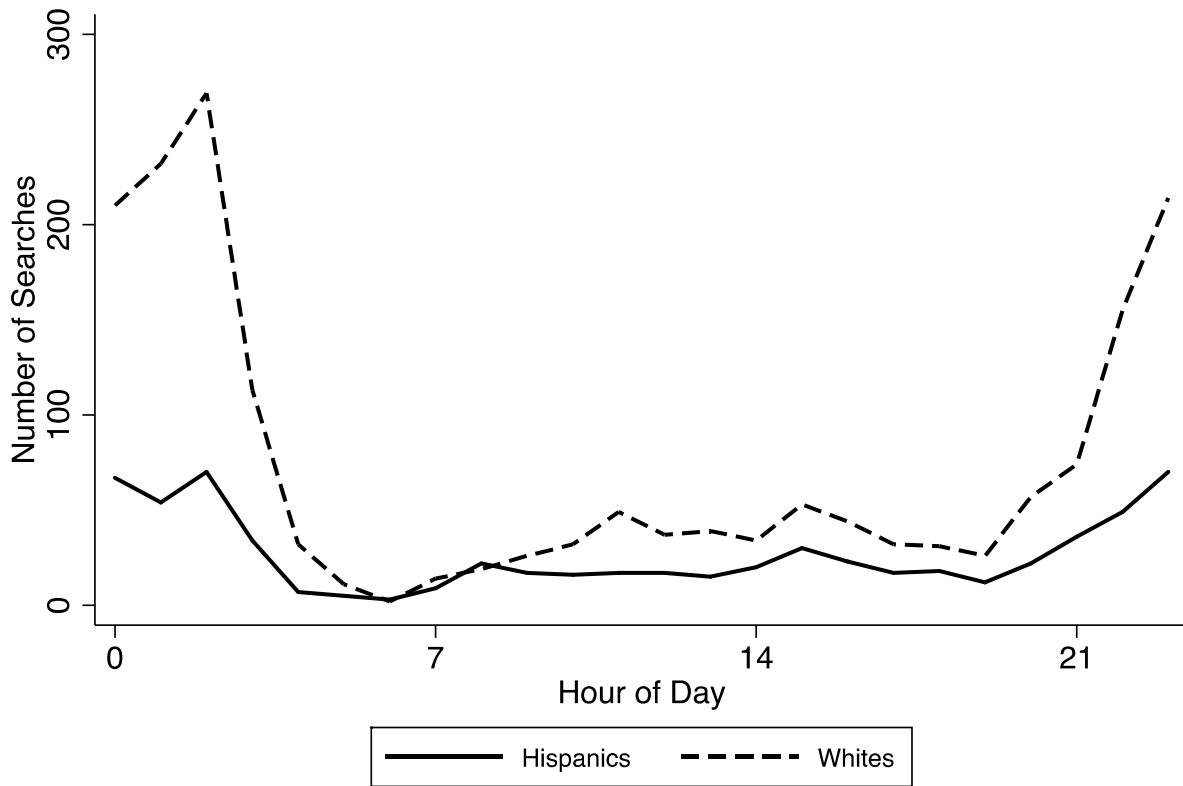


Figure A3. Stops by Hour of the Day



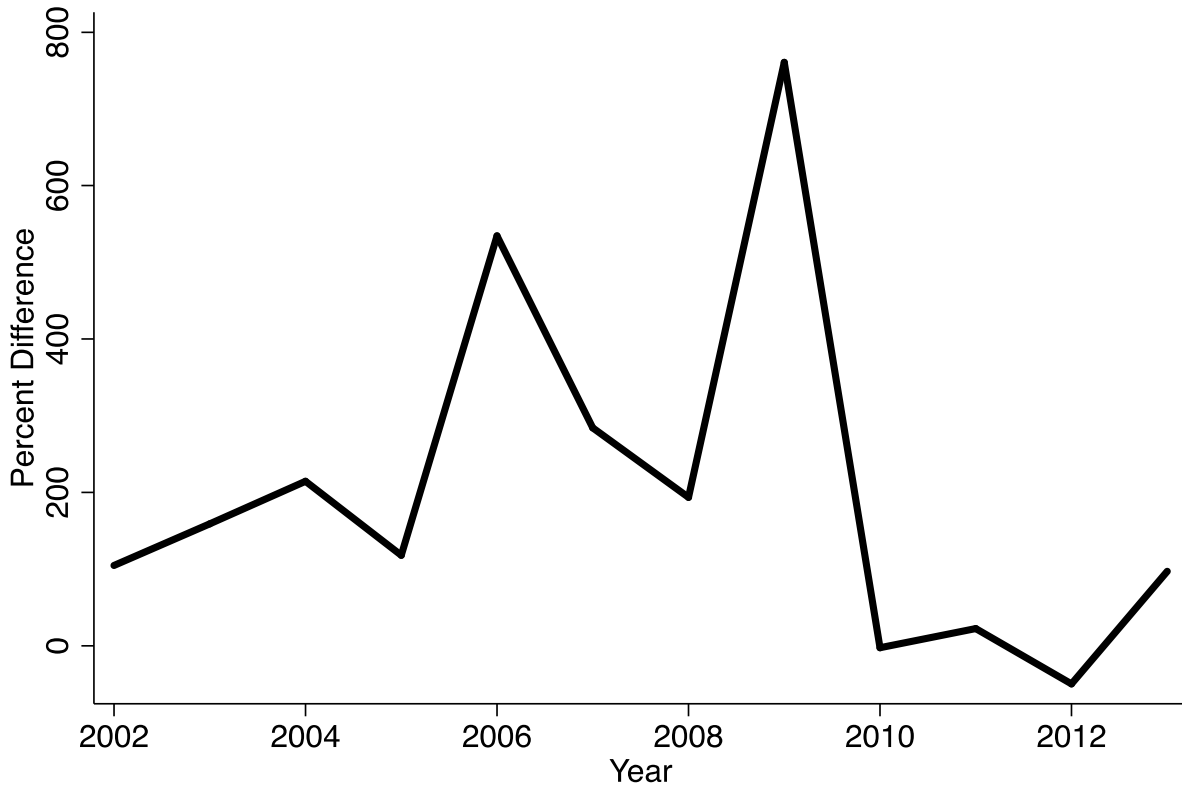
The figure excludes cases where the hour and minute was exactly 0:00. These cases were presumed to be missing data.

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	709	21.27	23.57	12.29
No	2,625	78.73	76.43	87.71
Total	3,334	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
White	No	118,416	1.31	48.67	3.01	46.55	0.47	100.0
Hispanic	No	15,270	1.47	38.62	1.30	57.46	1.15	100.0
Total	No	181,199	1.36	48.92	2.69	46.49	0.54	100.0
White	Yes	1,816	1.21	18.12	0.94	29.90	49.83	100.0
Hispanic	Yes	651	1.23	11.38	-	28.11	58.83	100.0
Total	Yes	3,334	1.35	17.82	0.90	30.17	49.76	100.0