

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

Frank R. Baumgartner, Derek Epp, and Kelsey Shoub¹
University of North Carolina at Chapel Hill
Department of Political Science
<http://www.unc.edu/~fbaum/traffic.htm>

Contact: Frankb@unc.edu

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¹ Baumgartner is the Richard J. Richardson Distinguished Professor of Political Science at UNC-Chapel Hill. Epp and Shoub are graduate students in political science. We thank UNC undergraduates Katherine B. Elliott, Amirah Jiwa, Morgan Herman, and Reena Gupta for assistance on the logistics of this project. We also acknowledge the assistance of the NC Department of Justice and State Bureau of Investigation for making available the official statistics on which this analysis relies, and for answering technical questions about the organization of this complex database.

Table 1. Overview of the Data

Data Subsets	Observations
Total stops	91,418
-2014	4,375
-Passengers	2,491
-Checkpoint stops	763
Stops for analysis	84,010
Searches	5,554

Search Rate = 6.61

Figure 1. Number of Traffic Stops per Year

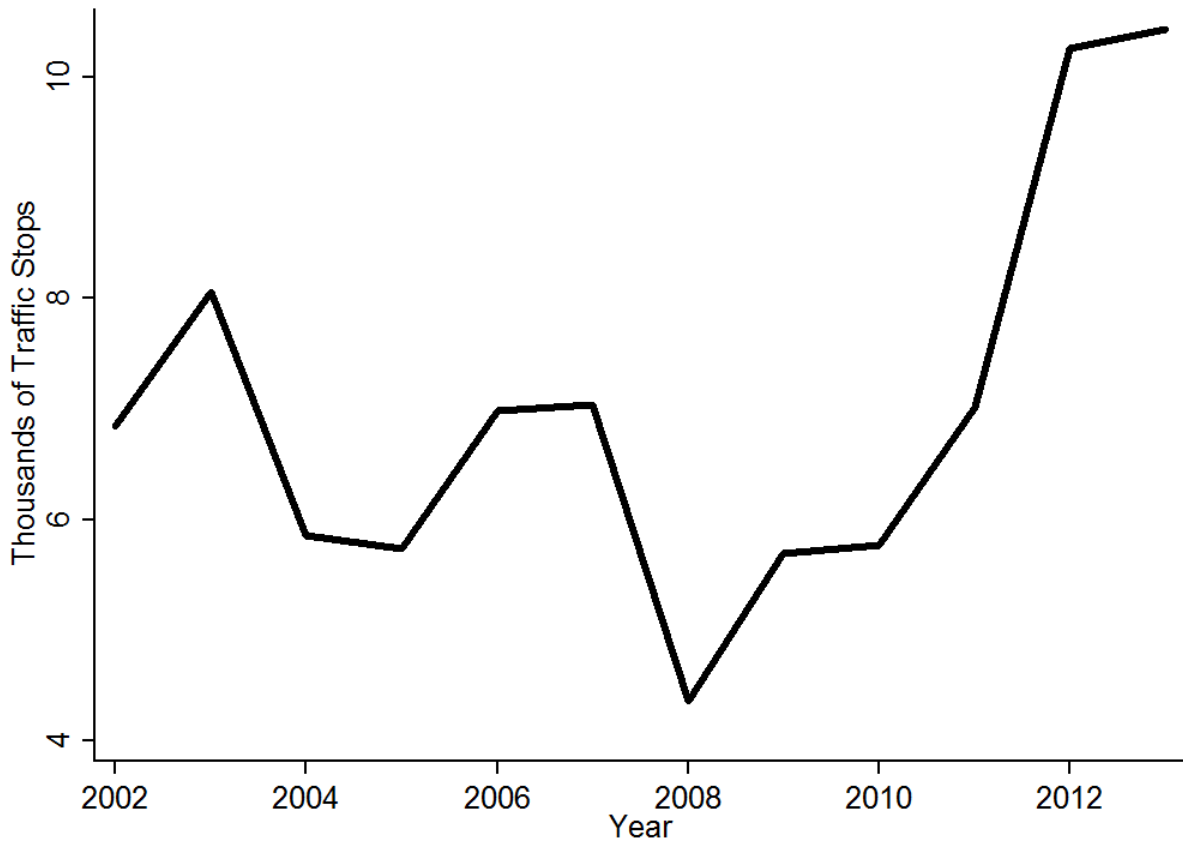


Figure 2. Ethnic Composition of Traffic Stops by Year

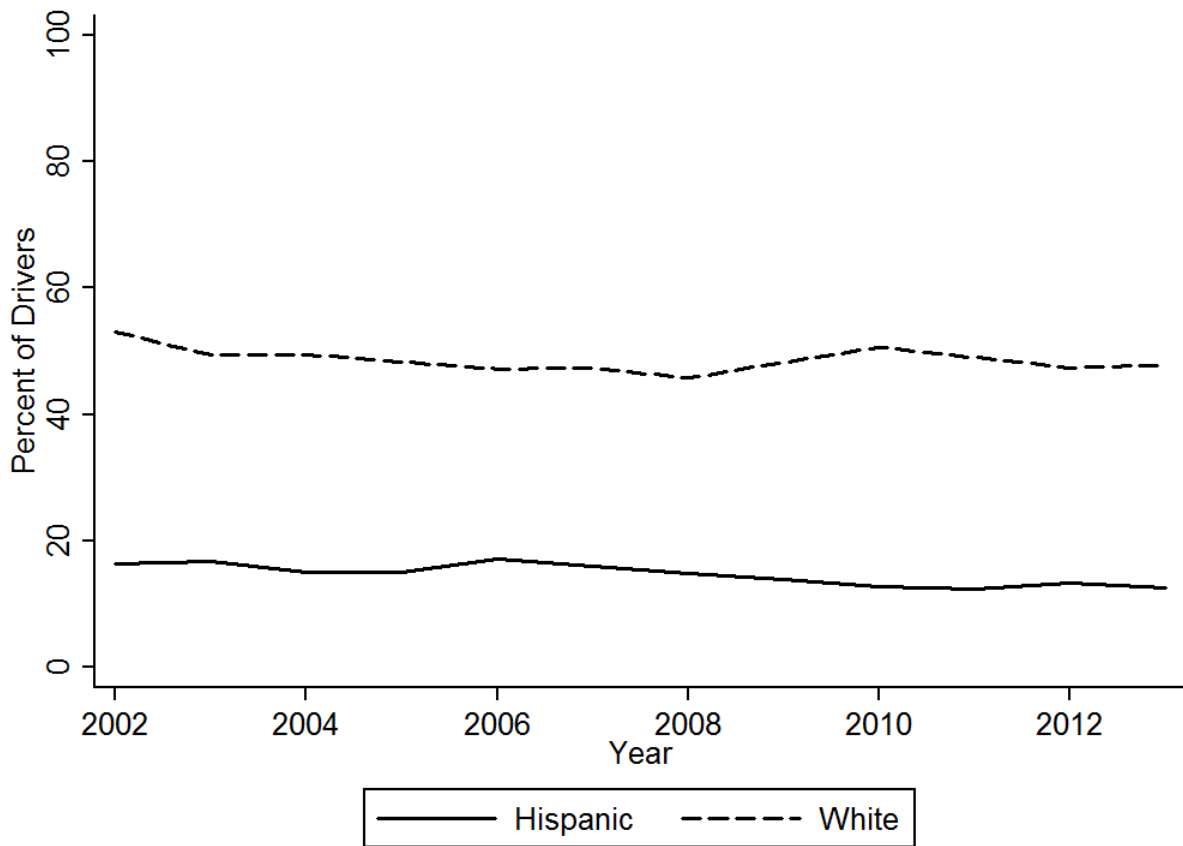


Table 2. Ethnic Composition of Traffic Stops by Purpose, Drivers

Purpose	Number	Percent	
		White	Hispanic
Total Stops	84,010	56.89	14.55
Speed Limit	25,140	63.96	11.07
Stop Light/Sign	5,700	55.76	15.93
Driving Impaired	1,991	61.20	26.47
Safe Movement	6,968	60.97	18.27
Vehicle Equipment	12,605	50.86	16.45
Vehicle Regulatory	16,252	54.55	10.81
Seat Belt	5,552	53.76	11.51
Investigation	5,998	48.11	23.44
Other Vehicle	4,804	48.80	20.07

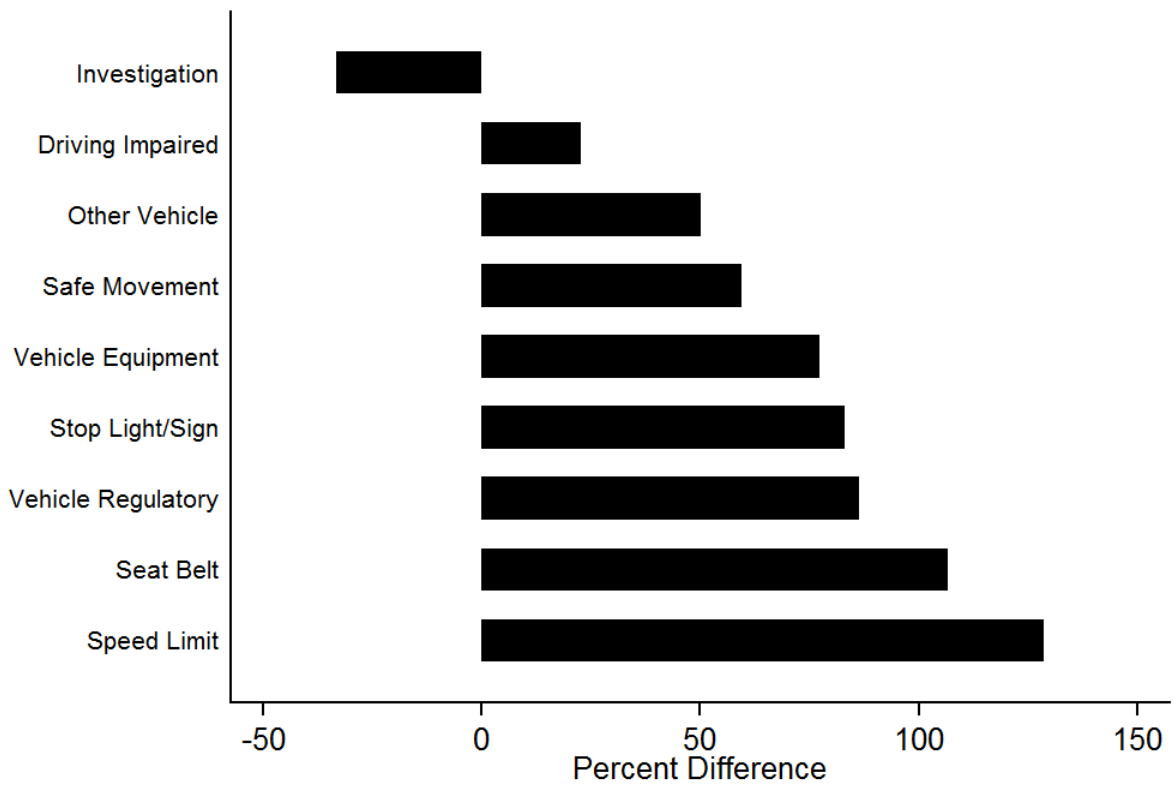
Note: Includes only drivers. Excludes 763 checkpoint stops. Excludes 2,491 passengers.

Table 3. Percent Searched by Ethnicity and Purpose of Stop

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	84,010	-	56.89	14.55	-
Total Searches	5,554	6.61	5.00	9.33	1.87
Speed Limit	25,140	2.70	1.97	4.49	2.28
Stop Light/Sign	5,700	5.40	3.67	6.72	1.83
Driving Impaired	1,991	39.73	39.73	48.77	1.23
Safe Movement	6,968	8.21	6.80	10.84	1.59
Vehicle Equipment	12,605	6.45	4.59	8.15	1.78
Vehicle Regulatory	15,252	4.87	3.29	6.12	1.86
Seat Belt	5,552	5.10	3.41	7.04	2.06
Investigation	5,998	17.04	17.70	11.81	0.67
Other Vehicle	4,804	7.16	5.39	8.09	1.50

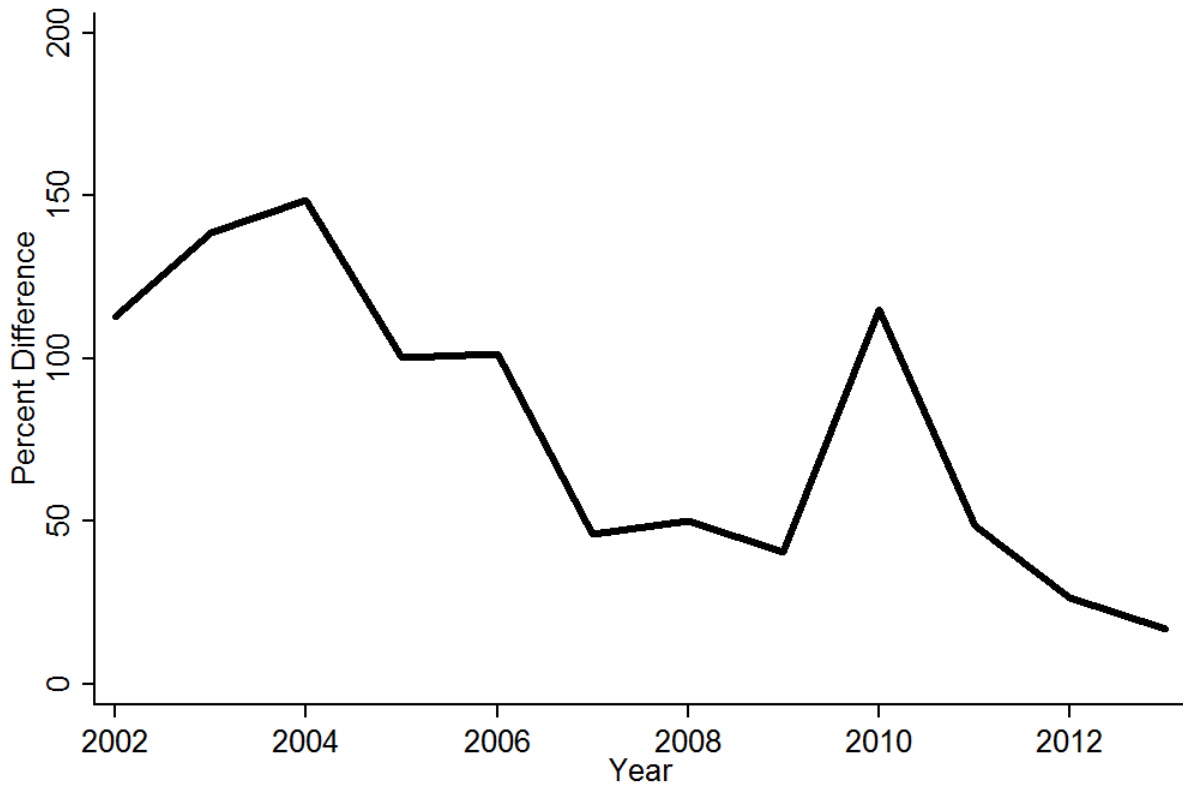
Note: See the appendix for this same table broken down for Men and Women.

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



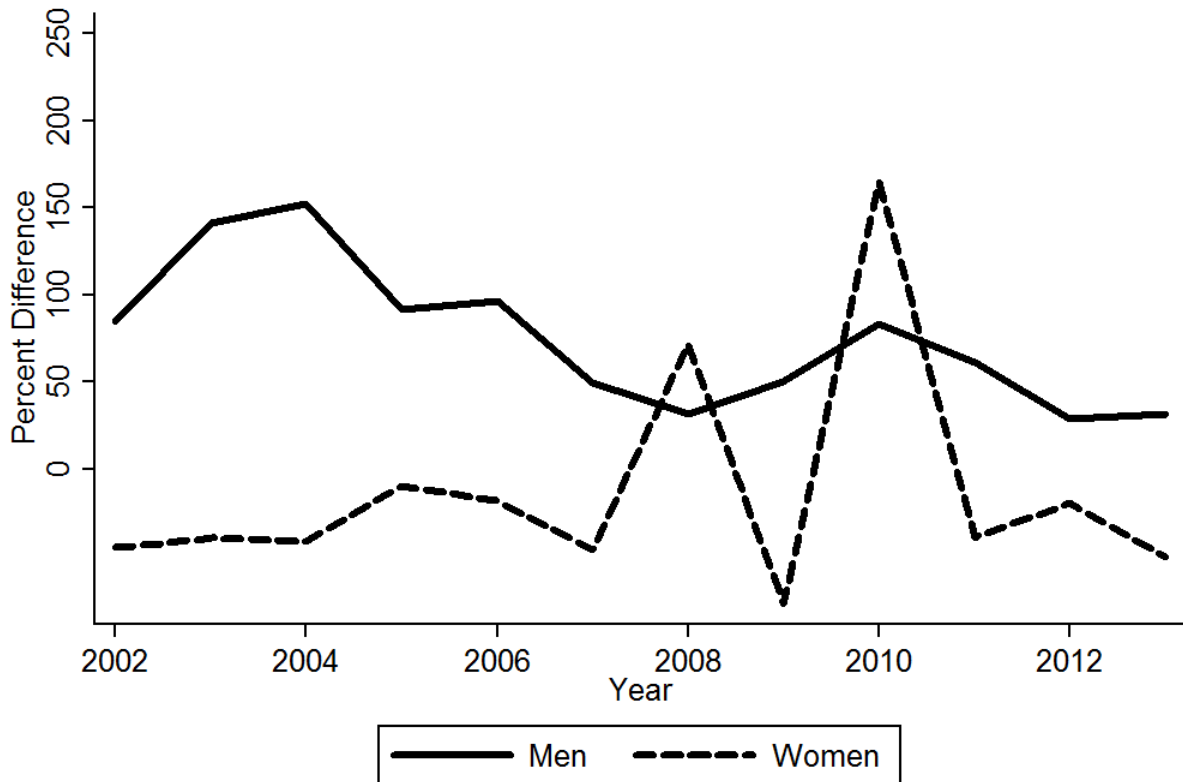
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by purpose of stop.

Figure 4. Ethnic Differences in the Likelihood of Search



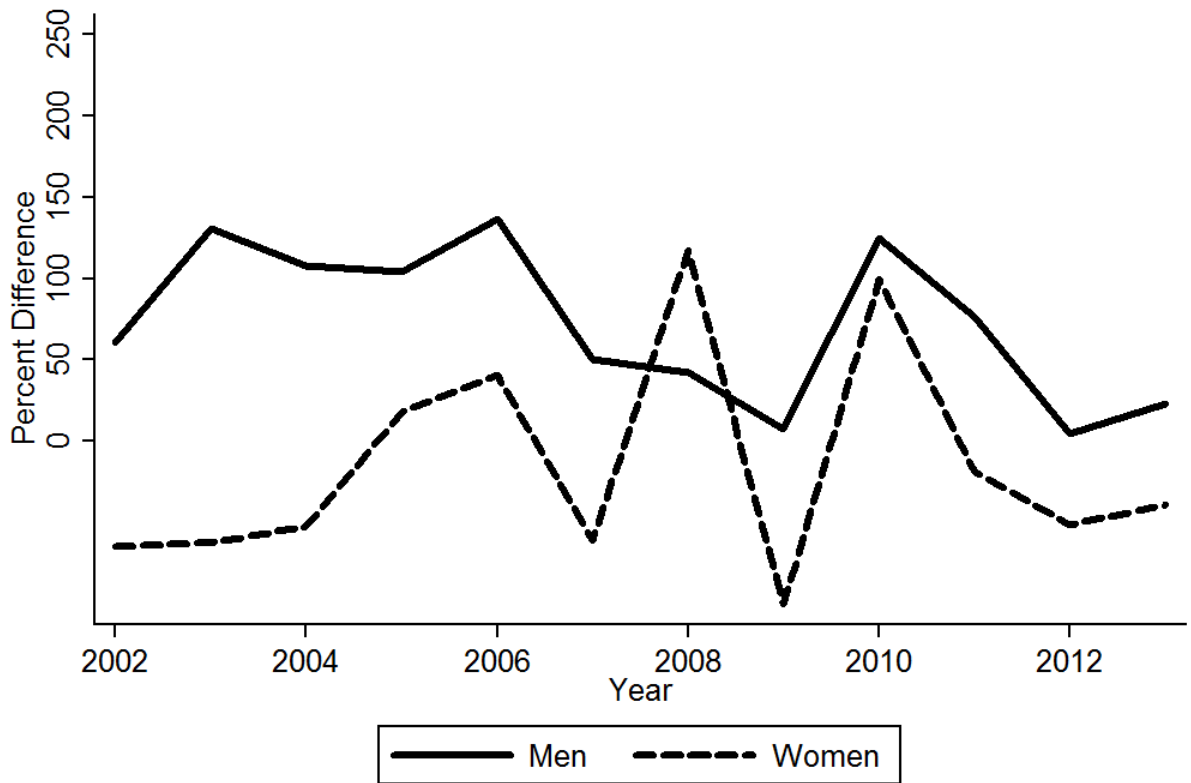
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites.

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



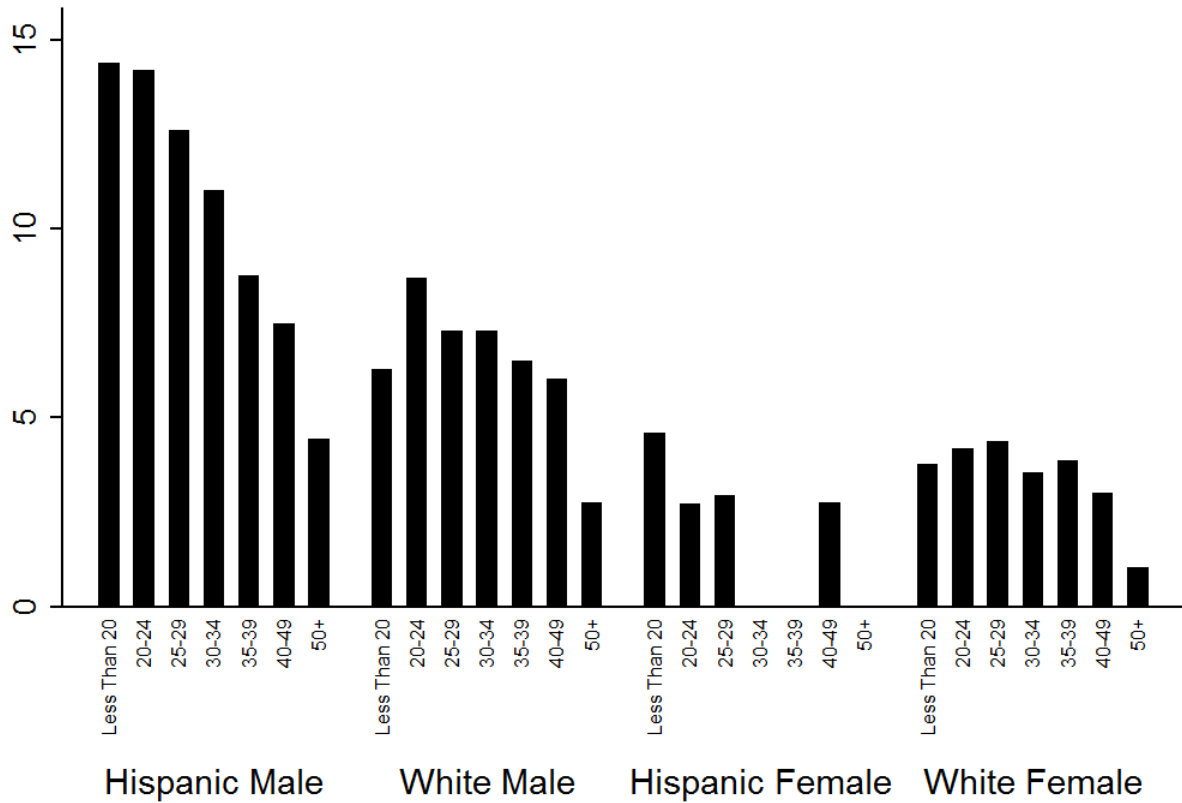
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by gender.

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 84,010 traffic stops from 2002 through 2013, and 5,554 searches. Overall rate of search: 6.61 percent.
 No data are presented for categories with fewer than 10 searches.

Figure 8. Number of Stops, by Ethnicity and Gender

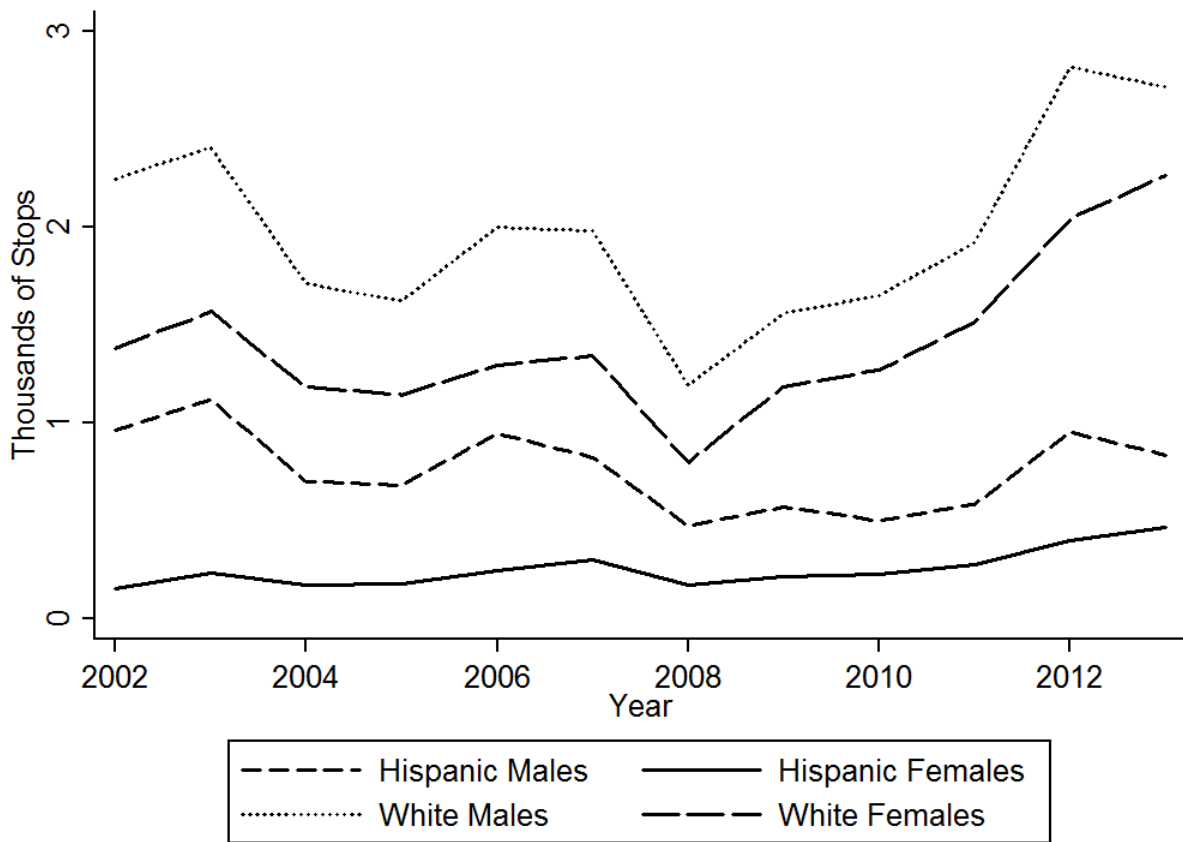


Figure 9. Percent of Stops Resulting in a Search, by Ethnicity and Gender

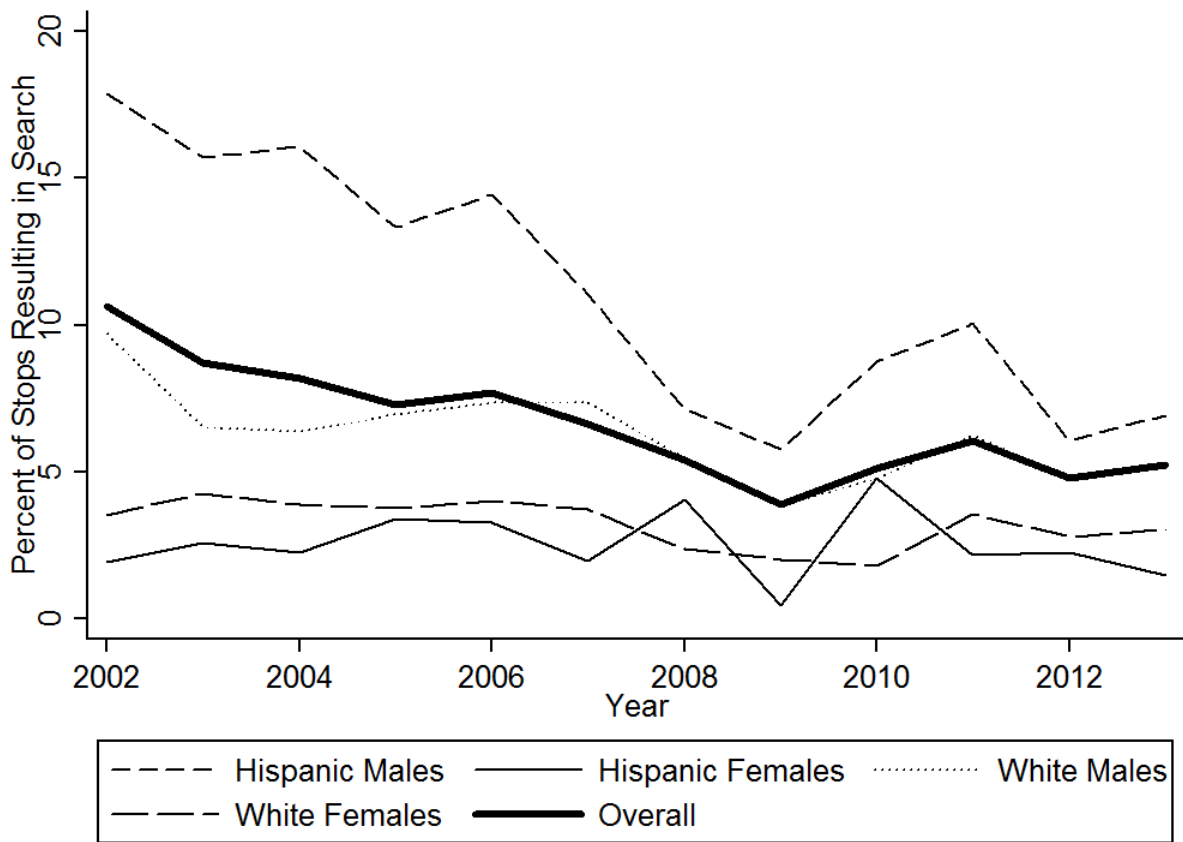


Table 4. Type of Search by Ethnicity

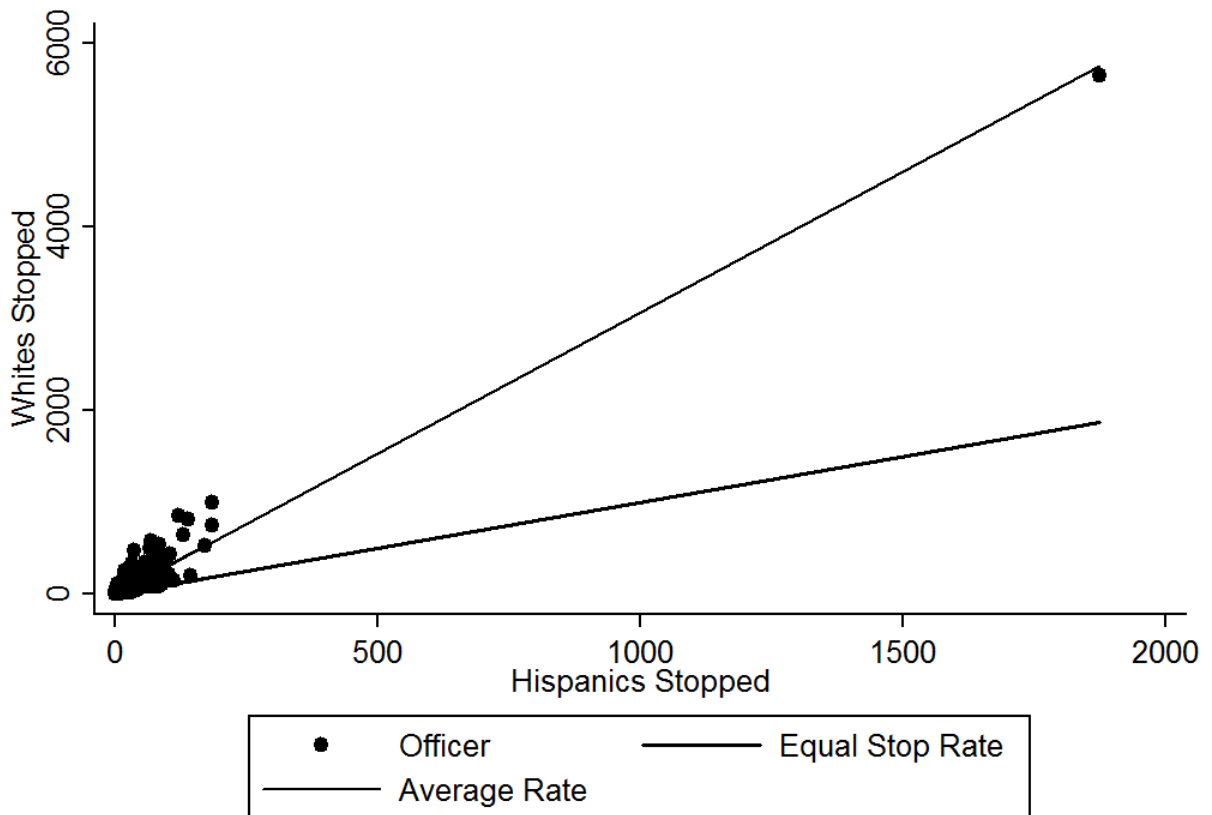
Search Type	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	84,010	-	56.89	14.55	-
Total Searches	5,554	6.61	5.00	9.33	1.87
Consent	1,788	2.12	1.73	2.40	1.39
Search Warrant	23	0.03	0.02	0.03	1.50
Probable Cause	996	1.19	0.81	0.83	1.02
Incident to Arrest	2,643	3.15	2.38	5.93	2.49
Protective Frisk	104	0.12	0.06	0.13	2.17

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

Table 5. Distribution of Officer IDs by Stop

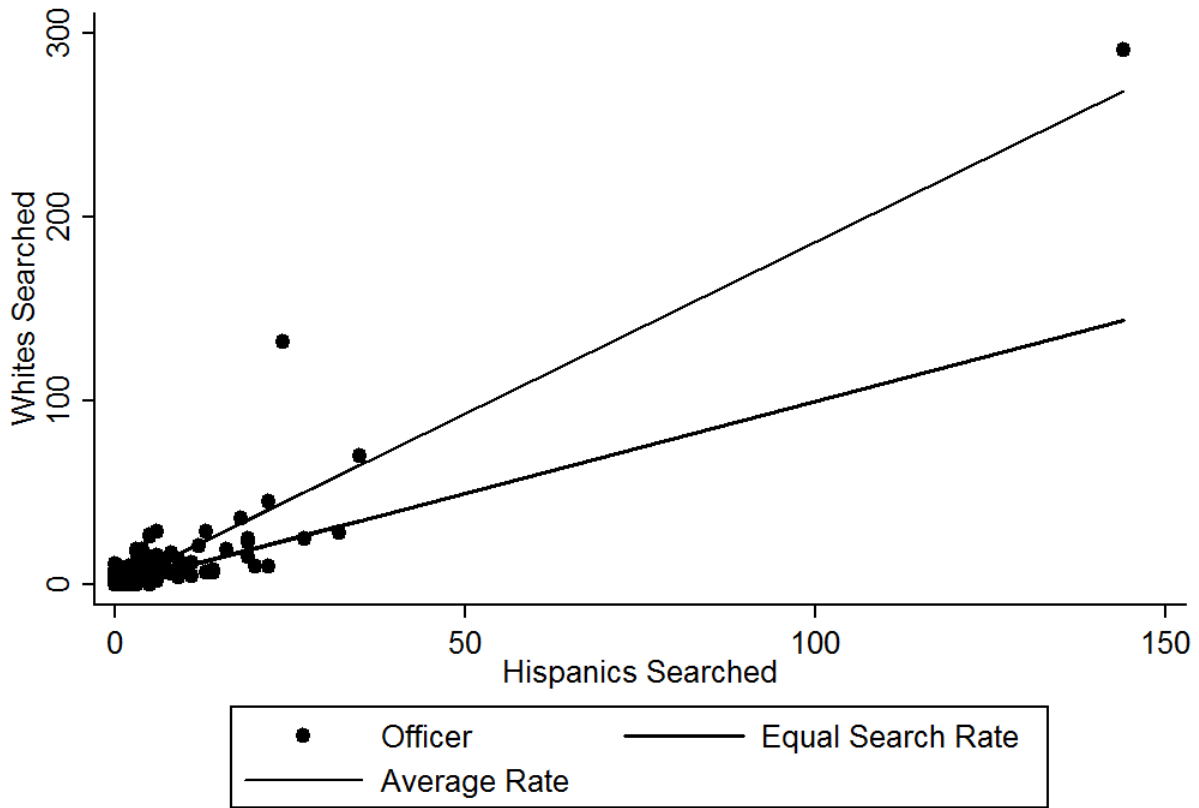
Number of Stops	Officers w/ this many Stops	Percent of Officers	Cumulative Percent	Percent of Stops	Cumulative Percent
1	621	48.55	48.55	0.74	0.74
2 – 10	258	20.17	68.73	1.26	2.00
11 - 100	199	15.56	84.28	9.15	11.15
101 – 1,000	194	15.17	99.45	65.04	76.19
1,001 +	7	0.55	100.00	23.81	100.00
Total	1,279	100	-	100	-

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



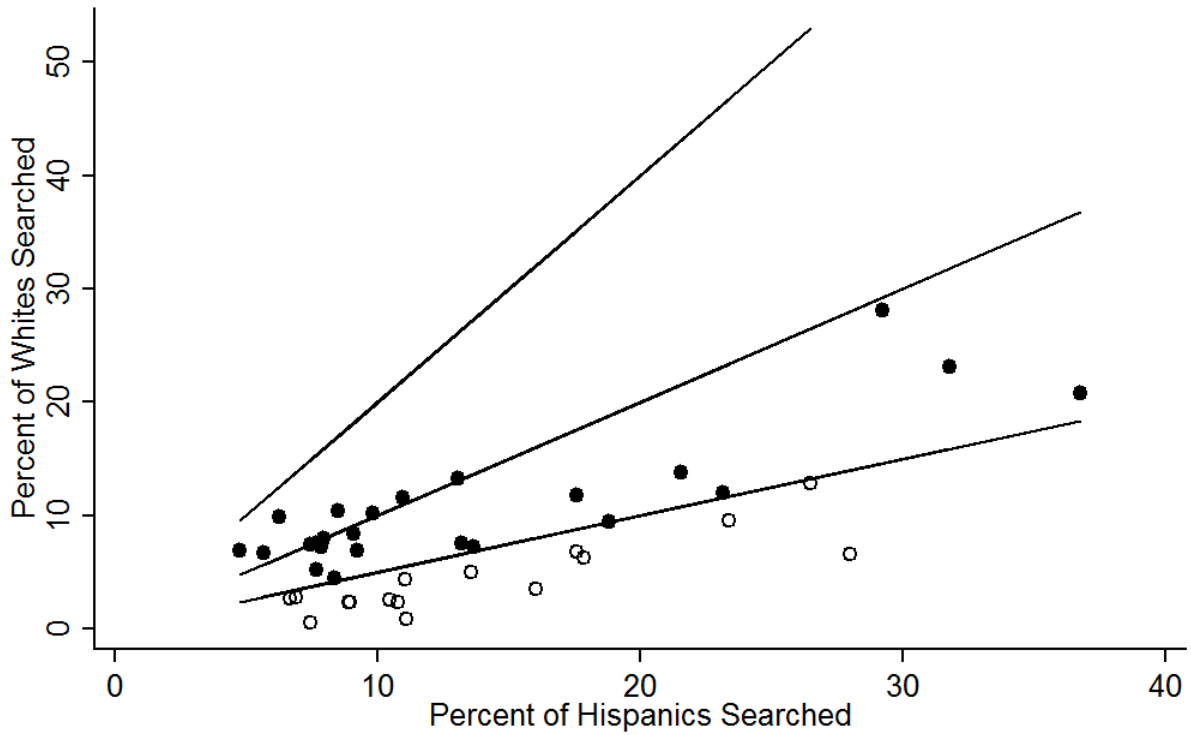
On average, officers stop 3.07 Whites for each Hispanic stopped.

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



On average, officers search 1.87 Whites for each Hispanic searched.

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



Includes 40 officers with a minimum of 50 White stops, 50 Hispanic stops, and a search rate above the department average of 6.61 for either ethnicity. The hollow circles indicate high disparity officers. 0 officers search Whites at more than twice the rate that they search Hispanics. 16 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	2,469	36.78	14.99
Speed Limit	249	37.90	87.95
Stop Light/Sign	132	31.82	83.33
Driving Impaired	161	45.45	68.32
Safe Movement	243	46.07	78.60
Vehicle Equipment	423	35.41	83.45
Vehicle Regulatory	335	33.67	89.55
Seat Belt	139	25.22	82.73
Investigation	647	38.10	90.88
Other Vehicle	140	32.64	80.71

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

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	51,298	-	56.58	17.88	-
Total Searches	4,564	8.90	6.25	11.62	1.86
Speed Limit	13,405	4.05	2.68	6.00	2.24
Stop Light/Sign	3,448	7.42	4.85	8.58	1.77
Driving Impaired	1,521	43.92	43.00	53.33	1.24
Safe Movement	4,729	9.92	7.50	13.15	1.75
Vehicle Equipment	8,011	8.35	5.28	9.97	1.89
Vehicle Regulatory	8,780	6.81	4.19	7.97	1.90
Seat Belt	3,875	6.43	3.95	8.51	2.15
Investigation	4,175	19.52	19.83	13.62	0.69
Other Vehicle	3,354	8.86	6.13	9.51	1.55

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

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	32,712	-	57.34	9.33	-
Total Searches	990	3.03	3.25	2.42	0.74
Speed Limit	11,735	1.15	1.17	1.06	0.91
Stop Light/Sign	2,252	2.31	2.14	1.64	0.77
Driving Impaired	470	26.17	32.62	14.52	0.45
Safe Movement	2,239	4.60	5.45	3.81	0.70
Vehicle Equipment	4,594	3.13	3.51	1.74	0.50
Vehicle Regulatory	6,472	2.24	2.16	1.49	0.69
Seat Belt	1,677	2.03	2.26	1.49	0.66
Investigation	1,823	11.35	13.69	5.45	0.40
Other Vehicle	1,450	3.24	3.88	2.90	0.75

Table A4. Type of Search by Ethnicity: Men

Search Type	Number	% Total	% White	% Hispanic	Ratio Hisp:White
Total Stops	51,298	-	56.58	17.88	-
Total Searches	4,564	8.90	6.25	11.62	1.86
Consent	1,464	2.85	2.16	3.00	1.39
Search Warrant	17	0.04	0.03	0.03	1.00
Probable Cause	817	1.59	1.02	0.97	0.95
Incident to Arrest	2,173	4.24	2.95	7.46	2.53
Protective Frisk	90	0.18	0.08	0.16	2.00

Table A5. Type of Search by Ethnicity: Women

Search Type	Number	% Total	% White	% Hispanic	Ratio Hisp:White
Total Stops	32,712	-	57.34	9.33	-
Total Searches	990	3.03	3.25	2.42	0.75
Consent	324	0.99	1.12	0.59	0.53
Search Warrant	3	0.01	0.01	0.03	3.00
Probable Cause	179	0.55	0.52	0.43	0.83
Incident to Arrest	470	1.44	1.56	1.34	0.86
Protective Frisk	14	0.04	0.04	0.03	0.75

Figure A1. Stops by Day of the Week

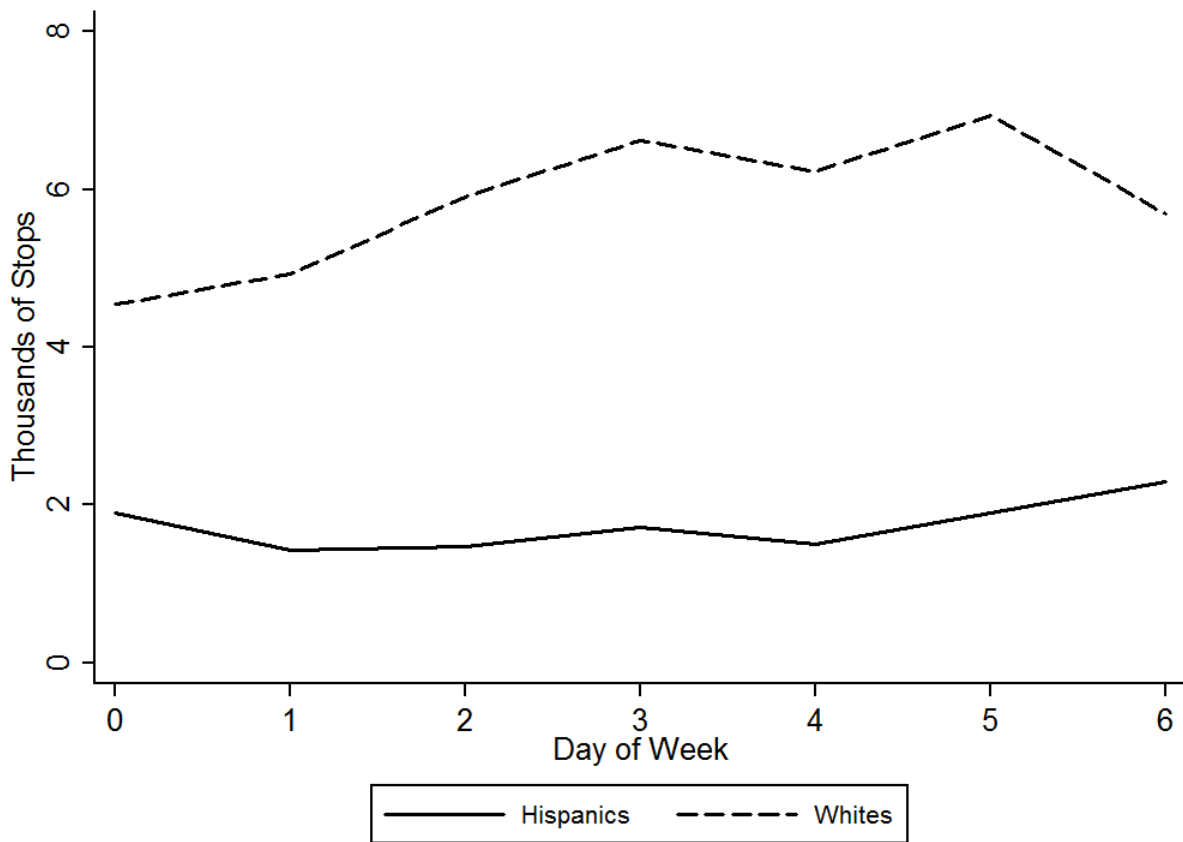


Figure A2. Searches by Day of the Week

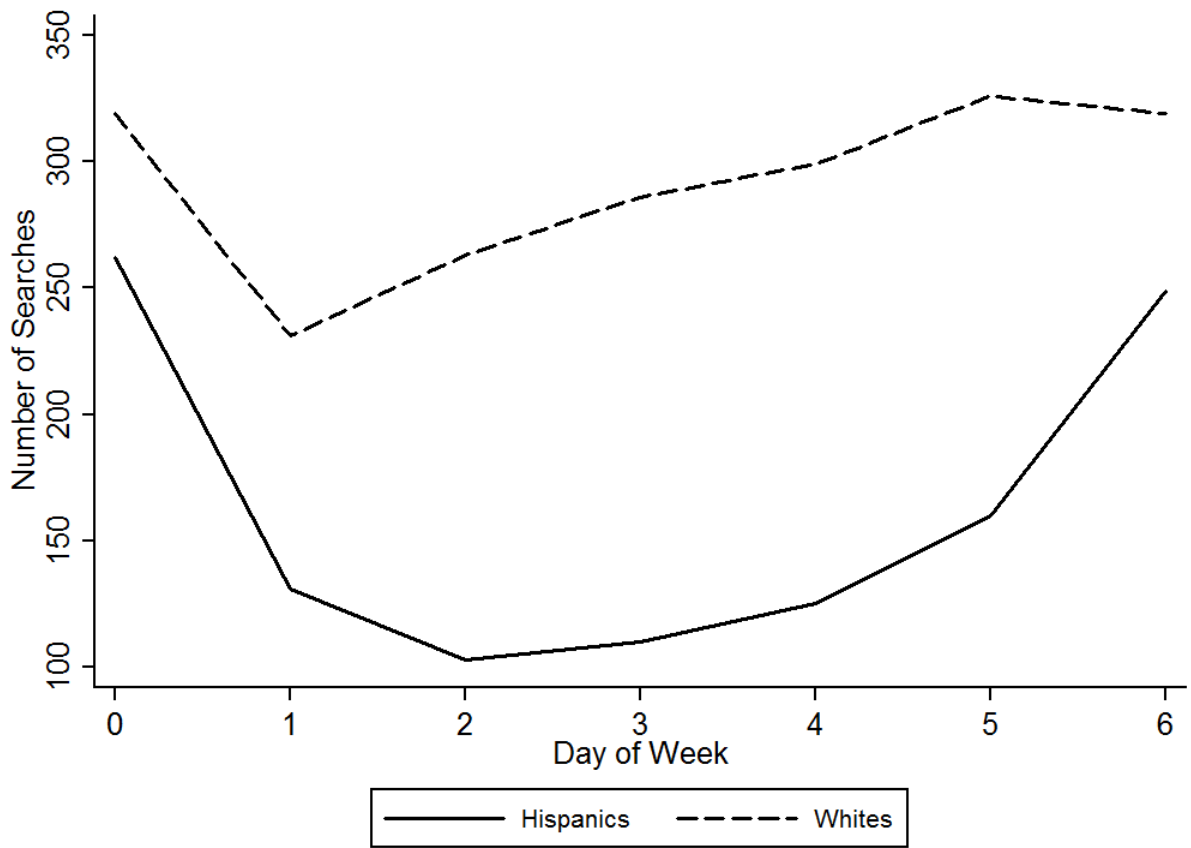
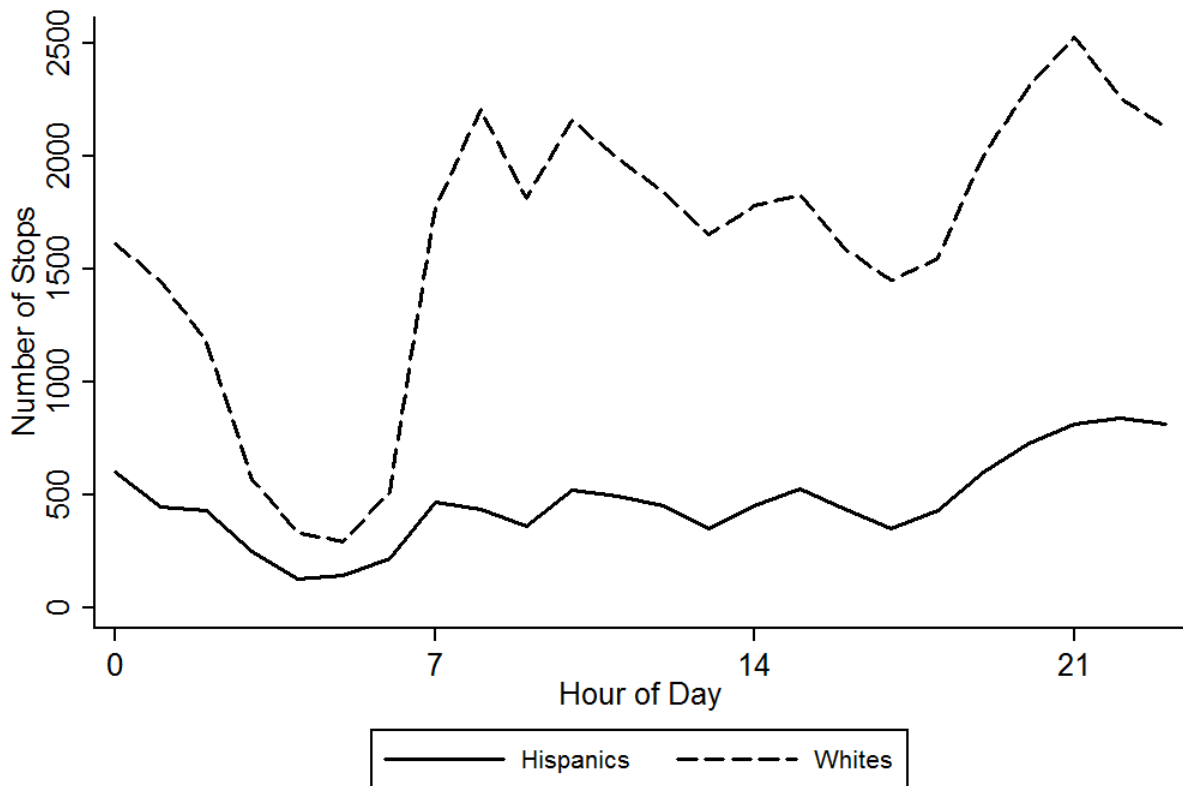
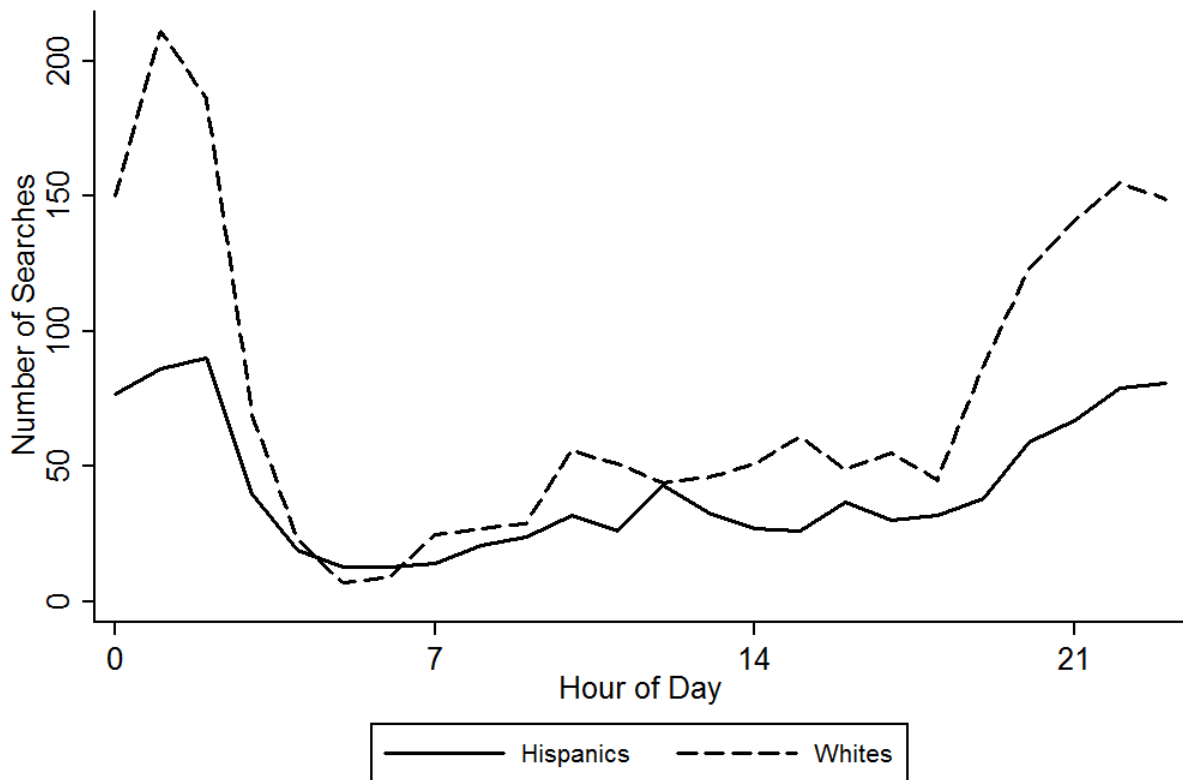


Figure A3. Stops by Hour of the Day



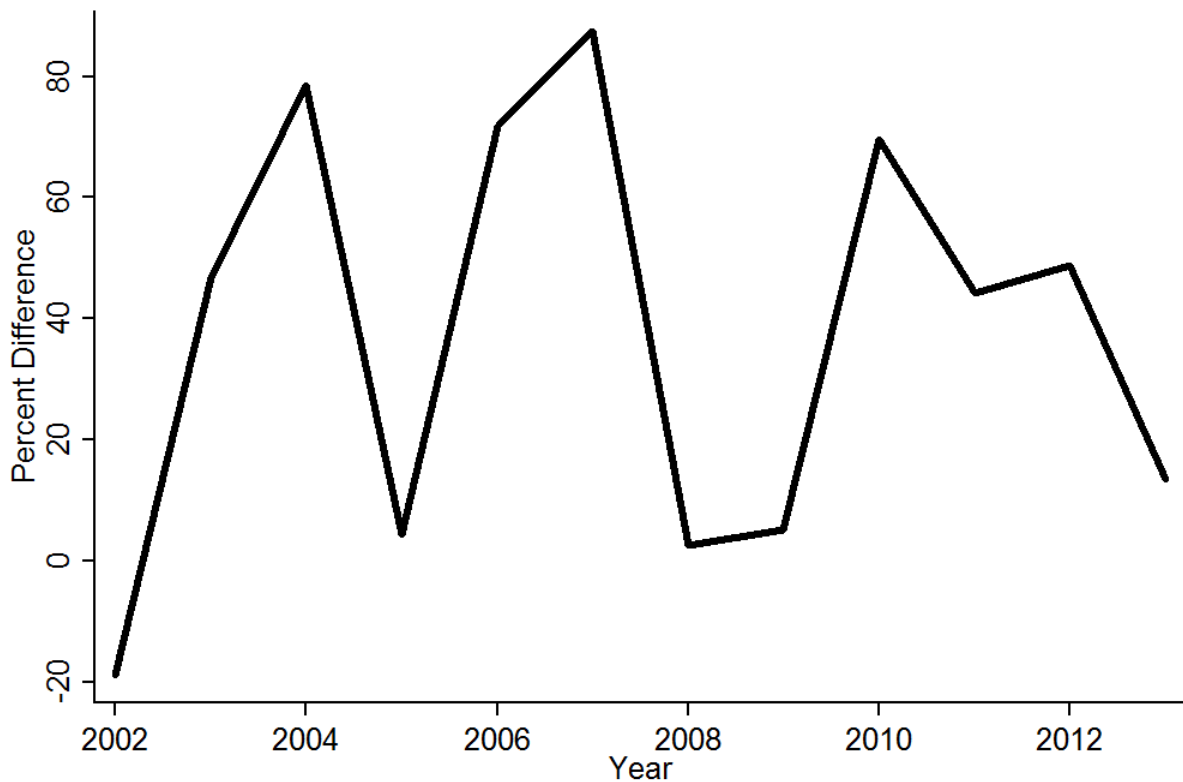
The figure excludes cases where the hour and minute was exactly 0:00. These cases were presumed to be missing data.

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	1,248	22.47	23.64	14.47
No	4,306	77.53	76.36	85.53
Total	5,554	100.00	100.00	100.00

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

Race	Search Occur	N	No Action	Verbal Warning	Written Warning	Citation Issued	Arrest	Total
White	No	38,797	4.02	44.12	2.71	48.14	1.02	100.0
Hispanic	No	11,084	4.35	32.37	1.45	58.72	3.10	100.0
Total	No	78,456	4.51	42.81	2.36	48.81	1.51	100.0
White	Yes	2,043	2.69	15.61	1.13	28.44	52.13	100.0
Hispanic	Yes	1,140	1.67	8.60	1.93	25.09	62.72	100.0
Total	Yes	5,554	3.06	14.17	1.35	29.40	52.02	100.0