## Summary of Durham Stops and Searches Before and After Written Consent Policy Reform of October 1, 2014

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http://www.unc.edu/~fbaum/traffic.htm

In October 2014, Durham, NC became the second city in the state to adopt a written form for consent searches. Discussion of the change was publicly announced the month before in a public city council meeting on September 4<sup>th</sup>, 2014 and was officially adopted on September 18<sup>th</sup>, becoming effective on October 1. What follows is a brief analysis of how announcement and adoption of this policy altered the number of stops and searches conducted by the city. This analysis includes traffic stops data from the six months before and after the enactment of the written consent form policy: 1 April 2014 to 31 March 2015. During this time period there were 19,997 stops and 1,348 searches (6.74% search rate); both numbers exclude passengers and checkpoint stops.

Figure 1 shows the trends in monthly stop numbers during this period by race and gender. The solid vertical line denotes when police officers in Durham officially started using the written consent form. As can be seen after the enactment, the number of traffic stops for every category briefly decreases, but then rebounds to former numbers. Figure 2 shows the trends for the number of searches per month by race and gender. Similar to the stops figure, the solid vertical line marks the date the policy took effect. Also similar to the first figure, there is a decrease in the overall number of searches directly following the policy's enactment and then an increase meeting or surpassing former numbers of searches by category.

These differences in the numbers of stops and searches by race and gender during this time can be more clearly seen in Figures 3a and 3b. The first bar in each case is the number of stops or searches before the written consent forms were used. The second is the number after the written consent forms went into use. As can be seen, there is a negligible change in the number of stops for any race-gender category. However, there is an observable increase in the number of searches of black men after the policy goes into effect.

One argument against the use of the written consent form is that police officers will simply find other reasons to search a vehicle, which we might call a "substitution effect." Evidence of this would be a rise in either probable-cause searches or incident-to-arrest searches. (There are two other types of searches – protective frisk and warrant – but these occur infrequently and have very restrictive definitions so they are excluded.) Figure 4 shows the relevant patterns. In Durham, a substitution effect seems apparent. As the number of consent searches declined, the number of probable cause searches increased. This is in sharp contrast to what was observed in Fayetteville, which was the first city in North Carolina to adopt and implement a written consent form. Our analysis of two years pre- and post-reform there showed no substitution effect.

Figure 1. Number of Stops by Race and Gender

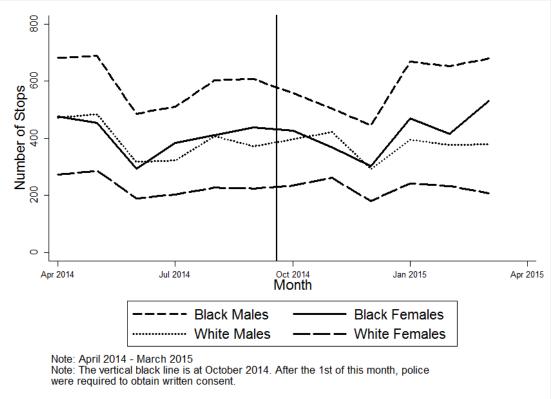


Figure 2. Number of Searches by Race and Gender

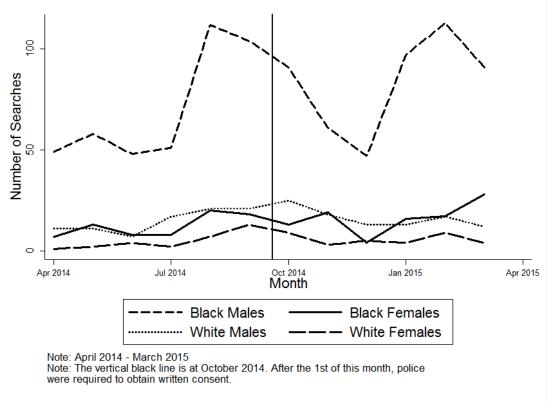
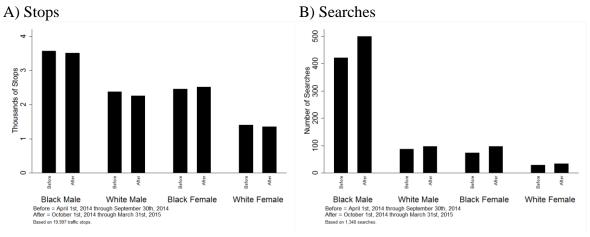
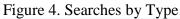
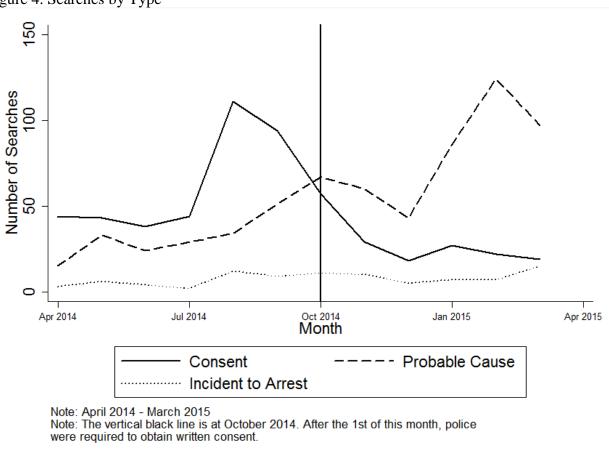


Figure 3. Number of Stops and Searches Before and After Written Consent Required, by Race and Gender







In addition to the visual evidence provided by Figures 1, 2 3, and 4, we calculated whether the introduction of the written consent form generated a statistically significantly different rate of search. Table 1 presents the results of this analysis. As can be seen, there was no statistically significant change in the overall search rate or the rate of incident-to-arrest searches. However, the rate of consent searches saw a statistically significant decrease, and the rate of probable cause searches witnessed a statistically significant increase. Table 2 shows the average number (not rate) of searches. Here, the analysis indicates that the overall number of searches increased by an average of 20 per month after the policy was enacted; however, this is not a statistically significant difference. As with the search rates, only consent searches and probable cause searches underwent a statistically significant change, where the number of consent searches decreased and the number of probable cause searches increased.

Table 1. Average Search Rates by Month Before and After the Written Consent Form

	Before	After	Difference
All Searches	6.17	7.31	1.14
Consent	3.75	1.74	-2.01*
Probable Cause	1.89	4.72	2.84*
Incident to Arrest	0.36	0.55	0.19

<sup>\*</sup>Denotes statistical significance at the 0.05 level.

Table 2. Average Number of Searches by Month Before and After the Written Consent Form

	Before	Difference	
	Before	After	Difference
All Searches	102.33	122.33	20.00
Consent	62.33	28.67	-33.67*
Probable Cause	31.00	79.50	48.50*
Incident to Arrest	6.00	9.17	3.17

<sup>\*</sup>Denotes statistical significance at the 0.05 level.

In sum, our statistical comparisons show that the written consent policy in Durham, in its first six months of operation, has led to no change whatsoever in search rates or number of searches. Rather, consent searches have declined quite substantially, but probable cause searches have increased by even more.

A reasonable point of comparison for Durham is the experience in Fayetteville, whose reform was the basis for calls in Durham to adopt a written consent policy. In Fayetteville, consent searches declined by approximately 90 percent, and there was no substitution effect. In fact, probably cause searches in the 2 years after written consent was implemented declined as well. (Incident-to-arrest searches showed a modest increase, however, from 29 to 39 per month.) See our analysis of Fayetteville for more details.