

NORTH CAROLINA TRAFFIC STOP STATISTICS ANALYSIS

Final Report To The North Carolina Advocates For Justice Task Force On Racial and Ethnic Bias

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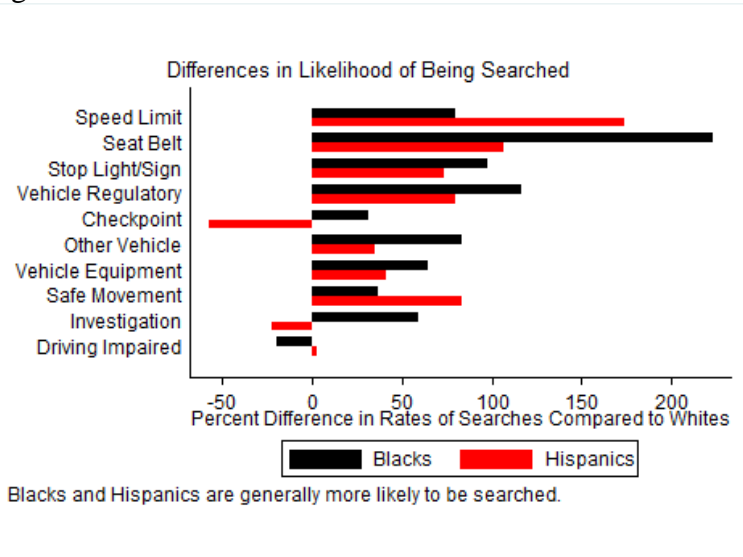
February 1, 2012

Executive Summary

Our analysis of over 13 million police stops, based on data collected and made available by the NC Department of Justice and covering all traffic stops in the state from January 1, 2000 through June 14, 2011, shows extensive disparities by race. Black and Hispanic citizens are subject to consistently higher rates of search and arrest than Whites. These disparities are consistent across various reasons for the motorist stop: speeding, running a stop light, etc. However, the disparities appear greatest when the level of officer discretion is highest—seat belts, vehicle equipment, and vehicle regulatory issues.

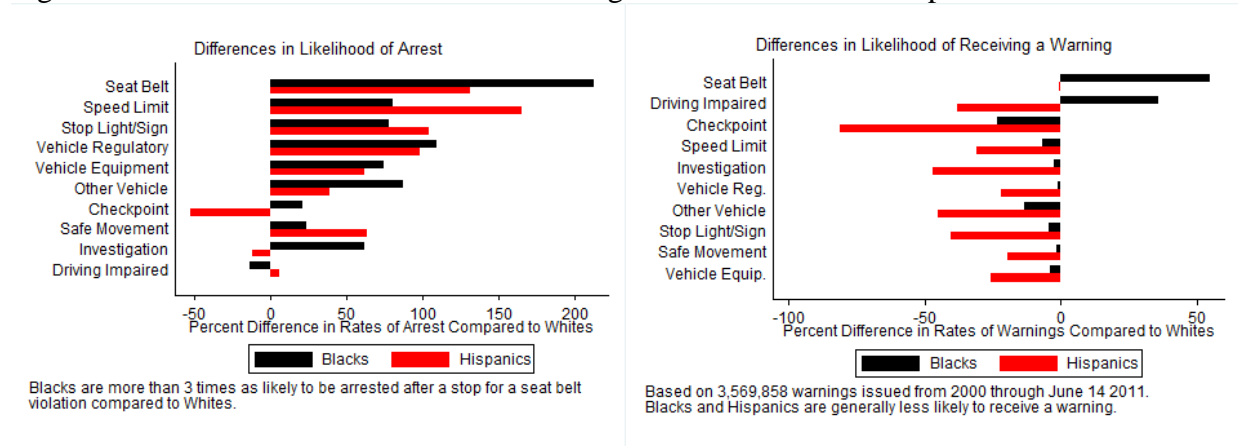
Figure 1 shows the differences in the likelihood of being searched. These numbers are expressed in terms of the percent increase or decrease in the likelihood of a Black or Hispanic motorist being searched as compared to a White motorist. If there were no racial differences, these numbers would all be zero. The data make clear that differences of 50 or even 100 percent are not uncommon. Note that these differences are derived from comprehensive and official data, covering over 450,000 searches from 2000 to 2011 and reported by police departments to the NC DOJ.

Figure 1. Differences in Rates of Search for Minorities and Whites.



These differences carry over into the eventual outcome of the police stop. Whites are more likely to receive a warning and minority drivers are more likely to be arrested after a stop. Figure 2 shows these rates. Recall that positive numbers represent the percentage increase as compared to Whites, and negative numbers represent the percentage decline in the likelihood as compared to Whites. Minorities are consistently more likely to be arrested, and therefore less likely to receive a warning, for the same types of infractions as Whites.

Figure 2. Rates of Arrest and Rates of Warnings for Minorities as Compared to Whites.



In the analysis contained in the following pages, we review in detail the types of disparities that have been occurring in North Carolina since 2000. Detailed appendices document a wide range of comparisons, including some county-by-county analyses showing those “hot spots” where disparities are significantly above the state-wide average (Cabarrus, Onslow, Mecklenburg, Catawba, Orange, and Craven for Blacks; Cabarrus, Caldwell, Wake, Iredell, and Burke for Hispanics). These comparisons also show those counties with the lowest levels of such disparities (Forsyth, Buncombe, Camden, and Yancey for Blacks; Pasquotank, Cumberland, Buncombe, Union, Yancey, and Forsyth for Hispanics).

Our state was the first in the nation to pass a “racial profiling” law that mandated the collection of ethnic and racial data on all police stops. Our analysis of the comprehensive results, based on 11 years of experience and over 13 million traffic stops suggests that the legislature was wise to require the collection of this information and that the trends apparent here merit official attention.

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Introduction and background

The term “racial profiling” came to public attention in the late 1990s. The *New York Times* published just three articles containing the term from 1960 through 1997, but 16 in 1998 and 156 in 1999 as the issue surged into the nation’s consciousness. At least 15 states considered legislation during 1999 mandating the collection of police-stop information, and North Carolina was the first in the nation to pass such a law.² Since Jan 1, 2000, the NC Department of Justice has collected information on every traffic stop from law enforcement agencies throughout the state.³ With the cooperation of the NCDOJ we have analyzed the data collected from Jan 1, 2000 through June 14, 2011. The dataset includes over 13 million police stops.⁴

Findings

From January 1st, 2000 through June 14th, 2011, various NC police departments reported 13,397,573 individuals involved in traffic stops.⁵ Table 1 shows the breakdown for Whites, Blacks, and Hispanics for each of ten types of stops.⁶

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² Racial Profiling. General Accounting Office report GAO/GGD-00-41. March 2000, p. 15.

³ Departments in towns with a population of fewer than 10,000 are exempt from reporting.

⁴ These are the same data that underlie the NCDOJ web site <http://trafficstops.ncdoj.gov/Default.aspx> that allows individuals to analyze traffic stops by jurisdiction. We appreciate the cooperation of the DOJ in providing these data.

⁵ Note that there is a slight difference in vehicle-stops and person-stops. The police pulled over 13,233,635 vehicles, but information about the driver and one or more passengers is recorded, for example if a passenger is searched, arrested, or issued a citation. We use the full number of persons in the database, 13.5 million, in all analyses that follow. Given the very large number of searches, and the small difference between vehicle-stops (13.2 million) and person-stops (13.5 million), the ratios we report are not strongly affected by either choice.

⁶ Race in the database consists of White, Black, Asian, Native American, and Other / Unknown. In addition, Hispanic / non-Hispanic is listed. For the purpose of this report, we compare White, Black, and Hispanic. Numbers do not therefore sum to 100 percent, as Hispanics may be of any race and we omit the smaller categories.

Table 1. NC Traffic Stops by Race and Purpose.

Purpose	Number	Percent		
		White	Black	Hispanic
Total Traffic Stops	13,476,953	63.33	29.78	7.92
Population, 2010	-	68.50	21.50	8.40
Speed Limit	5,782,202	67.40	25.88	6.01
Stop Light/Sign	612,347	63.11	30.43	8.64
Driving Impaired	165,109	64.01	21.35	19.04
Safe Movement	702,802	63.25	29.26	10.92
Vehicle Equipment	1,192,775	57.13	37.03	9.35
Vehicle Regulatory	1,958,495	57.66	38.02	7.10
Seat Belt	1,359,092	67.99	25.49	5.40
Investigation	872,679	56.36	32.74	14.05
Other Vehicle	777,531	57.46	33.04	12.72
Checkpoint	53,927	52.09	26.85	24.57

The table shows the 2010 population percentages for each group and the subsequent percentages for each stop justification. For instance, while Blacks make up 22% of the overall population, they constitute 30% of those pulled over, 33% of people pulled over for “other vehicle” issues, 37% of those pulled over for “vehicle equipment” issues and 38% of those stopped for “vehicle regulatory” issues. Hispanics, 8 percent of the population, represent 8 percent of those pulled over overall, but 25 percent of those stopped at checkpoints.

Table 2 shows the rate at which individuals are searched following a stop. Overall, 3.37 percent of all stops lead to a search. Whites, however, are searched less often (2.74 percent) whereas Blacks and Hispanics are searched at higher rates (4.86 percent for Blacks; 5.39 percent for Hispanics). If we calculate the ratio between the percent of Blacks who are searched to that of Whites (e.g., 4.86 compared to 2.74), that number is 1.77, as reported in the table. This means that Blacks are 77 percent more likely to be searched, given a traffic stop, than Whites. Hispanics are 96 percent more likely to be searched. These numbers are reported in the two right-most columns in the table. Subsequent tables also report these ratios. Numbers above 1.00 indicate that the group is more likely to be searched than Whites; numbers below 1.00 indicate that they are less likely to be searched.

Table 2. Percent Searched by Race and Purpose of Stop.

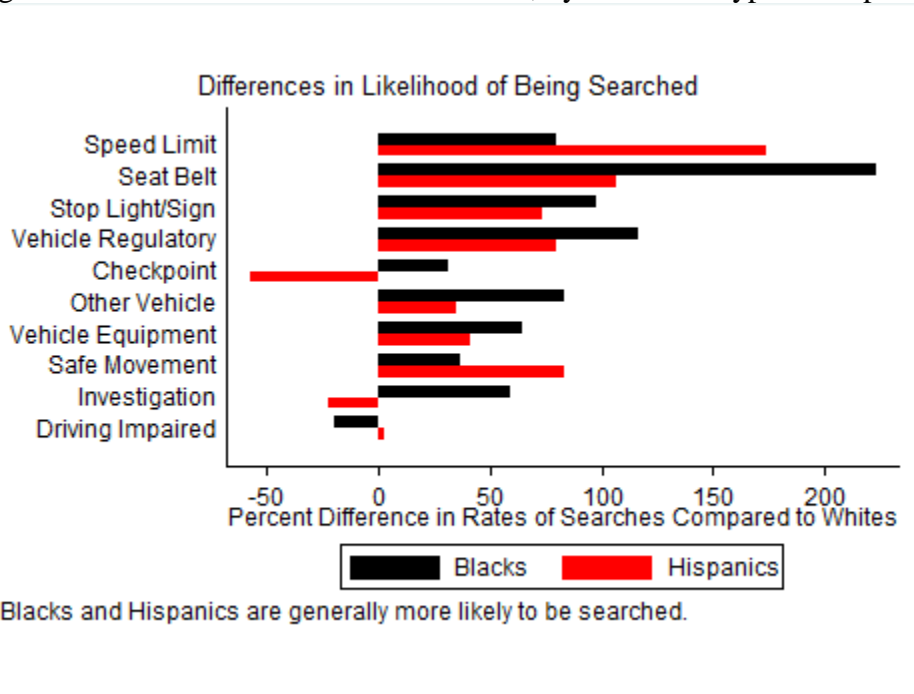
Purpose	Number	Total	% of Stops			Ratio	
			White	Black	Hispanic	Black: White	Hispanic: White
Total Stops	13,476,953	-	63.33	29.78	7.92	-	-
Total Searches	454,329	3.37	2.74	4.86	5.39	1.77	1.96
Speed Limit	69,183	1.20	0.96	1.73	2.63	1.80	2.74
Stop Light/Sign	19,208	3.14	2.42	4.78	4.20	1.98	1.74
Driving Impaired	52,876	32.02	34.11	27.39	35.02	0.80	1.03
Safe Movement	44,857	6.38	5.68	7.76	10.41	1.37	1.83
Vehicle Equipment	64,836	5.44	4.40	7.24	6.20	1.65	1.41
Vehicle Regulatory	75,141	3.84	2.65	5.73	4.76	2.16	1.80
Seat Belt	23,428	1.72	1.09	3.52	2.25	3.23	2.06
Investigation	67,604	7.75	6.76	10.76	5.27	1.59	0.78
Other Vehicle	35,641	4.58	3.61	6.62	4.88	1.83	1.35
Checkpoint	1,555	2.88	3.06	4.03	1.30	1.32	0.42

Note: This and subsequent tables may be read as follows. For all traffic stops, 3.37% lead to a search. Whites represent 63% of all stops, Blacks, 29.78%, etc. Among Whites, 2.74% are searched; among Blacks, 4.86%; and 5.39% among Hispanics. The ratios between the minority rate and the White rate, representing the difference in the likelihood of Blacks and Hispanics being searched as compared to Whites, are shown in the last two columns. For all searches, compared to the baseline of 2.74% for Whites, the Black figure of 4.86 is 1.77 times higher, or 77 percent more. Hispanics, at 5.39%, have a ratio of 1.96 compared to Whites indicating a 96 percent increase in the likelihood of being searched. The same calculation is then performed for each type of stop separately.

Table 2 makes clear that Blacks and Hispanics are systematically searched at much higher rates than Whites, given stops for the same purpose. For speed limit violations, Blacks are 80 percent (denoted by the ratio of 1.80) more likely to be searched, and Hispanics are 174 percent (denoted by 2.74) more likely to be searched. For stop light / stop sign violations, the numbers are 98 and 74 percent. The highest disparity is for seat belt violations, where Blacks are 223 percent and Hispanics 106 percent more likely than Whites to be searched. Overall, the numbers in Table 2 paint a picture of drastic differences in outcomes by race, given a traffic stop.

Figure 3 illustrates the disparities apparent in the ratios from Table 2 by graphically presenting the percentage increase in the likelihood of a Black or Hispanic motorist being searched for each of the types of traffic stops listed.

Figure 3. Increased Likelihood of Searches, by Race and Type of Stop.



Tables 3 and 4 give similar data for various types of searches and by the various bases or justifications for the search.

Table 3. Type of Search by Race.

Search Type	Number	Total	Percent of all Stopped or Searched			Ratios	
			White	Black	Hispanic	Black White	Hispanic White
Total Traffic Stops	13,476,953	-	63.33	29.78	7.92	-	-
Total Searches	454,329	3.37	2.74	4.86	5.39	1.77	1.96
Consent	203,790	44.86	44.74	45.87	40.18	1.03	0.90
Search Warrant	1,301	0.29	0.31	0.25	0.31	0.81	1.00
Probable Cause	58,227	12.82	10.51	16.23	7.06	1.54	0.67
Incident to Arrest	175,342	38.59	41.00	34.40	48.57	0.84	1.18
Protective Frisk	15,669	3.45	3.44	3.25	3.88	0.94	1.13

Table 4. Basis of Search by Race.

Basis of Search	Number	Total	Percent of all Stopped or Searched			Ratios	
			White	Black	Hispanic	Black White	Hispanic White
Total Traffic Stops	13,476,953	-	63.33	29.78	7.92	-	-
Total Searches	454,329	3.37	2.74	4.86	5.39	1.77	1.96
Erratic/Suspicious Behavior	313,239	39.32	42.06	35.97	43.24	0.86	1.03
Suspected Contraband	150,364	18.88	18.24	19.99	13.88	1.10	0.76
Other Official Information	188,553	23.67	22.83	23.88	26.54	1.05	1.16
Suspicious Movement	98,870	12.41	11.24	14.17	11.57	1.26	1.03
Informant Tip	25,511	3.20	3.16	3.52	2.19	1.11	0.69
Witness Observation	20,023	2.51	2.48	2.47	2.58	1.00	1.04

Table 3 shows that Blacks are 54 percent more likely to be searched for probable cause compared to Whites, but that Hispanics are only 67 percent as likely to be searched for this reason, compared to Whites. Hispanics are equally likely as Whites to be searched as the result of a warrant, but Blacks are 19 percent less likely to be searched as a result of a warrant. Similarly, Blacks are less likely to be searched incident to arrest as compared to Whites, but Hispanics are more so.

Table 4 shows that Blacks are less likely than Whites to be searched as a result of suspicious behavior but equal or higher than Whites for all other search justifications, especially “suspicious movement.” Hispanics are much less likely than Whites to be searched as a result of informant tips or because of suspected contraband.

Tables 5 through 8 show the results of various types of traffic stops for individuals of different race. Table 5 shows the percent of those arrested; Table 6 shows the number given a citation; Table 7 shows warnings; and Table 8, those released with no police action. In general, the ratios show that Blacks are arrested at higher rates, receive citations at similar rates to Whites, are less likely than Whites to receive a warning, and are more likely to be released with no action. Hispanics have high rates of arrest and citation, and relatively low rates of warnings or no action. In other words, the patterns suggest harsher treatment, given a stop, for Blacks and Hispanics as compared to Whites, as well as a higher percentage of potentially unwarranted stops for Blacks.

Table 5. Percent Arrested by Race and Purpose of Stop.

Purpose	Number	Percent Arrested				Ratios	
		Total	White	Black	Hispanic	Black White	Hispanic White
Total Traffic Stops	13,476,953	-	63.33	29.78	7.92	-	-
Total Arrests	460,659	3.42	2.79	4.50	5.93	1.61	2.12
Speed Limit	75,341	1.30	1.02	1.84	2.71	1.80	2.66
Stop Light/Sign	16,935	2.77	2.19	3.90	4.47	1.78	2.04
Driving Impaired	101,879	61.70	62.90	54.37	66.85	0.86	1.06
Safe Movement	35,070	4.99	4.62	5.73	7.57	1.24	1.64
Vehicle Equipment	42,234	3.54	2.75	4.81	4.45	1.75	1.62
Vehicle Regulatory	61,106	3.12	2.19	4.59	4.35	2.10	1.99
Seat Belt	20,384	1.50	0.94	2.94	2.18	3.13	2.32
Investigation	69,981	8.02	6.81	11.02	6.02	1.62	0.88
Other Vehicle	35,446	4.56	3.50	6.57	4.88	1.88	1.39
Checkpoint	2,283	4.23	4.51	5.46	2.14	1.21	0.47

Table 6. Percent Issued a Citation by Race and Purpose of Stop.

Purpose	Number	Percent Cited				Ratios	
		Total	White	Black	Hispanic	Black White	Hispanic White
Total Traffic Stops	13,476,953	-	63.33	29.78	7.92	-	-
Total Citations	9,209,115	68.33	68.88	65.45	72.06	0.95	1.04
Speed Limit	4,609,485	79.72	79.19	79.82	83.57	1.01	1.06
Stop Light/Sign	368,723	60.21	59.64	59.66	72.77	1.00	1.22
Driving Impaired	42,752	25.89	24.19	27.44	27.31	1.13	1.13
Safe Movement	286,847	40.81	40.35	39.94	48.20	0.99	1.19
Vehicle Equipment	415,743	34.86	34.16	34.09	48.60	1.00	1.42
Vehicle Regulatory	1,285,835	65.65	66.43	63.75	70.26	0.96	1.06
Seat Belt	1,216,067	89.48	90.92	84.81	89.71	0.93	0.99
Investigation	473,943	54.31	51.86	50.75	74.35	0.98	1.43
Other Vehicle	467,607	60.14	58.07	59.93	73.63	1.03	1.27
Checkpoint	42,113	78.09	71.84	78.61	94.20	1.09	1.31

Table 7. Percent Issued a Warning by Race and Purpose of Stop.

Purpose	Number	Percent Warned				Ratio	
		Total	White	Black	Hispanic	Black White	Hispanic White
Total Stops	13,476,953	-	63.33	29.78	7.92	-	-
Total Warnings	3,569,858	26.49	26.61	28.04	20.48	1.05	0.76
Speed Limit	1,098,029	18.99	19.77	18.45	13.65	0.93	0.69
Stop Light/Sign	225,904	36.89	38.01	36.38	22.67	0.96	0.60
Driving Impaired	16,709	10.12	10.06	13.68	6.24	1.36	0.62
Safe Movement	376,760	53.61	54.43	53.71	43.93	0.99	0.81
Vehicle Equip.	723,210	60.63	62.20	59.95	46.27	0.96	0.74
Vehicle Reg.	570,883	29.15	29.52	29.23	23.10	0.99	0.78
Seat Belt	120,758	8.89	7.93	12.28	7.88	1.55	0.99
Investigation	170,232	19.51	20.90	20.42	11.05	0.98	0.53
Other Vehicle	262,281	33.73	36.78	31.83	20.25	0.87	0.55
Checkpoint	5,092	9.44	12.06	9.26	2.28	0.77	0.19

Table 8. Percent with No Police Action by Race and Purpose of Stop.

Purpose	Number	Percent No Police Action				Ratio	
		Total	White	Black	Hispanic	Black White	Hispanic White
Total Stops	13,476,953	-	63.33	29.78	7.92	-	-
Total No Action	311,187	2.31	2.14	2.82	2.20	1.31	1.02
Speed Limit	15,357	0.27	0.23	0.33	0.45	1.43	1.96
Stop Light/Sign	4,018	0.66	0.56	0.85	0.69	1.52	1.23
Driving Impaired	11,754	7.12	7.21	9.58	4.39	1.33	0.61
Safe Movement	9,167	1.30	1.23	1.55	1.10	1.26	0.89
Vehicle Equipment	18,699	1.57	1.35	1.97	1.22	1.46	0.90
Vehicle Regulatory	53,660	2.74	2.36	3.36	2.86	1.42	1.21
Seat Belt	7,208	0.53	0.47	0.73	0.61	1.55	1.30
Investigation	168,128	19.27	21.34	19.37	9.36	0.91	0.44
Other Vehicle	18,489	2.38	2.24	2.94	1.93	1.31	0.86
Checkpoint	4,707	8.73	12.05	7.46	1.64	0.62	0.14

The trends in Tables 5 through 8 can be easily compared by looking at Figures 4 and 5, which recreate the analysis presented in Tables 5 and 7: Given a traffic stop, who gets arrested (Figure 4), and who receives a simple warning (Figure 5).

Figure 4. Rates of Arrest, by Race.

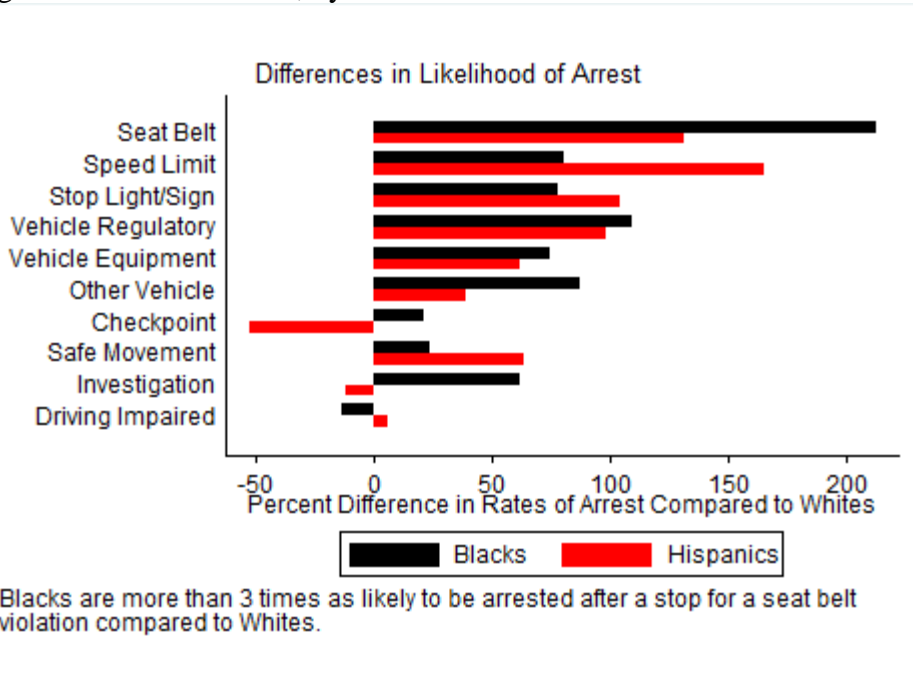


Figure 5. Rates of Warning, by Race.

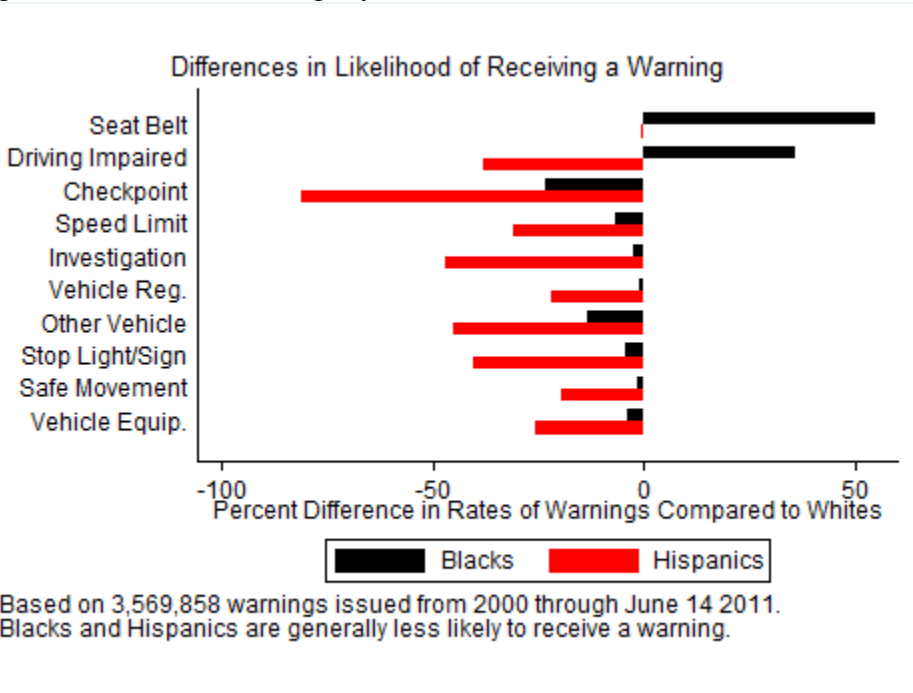


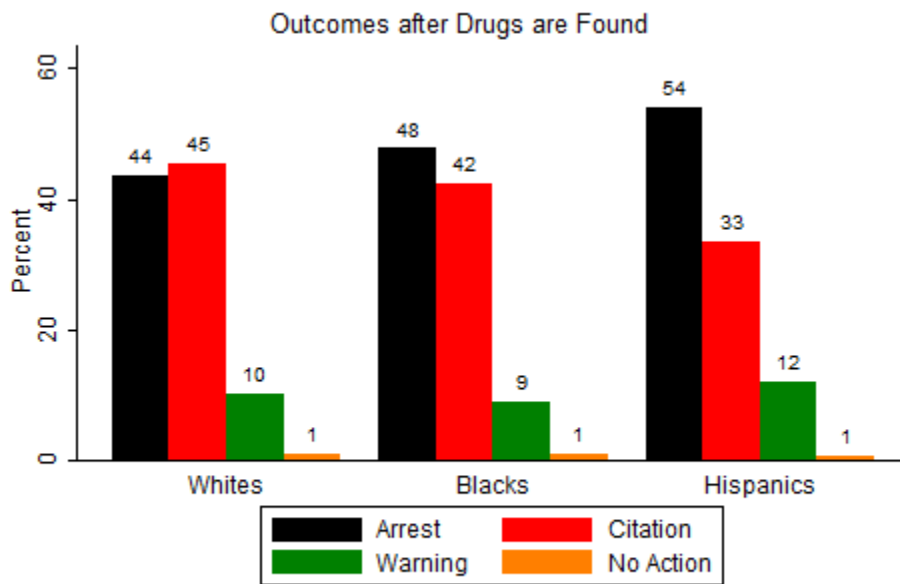
Table 9 shows the percent of individuals found with different types of contraband. Fewer than one percent of traffic stops lead to the discovery of contraband. Blacks and Hispanics are associated with higher percentages of each type of contraband than are Whites, with the exception of drugs, where Hispanics are almost 30 percent less likely than Whites to have drugs.

Table 9. Percent with Contraband by Race.

Contraband	Number	Percent with Contraband				Ratio	
		Total	White	Black	Hispanic	Black White	Hispanic White
Total Stops	13,476,953	-	63.33	29.78	7.92	-	-
Total Contraband	111,332	0.83	0.68	1.23	0.82	1.81	1.21
Weapons	12,657	0.09	0.06	0.17	0.09	2.83	1.50
Alcohol	25,511	0.19	0.18	0.22	0.31	1.22	1.72
Drugs	53,286	0.40	0.31	0.64	0.22	2.06	0.71
Money	5,446	0.04	0.02	0.09	0.05	4.50	2.50
Other	30,574	0.23	0.20	0.31	0.23	1.55	1.15

When drugs or other forms of contraband are found, Whites and minorities are treated differently. Figure 6 shows the percent arrested, issued a citation, given a warning, or with no police action after the discovery of drugs.

Figure 6. Rates of Arrest and other Outcomes after Drugs are Discovered, by Race.



Based on 195,152 cases where drugs were discovered from 2000 through June 14 2011. Whites are less likely to be arrested and more likely to receive a citation.

Appendix C shows in greater detail that outcomes, even for the discovery of the same type of contraband, are consistently different depending on the race of the individual searched. Here, we see that Hispanics in particular are more likely to be arrested rather than given a citation. For Whites, a citation is more common after the discovery of drugs than arrest.

The Appendices that accompany this memo lay out the detailed analysis which is condensed here.