

THE PORTLAND POLICE BUREAU'S STOP DATA

An Independent Analysis

Conducted by

Brian L. Withrow, Ph.D.

i.e. consulting partners, llc

5926 East 47th Street North, Bel Aire, Kansas 67220

(316) 208-8102

[January 2008]

Introduction

On September 12, 2007, the Portland Police Association asked Dr. Brian L. Withrow to conduct an independent analysis of the traffic stop data collected by the Portland Police Bureau during 2006. The purpose of this independent analysis is to 1) evaluate the 2006 stop data set's ability to describe the enforcement activities of the Portland Police Bureau, and 2) determine the extent to which the data set responds to recent allegations of racial profiling.

The 2006 stop data are the latest version of a multi-year stop data collection effort supported by the Portland Police Bureau. The reports produced by these stop data are repeatedly described as "stop studies" (rather than racial profiling studies) by representatives of the Portland Police Bureau contacted by the author. Even so, the author's review of recent media reports and notes from public meetings in the Portland area suggests the annual stop data reports are regularly cited as evidence of the presence and extent of a practice commonly known as racial profiling.

Brian L. Withrow, Ph.D. is a nationally recognized expert on racial profiling. Dr. Withrow has personally conducted three major racial profiling studies and assisted other researchers on more than a dozen more. He is the author of numerous scholarly and trade publication articles, more than thirty major technical reports affecting public policy, three book chapters, and a leading textbook on racial profiling. Dr. Withrow provides litigation assistance and testimony on racial profiling cases at both the state and federal court levels. He is a member and regular presenter at the annual meetings of the American Society of Criminology and the Academy of Criminal Justice Sciences. Dr. Withrow is an associate professor and director of the Forensic Sciences Program at Wichita State University. However, for this study, he was engaged in his capacity as principal of i.e. consulting partners, llc.

This report is organized into five sections followed by a conclusion. The first section includes a brief history of the Portland Police Bureau's involvement in the racial profiling controversy. This section also summarizes the public discussions leading to the development of the Bureau's multi-year stop data collection program. The second section summarizes the 2001 and 2004-2006 statistical reports published by the Portland Police Bureau. The third section includes brief descriptions of the 2006 stop study data and the statistical techniques used by the author to analyze these data. The fourth section reports the findings of the analyses. These findings are organized into three parts – who gets stopped and for what, what happens during the stops, and the results of the stops. The fifth section includes a discussion of the findings and a critique of the 2006 stop study data. This critique focuses on whether the stop data adequately describe the enforcement practices of Portland's police officers and support an allegation of racial profiling. This section also includes several recommendations for improving future data collection efforts.

SECTION I:

History of the Portland Police Bureau's Stop Data Collection Effort ¹

The Portland Police Bureau's most recent entry into the racial profiling discussion began in 1998, when Multnomah County sponsored a meeting, including law enforcement agencies, to discuss the over-representation of racial minorities in the criminal justice system. The next year the Oregon Legislature passed HB 2433 forming the Traffic Stop Data Collection Committee of the Governor's Public Safety Task Force. This task force eventually recommended minimum standards for a voluntary stop data collection program.

In 1999, policing professionals, leaders, union and labor representatives from throughout the state met to discuss the racial profiling controversy as well as the broader issue of discriminatory treatment of individuals by the police. This discussion resulted in the adoption of the Law Enforcement Non-Discrimination Resolution. The Portland Police Bureau signed this resolution originally in 1999 and reaffirmed their commitment to non-discrimination in 2001. This resolution states:

We do not train, teach, endorse, support or condone any type of race profiling by any law enforcement agency. The practice of race-based profiling is counterproductive to good and professional police work and to the public safety of our communities.

In 2000, the Blue Ribbon Panel on Racial Profiling convened to address public allegations and perceptions of racial profiling within Portland. Representatives from the Portland Police Bureau along with a broad spectrum of community advocates participated in this high profile public discussion. Panel members conducted reviews of the available literature and, through a series of meetings, heard testimony from individuals with varying perspectives on the presence and extent of racial profiling within the Portland Police Bureau. Eventually the Panel adopted the following definition of racial profiling:

The use of race as the sole basis for justifying traffic stops or other police action.

While the Panel considered expanding this definition to other protected classes of individuals, it chose to limit its focus on race. Ultimately, the Panel made several recommendations for addressing the specific practice of racial profiling and broader discrimination issues. These recommendations addressed:

- » Recruitment, promotion and retention
- » Communication
- » Training
- » Data collection
- » Accountability

The Panel's recommendations on data collection are the most relevant to this analysis. Specifically, the Panel recommended to:

- » Implement the data collection recommendations from Oregon's Governor's Public Safety Planning and Policy Council.
 - Collect data on traffic stops, subject stops and conversations that include police action in the form of a search, citation or arrest.
 - Collect the following information: perceived race, perceived gender, estimated age, reason for the stop, whether there was a search or frisk, and the disposition of the action.
 - The entire Bureau should be a part of this process, not just a pilot project consisting of a small number of officers.
- » Participate in the data and policy monitoring activities of the Public Safety Coordinating Council's Working Group on the Over-Representation of Minorities in the Criminal Justice System.
- » Work in cooperation with the Bureau of Emergency Communications (BOEC), the Bureau's Data Processing Division and the Bureau's Planning and Support Division regarding data collection.
- » Research technology and funding sources. (Note: This recommendation was intended to insure all patrol officers had access to the technology they needed to report stop data.)

Following the recommendations from the Blue Ribbon Panel on Racial Profiling and encouragement from the state legislature, the Portland Police Bureau began collecting stop data in 2001 and published its first statistical report on May 2, 2002. This report includes information on both traffic and person stops. In recognition of various data collection issues (e.g. some officers did not have access to a mobile display terminal with which to enter stop data), the Bureau revised its procedures in 2002 and 2003. As a result, no reports are available for those years. Then in 2004, the Bureau reinitiated its stops data collection efforts focusing only on traffic stops. These data collections produced reports for 2004, 2005 and 2006.

In addition to its data collection efforts, the Portland Police Bureau has been responsive to the other recommendations from the Blue Ribbon Panel on Racial Profiling as well as those from various community groups. In 2004, the Bureau invited Dr. Lorie Fridell, then the Director of Research for the Police Executive Research forum and a nationally recognized expert on racial profiling, to speak with the command staff, community advisory committees and other area policing leaders on racial profiling. The Bureau's 2004-2005 in-service training calendar included classes on cultural competency and police decision making. In 2005, the Bureau revised its recruitment processes resulting in a 36 percent increase in the number of minorities who applied to take the community police officer written examination. Finally, the Bureau maintains a website that includes extensive information relating to routine traffic stop procedures and how citizens should respond when stopped by the police. Importantly, this website also includes information for citizens who may want to file a formal complaint.

¹ Information in this section was provided by the Portland Police Bureau through its website. See the references for the complete web address.

SECTION II:

Summary of the 2001, 2004, 2005 and 2006 Stop Data Collection Reports

The four annual stop data reports available for review are consistent with respect to their format. Each presents data in tabular formats with explanatory footnotes. None of these reports, however, provide any analysis of the data. Ostensibly, the data are presented in this manner to allow the consumers of the reports the freedom to make their own conclusions.

Prior to the initial data collection (2001), the Portland Police Bureau made two very important methodological decisions that ultimately influenced the outcome of their studies. First, the Bureau adopted the United States Department of Justice definition of racial profiling. This definition defines racial profiling as:

Any police-initiated action that relies on the race, ethnicity, or national origin rather than the behavior of an individual or information that leads the police to a particular individual who has been identified as being, or having been, engaged in criminal activity.

This definition was originally proposed in 2000, by Ramirez, McDevitt and Farrell in a report written for the United States Department of Justice, Bureau of Justice Assistance. It is the most common definition used by racial profiling researchers (Withrow 2006, pp 79-86). Second, the Bureau chose to estimate the driving population at risk of being stopped by the police on the residential population of the Portland metropolitan area. Initially this information came from the United States Census Bureau and has been subsequently amended with projections from the American Community Survey. The decennial United States Census produces an enormous amount of qualitative information about the American population. The qualitative features of the residential population relating to the proportional representation of individuals by race, ethnicity and age are the most relevant to this and other racial profiling studies. The residential population is the most common basis used by racial profiling researchers to estimate the qualitative features (i.e. race, ethnicity, age) of the driving population (Withrow 2006, pp 88-100). The effect of these two decisions on the outcome of the stop study are discussed in more detail later in this analysis.

The data collection process changed dramatically after the initial 2001 report. The 2001 report includes information from all types of stops while the 2004 and subsequent reports include information only on traffic stops. During the 2001 data collection some of the patrol officers, notably motorcycle officers that initiate quite a lot of traffic stops, were less able to submit stop data because of their lack of access to mobile display terminals. As a result this section includes a separate summary of the 2001 report followed by a comparative summary of the 2004 and subsequent years' reports.

The Combined Traffic and Pedestrian Contact Data Collection 2001 Statistical Report

Issued on May 2, 2002, this report includes data on 114,386 police stops and contacts. When compared to their proportional representation within the residential population, White and Asian individuals are under-represented in the stop data. Alternatively, when compared to their proportional representation within the residential population, African-American, and Unknown race individuals are over-represented in the stop data. The latter finding has been interpreted as evidence of racial profiling within the Portland Police Bureau.

With respect to the age and gender of the individuals stopped several interesting patterns emerge. Overall, males represent the vast majority (73 percent) of all stops. This finding is consistent with those from similar studies in other jurisdictions. Within some racial and ethnic groups the overall pattern of stops changes slightly when gender and age are considered. For example, Hispanic/Latino men appear more likely to be stopped than Hispanic/Latina women. A rather dramatic change occurs within the African-American racial group with respect to age. Overall African-American drivers represent 15 percent of all individuals stopped. Consistent with this finding, African-American individuals represent 15 percent of all adults stopped. Among juveniles, however, African-American individuals represent a much higher proportion, 22 percent of the stops. It is important to note that the residential population figures used by the Bureau to estimate the driving population are reported to include only the 18 years of age and older residents while the 2001 stop data appear to include both adult and juvenile stops. Given the higher proportion of African-American juveniles stopped, this may affect the overall comparisons of stops by race or ethnicity with the benchmark, but only slightly.

With one exception, the reported reason for the stop² appears consistent with respect to the overall proportions of individuals stopped by race or ethnicity. For example, the proportions of stops by the race or ethnicity of the individual within each of these five categories approximate the proportions of stops for each race and ethnicity overall. The exception occurs in the stops for an alleged violation of the criminal code. Overall, African-American individuals represent 15 percent of all stops and 30 percent of all stops for an alleged violation of the criminal code. No other reason for the stop category is as disproportional with respect to the race or ethnicity of the individuals stopped.

Again, with one exception, the disposition of the stop³ appears consistent with respect to the race or ethnicity of the individuals stopped overall. This exception is important and involves the proportion of individuals taken into custody pursuant to a stop. African-American individuals represent 15 percent of all stops and 26 percent of all individuals taken into custody. This may appear to indicate that the police are more 'willing' to arrest African-American individuals. These data, however, cannot support this conclusion because the reason for the custodial decision is not reported. Studies in other jurisdictions (see for example Sedgwick County (Kansas), 2003) find that a larger proportion of African-American individuals are arrested pursuant to an active arrest warrant. An arrest warrant, as an order from a court, narrows an officers discretion, and it is unlikely an officer would be aware of the warrant prior to the stop.

Information relating to the incidence and productivity of searches is always an important consideration in a stop data analysis. The 2001 data indicate that 25 percent of African-American individuals and 11 percent of Hispanic/Latino individuals are searched during a stop. When compared to the overall proportion of stops involving these individuals (15 percent involving African-Americans and 8 percent involving Hispanic/Latinos), it would appear that the officers are more likely to search African-Americans and Hispanic/Latinos. We, however, cannot conclude this because there is little information available indicating the officers' motivation to conduct a search. When conducting a stop study it is critically important to measure the level of discretion officers have when conducting searches. Some searches, like warrant, inventory and incident to arrest searches, are non-discretionary because they are required by law or policy. Consent searches, on the other hand, are highly discretionary and should be the focus of a credible stop study. Overall, African-American individuals account for 24 percent of the inventory searches within the 2001 data. While this percentage exceeds the overall representation of African-Americans (15 percent), it may be explained by the higher proportion of African-American individuals that are taken into custody, and therefore subject to an inventory search by the municipal code. The tables (Tables #7 and #8) describing search productivity are rather difficult to analyze. Information relating to the results of the searches is comingled with a category indicating the reason or justification for the search. For example, these tables include the percentages of searches (by the race or ethnicity of the subject) that are 'inventory' searches. No information is provided on how many of these actually produced some type of illegal item (e.g. alcohol, contraband, drugs or weapons). The remaining categories describe search productivity in terms of whether or not something illegal was seized but no information on the reason of justification for these searches is provided.

The remainder of the 2001 study conducts the same analyses within each of the Bureau's five precincts⁴. While these analyses are interesting, because they each represent such large portions of the metropolitan area and are internally diverse, they do not sufficiently differ from the overall citywide findings. Ideally, a more detailed analysis at the beat level would produce more instructive findings.

Traffic Stops Data Collection 2004-2006 Statistical Reports

Following the publication of the 2001 report, the Portland Police Bureau made several important changes to its stop data collection procedures. First, the Bureau provided additional training to officers on how and under what conditions to complete the stop data reports. In every multi-year stop data collection effort known to the author, police departments have found it necessary to conduct follow-up training after the first year. Second, the Bureau expanded and facilitated the data collection process by providing a broader range of officers (e.g. motorcycle officers, mounted and foot patrol, etc.) access to an efficient means to report stop data. Third, the Bureau limited its stop data collection to traffic stops. There are fundamental differences in the dynamics of traffic and pedestrian stops. Most notably, the number of possible pedestrian violations that can be used to produce the probable cause necessary for a stop is substantially less than that available in the vehicle code (Withrow 2007).

The Traffic Stops Data Collection Statistical Reports from 2004 through 2006 are essentially identical with respect to their formats. In each year, the Bureau used the 2000 Census as the basis for estimating the proportional representation of the driving population by race or ethnicity. Consistent with the 2001 report, African-American and Hispanic drivers are over-represented when compared to the residential population based benchmark. In fact, this level of disproportion is nearly identical in each of the three reports (see Table 1).

Table 1. Comparison of stops (percentages) by race and ethnicity 2004-2006.

Perceived race/ ethnicity	2004	2005	2006	Adjusted Census: 18 or older
African-American	13%	13%	14%	6%
Asian	4%	4%	4%	6%
Hispanic/Latino	8%	9%	9%	6%
Native American	<1%	<1%	<1%	1%
White	71%	68%	66%	79%
Unknown/other	4%	5%	6%	<1%
Multiracial	-	-	-	3%
TOTALS	100%	100%	100%	100%
Number of stops	80,073	79,419	68,107	

The reports indicate the Bureau's use of the "Adjusted Census: 18 or older" portion of this residential population estimate. However, in every case the stop data contain juvenile stops. For example, Table 1 of the 2006 report includes information on 68,107 stops. These stops are reported by the race and ethnicity of the driver against the "Adjusted Census: 18 or older" residential population. Table 2 of this report indicates that 2 percent of the total 68,107 stops involved juveniles. Unlike the 2001 report, however, the percentages of stops involving juveniles by race or ethnicity is quite close to that of the overall proportions of drivers stopped by race or ethnicity. While removing the juvenile stops from the analysis prior to comparing them to the benchmark would be methodologically advisable, it does not appear this would make a substantial difference in the reports' findings.

Two interesting contrasts exist between the 2001 and 2004 – 2006 reports with respect to the reported reasons for the stop. The 2001 report indicates a higher proportion of African-Americans are stopped for an alleged violation of the criminal code. The same is also true in the 2004 – 2006 reports. The percentage of African-American drivers stopped for an alleged violation of the criminal code from 2004 – 2006 ranges from 20 to 23 percent, while the overall proportion of African-American drivers stopped ranges from 13 to 14 percent. The first contrast exists within the percentage of "Be on the Lookout for" stops. In 2001, African-American drivers accounted for 19 percent of the "Be on the Lookout for" stops,

compared to 15 percent of all stops. In 2004 – 2006, African-American drivers represented from 24 to 35 percent of “Be on the Lookout for” stops, compared to 13 to 14 percent of all stops. Second, the proportion of White drivers stopped for a “Vehicle Inspection” during 2004 – 2006 is markedly higher than that in 2001. In 2001, White drivers accounted for 61 percent of all “Vehicle Inspection” stops, compared to 69 percent of all stops. In 2004 – 2006, White drivers represented from 79 to 81 percent of “Vehicle Inspection” stops, compared to 66 to 71 percent of all stops. Beyond these contrasts, the pattern of stops by reason appears consistent from 2004 – 2006. The contrasts may be explained by the change in the reporting procedures (i.e. the inclusion of traffic only stops after 2001) implemented during 2004.

A consistent pattern exists in the reported disposition of stops in the 2004 – 2006 reports. The proportions of stops resulting in either a warning or no enforcement are essentially equal to the overall proportions of stops for each racial and ethnic group. African-American drivers appear slightly less likely and White drivers appear more likely to receive a traffic citation. The proportion of Hispanic/Latino drivers that received a citation is equal to their representation among all drivers stopped. The most substantial differences (with respect to the race or ethnicity of the driver) exist in the “Cite-in-Lieu” and “Custody” stop dispositions. In each year, African-American drivers are over-represented in stops resulting in a “Cite-in-Lieu” disposition (from 20 to 22 percent) and stops resulting in “Custody” (from 20 to 22 percent), compared to 13 to 14 percent of all stops. In nearly every year Hispanic drivers are over-represented in stops resulting in a “Cite-in-Lieu” disposition (from 8 to 13 percent) and stops resulting in “Custody” (from 10 to 14 percent), compared to 8 to 9 percent of all stops. Here again, this may appear to indicate that the police are more ‘willing’ to arrest African-American and Hispanic/Latino individuals. These data, however, cannot support this conclusion because the reason for the custodial decision is not reported. Furthermore, from these data the officer’s level of discretion cannot be measured.

When compared to their overall representation of stops, African-American and Hispanic/Latino drivers are subjected to a higher percentage of searches. African-American drivers represent from 22 to 24 percent of all individuals searched but only 13 to 14 percent of all individuals stopped. Hispanic/Latino drivers represent from 12 to 15 percent of all individuals searched but only 8 to 9 percent of all individuals stopped. Consistently, the percentages of White drivers searched (from 55 to 59 percent) are less than the overall percentages of White drivers stopped (from 66 to 71 percent).

Here again, the level of search productivity is difficult to determine from the information provided. The percentage of searches producing no contraband is consistent for each racial and ethnic group from one year to the next. Some differences exist from one year to the next in the search productivity with respect to African-American and Hispanic/Latino drivers. For example in 2004 and 2005, 7 percent of all searches involving African-American drivers resulted in the seizure of some illegal item. Conversely, in 2006, 11 percent of all searches involving African-American drivers resulted in the seizure of some

illegal item. An increase in drug and alcohol seizures from African-American drivers in 2006 accounts for this difference. In 2004, 4 percent of all searches involving Hispanic/Latino drivers resulted in the seizure of some illegal item. But, in 2005 and 2006, 8 percent of the searches involving Hispanic/Latino drivers resulted in the seizure of some illegal item. An increase in drug seizures from Hispanic/Latino drivers in 2005 and 2006 accounts for this difference.

²*Be on the lookout for, Violation of the criminal code, Violation of the municipal code, Violation of the vehicle code, and Vehicle inspection.*

³*Warning, Traffic Citation, Cite-in-Lieu, Custody, and No Enforcement.*

⁴*Central, East, North, Northeast, Southeast.*

SECTION III:

Description of the 2006 Stop Data and Analytical Strategy

The 2006 stop data contain records on 68,107 traffic stops conducted by officers from the Portland Police Bureau during calendar year 2006. It is the fourth annual stop data collection. The data are collected by the officers using mobile display terminals. In addition to routine data fields (e.g. incident number, dispatch group and jurisdiction), the data set contains the following variables:

- » The patrol precinct and district in which the stop occurred
- » The type of person (driver, passenger, pedestrian) involved in the stop
- » The race or ethnicity of the person stopped
- » The hour in which the stop occurred
- » The gender of the person stopped
- » The age (adult or juvenile) of the person stopped
- » The reason for the stop
- » The type and results of searches conducted
- » The disposition of the stop

Because most of the variables in the 2006 stop data set are measured at the nominal level, the statistical techniques that can be used to analyze the data are somewhat limited. With the exception of frequency tables, the most useful statistical technique available to the analyst is a Chi-Square cross tabulation. This technique, while well suited for nominally measured data, is non-inferential. In other words, a Chi-Square technique cannot establish a causal relationship between two variables. The cross tabulation mathematically compares the observed frequency with the expected frequency. For example, this analysis might reveal that 605 African-American drivers were taken into custody (the observed frequency) while only 416 African-American drivers should have been taken into custody (the expected frequency). The expected frequency is calculated by the model based primarily on the overall distribution of African-American drivers in the data set. While the above finding may suggest disparity, this statistical technique cannot establish a causal relationship between a driver's race and an officer's decision to arrest.

To test the significance of the differences between the observed and expected frequencies, the analyst used the Pearson Chi-Square Test for Significance. Consistent with practice standards, beta values (p.) below .05 are considered statistically significant. Unfortunately, the model cannot locate the specific statistically significant differences between the observed and expected frequencies. Therefore, conclusions must be based on a review of the cross tabulation results and the analyst's judgment.

Generally, the analyst considered a disparity significant if the observed frequency was equal to or greater than one and one-half times the expected frequency. For example, if the Pearson Chi-Square Test for Significance (for the overall model) equals .000 and the observed frequency of individuals arrested is 500 while the expected frequency is 250, then the analyst concluded that a statistically significant difference exists.

SECTION IV:

Findings

Upon receipt (electronically) of the 2006 data set from the Portland Police Bureau, the author converted the text file into an SPSS data file. Then using information provided by the Bureau, the author created variable and attribute⁵ labels to facilitate the subsequent analyses. The stop data received by the author are generally consistent with the findings presented in the Portland Police Bureau's Traffic Stops Data Collection 2006 Statistical Report. The data are, uncharacteristically for public safety data, free from missing values and incomplete records, indicating they had been 'cleaned' prior to distribution. The following findings are organized into three sections – who gets stopped and for what, what happens during the stops and the results of the stops.

Who Gets Stopped and for What

The overwhelming majority (99.2 percent) of the 68,107 stops recorded in the 2006 stop data involve drivers. The remaining stops involve pedestrians (.3 percent) and passengers (.4 percent). The higher proportion of stops involving drivers is the result of the Portland Police Bureau's intent to focus their stop data collection efforts on vehicular stops. Among all individuals stopped, 68.2 percent are male, 27.7 percent are female and 4.2 percent are reported as "unknown" gender. The proportions of male and female residents in Portland are essentially equal. Therefore, males appear to be over-represented among individuals stopped. This finding is consistent with similar studies in other jurisdictions. Among all individuals stopped, 98.4 percent are defined as "adult." Here again, this is the result of the Bureau's desire to limit their stop data collection to this particular segment of the population.

Among all individuals stopped, the vast majority (66.1 percent) are White. African-American drivers represent the second most frequent category of individuals stopped by race at 13.8 percent. Hispanic/Latino drivers, the third most frequently stopped category of individuals at 9.2 percent, are included within the same variable field as the racial categories. Because Hispanics can be any race, most researchers evaluate the stops involving these drivers separately. The Other/Unknown racial category is the next most frequently stopped category of drivers at 6.4 percent. It is unclear why stops involving Other and Unknown race individuals are comingled. Because these two racial categories are not analogous, they should be accounted for separately. Finally, the data set does not include a Multiracial category. Short of asking the driver (which is often regarded as inappropriate during a traffic stop), it is likely difficult to accurately classify individuals into one of the numerous Multiracial categories available (see Table 2).

Table 2. Drivers stopped by race or ethnicity (Adults drivers only).

Race/Ethnicity	Number of Stops	Percent of Total Stops
Asian	2,830	4.2%
African-American	9,284	13.8%
Hispanic/Latino	6,143	9.2%
Native American	169	0.3%
Other/Unknown	4,314	6.4%
White	44,295	66.1%
TOTALS	67,035	100%

The stop data include five separate categories that describe why drivers are stopped. The majority of the individuals stopped (98.0 percent) are stopped for an alleged violation of the vehicle code. Here again, the over-representation of stops for an alleged violation of the vehicle code is the result of the Portland Police Bureau's desire to limit their stop study data collection to traffic stops (see Table 3).

Table 3. Stops by reason (All stops).

Reason	Number	Percentage
Be on the Lookout for	121	0.2%
Criminal Code	994	1.5%
Municipal Code	161	0.2%
Vehicle Code	66,752	98%
Vehicle Inspection	79	0.1%
TOTALS	68,107	100%

A Chi-Square cross tabulation of the stops by reason and the race or ethnicity of the driver reveals that African-American and Hispanic/Latino drivers are over-represented in stops for an alleged violation of the criminal code. African-American drivers represent 13.8 percent of all drivers stopped and 21.6 percent of all drivers stopped for an alleged violation of the criminal code. Similarly, Hispanic/Latino drivers represent 9.2 percent of all drivers stopped and 13.2 percent of all drivers stopped for an alleged violation of the criminal code. In addition, African-American drivers are slightly over-represented in be on the lookout for stops. African-American drivers represent 13.8 percent of all stops and 24.0 percent of all be on the lookout for stops. These differences are statistically significant (p. = .000)

What Happens During the Stops

The data available in the 2006 stop study on what happens during the stops are limited to search information. In 2006 officers from the Portland Police Bureau conducted 11,972 searches. Of the 68,107 total stops, 17.6 percent included a search. The majority (59.9 percent) of these searches are reported as inventory searches. Because inventory searches are required by municipal code pursuant to an arrest or tow of the vehicle, they are non-discretionary. This means the officers have no option but to conduct the search. No information is provided on the productivity of these searches. Of the remaining 4,802 searches, 1,832 (38.2 percent) produced some potentially illegal substance⁶. Because the type of search and the result of the search are comingled into the same variable, it is not possible to fully analyze the search performance of Portland's police officers (see Table 4).

Table 4. Searches conducted in 2006 (All searches).

Search type/Result	Number	Percentage
Inventory	7,170	10.5%
Non Inventory		
Nonproductive	2,970	4.4%
Productive	1,832	2.7%
No Search	56,135	82.4%
TOTALS	68,107	100%

In an attempt to evaluate discretionary search performance, the non-inventory searches were distributed by the race or ethnicity of the driver. This required the creation of a new variable that included the following attributes:

- » Inventory Search (these were excluded from the following analysis)
- » Total Non-Inventory Searches
 - Nonproductive Search
 - Productive Search (includes searches producing alcohol, contraband, drugs and weapons)
- » No Search

The analysis reveals that African-American and Hispanic/Latino drivers are over-represented in non-inventory searches when compared to their proportional representation among all drivers stopped. African-American drivers account for 13.8 percent of all individuals stopped and 22.6 percent of all individuals subjected to a non-inventory search. Hispanic/Latino drivers account for 9.2 percent of all individuals stopped and 14.2 percent of all individuals subjected to a non-inventory search. These over-representations may be due to the larger proportion of African-American and Hispanic/Latino drivers that are stopped for an alleged criminal code violation. Criminal code violation stops are

more dependent upon the retrieval of evidence; hence police officers are more motivated to conduct searches during these types of stops. Unfortunately, the 2006 data set provides no insight into the search rationale, type of search or level of officer discretion (see Table 5).

Table 5. Non-inventory searches by race and ethnicity of the driver.

Race/Ethnicity (Percent)	Total Non- Inventory Searches (Percent of total)	Nonproductive Searches (Percent of total non-inventory searches)	Productive Searches (Percent of total non-inventory searches)	No Search (Percent)
Asian (4.2)	101 (2.1)	56 (55.4)	45 (44.6)	2,588 (4.6)
African-American (13.8)	1,083 (22.6)	703 (65.0)	380 (35.1)	6,808 (12.1)
Hispanic/Latino (9.2)	681 (14.2)	454 (66.7)	227 (33.7)	4,494 (8.0)
Native American (.3)	18 (.4)	8 (44.4)	10 (54.6)	117 (.2)
Other/Unknown (6.4)	227 (4.7)	142 (62.6)	85 (37.4)	3,681 (6.6)
White (66.1)	2,692 (56.1)	1,607 (59.7)	1,085 (40.3)	38,447 (68.5)
TOTALS	4,701.9 (100.1)	2,970 (61.8)	1,832 (38.2)	56,135 (100)

Note: Percentages may not total 100% because of rounding error.

The proportion of searches (by the race or ethnicity of the driver) that are nonproductive is an important issue in racial profiling and stop studies. A substantial difference in the proportion of nonproductive searches within any racial or ethnic category often suggests that the police might be ‘hassling’ minority drivers. Overall, 61.8 percent of all searches are nonproductive. The percentages of nonproductive searches for African-American and Hispanic/Latino drivers are 65.0 and 66.7 percent, respectively. A Chi-Square cross tabulation of these data suggests that these differences are statistically significant ($p = .000$); however, the practical significance of these differences cannot be determined. In other words, the slight over-representation of African-American and Hispanic/Latino drivers in nonproductive stops is not within itself a cause for concern. In the absence of data that would describe the rationale and other conditions preceding the officer’s decision to search it is not possible to conclude from differences this slight that these minority drivers are being subjected to arbitrary searches.

The Results of the Stops

The majority (57.2 percent) of the 68,107 stops recorded in 2006 resulted in the issuance of a warning. Traffic citation dispositions are the second most common disposition at 33.8 percent (see Table 6).

Table 6. Dispositions of traffic stops in 2006 (All stops).

Disposition	Number	Percentage
Traffic Citation	23,035	33.8%
Cite-In-Lieu	521	0.8%
Custody	3,005	4.4%
No Enforcement	2,558	3.8%
Warning	38,988	57.2%
TOTALS	68,107	100%

A Chi-Square cross tabulation of dispositions by the race or ethnicity of the driver reveals that stops involving African-American and Hispanic/Latino drivers are more likely to result in a custodial decision ($p = .000$). African-American drivers account for 13.8 percent of all stops and 20.1 percent of the stops resulting in custody. Hispanic/Latino drivers account for 9.2 percent of all stops and 12.8 percent of the stops resulting in custody. This may be interpreted as evidence that the police are more inclined to arrest these minorities. However, one must also remember that a higher proportion of African-American and Hispanic/Latino drivers are stopped for an alleged violation of the criminal code. Criminal code violations are more likely than traffic code violations to result in an arrest.

⁵ For example, "male" and "female" are attributes for the variable describing gender.

⁶ Alcohol, contraband, drugs, weapons.

SECTION V:

Discussion

This discussion is organized into two parts. The first part is a critique of the Portland Police Bureau's stop data collection program. In addition to identifying its shortcomings, this critique includes several recommendations for improving the stop data collection program's ability to more adequately describe the Bureau's enforcement program and their officers' enforcement decision making. The second part of this discussion evaluates the stop data's relevancy to public discussions on the presence and extent of racial profiling. This part focuses on the extent to which the stop data can support an allegation of racial profiling.

Comprehensive Critique of the Portland Police Bureau's 2006 Stop Data

The Portland Police Bureau publishes a report after each year's stop data collection. These reports are limited to a simple presentation of the stop data in tabular form. While the Bureau is to be commended for developing and maintaining a consistent mechanism for collecting stop data information, the lack of analysis of these data is remarkable. Given the importance of the racial profiling controversy in Portland, it would seem the Bureau would provide more insight into the factors that might explain its stop report's findings. Police operations are immensely complicated and not generally well known to the casual observer. For example, it is not enough to state that a certain percentage of individuals stopped were taken into custody. The analyst must evaluate, to the extent the data will allow, the factors that might explain the officer's decision to arrest. Often researchers find that a very small percentage of the arrests are discretionary and fewer still are arbitrary. The following critique analyzes the Portland Police Bureau's stop data collection program and offers recommendations for its improvement.

The validity of the stop data is unknown because its completeness is not reported.

The total number of traffic stops recorded decreased steadily each year from 80,073 in 2004; to 79,419 in 2005; to 68,107 in 2006, representing a 15-percent decrease during this three-year period. During this same time period:

- » The rate (per 1,000 residents) of person crime remained steady at 7.
- » The rate (per 1,000 residents) of property crime decreased nearly 25 percent from 77 (2004) to 69 (2005) to 58 (2006).
- » The number of dispatched calls decreased nearly 13 percent from 259,661 (2004) to 244,335 (2005) to 227,026 (2006).
- » The number of self initiated calls increased nearly 12 percent from 173,269 (2004) to 189,861 (2005) to 193,383 (2006).

- » The number of sworn officers increased 6 percent overall from 673 (2004) to 670 (2005) to 714 (2006) (Portland Police Bureau Annual Report, 2004; Portland Police Bureau Annual Report 2005; Portland Police Bureau Annual Report 2006).

While there is seldom any direct correlation between the number of traffic stops and the various measures of criminal activity or calls for service, a significant and sustained change over time is potentially important. In most cases, a change in the number of stops is caused by an external factor or administrative decision. For example, a reduction in a department's overtime salary budget may result in an overall reduction in stops. Sometimes however, a reduction in traffic stops is caused by a voluntary reduction in activity by individual police officers based on a fear of sanction or public scrutiny. Commonly called disengagement or de-policing, this practice potentially threatens the validity of a stop study. Police officers concerned about how stop data will be interpreted or afraid they will be subjected to administrative scrutiny (e.g. discipline) may chose to reduce their overall levels of productivity. In its extreme form, a police officer may chose not to stop minority drivers at all. This practice is well documented in the literature, and in some cases the reductions are dramatic (Withrow, 2006, p. 217). A 15 percent decrease in stops occurring during the same time frame as a 12 percent increase in self-initiated calls and a 6 percent increase in sworn officers warrants some explanation.

Recommendation: The Portland Police Bureau should consider implementing an auditing mechanism independent of the stop data collection program what would measure the completeness and accuracy of the future stop data collections.

Limiting the scope of their stop data to vehicular stops involving adults inhibits the Bureau's ability to fully evaluate the overall enforcement performance of their officers. Within any major urban area there are numerous enforcement contexts and each of them are distinctive in their character and dynamics. For example, there are literally thousands of statutes regulating vehicular traffic. Drivers who violate any one of these provide the police the probable cause they need to initiate a traffic stop. The anecdotal evidence suggests that most drivers when followed long enough (but usually not very long) will commit at least one traffic violation. As a result, police officers often have little difficulty finding a pretext upon which to initiate a traffic stop and when stopped, most individuals will consent to having their vehicle searched. Alternatively, the statutes regulating pedestrian traffic, even in highly dense urban areas, are limited. It is therefore more difficult for the police to develop a pretext upon which to stop, question and search a pedestrian. Comparative studies indicate that racial and ethnic minorities are even more over-represented as pedestrians than as drivers (Spitzer, 1999; Withrow, 2007). Portland also has one of the most extensive bicycle lane systems among similarly sized cities in the nation. As a result, stops involving bicyclists would seem to be an important part of the Bureau's enforcement activities and should be included in the routine stop data collection.

Recommendation: The Portland Police Bureau should consider expanding the types of contacts included in future stop data collections so as to allow a more comprehensive analysis of its entire enforcement activities.

Overall, juveniles represent 21.8 percent of Portland’s population, and one fourth of these are driving age (15 to 19 years old). While this may seem a relatively small percentage of the total population, juveniles tend to commit a disproportionately higher number of traffic violations than they are represented in the population. Furthermore, juvenile drivers are more likely to be victims of traffic accidents and are subjected to more searches than adult drivers. In short, because juvenile drivers are potentially involved in a disproportionately larger number of enforcement events, they should be included in the stop study.

Recommendation: The Portland Police Bureau should consider including information on juveniles stopped in future stop data collections.

The racial and ethnic categories reported by police officers in the stop data are poorly conceptualized and incongruent with those in the benchmark used by the Portland Police Bureau to estimate the driving population. The Portland Police Bureau uses the United States Census Bureau’s residential population estimate as the benchmark upon which to compare the percentages of individuals stopped by race or ethnicity. First, the United States Census Bureau uses six ‘one race’ categories, while the Portland Police Bureau only uses five ‘one race’ categories (see Table 7). Admittedly, however, Native Hawaiian and Other Pacific Islanders, who are excluded in the Portland Police Bureau’s list of racial groups, only account for about .3 percent of Portland’s adult population. Therefore, their exclusion would not make a profound difference in the outcome of the comparison.

Table 7. Comparison of one-race categories used by the United States Census Bureau and the Portland Police Bureau’s Traffic Stops Data Collection 2006 Statistical Report.

U.S. Census Bureau Categories	Portland Police Bureau Categories
White	White
Black or African-American	African-American
American Indian and Alaskan Native	Native American
Asian	Asian
Native Hawaiian and Other Pacific Islander	Not included
Some Other Race Alone	Other/Unknown

Second, beginning with the 2000 Census, the United States Census Bureau allowed respondents to indicate their multiracial status. Previously respondents were required to indicate their “primary” race. The annual stop study reports include a “Multiracial” category. Unfortunately, while this stratum may be as much as 3 percent of Portland’s adult population, it does not appear that the Portland Police Bureau’s data collection protocols allowed the collection of this information. It is unlikely that

no multiracial individuals were stopped during 2006. It is more likely that the officers were unable to classify individuals as multiracial either because this attribute does not exist in the stop data set's variable describing the race or ethnicity of the driver or they were unable to accurately differentiate between the numerous multiracial categories.

Third, the Portland Police Bureau combines "Other" race with "Unknown" race individuals. These are not the same. The "Some Other Race Alone" category used by the United States Census Bureau provides respondents that are not one of the other five "one race" categories a place to report their race. It is assumed that the "Other" category used by the Portland Police Bureau has a similar meaning. Neither of these categories however are analogous to "Unknown."

Finally, the United States Census Bureau considers "Hispanic or Latino" as a separate ethnicity within the total population. The Portland Police Bureau considers "Hispanic/Latino" as a discrete ethnicity, equivalent to a racial category. According to the Census Bureau, 97 percent of Portland's adult residents fit into one of six "one-race" categories. The remaining 3 percent of the adult population report themselves to be two or more races. Because Hispanics can be of any race the 23,757 Hispanic or Latino residents in Portland (5.7 percent of the total population) are distributed throughout the six "one race" or numerous "two or more races" categories. The difference between these two racial and ethnic categorizations and their potential effect on the analytical outcome of the stop study is illustrated on Table 8.

Table 8. Comparison of United States Census Bureau and Portland Police Bureau racial and ethnic proportional representations.

United States Census Bureau		Portland Police Bureau	
Racial/Ethnic Categories	Percent	Racial/Ethnic Categories	Percent
White	80.8%	White	79%
Black or African American	5.8%	African-American	6%
American Indian and Alaskan Native	1%	Native American	1%
Asian	6.1%	Asian	6%
Native Hawaiian and Other Pacific Islander	0.3%	Category not included-	
Some other race alone	3%	Other/Unknown	1%
Two or more races	3%	Multiracial	3%
Hispanic or Latino	5.7	Hispanic/Latino	6%
TOTALS	105.7		102%

Notes: Figures reflect the 18 years of age and older population. The percentages for the Portland Police Bureau reflect those used in their comparative benchmark.

The ultimate effect of this incongruence is unclear. It is not possible to know how the comparison would have been affected had the Portland Police Bureau allowed its officers to indicate a driver's

multiracial status, included all six “one race” categories, and separated the racial and ethnic variable fields. Short of asking the driver, it is likely difficult for an officer to accurately classify a multiracial driver. At the very least, the Portland Police Bureau should have considered Hispanic/Latino a separate ethnicity so as to insure Hispanic drivers, regardless of their race, are counted in the stop data in the same manner they are counted in the benchmark. Additional information on the inadequacies of population-based benchmarks is included in the discussion and conclusion sections.

Recommendation: If the Portland Police Bureau continues to use a population-based benchmark, then at the very least it should revise its stop data collection protocols so that the racial and ethnic categories are consistent with those in their benchmark.

Because the reported reasons for the stops are nominally measured and nondescript, no correlation can be established between the relative severity of the driver’s observed behavior and the ultimate outcome of the stop. The stop data provide information on the officers’ reported reasons for initiating a traffic stop. It appears African-American and Hispanic/Latino drivers are over-represented⁷ in “Be on the Lookout for” and “Violation of Criminal Code” stops. African-American drivers are also over-represented in “Violation of Municipal Code” stops. It also appears White drivers are over-represented in “Vehicle Inspection” stops. Because the reasons for stop categories are nominally measured, there is no way to determine the relative severity of the drivers’ behavior. For example, a stop for a violation of the vehicle code may be as serious excessive speed through a school zone or as benign as a dirty license plate. The nondescript nature of these categories makes any attempt to correlate driver behavior with the outcome of the stop impossible. For example, are African-American drivers stopped for less serious behaviors than White drivers? When stopped for relatively minor violations are Hispanic drivers more likely than Asian drivers to receive a citation? These and other similar questions are important to a credible stop study and essential to a racial profiling analysis.

Even though they represent a very small proportion of the total stops, the “Be on the Lookout for” stops offer a potentially important analysis opportunity for the Portland Police Bureau. The other five categories represent objective, albeit alleged, violations of some law, code or regulation. A stop predicated on “[An individual or vehicle matching the description of a suspect or a suspect vehicle in a recent investigation” is highly subjective and addresses an important issue in the racial profiling controversy⁸. Reviews of narrative accounts of stops (published in newspapers) from individuals alleging themselves to be victims of racial profiling consistently include assertions that the officers told them they were stopped because they fit the description of a known suspect. Later when officers are asked to provide the suspect or vehicle description they used to justify the stop, the driver and/or vehicle actually stopped are occasionally quite dissimilar (Withrow and Jackson, 2002). It would be interesting to determine what proportion of “Be on the Lookout for” stops resulted in an actual arrest for an alleged violation.

Recommendation: The Portland Police Department should include a variable (measured at the scale level) within their stop data collection protocol that allows officers to indicate the relative severity of the driver's behavior prior to the stop.

Because the reported reasons for the stops are nominally measured, the officers' motivation and level of discretion for initiating the stop cannot be determined. Some alleged violations of the law are more serious than others. The seriousness of a driver's behavior within an enforcement context is an important consideration in racial profiling research. For example, speeding 10 miles over the limit may be considered less serious on one of Portland's interstate highways than through one of Portland's residential neighborhoods. Officers are likely more motivated to stop the most flagrant violators. The totality of the available research on a potential relationship between race and driving behavior is rather inconclusive. About half of the studies find that racial minorities are more likely to commit serious violations and the other half find that race is not at all related to driving or criminal behavior (see Withrow, 2006, pp. 115-117). The most recent study of any significance was conducted on the New Jersey Turnpike in 2001. Using digital imaging technology along with speed detection devices Lange, Blackman and Johnson found "significant and substantial differences in the rates of speeders among some racial groups in some areas" (p. 18). Specifically, these researchers found that African-American drivers are more likely to speed within the 65 rather than the 55-mile-per-hour zones of the turnpike. While it is provocative to suggest race or ethnicity plays a role in driver behavior, it is important for a stop study to at least measure the relative severity of the drivers' behavior prior to the stop. In doing so, the study can provide important insights into the officers' motivations for initiating a stop.

In a similar manner the categories describing the reason for the stop cannot establish the officers' level of discretion, which is known to fluctuate. It is assumed that all stops reported in the stop data are to some degree discretionary. For example, calls for service (initiated by citizens through the central dispatch center) and accident investigations are not included in the study because the officers have very little discretion on whether to initiate a contact. Beyond these types of contacts, officers have considerable discretionary authority. When an officer observes a violation, he or she can either initiate a stop or ignore it without impunity. This, however, does not mean that officers ignore all violations equally. Furthermore, other factors not related to the driver's behavior may play a role in the officer's decision to stop. For example, an officer is less likely to stop an individual who fails to signal a lane change when it is raining. Conversely, most officers would not likely ignore a potential drunk driver regardless of the weather conditions. The most efficient way to measure an officer's level of discretion is through a proxy variable describing the relative seriousness (i.e. threat to public safety) of the driver's behavior. From this we can assume officer discretion decreases as driver flagrancy increases. This type of analysis would provide far more insight into the officers' decision to initiate a traffic stop than is currently provided by the stop data.

Recommendation: The Portland Police Bureau should expand the number of attributes in the variable describing the reason for the stop so as to support a separate evaluation of discretionary and non-discretionary stops.

The stop data provide very little insight into the officers' motivation, level of discretion and justification for conducting searches. Often the most conclusive evidence of an enforcement program's disparate effect comes not from who gets stopped, but what happens to drivers once they are stopped. At issue here is officer motivation, discretion and justification, not productivity. Our justice system never bases the legality of a search on whether evidence of a crime or contraband is confiscated. Instead, we are more concerned with whether or not the police abused their authority during the investigatory process. With one notable exception (inventory searches), the stop data only report on search productivity. Because inventory searches are non-discretionary (meaning they are required by city code when the driver is taken into custody), the decision to conduct this type of search was made by the Portland City Council and not by the officers.

The officers' justification, motivation or level of discretion for conducting the searches cannot be ascertained from the available data. Searches were conducted during 11,369 of the total 68,107 total stops reported in 2006. In other words, 17.6 percent of all stops involved a search. Most of these searches (7,170, or 59.9 percent) are reported as inventory searches. One can logically assume that the remaining 4,802 searches were to some degree discretionary. Here again, the level of officer discretion is not equally distributed across all types of searches. For example, searches predicated on an independent finding of probable cause (resulting in the issuance of a warrant by a magistrate) are less capricious than consent searches that are based on little more than an officer's hunch or curiosity. As a result, the consent search justifiably commands the attention of most racial profiling researchers. Unfortunately, the traffic stop data ignore this important issue.

The performance of police officers during searches is an important issue. Few police activities are subjected to more legal and social scrutiny than searches. Ideally, police officer performance should be evaluated in four separate dimensions. First, the stop data should indicate whether or not a search was conducted. Second, the stop data should differentiate between the various types of searches⁹. This dimension should also include information on the number of consent search requests that were rejected by the drivers. Differentiating between the types of searches provides the analyst with another evaluative dimension – officer discretion. Not all searches are equally discretionary. Some, like inventory and incident to arrest searches, are required by law or policy. Other searches, like consent searches, are highly discretionary and should be the focus of any racial profiling inquiry. Third, the search information should provide some information on the officer's rationale for conducting a search. While the list of potential search rationales may be extensive, these can be organized into a few discrete categories¹⁰. For example, verbal indicators could include inconsistencies in the independent comments made to police officers by drivers and passengers. Finally, the search information should

provide some insight into officer productivity. While the legality of a search can never be established by its result, it is administratively important for a police agency to routinely evaluate the extent to which its officers are correct in their decisions to initiate searches.

Recommendation: The Portland Police Bureau should expand the level of detail in its stop data so as to fully document the various evaluative dimensions of searches. This will require the addition of several new variable fields.

The information relating to the disposition of the stops provides little insight because it does not measure the factors that are well known to affect officer decision making. The stop data include information that allows the comparison of stops by their disposition and the race or ethnicity of the driver. Five dispositional categories are reported: "Warning," "Traffic Citation," "Cite-In-Lieu," "Custody" and "No Enforcement." It appears that stops involving African-American drivers are more likely to result in "Cite-In-Lieu" and "Custody" dispositions and slightly less likely to result in the issuance of a "Traffic Citation." Similarly, stops involving Hispanic/Latino drivers are more likely to result in "Cite-In-Lieu" and "Custody" dispositions. Stops involving White drivers are more likely to result in the issuance of a "Traffic Citation." This finding implies that the race or ethnicity of the driver has some influence in the officer's decision on how to dispose of the stop. Unfortunately, the body of literature overwhelmingly suggests that dozens of other factors play a more important role in an officer's enforcement decision making (see Withrow, 2006 pp. 6-8).

Because police officer decision making is known to be complex and contextual, it is essential for a stop data set to include as much information as possible to document the conditions that may explain police officer behavior. Some of these conditions are highly relevant to the racial profiling controversy. Information on the duration of the stop, the number of officers at the stop, and whether a physical confrontation occurred during the stop are important factors. In addition, it is essential for stop data to include some indication of the temporal order of events. For example, the data should be able to determine whether physical confrontation was the reason for an arrest or the result of an arrest decision.

The stop data set does not include enough detail to fully understand the officers' motivations for initiating an arrest and the legitimacy of their arrest decisions. For example, the percentage of these arrests that are made pursuant to an active arrest warrant are not reported. Because arrests made pursuant to an active warrant are non-discretionary, these should be separated from the analysis. Similarly, it is also important to differentiate between felony and misdemeanor arrests. This distinction provides some indication of the seriousness of the alleged offense, a known influential factor in an officer's decision to initiate an arrest. It is also unclear what percentage of the arrests actually result in the filing of a bona fide criminal charge. The Multnomah County Sheriff reports that in 2006, 21.8 percent of the individuals booked into the county jail were African-American (Sanders, March 30, 2007), essentially equal to the percentage of African-American drivers arrested. This suggests that the police are following through on the arrest decisions involving these drivers. If the police were merely

using their arrest powers to harass individuals, the 'you may beat the rap but not the ride' scenario, then the percentages of arrests and bookings for this minority group would be disproportionate.

The dispositional information produces more questions than answers. For example, is there a relationship between the punitiveness of the disposition and the severity of the driver's alleged behavior? If a ticket was issued, was it for the same alleged behavior that caused the officer to initiate the stop? The most troublesome disposition category is "Custody." What were the officers' levels of discretion in making the decision to take a driver into custody? Was there an active and unrelated arrest warrant on file for that driver? Was there a confrontation between the officer and the driver? Did the driver commit a violation (e.g. domestic violence or driving while intoxicated) for which the officer is required to initiate an arrest?

Recommendation: The Portland Police Bureau should expand the amount of information collected in its stop data to more fully document what happens to drivers and officers during traffic stops. This information should measure the presence and extent of the factors that are known to influence police decision making.

The benchmark used by the Portland Police Bureau is invalid as an estimate of the population of drivers at risk of being stopped. The most controversial issue facing racial profiling studies is the manner in which researchers attempt to estimate the population of individuals at risk of being stopped, often referred to as a benchmark. Most researchers use the residential population estimates from the United States Census Bureau or a state-level population center. While residential population estimates are readily available and inexpensive, they are not likely a valid measure of the driving population, and in particular the population of drivers at risk of being stopped by the police.

The residential population figures only estimate the individuals that actually reside in a community. Drivers who work and drive daily in Portland but do not live there would not be counted in the city's residential population, yet they are regularly at risk of being stopped by the Portland Police Bureau. Similarly, transient drivers who drive through Portland en route to other locations are also at risk of being stopped, yet they are not counted in Portland's population estimate. Because two major interstate highways (I-5 and I-84) intersect in Portland, there are likely a sizeable number of transient drivers in the city on a daily basis. Second, population-based benchmarks do not account for differential levels of exposure to police observation. Age, gender and socioeconomic status are three of many factors known to influence the number of annual miles driven. For example, a 35-year-old man working as a delivery driver in Portland may drive 50,000 miles per year. On the other hand, this man's 85-year-old grandmother may only drive occasionally for a total of 10,000 miles per year. The delivery driver is five times as exposed to routine police supervision, but he and his grandmother count equally (each as one person) in the population estimates. Third, race is known to correlate with private vehicle ownership and the frequency of public transportation use. Generally, African-Americans and Hispanics

own fewer cars, drive less often in private cars, and are more likely to use public transportation, likely reducing their exposure to routine police supervision. Fourth, certain ethnic minorities are less likely to complete census forms and be counted among the residential population. This problem is particularly acute among the Hispanic residents that are in the United States without proper documentation. Finally, the manner in which racial and ethnic group data are collected by demographers (i.e. census workers) and police officers is markedly different. Racial and ethnic group information is self reported by residents when they complete their decennial census forms. Within this context, the respondents report what they perceive to be their race or ethnicity. Racial and ethnic group information collected in a stop study represents a police officer's perception of an individual's race or ethnicity and may not be objectively correct. The Portland Police Bureau recognizes the potential measurement error associated with residential population based benchmarks and offers the following criticisms of their own benchmark:

- » Non-driving residents, such as children, would be counted in the Census data.
- » People may come into an area to work or shop and would not be reflected in the Census residential count.
- » While the same driver could be involved in several traffic stops during any particular time period, the Census data only counts a person once (Portland Police Bureau Website, 2007).

Given this, it would seem reasonable for the Portland Police Bureau to consider an alternative benchmarking strategy or none at all. At least one researcher (see for examples Lamberth, 1996 and 2003) creates a benchmark based on the random observation of drivers in various locations throughout a jurisdiction. Field observation based benchmarks, more appropriately called baselines, can be an effective benchmarking strategy, however, they are inordinately expensive, time consuming, potentially unreliable in low-light situations and limited in scope¹¹. Another benchmark based on the race or ethnicity of the not-at-fault drivers in two-vehicle accidents is becoming increasingly popular. First used in a racial profiling study by the Washington State Patrol (2001) and later advocated by Alpert, Smith & Dunham (2003), accident records have been used by traffic engineers to estimate the qualitative features of drivers for more than 30 years. Based on their analysis of crash data, traffic engineers are able to estimate the risk potential of various classes of individuals. For example, the analysis of crash data provides the justification for increased insurance premiums for male teenage drivers. Normally risk exposure is measured with respect to age and gender but the same can be accomplished for race and ethnicity. The use of this benchmark is of course predicated on the following assumptions:

- » The race and/or ethnicity of the not-at-fault drivers in a two-vehicle crashes are collected.
- » The not-at-fault drivers can be differentiated from the at-fault drivers in the accident record database.

Based on the author's review of the Oregon Department of Motor Vehicle's website, it appears race and ethnicity information is not routinely collected from individuals reporting motor vehicle accidents or applying for drivers licenses.

In 2002, a similar situation occurred in Denver, Colorado. The inclusion of residency information on their stop data collection form, with which the Department could have differentiated between drivers who did and did not live in the Denver SMSA, rendered the population based benchmark more palatable. The Department, however, in recognition of the measurement error associated with population estimates, chose to report the stop data without a benchmark. At the time, many researchers and community advocates considered this irresponsible. The Department argued that using a benchmark based on an unreliable estimate of the actual driving population (i.e. the census data) would result in misleading conclusions.

A relatively new benchmarking strategy based on the comparison of individual officer performance with similarly assigned and situated officers is emerging as an attractive alternative. Originally developed as an early warning system for departments experiencing serious public integrity issues (Walker, 2003), an internal benchmark can be used quite effectively within the context of a racial profiling study.

Recommendation: The Portland Police Bureau should strongly consider an alternative to their current population based benchmarking strategy.

The evaluation of the stop data at the citywide and precinct levels is non-informative and does not consider the effect officer deployment may have on the overall findings. With the exception of the individual officer, beat-level data provide the most detailed analysis of a department's enforcement strategy. Patrol beats¹² are often sociologically pure and approximate natural neighborhood boundaries. The officers working on shifts within these beats are similarly situated in that they are exposed to essentially the same populations of drivers. This provides the analyst with an ability to compare individual officer performance within the context of the officers that are assigned to the same beat, shift and driving population. Importantly, this analytical method completely eliminates the need for a benchmark based on information external to and incongruent with the enforcement context.

In addition to completely eliminating benchmark measurement error, an internal benchmark allows an administrator to identify errant officers (e.g., those who consistently stop a higher percentage of minorities than their similarly situated coworkers), identify training issues, and respond from an informed perspective when asked to justify officer performance at the neighborhood or beat level. In a recent study conducted in another community, the author was able to identify two officers who stop a higher percentage of White, Non-Hispanic drivers and two officers who stop a higher percentage of Hispanic drivers. Upon further review, it was determined that these four officers typically work in teams

within their beats and shifts. The two that consistently report stopping a higher percentage of White Non-Hispanic drivers do not speak Spanish. When these officers stop Spanish only speaking drivers, they refer the case to one of the two officers (both of which are bilingual) who consistently report stopping a higher percentage of Hispanic drivers. The issues here are training, communication and workload dynamics, not racism.

In order for the Portland Police Bureau to conduct this type of analysis, it must amend its analytical strategy and add at least one variable to its current stop data collection process. First, the patrol precincts currently used are far too large geographically and likely too diverse demographically to approximate natural neighborhood boundaries and differential traffic patterns. Future analyses should rely on smaller work areas. For example, a similar study (Withrow, ongoing) in Wichita considers 36 patrol beats and three shifts, for a total of 108 separate analyses. While more complicated, this level of analytical detail produces far more instructive information about how officers work. Second, it is essential for the data set to include a variable that can differentiate stops by individual officers. Some communities use the officers' identification numbers. While controversial, the inclusion of this variable need not threaten individual officers with unwarranted administrative scrutiny. For example, in the current Wichita study, the researcher mathematically altered the officers' identification numbers so as to eliminate any potential for inadvertent disclosure. Other communities may opt to allow officers to create a separate personal identification number (PIN) with which to report stop data. This PIN of course could not be used to identify an individual officer.

In Portland there are considerable differences between and within the precincts with respect to their workload demands and officer allocation. The number of beats per precinct ranges from six (North) to 16 (Central). The number of reported offenses per person ranges from 2.55 (Central) to 4.00 (Southeast). Despite the dramatic difference in their crime rates, these two precincts have an equal percentage (19.3 percent) of the total sworn officer allocation. Predictably, the precinct (Southeast) with the highest crime rate and density (persons per square mile) is also the precinct reporting the highest percentage of total stops in 2006. Within a few of the precincts (East, Central and Northeast), the workload demands vary considerably between the patrol beats. For example, Beat 951 in the East Precinct received 7,821 total reported offenses in 2006, while Beat 982 (in the same precinct) received only 1,519 (see Table 9). The dramatic differences between and within the precincts suggests that the Portland Police Bureau should encourage the analytical focus at the beat level.

Table 9. Comparison of workload demands and officer allocation between precincts in 2006.

Precinct (# of beats)	Reported offenses (% of city total) ¹	Reported offenses per person ²	Density (persons per sq. mile) ²	Sworn officers (% of city total) ¹	Reported stops (% of city total) ³	Range of total reported offenses (highest beat/ lowest beat)
North (6)	14,478(8.4)	3.33	1,612	74(10.4)	5,069 (7.4)	2,785
Northeast (12)	29,524 (17.1)	2.96	4,049	124 (17.4)	12,117 (17.8)	3,791
Southeast (14)	36,379 (21)	4.00	6,522	138 (19.3)	14,264 (21.0)	1,712
Central (16)	38,916 (22.5)	2.55	3,061	138 (19.3)	1,409 (16.8)	3,879
East (13)	46,748 (27)	3.16	4,494	145 (20.3)	3,754 (20.2)	6,302
Unassigned/Other	6,859 (4)	-	-	95(13.3)	11,494(16.9)	-
TOTALS	172,904 (100)	-	-	714(100)	68,009.9(100.1)	-

Notes:

¹ Source: Portland Police Bureau 2006 Statistical Report. Building Relationships in the Community. (2006) Portland, OR: Portland Police Bureau.

² Source: Portland Police Bureau Website (2007). www.portlandonline.com/police/index.cfm?c=42284 Accessed from the World Wide Web on September 22, 2007.

³ Source: Traffic Stops Data Collection 2006 Statistical Report. Portland, OR: Portland Police Bureau.

Totals may not equal 100% because of rounding error.

Recommendation: The Portland Police Bureau should consider evaluating its annual stop data at the patrol district (beat) level.

Does the 2006 Stop Data Support an Allegation of Racial Profiling?

Despite claims that the 2006 stop data collection is merely a “stop study,” the race and ethnicity of the individuals stopped is a recurring theme in the Portland Police Bureau’s Traffic Stops Data Collection 2006 Statistical Report. Regardless of the variable under consideration (e.g. searches, dispositions, reason for stop, etc.), the race or ethnicity of the drivers stopped is always included as a comparative dimension. As a result, it is rather naïve to believe that this or any other contemporary stop study will not be considered relevant to community discussions on racial profiling.

The stop data cannot establish the presence of racial profiling as defined by the Portland Police Bureau. The Portland Police Bureau defines racial profiling as:

Any police-initiated action that relies on the race, ethnicity, or national origin rather than the behavior of an individual or information that leads the police to a particular individual who has been identified as being, or having been, engaged in criminal activity (Portland Police Bureau Website, 2007).

Using this definition, to conclude racial profiling is occurring one must:

- » Determine that police officers are aware of a suspect's race or ethnicity prior to the stops, and
- » Prove that police officers used this information (rather than the driver's behavior) as a reason for initiating a stop.

The variable describing the race or ethnicity of the driver measures the officers' perceptions of the drivers' race or ethnicity after, not before, the decision to stop was made. It is likely that the driver's race or ethnicity is first perceived by the officer during the initial face-to-face contact with the driver and then recorded in the stop data set after the driver has been released. The stop data do not include information on the officers' perceptions of the drivers' race or ethnicity prior to the decision to initiate a stop. It is not possible to allege that the police officers are influenced by a driver's race or ethnicity when making the decision to stop unless it can first be proven that the officers actually knew the race or ethnicity of the driver prior to the stop. Nationwide, only one study attempts to determine whether police officers can accurately determine the race or ethnicity of a driver prior the initial face-to-face contact. In Miami/Dade County, Alpert, Dunham & Smith (2007) find that police officers were able to accurately determine the race or ethnicity of the driver only 29 percent of the time prior to the stop. This finding was based on the in-car observation of 51 randomly selected tours of duty including 184 stop events.

The stop data do not measure the relative influence the officer's knowledge of a driver's race or ethnicity might have had on the officer's decision to initiate a stop. The only possible measurement of the officers' motivation to initiate a stop exists in the nominally measured variable describing the reason for the stop. An officer's reason for initiating a traffic stop however is not analogous to the officer's motivation for initiating a traffic stop. This variable merely differentiates between five very broad categories of violations committed by drivers.

There is no information on the relative severity of the driver's behavior and how that, rather than the driver's race or ethnicity, might have influenced an officer's decision to initiate the stop. The absence of this information coupled with the repeated comparisons of stops and stop events (i.e. searches and arrests) by the race or ethnicity of the drivers may result in an unsupportable conclusion that the driver's race or ethnicity plays a role in an officer's decision to initiate a stop. In the 1970s, several attempts were made to identify the extra-legal factors (including race) that might influence police decision making (Bittner, 1970; Black, 1971, 1976, 1980; Black and Reiss, 1970; Quinney, 1980; Rubenstein, 1973; Smith and Visher, 1981; Van Maanen, 1974). While these researchers consistently find that race appears to have some influence on an officer's arrest decision, its importance appears to be quite small, especially when compared with other contextual factors like the severity of the suspect's behavior. At first glance, this research appears directly relevant to the racial profiling controversy. However, it is not. All of this research is conducted within the scope of well-documented police/citizen contacts wherein the race or ethnicity of all individuals, arrested or not, is known to

the researcher. Racial profiling researchers do not have the luxury of knowing the race or ethnicity of individuals who are actually observed by the police but not stopped.

By way of analogy, in most states, before an officer can allege a driver is guilty of driving under the influence the officer must establish three important elements of the offense. First, the individual must be observed driving a motor vehicle. Second, the driver must be observed driving on a public street, highway or place. Third, the driver must be under the influence of some substance, normally alcohol or drugs. An officer's failure to provide evidence supporting each of these elements would justify the dismissal of a DUI charge. In accordance with the Portland Police Bureau's definition of racial profiling, unless and until the stop data can establish that an officer knew a suspect's race or ethnicity prior to a stop and then relied on this information (rather than the suspect's behavior) to initiate a stop, a conclusion of racial profiling cannot be substantiated. The mere comparison of officer-reported stop data against a poorly conceptualized benchmark offered as evidence of a disparate effect does not establish the elements of a racial profiling allegation.

A comparison of daytime and nighttime stops by the race or ethnicity of the driver does not substantiate an allegation of racial profiling. In an attempt to determine whether Portland's police officers might be targeting African-American and Hispanic/Latino drivers, the author compared stops occurring at night with stops occurring during the day. If the police stop a higher proportion of minority drivers during the day, when they are more able to actually observe the driver's race or ethnicity prior to the stop, then it might be possible to conclude that the race or ethnicity of a driver has some influence on an officer's decision to initiate a traffic stop. On the other hand, if the proportions of stops involving minority drivers are essentially equal regardless of the time of day (e.g., light conditions) then it might be possible to conclude that the race or ethnicity of a driver does not influence an officer's decision to initiate a traffic stop. Similarly, if the police stop a higher proportion of minority drivers during the nighttime, when they are less able to actually observe the driver's race or ethnicity prior to the stop, then it also might be possible to conclude that the race or ethnicity of a driver has no influence on an officer's decision to initiate a traffic stop.

Daytime hours are defined from the latest sunrise (7:51 a.m., occurring from January 1-5 and December 29 - 30, 2006) and the earliest sunset (4:27 p.m., occurring from December 5 - 14, 2006). Therefore, regardless of the season, it was always daytime in Portland from 8 a.m. until 4 p.m. during 2006. Nighttime hours are defined from the latest sunset (9:04 p.m., occurring from June 25 - 27, 2006) and the earliest sunrise (5:21 a.m., occurring from June 12 - 19, 2006). Therefore, regardless of the season, it was always nighttime in Portland from 9 p.m. until 5 a.m. during 2006.

Overall, African-American drivers represent 13.8 percent of all stops. Consistently, during the daytime hours African-American drivers represent a lower proportion of the stops, from 7.7 percent (8 a.m. - 9 a.m.) to 10.7 percent (1 p.m. - 2 p.m.), for an average proportion during the daytime hours of 9.1 percent. Alternatively, during the nighttime hours, African-American drivers represent a higher

proportion of the stops, from 14.5 percent (4 a.m. – 5 a.m.) to 21.9 percent (2 a.m. – 3 a.m.), for an average proportion during the nighttime hours of 17.3 percent. These differences equate to a 91 percent increase in the proportional representation of African-American drivers during times when the police are less likely to observe the driver’s race. Although not as dramatic, similar patterns are observed between daytime and nighttime stops involving Other/Unknown and Asian drivers (see Table 10).

Table 10. Proportional representation of stops by race/ethnicity and daytime/nighttime hours.

Hours/ Daytime	African- American	Hispanic/ Latino	White	Native American	Asian	Other/ Unknown
8am – 9am	7.7	9.2	73.9	0.3	4.2	4.7
9am – 10am	8.5	11.0	72.2	0.4	4.1	3.8
10am – 11am	8.7	11.5	71.6	0.4	3.8	4.0
11am – 12pm	8.4	10.6	72.7	0.2	3.3	4.8
12pm – 1pm	9.4	9.6	73.2	0.2	3.3	4.2
1pm – 2pm	10.7	8.0	71.7	0.3	3.5	5.8
2pm – 3pm	9.9	11.3	70.9	0.2	3.7	4.4
3pm – 4pm	9.5	8.9	71.9	0.3	3.8	5.7
<i>Average daytime proportions</i>	<i>9.1</i>	<i>10.0</i>	<i>72.9</i>	<i>0.3</i>	<i>3.7</i>	<i>4.7</i>
Nighttime						
9pm – 10pm	15.4	8.5	65.1	0.3	3.8	6.9
10pm – 11pm	15.5	8.9	63.0	0.4	4.7	7.6
11pm – 12am	16.0	9.2	62.3	0.2	5.0	7.2
12am – 1am	17.2	8.0	62.4	0.2	4.5	7.7
1am – 2am	17.7	8.1	60.6	0.3	4.9	8.4
2am – 3am	21.9	9.5	56.8	0.2	4.0	7.7
3am – 4am	19.9	9.2	57.2	0.1	5.5	8.0
4am – 5am	14.5	11.1	62.2	0.3	5.6	6.4
<i>Average nighttime proportions</i>	<i>17.3</i>	<i>9.1</i>	<i>61.2</i>	<i>0.3</i>	<i>4.8</i>	<i>7.5</i>
Overall proportions	13.8	9.2	66.1	0.3	4.2	6.4

An alternative pattern is observed for stops involving Hispanic/Latino and White drivers. Overall, White drivers represent 66.1 percent of all stops. During the daytime hours, White drivers represent a higher proportion of the stops, from 70.9 percent (2 p.m. – 3 p.m.) to 73.9 percent (8 a.m. – 9 a.m.), for an average proportion during the daytime hours of 72.9 percent. During the nighttime hours, White drivers represent a lower proportion of the stops, from 56.8 percent (2 a.m. – 3 a.m.) to 65.1 percent (9 p.m. – 10 p.m.), for an average proportion during the nighttime hours of 61.2 percent. This difference

equates to a 15.3 percent decrease in the proportional representation of White drivers during the nighttime hours. Overall, Hispanic/Latino drivers represent 9.2 percent of all stops. During the daytime hours, Hispanic/Latino drivers represent a slightly higher proportion of the stops, from 8.0 percent (1 p.m. – 2 p.m.) to 11.5 percent (10 a.m. – 11 a.m.), for an average proportion during the daytime hours of 10.0 percent. During the nighttime hours, Hispanic/Latino drivers represent a slightly lower proportion of the stops, from 8.0 percent (12 a.m. – 1 a.m.) to 11.1 percent (4 a.m. – 5 a.m.), for an average proportion during the nighttime hours of 9.1 percent (see Table 10).

Because the benchmark used by the Portland Police Bureau to estimate the driving population is poorly conceptualized and improperly applied, the over-representation of some minority drivers in traffic stops, if any, cannot be definitively established. In racial profiling research, benchmarks are used to estimate the qualitative features (e.g., race and ethnicity) of individuals at risk of being stopped by the police. Benchmarks are essentially denominators. If the benchmark indicates that 10 percent of the population at risk of being stopped is African-American and 20 percent of the individuals actually stopped are African-American, then some may conclude that the race of the driver plays some role in the officer's decision to initiate a traffic stop. If true, this would be racial profiling. However, conclusions like this overreach the data.

The Portland Police Bureau estimates the qualitative features of the individuals at risk of being stopped by the police on the residential population. Because the relationship between who lives in a city and who actually drives in a city is unknown, residential population based benchmarks have been largely discredited as a valid means of estimating the population of individuals at risk of being stopped by the police. Who gets stopped is largely a function of who drives where the police are assigned to work. People who live in neighborhoods with high crime rates and calls for service are subjected to higher levels of police supervision. Sometimes these neighborhoods are principally populated by racial and ethnic minorities. If substantial police resources are inadvertently assigned to patrol districts (on the basis of demand or potential workload) that are populated principally by racial or ethnic minorities, then it should surprise nobody that racial and ethnic minorities will be over-represented in traffic stops. This important alternative explanation for an over-representation of minorities in traffic stops cannot be fully analyzed by the data available in Portland's stop study.

The validity of a residential population based benchmark is predicated on the notion of equal distribution. If 10 percent of the overall residential population is African-American, then every tenth driver a police officer encounters, regardless of where the officer is assigned to work, must be African-American. Because most urban areas continue to be segregated with respect to race and ethnicity, it is not likely the actual driving population is proportionally integrated throughout the overall city.

Previously this analysis included a recommendation for the Portland Police Bureau to revise its stop data collection reporting protocols to insure its race and ethnic categories are consistent with those in the population based benchmark. In addition, the Bureau should consider evaluating its stop data

at the patrol district or beat level. The results of such analyses will be more instructive and provide the Bureau with a better insight on potential problem areas. Furthermore, although controversial the Bureau should consider adding a variable to differentiate between the stops made by individual officers. Doing so enables the Bureau to evaluate each officer's performance with that of similarly situated (i.e., by beat and shift) officers.

Because the reported reason for the stops are nominally measured in the stop data, it is not possible to determine whether minority drivers are disparately treated. Ideally a stop study used to detect the presence or measure the extent of racial profiling should include information on whether police officers are more willing to stop minority drivers for less serious alleged violations. If an enforcement program or practice results in a significantly higher proportion of minority drivers stopped for less serious alleged violations, then one might conclude that minority drivers are disparately treated. Nothing in the stop data indicates the relative severity of the driver's behavior and how this might have influenced an officer to initiate a traffic stop.

Similarly, it is not possible to calculate a correlation between the severity of a driver's behavior (predicating the officer's decision to initiate the stop) and the punitiveness of the disposition. It is reasonable to assume that individuals who commit flagrant violations of the traffic or criminal codes would receive the most punitive response. For example, a person driving five miles over the speed limit on Interstate 5 might receive a warning while a person driving five miles over the speed limit in a school zone might justifiably receive a citation. The relationship between offense severity and disposition punitiveness is an important dimension in racial profiling research. One would like to think that two individuals (one White and the other African-American) who commit the same violation (with respect to its level of flagrancy) would receive essentially the same disposition. Unfortunately, this important relationship cannot be determined with the data available. Here again, the data cannot support a racial profiling or disparate treatment allegation.

Because the stop data provide very little insight into the officers' motivation, level of discretion and justification for conducting searches, it is not possible to determine whether minority drivers are subjected to higher levels of arbitrary or capricious searches. Very few policing tasks are subjected to more public and legal scrutiny than searches. Optimally, searches should be preceded by the issuance of a warrant by an independent magistrate upon a finding of probable cause. In reality however, most searches are conducted without this procedural prerequisite. Many searches are predicated on little more than a mere hunch. These types of searches (i.e., consent searches) are the most important to a racial profiling inquiry because of their potential for abuse. A police officer need only receive a "No" when he asks a driver "Do you mind if I search your car?" in order to insure any evidence seized during the search will be admissible in a subsequent judicial proceeding. Furthermore, the anecdotal evidence suggests that when asked most drivers will waive their Fourth Amendment rights and allow a police officer to conduct a search.

In the absence of any mechanism within the stop data to differentiate between the types of searches, it is not possible to determine whether minority drivers are subjected to a higher proportion of potentially abusive consent searches. Furthermore, because the stop data do not contain information on the contextual factors occurring during the stops that might justify a request to conduct a consent search, it is not possible to determine the extent to which police officers are applying objective criteria in their decisions to conduct a search.

The search hit rates reported in the stop data do not appear to indicate the race and ethnicity of the drivers are influential factors in an officer's decision to search. In his meta-analysis of traffic stops and searches, Harris (2002) found that searches involving minority drivers are less likely (on a percentage basis) to result in the seizure of an illegal substance or item. The race or ethnicity of a driver is universally regarded as an invalid indicator of potential criminal behavior. Harris and others (see Withrow, 2006 pp. 23-26) argue that a higher proportion of nonproductive stops involving minority drivers might be evidence of racial injustice. For example, if 70 percent of the searches involving minority drivers and 30 percent of the searches involving non-minority drivers are nonproductive, then one might conclude that minority drivers are being disproportionately subjected to arbitrary and unjustified searches. The analysis reveals that a higher than expected percentage of some searches involving African-American and Hispanic/Latino drivers are nonproductive. This finding should be considered within the context of another finding indicating that African-American and Hispanic/Latino drivers are stopped more frequently for an alleged violation of the criminal code. The percentage differences, while statistically significant, are too slight to substantiate an allegation of disparate treatment, much less active discrimination. In the absence of data that would describe the rationale and other conditions preceding the officer's decision to search, it is not possible to conclude from differences this slight that minority drivers are being subjected to arbitrary searches.

There is no evidence within the stop data that the stops are pretextual. Stops made for relatively minor violations of the law can be mere pretexts for an officer's actual desire to conduct a more thorough investigation (i.e. a search) of the driver in the absence of probable cause. Sometimes the reported reason for the stop is ignored (resulting in the issuance of a warning or no enforcement) in deference to the officer's request for the driver's consent to search. When this occurs, drivers may perceive the reported reason for the stop a mere pretext. When drivers are either warned or simply released in percentages significantly higher than their representation in the overall stops, one might conclude the police are overusing the pretextual stop as a means to conduct more intrusive consent searches. This, however, does not appear to be occurring in Portland.

One of the most interesting dynamics of racial profiling research is the proportion of stops involving minority drivers that result in a warning or no enforcement. When the racial profiling controversy began in earnest about 15 years ago, many minority drivers and their advocates complained that despite being stopped frequently they are seldom issued tickets. This seems counterintuitive. Not getting a ticket for an alleged violation would seem to be a good thing. It is, however, legitimate to ask,

“If my driving behavior is bad enough to cause me to get stopped a lot, then why am I never issued a citation?” An over-representation of stops involving minority drivers is often considered evidence that the police are merely ‘hassling’ the minority community. There is no evidence of this in the 2006 data. African-American drivers account for 13.8 percent of all stops and 14.2 percent of the stops resulting in a warning and 13.7 percent of the stops resulting in no enforcement. Hispanic/Latino drivers account for 9.2 percent of all stops and 8.9 percent of the stops resulting in a warning and 8.9 percent of the stops resulting in no enforcement. These percentage differences are not statistically significant.

The analysis of the stop data compared to actual jail bookings does not support an allegation that Portland’s police officers are abusing their arrest authority. Often allegations of racial profiling are based on what happens to individuals once they are stopped. If the data indicate minority drivers are treated more harshly than non-minority drivers, then all things being equal, one might reasonably conclude the police are unfair, prejudice or even racist. The 2006 stop data set however does not provide sufficient detail to fully support such an allegation. African-American and Hispanic/Latino drivers are over-represented in stops involving allegations of criminal code violations and in stops resulting in an arrest. Importantly, however, the percentage of African-American individuals actually booked into the Multnomah County Jail in 2006 is essentially equal to the proportion of African-American drivers arrested subsequent to a traffic stop. This suggests that the police are actually following through with their arrests rather than merely ‘hassling’ African-American drivers. The booking process documents an arrest event and holds a police officer accountable. The officer must follow through and present evidence during the booking process that sufficient proof is available (e.g., probable cause) to both arrest and maintain custody of a suspect.

Conclusion

The Portland Police Bureau should be commended for their consistent commitment in responding to public concerns about racial profiling. Few police agencies are as responsive to the concerns of their citizens and as willing to maintain a comprehensive stop study data collection program from one year to the next. While stop studies teach us a great deal about how police officers work, they are often inappropriately used as a means to identify the presence and extent of a practice commonly known as racial profiling. Portland’s 2006 stop data can neither adequately describe the enforcement behavior of its officers nor support an allegation of racial profiling.

The 2006 and previous years’ stop data are largely unresponsive to the racial profiling controversy. Representatives from the Portland Police Bureau contacted by the author repeatedly stated that this report is a “stop report” and not a racial profiling study. While the distinction between these two types of research objectives is well understood, the original intent of the state legislation (HB 2433) and Governor’s Traffic Stop Data Collection Committee that recommended data collection was to measure the potential for racial profiling. An attempt to extricate a “stop study” from the contemporary racial profiling controversy is more than naive. It is likely unethical. Left alone with tabular, unanalyzed

and incomplete data, the consumers of the annual statistical reports based on the stop data are free to draw their own conclusions. While this may seem to be a responsible position, it is not. Police procedures are complicated and not well understood by non-practitioners and casual observers. It is important for a statistical-based report to explain the meaning of the various numerical findings and the context within which these data are produced. The Portland Police Bureau's failure to provide any analysis or explanation of its quantitative results may expose individual police officers and ultimately the entire organization to unwarranted accusations and undeserved ridicule.

The stop study data do not appropriately document and describe the routine enforcement activities of Portland's police officers. In addition to addressing the racial profiling controversy, stop studies are of immense value to administrators and elected officials because they, often for the first time, provide insight into the practice of policing. Before the racial profiling controversy, we knew very little about the efficiency of American policing. Routine administrative questions like, How long does the average traffic stop last? or What percentage of searches are discretionary, and of those how many result in the seizure of illegal contraband? were essentially unanswerable prior to racial profiling research. Ultimately, the value of a stop study lies in its ability to document the contexts in which enforcement decisions are made. Policing is highly contextual, and no two situations are ever identical. Of course, police officer behavioral patterns will emerge from the analysis of stop study data and our recognition of the dynamics of these patterns, as well as their exceptions, is critical to our understanding of the practice of policing. Police behavioral patterns are often influenced by systems (e.g., training, policy, deployment, etc.) over which police administrators have some control. Administrators in possession of detailed information on how the police officers under their supervision work are in a better position to effect change. Unfortunately, as evidenced by the rather consistent performance of the Portland Police Bureau over the past three years and despite its desire to do so, it does not appear that its data collection efforts have changed its officers' enforcement patterns and practices.

In its present form, the stop study cannot be used to determine the presence or extent of racial profiling within Portland. There are five principal reasons that led the author to this conclusion. First, the Portland Police Bureau uses the residential population to estimate the demographic features of the driving population. As previously mentioned, population-based benchmarks have been largely discredited by contemporary racial profiling researchers. Even researchers that have relied upon them in the past (the author included) recognize the potential measurement error associated with this benchmarking strategy. Simply put, because the relationship between who lives in a community and who drives in a community cannot be accurately determined, the efficacy of a population-based benchmark is questionable.

Second, the utility of a population-based benchmark is predicated on several assumptions that are known to be false. We cannot assume that the proportional representation of drivers by race and ethnicity is equally distributed throughout the community. For example, we know that approximately 6 percent of Portland's adult population is African-American. This however, does not mean that

six out of every 100 drivers observed by every police officer working everyday or night in every patrol district in Portland will necessarily be African-American. We can neither assume that patrol resources are equally distributed throughout the city. Frequently, researchers find more policing resources are deployed to densely populated and low income areas of a city because these areas are generally the most in need of policing services. Often these areas are populated primarily by racial and ethnic minorities. As a result, we should not be surprised that racial and ethnic minority drivers are overrepresented in overall stops when they are inadvertently exposed to higher levels of police supervision.

Third, the racial and ethnic categories and classification procedures used in the stop data are incongruent with those in the benchmark used to estimate the population of drivers at risk of being stopped. This issue is particularly acute with respect to Hispanic/Latino and Multiracial drivers. It is absolutely essential for the attributes of the variables describing the race and ethnicity of the drivers stopped and the drivers at risk of being stopped to be equivalent. The failure to achieve this equivalency introduces substantial error in the analysis. Furthermore, it is important to remember that the decisions on how to classify individuals into racial and ethnic categories are made separately. In the United States Census population data, individuals are allowed to self-report their race and ethnicity. In the stop study data, this decision is made by a police officer.

Fourth, the stop data cannot be used to establish the presence or extent of racial profiling because it does not collect the information necessary to be responsive to the Portland Police Bureau's own definition of racial profiling. According to the Portland Police Bureau, racial profiling occurs when officers rely on the race or ethnicity of the driver (rather than the driver's behavior) to initiate a traffic stop. The data necessary to establish this (i.e. whether the officers knew the driver's race or ethnicity prior to the stop and whether they used this information inappropriately) is not collected.

Finally, the attributes of the variables used in the stop data are not detailed enough to produce evidence of racial discrimination. Attributes are defined as the levels within a variable. This issue is particularly troublesome within the variables describing searches and dispositions. There is simply not enough detail within these variables' attributes to determine whether minority drivers are treated differently than non-minority drivers during stops that are contextually similar. For example, during two separate stops for a similarly flagrant speeding violation, one involving a White driver and the other involving an African-American driver, which of the two drivers are more likely to be issued a citation? This, and similar questions, are critical to a racial profiling study and warrant analytical attention. Unfortunately, they are unanswerable using Portland's stop data.

In order to establish a causal relationship between two variables, a researcher must satisfy three conditions. The first is temporal order. The cause must occur prior to the effect. Second, there must be some correlation between the cause and the effect. The nature (i.e. positive or negative) of this correlation is not important. It is, however, critical for the cause and effect to vary together. Finally,

the researcher must eliminate all alternative plausible explanations. In racial profiling studies, wherein an individual's race is alleged to be the cause of a police officer's decision to initiate a stop, establishing temporal order is critical. The data must clearly establish that the officers knew the driver's race or ethnicity prior to the stop and that they relied inappropriately upon this information (rather than the driver's behavior) to initiate a traffic stop. Nothing in the data set indicates that police officers are aware of a driver's race or ethnicity prior to the stop. Nothing in the data set actually measures the extent to which a driver's race or ethnicity actually causes a police officer to initiate a traffic stop. To the extent benchmarks and stop data are accurate, racial profiling researchers have established correlation. Minorities are consistently found to be over-represented among individuals stopped when compared to benchmarks estimating their representation within the driving population. This correlation is important, but correlation is not cause. Finally, like most racial profiling studies, Portland's 2006 stop study data do not eliminate the alternative plausible explanations of this disparity. For example, the effect of officer deployment and allocation on who gets stopped cannot be determined from the available data. Unless and until the stop study data establish these three conditions, it is irresponsible to consider their analytical results as evidence of racial profiling.

Finally, stop studies rarely change long held perceptions about the fairness of a police department. While the objective findings of these studies are seldom questioned, their subjective interpretations are often controversial. Well-intentioned individuals disagree, especially when a study's findings contradict their personal experiences. The racial profiling controversy is highly influenced by individuals and groups with alternative political and social agendas. A finding of racial disparity in police stops may lead one researcher to conclude racial profiling is rampant in a community, while another researcher, looking at the same data, may conclude the opposite. Some disagreement among researchers and consumers is understandable. It is even possible that disagreement among well-intentioned individuals improves the quality of the available data and their analyses. Ultimately, the value of a stop study lies in its capacity to initiate reasoned public discourse. It appears the Portland Police Department's stop studies have at least accomplished this.

⁷ When compared to the overall proportional representation of stops by race and ethnicity.

⁸ African-American drivers represent 14 percent of all stops and 24 percent of all "Be on the Lookout for" stops. Hispanic/Latino drivers represent 9 percent of all stops and 17 percent of all "Be on the Lookout for" stops.

⁹ Inventory, incident to arrests, probable cause, stop and frisk, plain view, warrant, consent, etc.

¹⁰ Vehicle indicators, verbal indicators, physical/visual indicators, document indicators, etc.

¹¹ Normally, field observation based benchmarks focus on specific intersections or portions of a road. As a result, their findings are only relevant to the places wherein the data are collected and cannot be generalized to a larger geographical area.

¹² The Portland Police Bureau uses the term "patrol district" to describe patrol beats.

References

- Alpert, G.P., Dunham, R.G. and Smith M.R. (2007). Investigating racial profiling by the Miami-Dade Police Department: A multimethod approach. Criminology and Public Policy. 6(1). 25-55.
- Alpert, G.P., Smith, M.R. and Dunham, R.G. (2003) (March). Toward a better benchmark: Assessing the utility of not-at-fault traffic crash data in racial profiling research. Paper presented at Confronting Racial Profiling in the 21st Century: Implications for Racial Justice. Boston, MA: Northeastern University.
- Bittner, E. (1970). The functions of the police in modern society. Washington, DC: U.S. Government Printing Office.
- Black, D.J. (1971). The social organization of arrest. Stanford Law Review. 23. 1050-111.
- Black, D.J. (1976). The behavior of law. New York, NY: Academic Press.
- Black, D.J. (1980). The manner and customs of the police. New York, NY: Academic Press.
- Black, D.J. and Reiss, A.J. (1970). Police control of juveniles. American Sociological Review. 35(1). 63-77.
- Denver Police Department (2002). First annual report: Denver Police Department contact card analysis. Denver, CO: Denver Police Department.
- Harris, D.A. (2002). Profiles in injustice: Why racial profiling cannot work. New York, NY: New Press.
- Lamberth, J. (1996). Report of John Lamberth, Ph.D. Washington, DC: American Civil Liberties Union. www.aclu.org/court/lamberth.html. Accessed from the World Wide Web on July 7, 1999.
- Lamberth, J. (2003). Racial profiling data analysis: Final report for the San Antonio Police Department. Chadds Ford, PA: Lamberth Consulting.
- Portland Police Bureau (Annual Report) (2004). Renewing our community police vision. Portland, OR: Portland Police Bureau 2004 Statistical Report.
- Portland Police Bureau (Annual Report) (2005). A report on police and community initiatives. Portland, OR: Portland Police Bureau 2005 Statistical Report.
- Portland Police Bureau (Annual Report) (2006). Building relationships in the community. Portland, OR: Portland Police Bureau 2006 Statistical Report.
- Portland Police Bureau Website (2007). Bureau website, Portland, OR: Portland Police Bureau. www.portlandonline.com/police/index.cfm?c=42284. Accessed from the World Wide Web on September 22, 2007.

Quinney, R. (1980). Class, state and crime. New York, NY: Longman.

Ramirez, D., McDevitt, J., and Farrell, A. (2000). A resource guide on racial profiling data collection systems: Promising practices and lessons learned. Washington, DC: United States Department of Justice, Bureau of Justice Statistics.

Rubenstein, J. (1973). City police. New York, NY: Random House.

Sanders, J.Q. (March 30, 2007). "Data reveal more racial disparities". Portland, OR: Portland Tribune. www.portlandtribune.com. Accessed from the World Wide Web on October 10, 2007.

Sedgwick County (Kansas) Sheriff's Department: Racial Profiling Study. Midwest Criminal Justice Institute, Wichita State University. October, 2003.

Smith, D.A. & Visher, C.A. (1981). Street-level justice: Situational determinants of police arrest decisions. Social Problems, 29(2). 167-77.

Spitzer, E. (1999). The New York City Police Department's "Stop and Frisk" practices: A report to the people of the state of New York from the Office of the Attorney General. Albany, NY: Office of the State Attorney General.

Van Maanen, J. (1974). Working the street: A developmental view of police behavior. In the potential for reform of criminal justice. H. Jacob (Ed.) pp. 83-130. Beverly Hills: CA: Sage.

Walker, S. (2003). Internal benchmarking for traffic stops data: An early intervention system approach. Omaha, NE: Police Professionalism Initiative, University of Nebraska at Omaha.

Washington State Patrol (2001). Report to the Legislature on routine traffic stop data. Olympia, WA: Washington State Patrol.

Withrow, B.L. (2006). Racial profiling: From rhetoric to reason. Upper Saddle River, NJ: Prentice Hall.

Withrow, B.L. (ongoing). A beat and shift level analysis of the Wichita Stop Study data using an internal benchmark.

Withrow, B.L. (2007). When Whren won't work: The effect of a diminished capacity to initiate a pretextual stop on police officer behavior. Police Quarterly, 10(1). 351-70.

Withrow, B.L. and Jackson H. (2002). Race based policing: Alternatives for assessing the problem. In Crime and Justice in America: Present Realities and Future Prospects, 2nd. W.R. Palacios, P.F. Cromwell & R. Dunham, (Eds.) pp. 183-90. Upper Saddle River, NJ: Prentice Hall.

i.e. consulting partners, llc

The primary purpose of our consulting practice is to assist our clients and their organizations with improving the quality of life in their communities. Most of the firm's clients are police departments, criminal justice agencies and allied organizations. We also provide litigation assistance and expert testimony on a broad range of policing systems and practices, with a particular emphasis on racial profiling.

We believe in providing the most common sense and practical solutions possible. Our clients seek our consultation because they are either 'too close to the problem' or need the objectivity and technical skill only an independent consultant can provide. Our ability to access the leading edge of research, our knowledge of the best practices of other agencies, our own independent research, and considerable practical experience provide us the insights necessary to define problems, develop common sense solutions, and make practical recommendations.

Our commitment to our clients is uncomplicated. We only accept consultations if we are qualified to perform the work. We fully disclose our fees and charges. We guarantee our work product will meet our client's needs. We adhere to our client's schedule.

Dr. Brian L. Withrow, Principal
5926 East 47th Street North, Bel Aire, Kansas 67220
brian.withrow@wichita.edu • 316-208-8102