

**Analysis of Hispanic-White Differences in Traffic Stops and  
Searches from the NC Division of Motor Vehicles, License and Theft  
Bureau (DMV), 2000-2013**

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Table 1. Overview of the Data

Data Subsets	Observations
Total stops	154,654
-2014	2,657
-Passengers	1,468
-Checkpoint stops	390
Stops for analysis	150,179
Searches	1,996
Search Rate = 1.33	

Figure 1. Number of Traffic Stops per Year

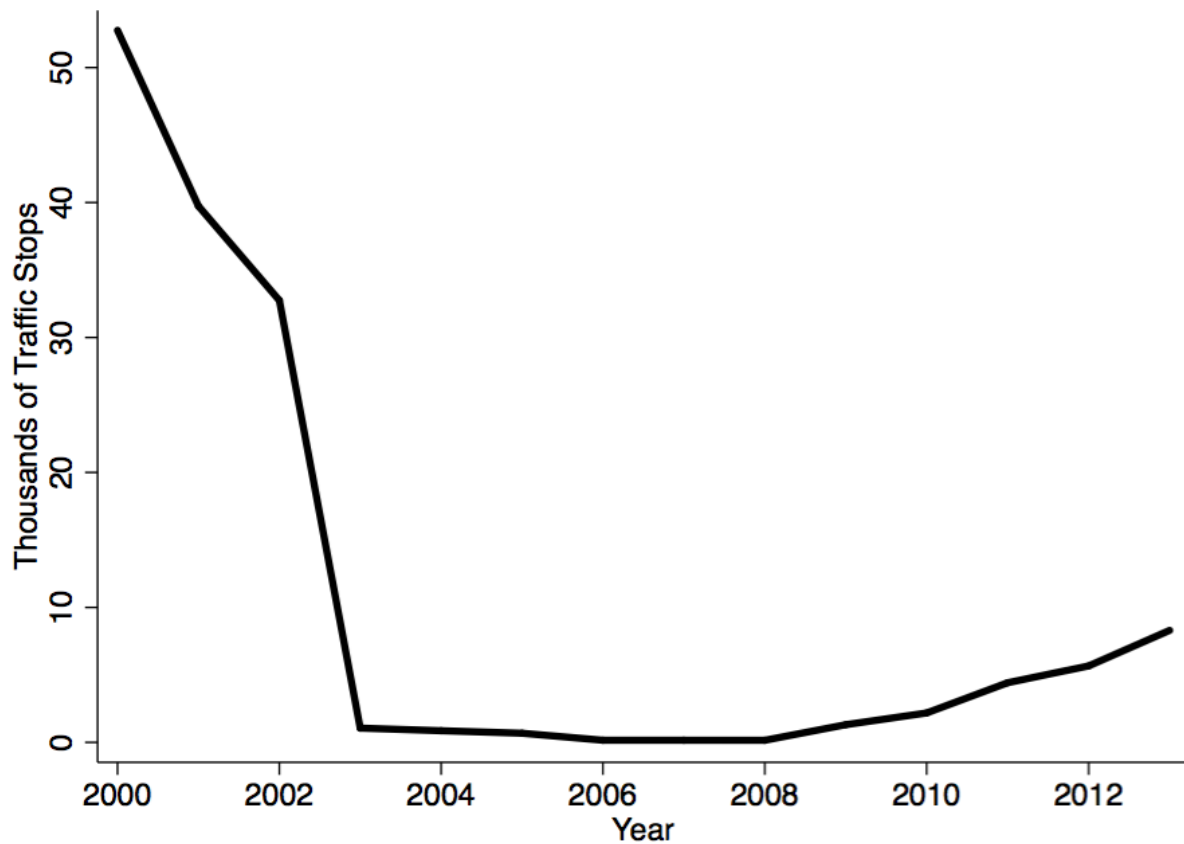


Figure 2. Ethnic Composition of Traffic Stops by Year

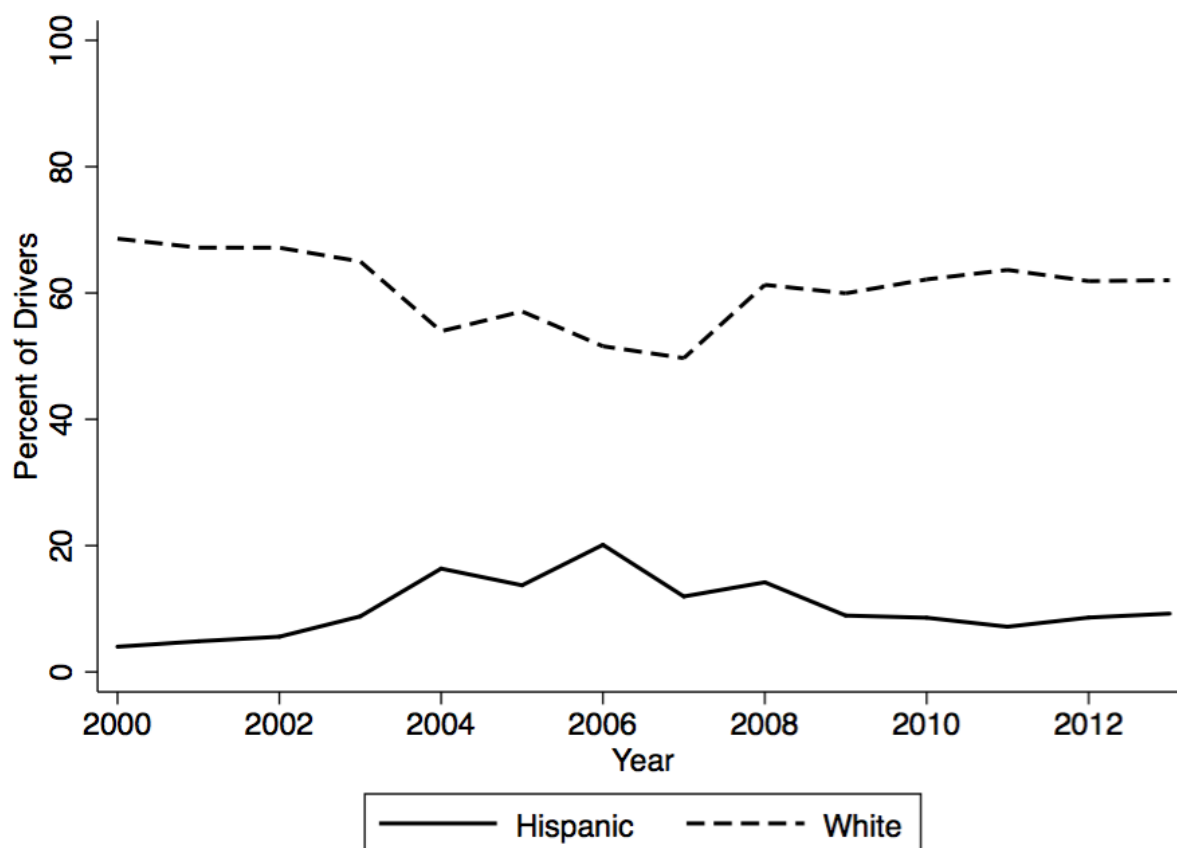


Table 2. Ethnic Composition of Traffic Stops by Purpose, Drivers

Purpose	Number	Percent	
		White	Hispanic
Total Stops	150,179	70.60	5.42
Speed Limit	51,391	70.35	4.14
Stop Light/Sign	1,873	71.82	6.41
Driving Impaired	579	76.13	16.06
Safe Movement	4,900	70.23	7.18
Vehicle Equipment	12,762	69.62	5.74
Vehicle Regulatory	41,561	70.23	5.16
Seat Belt	6,210	75.03	4.93
Investigation	3,973	72.77	11.63
Other Vehicle	26,930	70.65	6.66

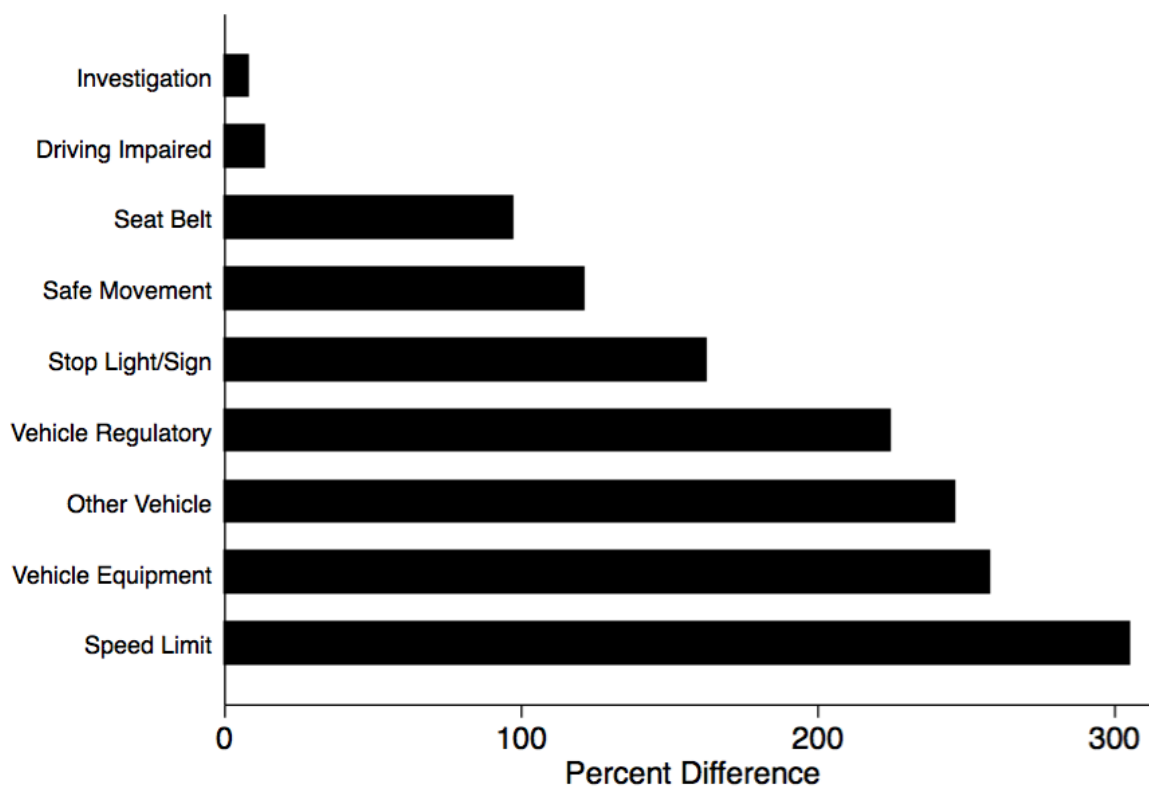
Note: Includes only drivers. Excludes 390 checkpoint stops. Excludes 1,468 passengers.

Table 3. Percent Searched by Ethnicity and Purpose of Stop

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	150,179	-	70.60	5.42	-
Total Searches	1,996	1.33	1.09	3.54	3.25
Speed Limit	51,391	0.68	0.56	2.26	4.04
Stop Light/Sign	1,873	0.75	0.64	1.67	2.61
Driving Impaired	579	39.55	39.73	45.16	1.14
Safe Movement	4,900	1.61	1.28	2.84	2.22
Vehicle Equipment	12,762	1.10	0.80	2.86	3.58
Vehicle Regulatory	41,561	1.48	1.22	3.96	3.25
Seat Belt	6,210	0.66	0.50	0.98	1.96
Investigation	3,973	6.07	5.40	5.84	1.08
Other Vehicle	26,930	1.07	0.81	2.79	3.44

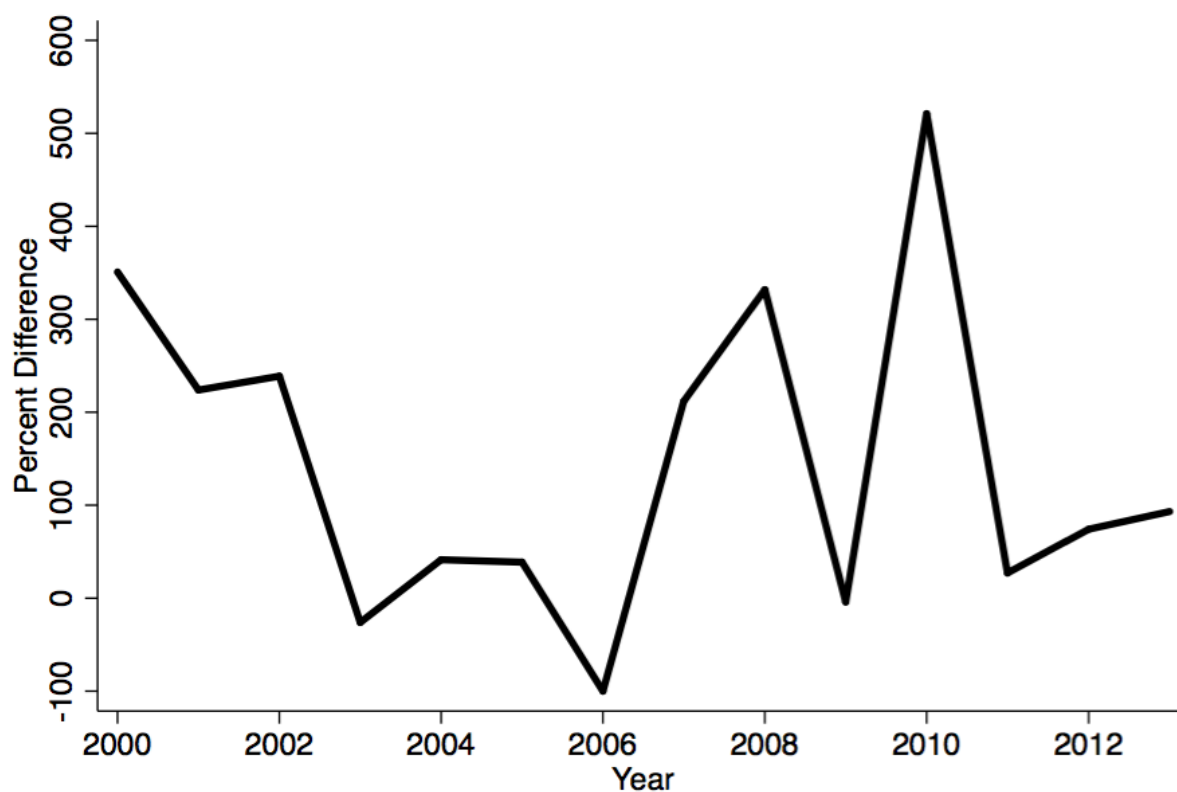
Note: See the appendix for this same table broken down for Men and Women.

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



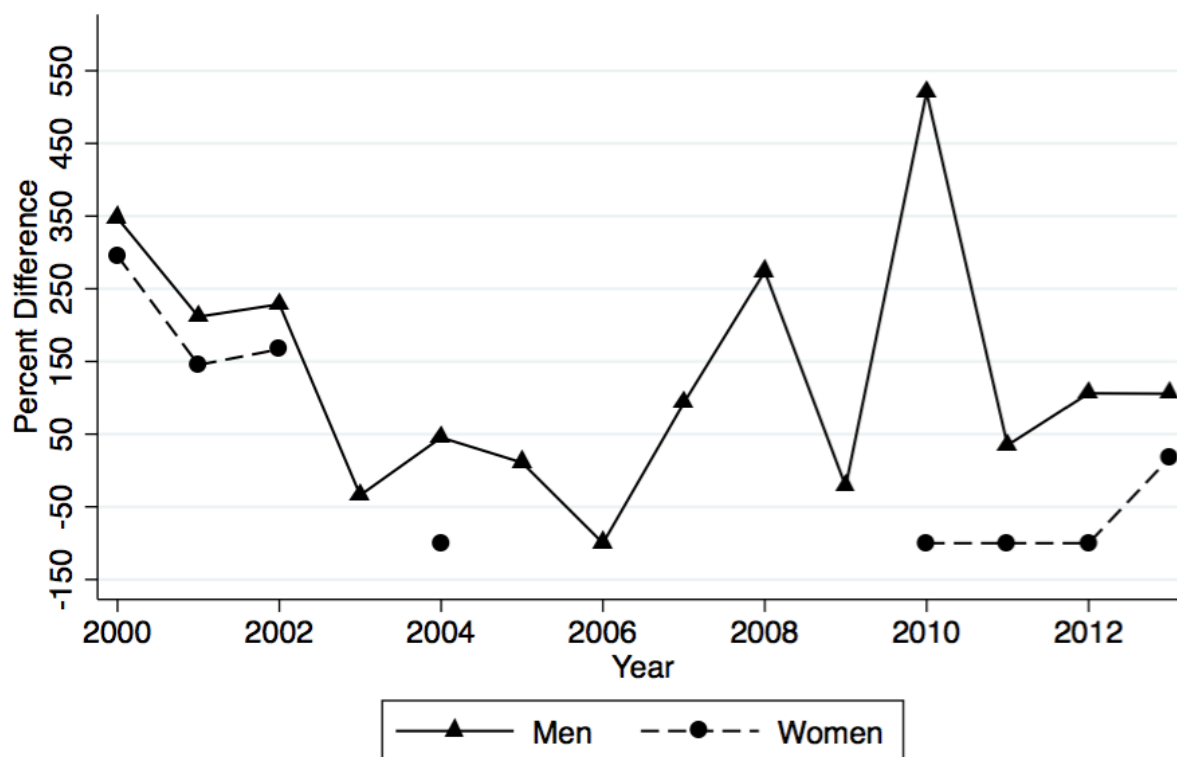
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by purpose of stop.

Figure 4. Ethnic Differences in the Likelihood of Search



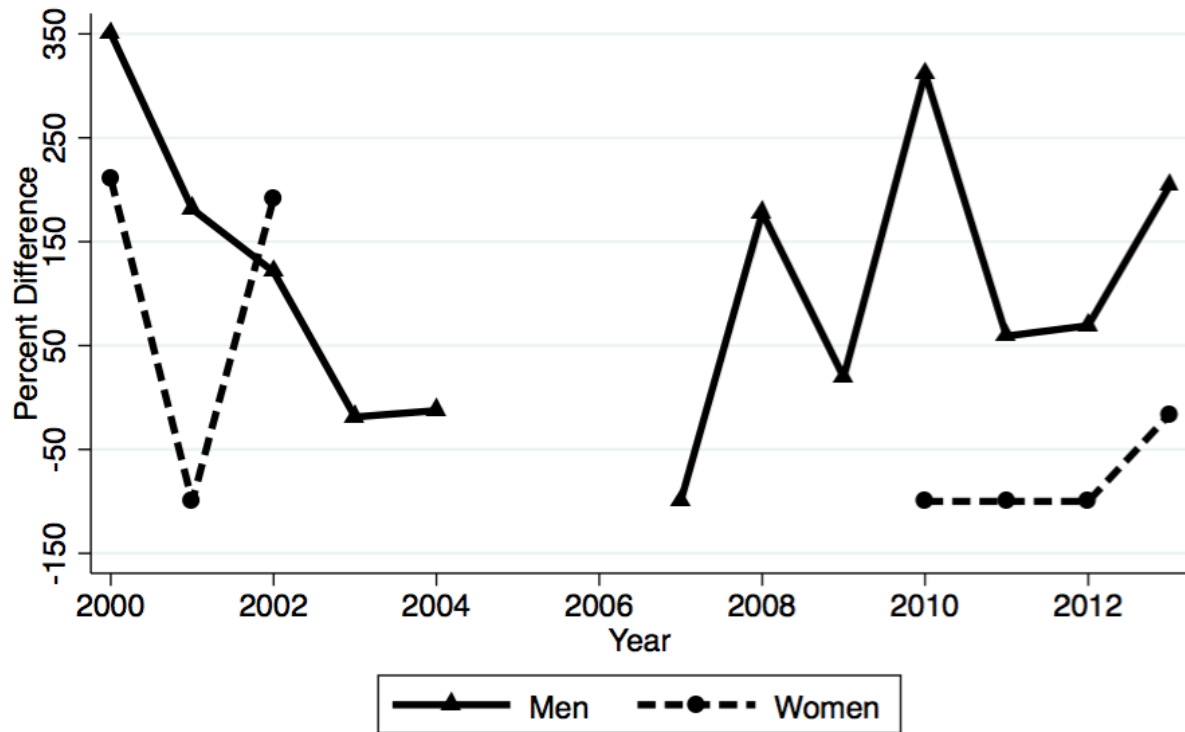
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites.

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



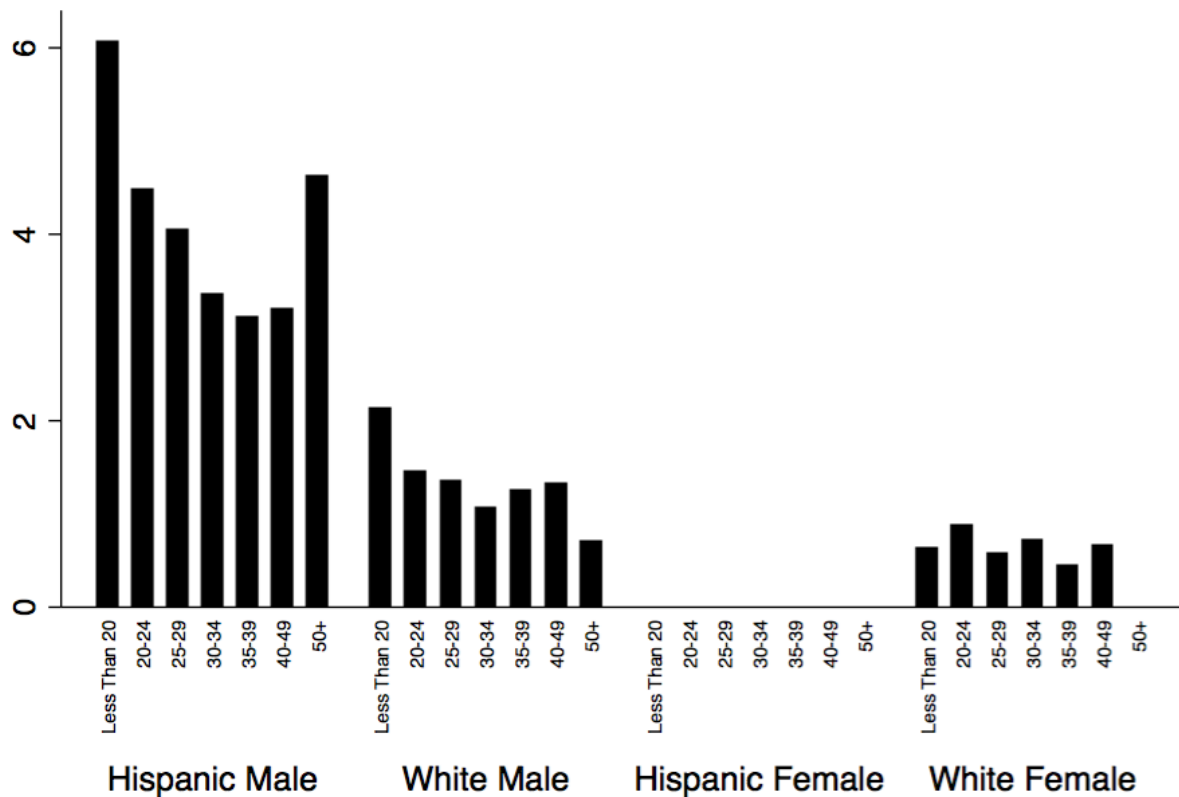
The figure shows the percentage difference in the likelihood of Hispanics being searched as compared to Whites by gender. Points for females in 2003 and from 2005 through 2009 are missing due to a lack Hispanic and White female searches.

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. Points for females from 2003 through 2009 are missing due to a lack Hispanic and White females under 30 searched. Points for males from 2005 through 2006 are missing due to a lack of Hispanic and White Males Under 30 searched

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



Based on 150,179 traffic stops from 2000 through 2013, and 1,996 searches. Overall rate of search: 1.33 percent.  
 No data are presented for categories with fewer than 10 searches.

Figure 8. Number of Stops, by Ethnicity and Gender

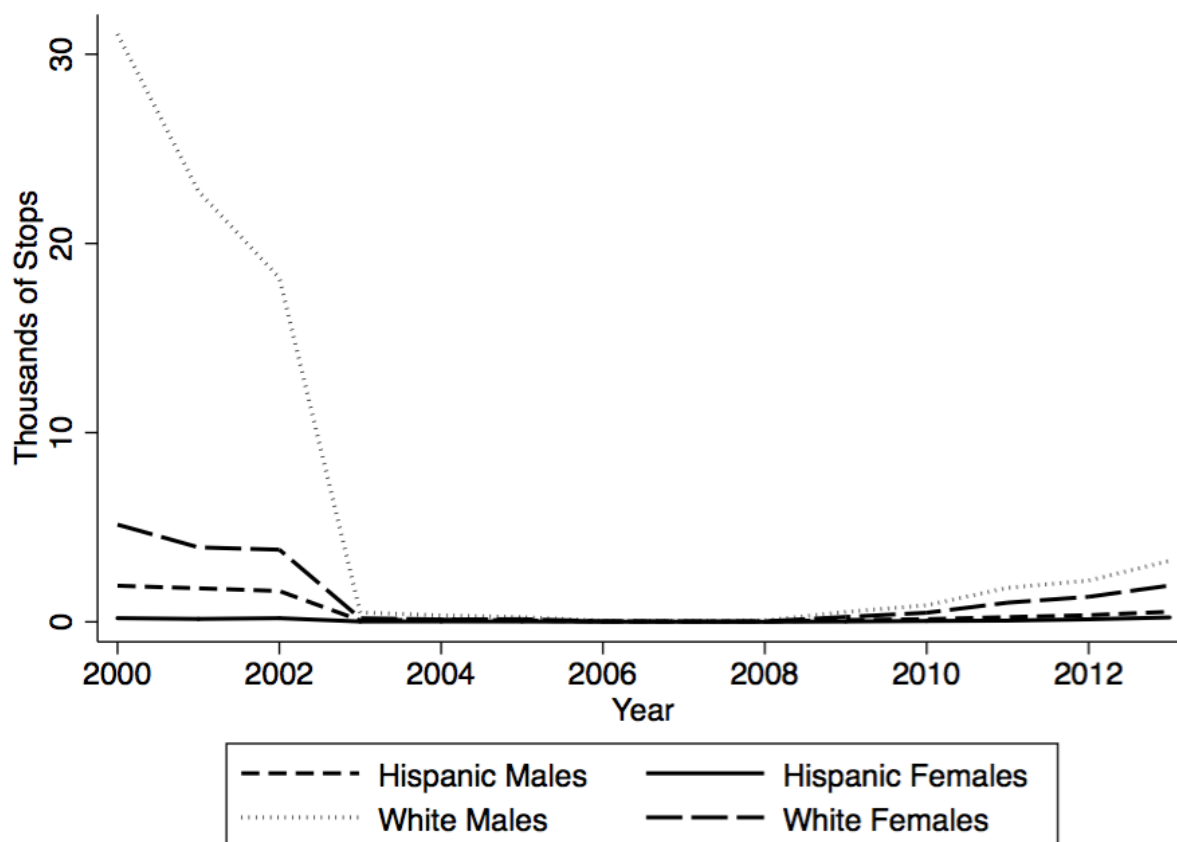


Figure 9. Percent of Stops Resulting in a Search, by Ethnicity and Gender

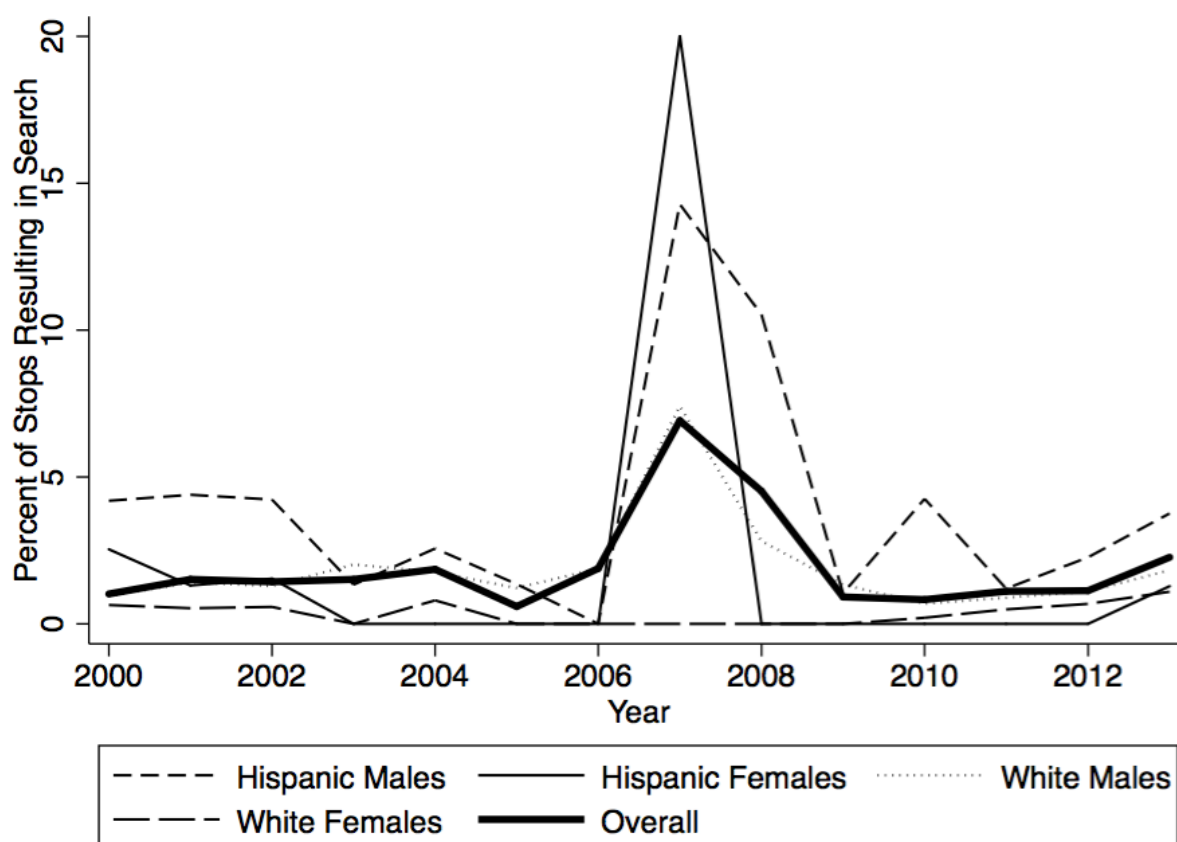


Table 4. Type of Search by Ethnicity

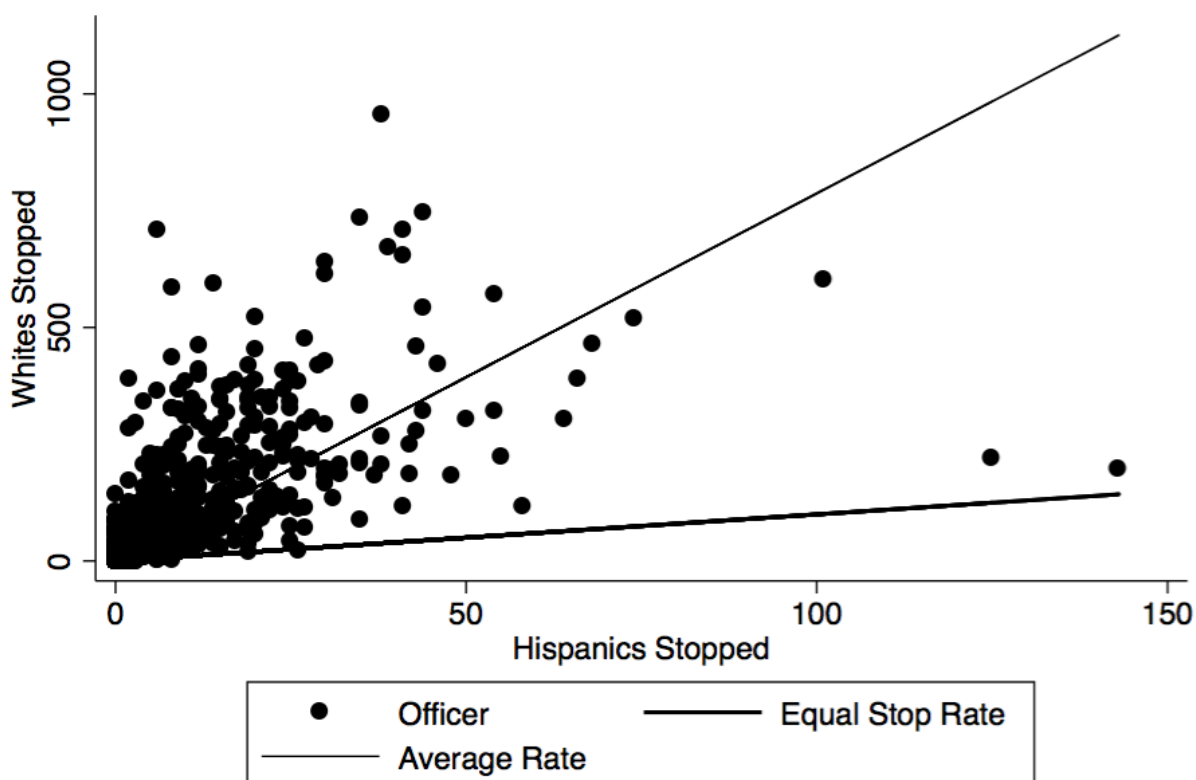
Search Type	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	150,179	-	70.60	5.42	-
Total Searches	1,996	1.33	1.09	3.54	3.25
Consent	932	0.62	0.52	1.70	3.27
Search Warrant	3	-	-	0.01	-
Probable Cause	223	0.15	0.12	0.22	1.83
Incident to Arrest	676	0.45	0.37	1.28	3.46
Protective Frisk	162	0.11	0.08	0.33	4.13

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	576	31.17	31.17	0.38	0.38
2 – 10	532	28.79	59.96	1.46	1.84
11 - 100	423	22.89	82.85	11.39	13.23
101 – 1,000	312	16.88	99.73	63.05	76.28
1,001 +	5	0.27	100.00	23.72	100.00
Total	1,848	100.00	-	100.00	-

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



On average, officers stop 7.87 Whites for each Hispanic stopped.  
Excludes 31,270 traffic stops where the officer ID is missing.

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

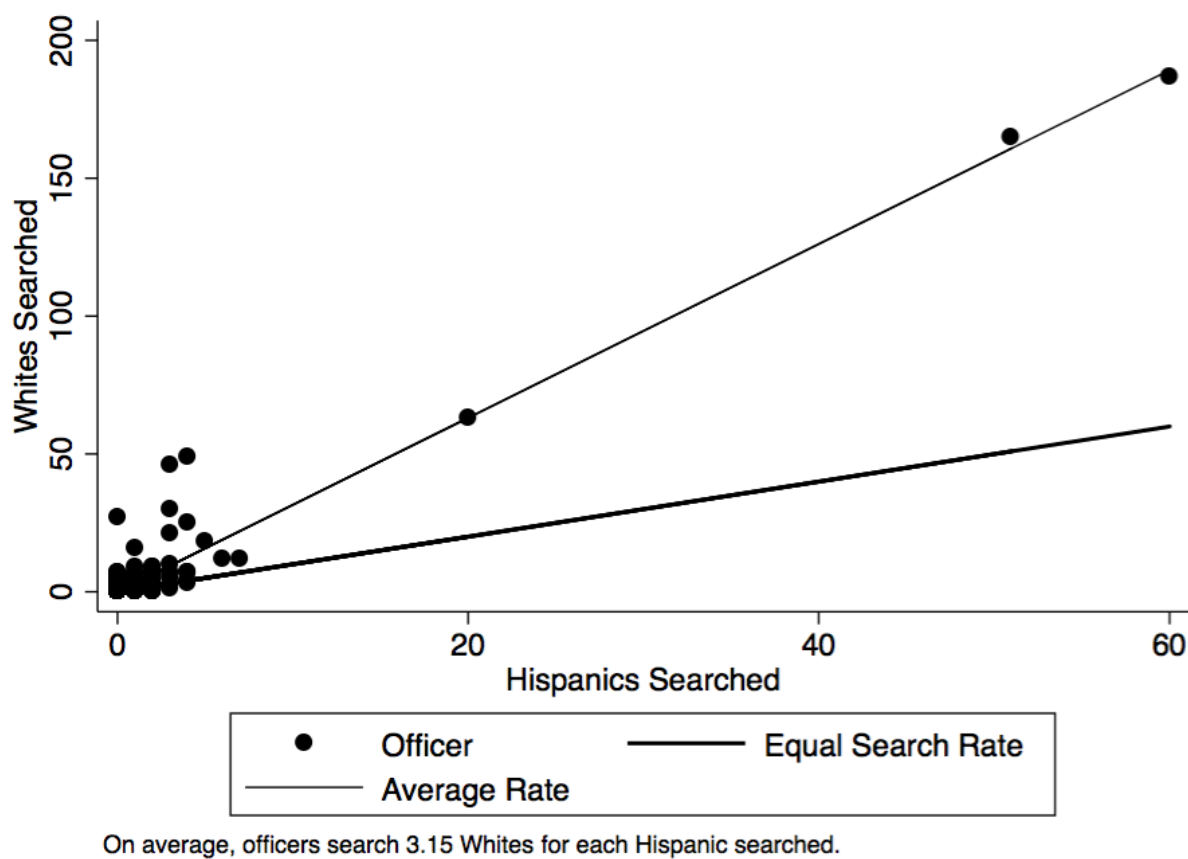
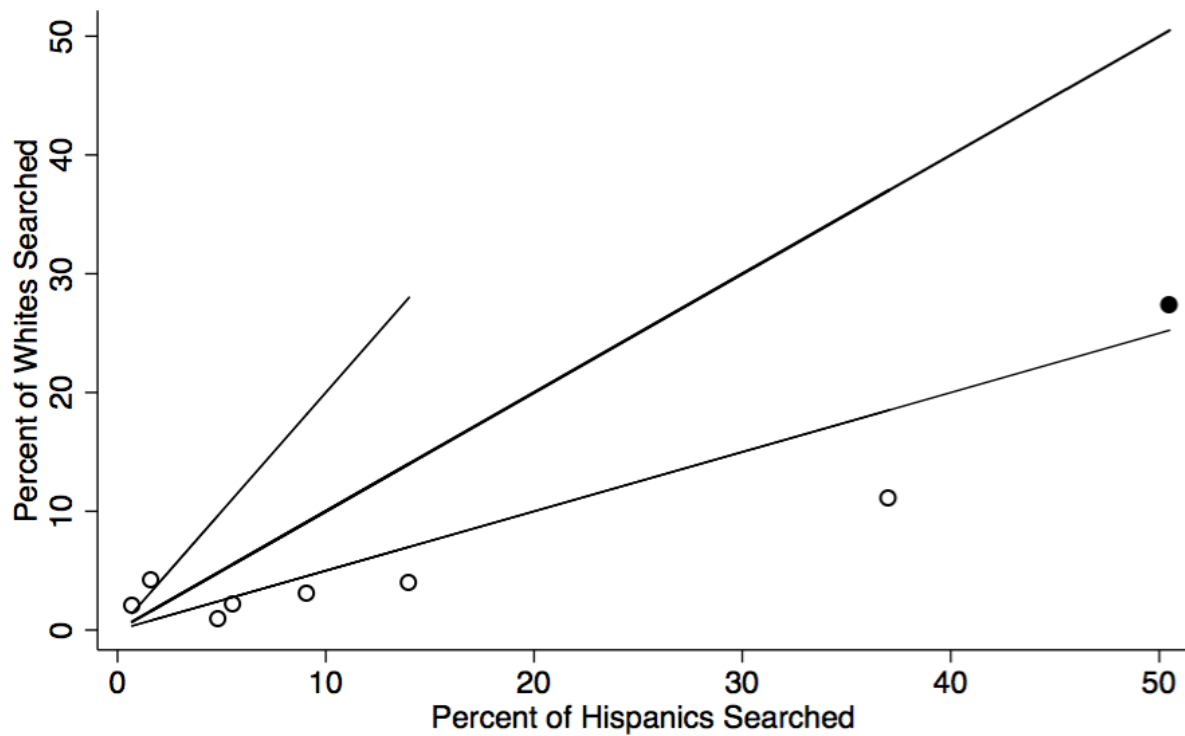


Figure 12. Percent of White and Hispanic Drivers Searched, by Officer



Includes 8 officers with a minimum of 50 White stops, 50 Hispanic stops, and a search rate above the department average of 1.33 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	548	57.11	17.88
Speed Limit	123	57.45	23.58
Stop Light/Sign	4	-	75.00
Driving Impaired	48	61.29	35.42
Safe Movement	27	64.00	7.41
Vehicle Equipment	43	50.00	11.63
Vehicle Regulatory	104	54.02	16.35
Seat Belt	21	71.43	-
Investigation	101	60.44	9.90
Other Vehicle	77	51.61	19.48

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

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	122,063	-	71.14	5.74	-
Total Searches	1,811	1.48	1.20	3.91	3.26
Speed Limit	40,574	0.79	0.63	2.52	4.00
Stop Light/Sign	1,307	0.69	0.69	2.11	3.06
Driving Impaired	515	38.83	39.25	43.68	1.11
Safe Movement	3,628	1.87	1.55	3.07	1.98
Vehicle Equipment	11,264	1.14	0.79	3.08	3.90
Vehicle Regulatory	33,790	1.65	1.37	4.34	3.17
Seat Belt	4,570	0.81	0.54	1.20	2.22
Investigation	3,397	6.33	5.34	7.28	1.36
Other Vehicle	23,018	1.20	0.89	3.07	3.45

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

Purpose	Number	% Total	% White	% Hispanic	Ratio
					Hispanic:White
Total Stops	28,116	-	68.27	3.99	-
Total Searches	185	0.66	0.61	1.25	2.05
Speed Limit	10,817	0.29	0.27	0.66	2.44
Stop Light/Sign	566	0.88	0.51	-	-
Driving Impaired	64	45.31	42.86	66.67	1.56
Safe Movement	1,272	0.86	0.49	1.69	3.45
Vehicle Equipment	1,498	0.87	0.87	1.20	1.38
Vehicle Regulatory	7,771	0.71	0.56	1.66	2.96
Seat Belt	1,640	0.24	0.36	-	-
Investigation	576	4.51	5.79	-	-
Other Vehicle	3,912	0.28	0.28	0.50	1.79

Table A4. Type of Search by Ethnicity: Men

Search Type	Number	% Total	% White	% Hispanic	Ratio Hispanic:White
Total Stops	122,063	-	71.14	5.74	-
Total Searches	1,811	1.48	1.20	3.91	3.26
Consent	850	0.70	0.57	1.93	3.39
Search Warrant	3	-	-	0.01	-
Probable Cause	206	0.17	0.14	0.20	1.43
Incident to Arrest	602	0.49	0.40	1.38	3.45
Protective Frisk	150	0.12	0.09	0.39	4.33

Table A5. Type of Search by Ethnicity: Women

Search Type	Number	% Total	% White	% Hispanic	Ratio Hispanic:White
Total Stops	28,116	-	68.27	3.99	-
Total Searches	185	0.66	0.61	1.25	2.05
Consent	82	0.29	0.30	0.27	0.90
Search Warrant	-	-	-	-	-
Probable Cause	17	0.06	0.05	0.36	7.2
Incident to Arrest	74	0.26	0.21	0.62	2.95
Protective Frisk	12	0.04	0.04	-	-

Figure A1. Stops by Day of the Week

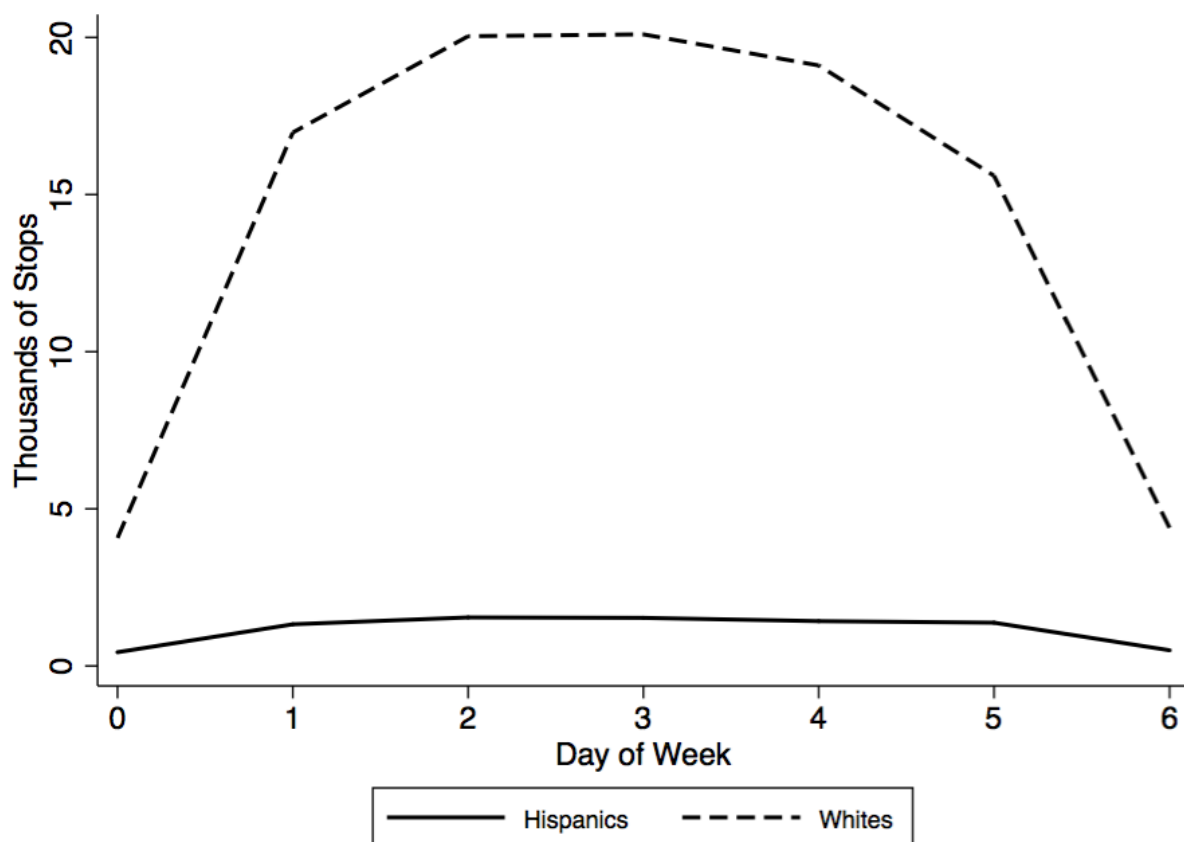


Figure A2. Searches by Day of the Week

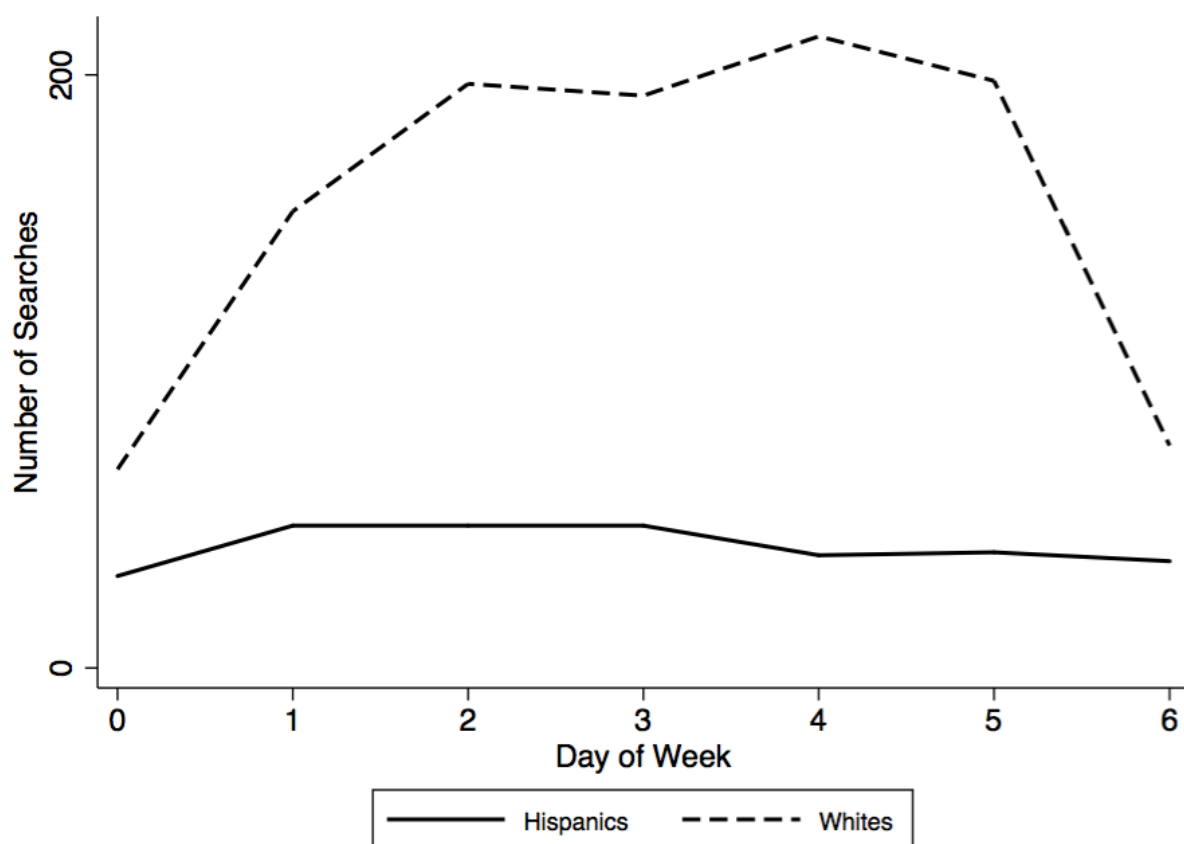
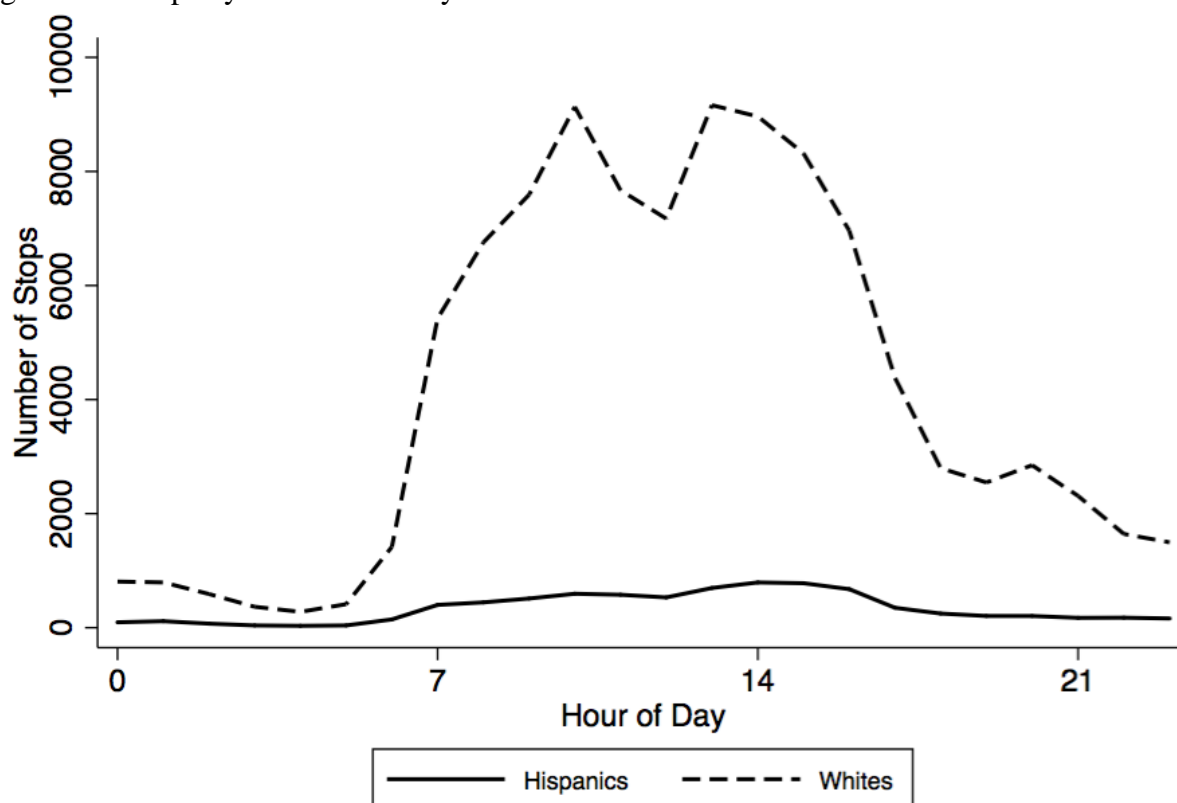
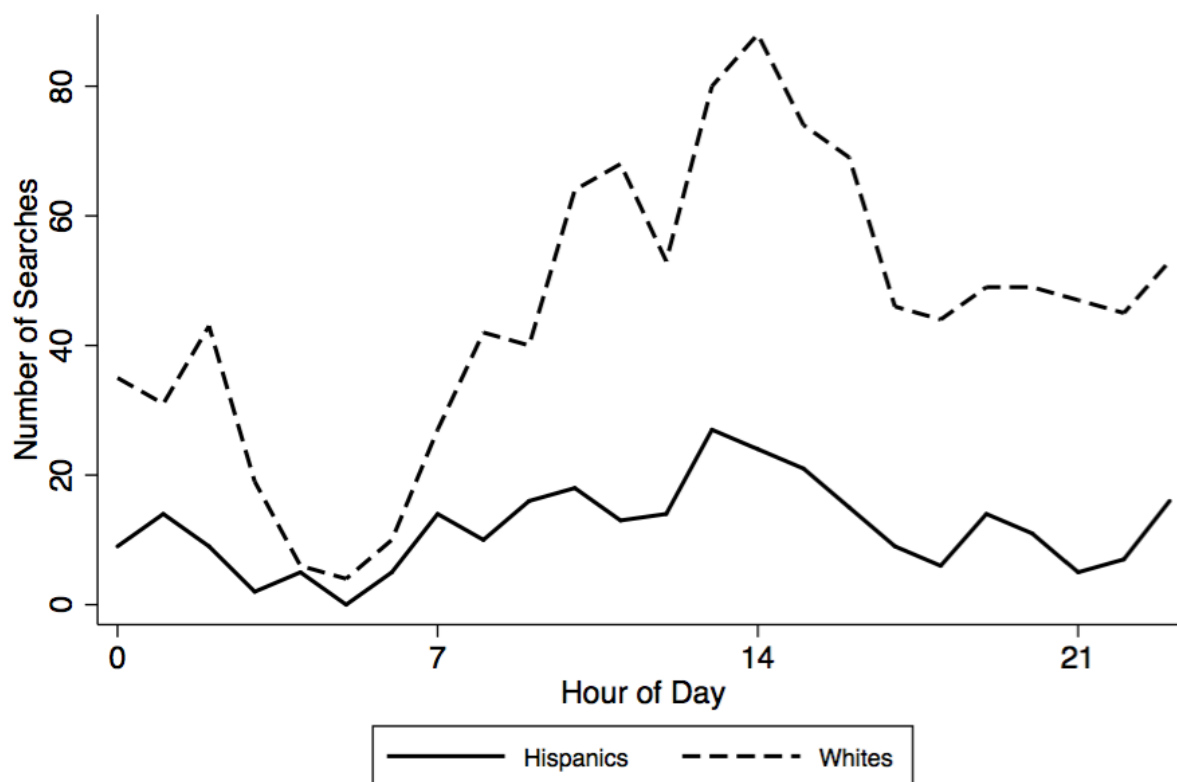


Figure A3. Stops by Hour of the Day



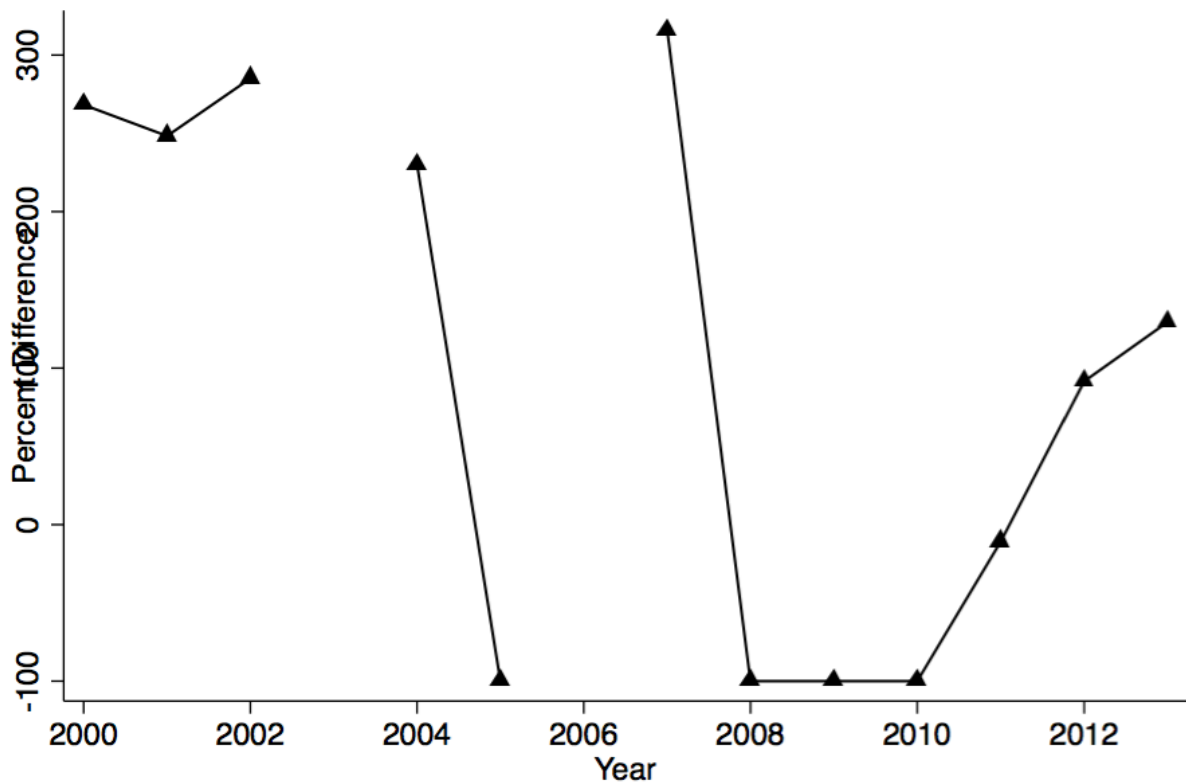
The figure excludes cases where the hour and minute was exactly 0:00. These cases were presumed to be missing data.

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. Points for 2003 and 2006 are missing due to a lack of conse

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

Contraband	Number	% Total	% White	% Hispanic
Yes	493	24.70	28.35	11.46
No	1,503	75.30	71.65	88.54
Total	1,996	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	99,181	1.21	2.19	33.25	63.11	0.25	100.0
Hispanic	No	7,846	0.73	1.85	17.41	79.26	0.75	100.0
Total	No	148,183	1.06	2.20	31.08	65.34	0.32	100.0
White	Yes	1,097	7.11	0.64	12.49	53.24	26.53	100.0
Hispanic	Yes	288	8.68	0.35	14.93	44.79	31.25	100.0
Total	Yes	1,996	6.51	0.80	12.98	51.45	28.26	100.0