Miami-Dade Police Department Racial Profiling Study

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November 2004

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Executive Summary

Several years ago we agreed to look into the traffic stop practices of the Miami-Dade Police Department. On the surface, this appeared to be a straightforward issue that, like other police practices, could be evaluated with relative ease and precision. After reviewing many other studies of racially-biased policing and racial profiling, and consulting with the researchers and police officials in these other jurisdictions, we learned that conducting such an assessment is difficult and may not produce a definitive conclusion regarding racial bias by the police officers.

Because the police officer is the only person who really knows if race was used as a reason, or the reason to take an official action, and we are unable to look into the mind of the officer, we were left to look for patterns of racial disparities in activities. In other words, we were looking to see if police actions toward various racial and ethnic groups were fair and balanced.

Therefore, the Miami-Dade Police Department Racial Profiling Study was undertaken to collect and analyze information on the aggregate actions of police officers involved in discretionary traffic stops. Our overall goal was to assess the aggregate agency data on traffic stops and to examine general patterns of stops with respect to the race of drivers. Diverse sources of data requiring multiple methodologies were used to conduct the study. There were three separate components in our research, and each method collected information to assess the potential for racially-biased policing.

First, we used trained observers to ride with police officers (Ride-Along Component). The objective of this aspect of the study was to understand what it is the officers see, what they experience, and whether or not the officers use race inappropriately to make decisions. These observations were conducted department-wide and during all shifts.

Second, we observed the flow of traffic in Black, non-Black, and racially mixed areas, in unincorporated Miami-Dade County. We did this to create a demographic profile of the people driving on the roads and of those who violate the traffic laws (Traffic Observation Component). Because observers cannot determine the ethnicity of drivers or violators, the categories they recorded were limited to Black and non-Black. The data on traffic patterns were used as a logical and realistic benchmark or baseline, first to measure who is driving, and second to determine who is violating the traffic laws. In research on racial profiling, the best benchmark is the most accurate description of drivers at risk of being stopped by police absent bias. Because drivers who violate traffic laws are at greater risk of being stopped by the police than drivers who do not violate, we have more confidence in the results based on violator benchmarks than on driving benchmarks, at least in terms of drawing conclusions about whether disparities in stop rates indicate bias. The drawback to our observation benchmark is that we only collected and analyzed data at a limited number of times and only in certain locations around the county. To compensate for our inability to generalize to the whole county, we used an additional benchmark for the county-wide analysis discussed below. This proxy is a measure of the characteristics of drivers who have the possibility of being stopped simply because they are driving on the roadway. However, this measure does not take into consideration that officers should be focusing on drivers who are obviously violating traffic laws. Although all drivers will likely violate a traffic law if they are followed long enough, officers should focus on the obvious infractions. While important, these county-wide data do not create as accurate a baseline or profile of those at risk to be stopped by the police without bias, as do the observed violator data.

The third research component was the citizen contact card, which was completed by officers when making a stop (Citizen Contact Card component). Because officers were not previously required to issue warning tickets or otherwise create a written record of all traffic

stops, we created a “paper trail” in the form of a contact card which was completed by the officers for all traffic stops during the study period. The card included information on the reason for the stop, where the stop occurred, what happened during the stop, as well as demographic information on the driver, and a link to information about the officer. The purpose of the Citizen Contact Card was to create a record of all discretionary traffic stops made by patrol officers.

Three checks were performed to determine if the stop (contact card) data were valid. The purpose of these checks was to ensure that officers recorded the race and ethnicity of drivers accurately and that they did not alter their normal work patterns in response to the study. A workload analysis was conducted to determine if the number of traffic tickets issued by officers changed during the study period. An analysis of Signal 19 (traffic stop) radio calls was conducted to ascertain whether the number of stops was consistent with the number of times officers reported the stop to the dispatcher. Further, information on the citizen contact cards was checked to find out if the officers were correctly reporting the race of the drivers they stopped by checking a sample of pictures of the drivers and then comparing them to the race recorded by the officers. In addition to the validity checks, officers who stopped Black drivers disproportionately had their contact cards compared to other officers’ cards to determine if their pattern of stops of Black drivers was consistent with other officers assigned to the same area.

It is important to realize that patterns of activities may be different in the eight districts that make up the Miami-Dade Police Department (MDPD). If disparities exist in only two or three of the districts, they may show up in the overall analyses, even if there are no disparities within the other five or six districts. Consequently, we conducted a district level analysis of the contact card data.

It is also important to note that there is a difference between racial disparity and discriminatory intent. On the one hand, a finding of a disparity indicates that a policing practice

has a disproportionate effect on a racial group, which may or may not be caused by a discriminatory motive. On the other hand, discriminatory intent refers to a policing practice that is motivated by cognitive bias or stereotyping, prejudice, or animus. In any case, finding a disparity would certainly call for further study and analysis, but it is important to recognize that there may be valid reasons for disparities that are not explained by racial profiling.

Additional Information

Several existing data sets were merged into spatial and statistical software packages for the purposes of understanding whether social context had an effect on the Miami-Dade County Police Department's activities. The police department provided data on relevant officer activities from the citizen contact cards, crime data, personnel files, and the records maintained by the Professional Compliance Bureau of the Miami Dade Police Department. This information was merged with the 2000 census data that was provided by the county and the U.S. Census Bureau.

Key Findings

After a thorough review of the research design, the data collection, and the analyses, and by using our data with the clearest and best benchmark comparison, we are able to report with confidence that, overall, there was no consistent, systematic, or patterned targeting of minority citizens for differential treatment in deciding to make traffic stops by the Miami-Dade police. Using the preferred method of benchmarking violators in the selected times and areas we studied as a denominator, and comparing these figures to the numerator of stops made by the police in the same areas, the results of our analysis indicate that there were no differences between the rate of Black citizens who violated traffic laws and those who were stopped by police officers.

While this data set is the most rigorous in terms of comparing who the police stop with who should be stopped, and therefore provides the clearest and most precise picture of police

traffic stop activity, as noted above, it is limited to the selected times and study areas, and does not represent all of unincorporated Miami-Dade County.

The police actions in the remainder of unincorporated Miami-Dade County, where this level of high quality of data are not available, were examined using crash data in order to develop a benchmark representing drivers (not violators). The analysis of the 66,109 citizen contact cards showed mixed results, with racial disparities in stops in some areas but not in other areas. Specifically, in predominantly Black areas, Black drivers were stopped proportionately to their representation in the driving population. In non-Black and racially mixed areas Blacks were over-represented among drivers stopped by the police, relative to their representation in the driving population – a result produced by using our proxy measure.

While these data incorporate information from the entire county, they do not present as clear and reliable a picture as the information from the targeted intersections because the county-wide analyses were configured on a baseline that estimated drivers but not violators. Overall, there were some areas of the county where the race of the drivers stopped was consistent with the traffic crash benchmark, and there were other areas where the race of the drivers stopped was inconsistent with the benchmark. As noted, we do not have as much confidence in these results, compared to the findings based on the violating benchmark, because differences in stop patterns may be due to differences in violation rates between groups of drivers. Nonetheless, the disparities provide sufficient reasons for the Miami-Dade Police Department to enhance the monitoring of officer activities, including contacts with citizens from all races and ethnic groups. It is also important to consider that, based on our observational component, police officers were only able to determine the race of a driver prior to the stop in approximately 30% of the time.

Utilizing the county-wide data, we incorporated a large number of variables in a statistical model to determine the predictors of being stopped. We recoded race into two

categories: Blacks compared to Whites, and Hispanics compared to Whites. This allowed us to determine the predictors for stops of Blacks and Hispanics, both compared to Whites. The factors with the largest impact on stopping Black motorists include stops for equipment violations and investigative purposes. In addition, female officers were more likely to stop Blacks than male officers, and White and Hispanic officers were less likely to stop Black motorists than Black officers. These effects were fairly small, showing that they were not strong predictors. This finding is consistent with deployment patterns that often assign Black officers to Black neighborhoods.

Variables that predicted the stop of a Hispanic driver likewise included whether the stop was for an equipment violation or an investigative stop. Hispanic officers were more likely to stop Hispanic drivers, and Black officers were less likely to stop Hispanic drivers than White or Black officers. These findings are consistent with an officer deployment pattern that disproportionately assigns Hispanic officers to mostly Hispanic areas.

Post-Stop Outcomes

Although there are some questions about the baseline measure used to compare traffic stops, we were able to analyze data from all of the stops to assess post-stop outcomes without reference to an external benchmark. We found that after a stop, a disparate pattern of outcomes between Black and non-Black drivers emerges. There are legitimate reasons for many of these differences, but others raise the concern that race may be used inappropriately by officers when making a decision. White and Hispanic motorists were more likely to receive a summons following a traffic stop than Black motorists. Black drivers, however, were more likely than White or Hispanic drivers to receive a verbal warning. A similar finding existed with respect to custodial arrests. Our analysis of arrests was limited by a significant amount of missing information. The data we were able to examine explained most of the arrest disparity between

Blacks, whites and Hispanics, because Black citizens are arrested on warrants far more frequently than whites or Hispanics. When a citizen is stopped and it is determined that there is an outstanding warrant, the officer has no choice but to arrest the individual. As the officers have no discretion, their decision to arrest cannot be based on the race or ethnicity of the person. In other words, it is the warrant, not the race or ethnicity of the individual that explains the decision to arrest.

Overall, two percent of Whites and Hispanics were arrested following a traffic stop, whereas 3.7% of Black drivers were arrested. Following their arrest and in accordance with departmental policy and proper police procedure, an officer completes a Field Interrogation Card, tows the vehicle, and searches the vehicle and arrestee. It is important to note that none of these arrests was reviewed for appropriateness or validity by the research team.

Black drivers also fared less well than White or Hispanic drivers in most other measures of post-stop outcomes. Blacks were more likely than Whites or Hispanics to have their vehicles towed, to receive a pat down search, or to have record checks conducted, either on them or their vehicles. Blacks were substantially more likely than Whites or Hispanics to be the subject of a Field Interrogation (F.I.) Card, which is a documented record of a police-citizen encounter that officers complete when they believe that the citizen is suspicious in some way. These differences raise the possibility that different criteria are being used for Blacks in comparison to other citizens. Differences in the treatment of Whites and Hispanics were either minimal or inconsistent, indicating that members of these two racial and ethnic groups were not treated substantially differently from one another. The effect of officer race on post-stop outcomes also had inconsistent patterns. Generally speaking, Black officers were less punitive than White or Hispanic officers, regardless of the race of the motorist. For example, they were less likely to arrest a driver or issue a citation than White or Hispanic officers. The completion of FI cards,

therefore stands as an exception to this general rule. Black officers were more likely than White or Hispanic officers to complete FI cards for Black or Hispanic drivers. Overall, though, the data did not indicate that officers of a particular race or ethnicity targeted drivers of an identified racial or ethnic group for differential treatment.

Searches

The strongest predictor of a search is a custody arrest, regardless of race or ethnicity of the citizen. This is to be expected since the vast majority of arrests resulted in searches incident to arrest. Importantly, being Black did not affect the likelihood of a search when controlling for a custody arrest. Thus, higher rates of arrest, and searches incident to arrest among Blacks, seem to be the critical variables. A large part of this disparity is accounted for by the greater likelihood that officers conducted a record check or a pat down search on Black suspects compared to non-Black suspects. White and Hispanic officers (particularly males) were significantly more likely to search suspects than were Black officers, regardless of suspect race.

Police officers did not request consent searches differently for Black versus White drivers. Further, once asked, Black and White drivers gave consent for searches at the same rate. This is also true for Hispanic drivers when compared to White drivers. Further, the duration of searches was similar for White versus Black drivers, as well as for White versus Hispanic drivers. The data did not indicate that officers of a particular race or ethnicity targeted Black or Hispanic drivers. Blacks were the least likely of the racial and ethnic groups to be found in possession of contraband following a search, which may indicate that the criteria used for searching a Black citizen may be more liberal than the criteria used for searching other citizens.

Findings From Other Research Components

Ride-Along Component

Observers accompanied officers on 51 shifts. During these shifts, officers formed suspicion 168 times. Observers, seated next to the officers in their patrol cars, were unable to determine the race of the driver or primary suspect of the suspicion at the time that suspicion was formed in 119 (71%) of the incidents. This suggests that officers would not have been able to determine the race of those who they suspected of committing a traffic infraction or some other violation of the law. In most cases, the behavior of the suspect (140 cases, 84%), as opposed to their appearance, the time, and place of the incident, or other information, led the officer to become suspicious. Once an officer formed a suspicion a stop was conducted in most cases (86%, 144 cases).

As with the factors that explained why officers formed suspicion in the first place, the stops themselves were based predominantly upon the behavior of the driver (86%). Observers were unable to determine the race of the driver in 73% of the incidents prior to the stop. Based on the observer's inability to determine driver race before stops occurred in most cases, it is unlikely that a driver's race was a factor in the officer's decision to make a stop.

Traffic Observation Component

The observers recorded 93,251 drivers and more than 12,000 violations in White, Black, and racially mixed neighborhoods. The police made 535 traffic stops at the 16 observed locations. The data showed that while the rates of violation vary among the four race and gender categories (White males, Black males, White females and Black females), the rates of police stops were very close to the rates of violation for each of the groups. According to our aggregate data, White males had a slightly greater likelihood of being stopped by the police when compared to their rate of violation, while both White females and Black males had a slightly

lower likelihood of being stopped by the police in comparison to their rate of violation. Black females were stopped at exactly their rate of violation. Our conclusion is that the combined information from all 16 intersections show that the four race and gender groups of citizens were stopped at approximately the same rate at which they violated the traffic laws.

In addition to this aggregate analysis, a comparison was made between police stops and violation rates for drivers in each of the three types of neighborhoods. In predominately White and substantially Black neighborhoods, White female drivers were stopped at a higher rate than other race and gender combinations. In racially mixed neighborhoods, the opposite was true for White females, who were stopped at a rate lower than their violation rate. Black drivers were stopped below their violation rate in most areas and never at a rate higher than their violation rate. Additionally, stops more closely match the violation rates for Black drivers than for White drivers. White females had the highest rates of stops over their violation rate, and White males had the lowest rates of stops below their violation rate. However, as stated above, when the neighborhood data were combined, citizens in all four racial and gender groups were stopped at rates very close to rates at which they violated the traffic laws.

A Final Comment

The Miami-Dade Police Department must continue to monitor its officers to assure the citizens of Miami-Dade County that no policing decision is made using race inappropriately. There are several opportunities for the Department to conduct further research and to train officers to understand their own decision-making styles. Further, it is important the MDPD collect and maintain thorough and complete records of stops, and post-stop activities that can be analyzed.

Police officers must be sure to treat all citizens alike and may have to modify their discretionary decisions to achieve this goal. Research has shown that some racial disparities in

officer decision making are derived from general cultural values and unconscious attitudes. These concerns are not limited to the police but are shared by many people in the general population. It is important for the department to make officers cognizant of their attitudes and to modify any inappropriate behavior.

Overall, in our attempt to examine the potential for racially biased policing, we modeled our study to observe the officers conducting their routine activities in their natural environment. Our observations and contact data reflect what the officers see and do. Consequently, the inability to determine the race or ethnicity of a driver prior to a stop is often a reality for officers and a fact that must be reflected in the research findings as well as in any assessment of a benchmark against which police stops are to be compared.

Our research efforts focused on the behavior of officers toward motor vehicle stops and drivers, but made no attempt to look at the actions of the police toward people walking or those who were outside of vehicles. Involving the actions of the police toward pedestrians in a study of racial profiling may be an important step in building the public's trust and confidence in the Miami-Dade Police Department.

Chapter 1

Introduction

Generally speaking, "racial profiling" refers to the use of race or ethnicity as a key factor in police decisions to stop and interrogate citizens. Most discussions of racial profiling focus on police-initiated traffic stops, although its presence has also been examined in other law enforcement contexts, such as pedestrian stops or airport searches. As this study is limited to traffic stops, our overview in this introduction focuses on the dynamics of racial profiling in the context of discretionary traffic stops and subsequent searches of suspects.

In recent years, the practice of profiling individuals in automobiles, which has led to the so called "Driving While Black" (DWB) phenomenon, has attracted considerable attention from the media, civil rights groups, and political leaders. Consequently, the majority of public proclamations have condemned the practice of racial profiling. For example, in 1999, President Bill Clinton criticized the practice and directed Federal law enforcement agencies to collect information on the race of persons whom their agents stop and interrogate. Congressional hearings on racial profiling have been held to discuss proposed federal legislation to require the collection of information on all persons stopped by law enforcement officers, and several states have passed or are considering the introduction of legislation to require law enforcement agencies to collect demographic data on people stopped by the police.

The controversy surrounding racial profiling focuses on whether police officers may legitimately consider a person's race or ethnicity as a reasonable criterion for making a stop or search. Forceful and logically coherent views defending and criticizing the use of race in police decision-making have emerged. Those who defend racial profiling argue that many types of criminal behavior are committed disproportionately by members of certain racial

groups, which means there are many situations in which profiling of such groups might more effectively help police to solve crimes and arrest criminals. Those who are critical of profiling make a two-pronged argument. First, they argue profiling "doesn't work." For example, statistical evidence indicates that the "hit rate," or the rate at which police find contraband on people pursuant to a search, is lower for Blacks than for Whites. Second, even if empirically-based claims about the greater distribution of criminal offending among racial minorities are true, profiling violates the basic principle of Equal Protection of the law. Under this rights-based argument, race is not recognized as a legitimate basis for decision-making, even when it might be useful.

Defining Racial Profiling

Although the phrase "racial profiling" is widely used, there is no agreement on precisely what it means or involves. In fact, the definition of profiling by race poses complex questions both in law and social science. Definitions of profiling follow a continuum of what is arguably the most critical tenet in profiling: the role of race in justifying a stop and or a search. At the near end of the continuum, race is seen as the sole justification for police intervention. Under this conception, other criteria, such as age, gender, location, or behavior may be irrelevant. It is important to point out that this is an extreme view and is one held by a distinct minority. In fact, the Supreme Court has held that race cannot be used by the police as the sole criteria for making a stop. In the middle of the continuum is the notion that race may be used as one factor among others, such as age, gender, location, or behavior, in providing a justification for a stop or search. Significantly, this standard, which permits the use of race in conjunction with other factors, has emerged as the dominant view adhered to by law enforcement officials and agencies. Parenthetically, it is worth noting that these other factors (e.g. age, gender, location, and behavior) have been correlated with race, thereby

creating redundancy and masking the role of race in the decision to stop a citizen. At the far end of the continuum is the notion that neither race nor ethnicity should ever be part of a decision to stop or search a citizen. In other words, race should be an irrelevant factor in law enforcement.

Influences on Racial Disparities in Police Stops

Racial profiling is one of four recognized "influences" that account for or explain racial disparities in police stops. Each of the four influences constitutes a distinct process, and each should be expected to occur occasionally in any situation where race-sensitive choices by powerful decision-makers (i.e. the police) are made. Although these four influences or mechanisms are analytically distinct, in practice they likely overlap, so that stops by police officers are often a product of multiple influences. These four major influences are racial profiling, prejudice, cognitive bias and stereotyping, and race-based deployment.

1) Racial Profiling

In some cases, the explicit use of race as a decision-making criterion may result in racial disparities in police traffic stops.

2) Cognitive Bias and Stereotyping

There is ample research demonstrating that stereotyping and cognitive bias against minorities exists among some members of society. This mechanism often operates subconsciously and is rooted in the notion that every minority is viewed as having the same characteristics as other minorities.

3) Prejudice and Animus

This is active racism and it is based on the notion that an individual police officer is motivated to discriminate based on conscious prejudice or dislike. Fortunately, this form of

animus has declined statistically in the U.S. in the last few decades but may still be a problem among some officers.

4) Race-Based Deployment

It is possible that the police have no racial bias in individual police stop decisions, but that any disparity in stops is created by police deployment. This occurs if the police leadership focuses its attention on minority neighborhoods because of reported high levels of crime or high demand for police services. In this scenario, it is likely that there is no individual bias because within each neighborhood the police tend to treat everyone equally. The police stop more minority drivers in the aggregate simply because they spend more time in minority neighborhoods.

Summary

A police officer's decision to stop, ticket, or search a driver or passenger in a vehicle can be affected by a variety of influences. However, without a clinical evaluation of the officer and citizen, as well as an understanding of the environment in which the encounter occurs, it may not be possible to determine or isolate which specific influence, if any, has impacted an officer's decision or action. Clearly, there are many reasons other than racial profiling that cause officers to become suspicious or to take action.

Research on profiling in general, and in our study specifically, does not attempt to examine individual incidents but is designed to look at the aggregate level stops and searches of the agency being studied. Each stop and each search may be influenced by a number of legitimate and illegitimate factors. We are limited to the analysis of all of these actions: stops and searches taken together. Although our statistical analyses can describe the actions of the police compared to a variety of baseline and benchmark measures, our analyses are not able

to determine definitively whether discrepancies between the actions of the police and the benchmarks are caused by any of the factors mentioned above.

Noting the difference between racial disparity and racial discrimination necessarily prefaces our discussion of the study and its results. Disparity is defined as a difference or disproportion while discrimination connotes unfairness or prejudice. A finding of racial disparity certainly calls for further examination and analysis, but there are valid reasons for disparities that are not explained by racial discrimination. Not every police decision or action taken in which race is considered is motivated by racial discrimination.

This Report begins with a review of the existing social science literature on racial profiling, which is followed by an analysis of current laws. After the background information is presented, the different methodologies used to collect the data in the present research are discussed. The next chapters present the findings of the study, which are divided into sections that correspond with the methods: The Ride-Along Component, The Traffic Observation Component, and The Citizen Contact Card Component. A final chapter that summarizes the findings and presents policy recommendations follows these findings.

Chapter 2

Previous Research on Racial Profiling

Research on racial profiling is a new and evolving area of social inquiry. Although studies and reports on the traffic stop practices of law enforcement agencies have begun to proliferate over the last several years, few have appeared in scholarly outlets or peer-reviewed journals.[1] Despite this relative lack of published, empirical scholarship on racial profiling,[2] it is important to review the existing literature on the subject, recognizing that the body of knowledge related to traffic stop data collection and analysis is changing almost daily. The remainder of this chapter reviews selected research findings on racial profiling.

About one-half of the racial profiling studies that have been reported were conducted in-house by law enforcement agencies using their own data and personnel, while the other half were conducted with the assistance of outside researchers. Although most studies have focused on police traffic stops, a few have examined pedestrian stops. We will briefly summarize the pedestrian stop research before turning to a more comprehensive review of the research on traffic stops.

Pedestrian Stops

The largest and most comprehensive study of police pedestrian stops in the United States was undertaken by researchers at Columbia University at the request of the New York attorney general (New York Attorney General's Office, 1999). Analyzing more than 181,000 field interrogation cards completed by NYPD officers from January 1998 through March

[1] The Office of Community Oriented Policing Services (COPS Office) recently released a publication that reviews much of the existing research on racial profiling, including many unpublished studies (McMahon, Garner, Davis, & Kraus, 2003). We do not replicate this review here but rather attempt to show the evolution of racial profiling research as a backdrop to the current study.

[2] Legal scholars have written extensively on the subject of racial discrimination and racial profiling by police. However, their works typically do not include analyses of actual traffic stop data.

1999, the researchers found that although Blacks comprised only 25.6 percent of New York City's population, they accounted for 50.6 percent of all persons stopped by the NYPD. Hispanics were also over represented among persons stopped, while Whites were significantly underrepresented. Using Poisson regression, the researchers controlled for the different rates at which minorities commit criminal offenses (as measured by arrests) and still found that Blacks and Hispanics were stopped more frequently than Whites across all crime categories: Blacks 23 % more and Hispanics 39 % more.

As with most traffic stop studies, the New York attorney general's research team used census data as the benchmark population against which to compare police pedestrian stops. Researchers in Britain also have studied police stops of pedestrians and have developed innovative methods for identifying the comparison population of those available to be stopped. Theorizing that the pedestrian or driving population may vary from the census population in an area of interest, Home Office researchers mounted video cameras on automobiles and used observers to record the race and ethnicity of persons moving about (either as a pedestrian or as a driver) in five areas located in four cities in England (Miller, 2000). The researchers confirmed that the population of persons who frequented an area was substantially different from the census-based residential population. In most cases, the pedestrian and vehicular populations of the areas under study were comprised of a greater percentage of minorities than the census indicated. These findings suggest that the census population may be limited as a benchmark against which to compare stops by the police**.** Unfortunately, these two studies are the only ones which investigated pedestrian stops. The remainder of the chapter discusses research on traffic stops.

Traffic Stop Studies

Descriptive Studies

Because racial profiling is such a new area for research, studies that are now only a few years old were among the first attempts to examine disparities in police traffic stop practices. Since that time, the number of reported studies has increased dramatically and research methodologies have improved significantly. In most cases, the first reported studies used census data as their benchmarks and made relatively simple comparisons between minority groups and Whites regarding stops, searches, tickets, and arrests.

As in all social science research, methods or protocols improve as their strengths and weaknesses are assessed. The use of census data as a benchmark in the early studies of racial profiling was logical. The data were readily available at little or no cost. There was an explicit assumption that the people who lived in an area also were the ones who drove in the area. However, researchers quickly reasoned that the static nature of the census did not represent the fluid nature of those who drove in the same areas. By the late 1990s, however, the use of census data had been largely discredited as a benchmark measure for profiling research conducted in urban areas (see Engle and Calnon, 2004 and Fridell, 2004). The early research efforts relied upon the census as no other existing data were available. These research efforts are described below.

San Jose, California

Representing the early, in-house variety of profiling studies and using census data as the benchmark, the San Jose, California Police Department (1999) conducted an analysis of traffic stops from July through September 1999. In San Jose, Hispanics made up 31 percent of the city's population but accounted for 43 percent of the persons stopped by police during

the study period. Blacks were stopped at a greater proportion than their percentage in the population, while Whites and Asians (21 % of the population; 16 % of persons stopped) were underrepresented among motorists stopped.

New Jersey State Police

As the result of litigation over the allegedly discriminatory traffic stop practices of New Jersey state troopers, the State of New Jersey undertook a study of the stop and search activities of troopers in two State Police districts. Examining the stops that occurred from April 1997 through February 1999, and including most of 1996 and a few months from 1994, a New Jersey Attorney General's team found that only 627 of the 87,489 traffic stops involved a vehicle search. However, of those searches, 77.2 percent involved Black or Hispanic motorists. During a similar time period, only 33.9 percent of the total traffic stops made in the two districts were of Blacks and Hispanics (Interim Report of the State Police Review Team, 1999).

Maryland State Police

Similar search disparities were found by Lamberth (1997) in his study of the stop and search practices of the Maryland State Police. In a visual survey of traffic violators along the I-95 corridor through Maryland, Lamberth found that 17.5 percent of the speeding violators were Black, while 74.7 percent of the violators were White. However, of the 823 motorists searched along I-95 from January 1995 through September 1996, 600 or 72.9 percent were Black. In other words, Blacks were stopped and searched far more frequently than the rate at which they were observed speeding along the interstate.

San Diego, California

Cordner, Williams, and Zuniga (2000) examined traffic stop data from the San Diego Police Department during the first six months of 2000 and found that both African-Americans and Hispanics were over-represented among persons stopped, searched, and arrested by the San Diego Police. Although they used census data as a benchmark, they point out that because of San Diego's proximity to Mexico, census data on the driving-eligible population may not be accurate and may significantly under-represent the percentage of Hispanic drivers in San Diego.

State of Missouri

In Missouri, researchers analyzing four months (August 28 through December 31, 2000) of traffic stop data from virtually all of Missouri's law enforcement agencies found that Blacks were over-represented among persons stopped when compared to their 18 and over 2000 census population while Whites and Hispanics were underrepresented (Missouri Attorney General's Office 2000). Among persons searched, both Blacks and Hispanics were searched at rates that significantly exceeded the search rate of Whites.

Selected cities in the State of Ohio

Rather than relying on police self-report data on traffic stops, Harris (1999) used municipal court records from Akron, Dayton, Toledo, and Columbus, Ohio to examine racial profiling among police in those jurisdictions. Comparing the court record violator rates of Blacks and Whites to their percentage in the Ohio driving population, Harris found that Blacks were at least twice as likely as non-Blacks to be ticketed by the police.

Sacramento, California

As an example of an increasing number of profiling studies contracted out by municipalities, the City of Sacramento, California engaged researchers from the University of Southern California to conduct a study of the traffic stop practices of its police officers (Greenwald, 2001). These researchers relied on traffic stop data collected by officers from July 2000 through June 2001. Additional variables made available to the researchers included information on individual officers (age, race, education), census data, calls for service, traffic checkpoint data, and information on victim and suspect characteristics. In addition, the researchers collected observational data on drivers passing selected points of interest in Sacramento. Using census data as a benchmark, the researchers found that African-Americans were significantly overrepresented among persons stopped and that Whites were underrepresented. However, the researchers pointed out that African-Americans were reported as suspects to police at greater rates than Whites and that stop percentages of African-Americans by neighborhood were substantially lower than the percentage of African-Americans reported to the police as criminal suspects in those neighborhoods. Finally, the researchers found substantial differences between traffic observation data by race and census data for those tracts where observations took place. These findings further call into question the use of census figures as a benchmark at the local level.

Denver, Colorado

Unlike the previously discussed studies that used census data, at least in part, for comparison purposes, a recent study commissioned by the Denver Police Department takes a different approach to the question of benchmarking (Thomas, 2002). Beginning in June 2001, and continuing for a year, the Denver Police Department began collecting information on all

police stops, both traffic and pedestrian. Analysis of the data revealed that less than half of traffic stops made by the police were of Denver residents. Although the figure was higher for pedestrian stops (70%), a substantial proportion of persons stopped did not live within the city limits (30%). As a result, Deborah Thomas, the University of Colorado at Denver researcher who conducted the analysis, chose not to use Denver census data as the primary benchmark. Instead, she used a variety of other data for comparative purposes, including suspect identifications from offense reports, non-discretionary arrests, and vice and narcotics complaints, among others.

With respect to traffic stops, Blacks made up 16.6 percent of drivers stopped during the data collection period, Whites comprised 48.2 percent of those stopped, and Hispanics made up 31.3 percent of stops. Of the known suspects reported to the police, approximately 30 percent were Black, 43 percent were Hispanic, and 25 percent were White. Thus, Blacks and Hispanics were not stopped at rates disproportionate to those persons suspected of committing criminal offenses during the data collection period. Unfortunately, data were not collected, or were not reported, on the percentage of persons from each racial group who violated traffic laws during the timeframe for the study.

As for police treatment of minorities in Denver after stops occurred, Whites and Hispanics were more likely than Blacks to receive a citation, while Blacks were more likely than Whites or Hispanics to receive a verbal warning. In contrast, Blacks and Hispanics were substantially more likely than Whites to be the subjects of all types of searches; these differences were more extreme with traffic stops than with pedestrian stops. As studies of the Maryland State Police and the North Carolina Highway Patrol revealed, Blacks and Whites were found in possession of contraband at approximately the same rates in Denver.

As with many racial profiling studies, Thomas (2002) did not attempt to control for other potential explanatory variables in a multivariate statistical model, and instead used percentages and simple comparisons to examine how drivers of different races were treated by Denver police. A significant weakness in this approach is that it ignores relevant criteria that may possibly explain or provide context for why minorities may have been disproportionately stopped, searched, or ticketed by the police. Relying solely on census data for comparison purposes is another drawback in many of the early studies.

Alternative Benchmarks and Multivariate Analysis

Lamberth (1997) was one of the first researchers to attempt to correct for the potential problems of using the census as a benchmark. He developed an observational methodology that placed researchers in automobiles and on highway overpasses in order to estimate the percentage of drivers and speeders who appeared Black and those who appeared White. Smith and Alpert (2002) have argued that observational strategies help correct for the possibility that census figures may not accurately represent the driving population. They coined the term "baseline" to describe a comparison driving population identified from traffic observations.

North Carolina Highway Patrol

In one the largest and most sophisticated studies of racial profiling to date, Smith et. al. (2003) analyzed 1998 traffic stop data from the North Carolina Highway Patrol using a variety of benchmarks, including the population of licensed drivers in the state or specific district being analyzed and traffic observations similar to those of Lamberth. Smith et. al. found that African-Americans were slightly more likely to be ticketed than Whites when compared to their percentage among licensed drivers in North Carolina. Moreover, they

found that Blacks were significantly more likely than Whites to be searched, even though they were slightly less likely than Whites to be in possession of contraband.

Richmond, Virginia

Smith and Petrocelli's (2001) analysis of traffic stop data in Richmond, Virginia, offers one of the few examples of multivariate analysis in the racial profiling literature. Controlling for variables such as type of stop, area crime rate, and officer age, race, gender, and years of service, Smith and Petrocelli found that although African-Americans in Richmond were stopped at rates that exceeded their proportion in the driving-eligible population, they were no more likely to be searched than Whites but were actually less likely than Whites to be ticketed or arrested. Moreover, race of the officer did not predict the race of the motorist stopped, nor did it predict whether a search or an arrest took place. This latter finding helped dispel the commonly held perception that White officers targeted minority drivers for punitive stop dispositions.

In a subsequent article, Petrocelli, Piquero, and Smith (2003) analyzed the Richmond traffic stop data at the neighborhood level. They found that when stops were aggregated according to census tracts, the Part I crime rate strongly predicted the rate of stops per 1,000 residents, even after controlling for other relevant variables, and including the percentage Black population and measures of poverty and unemployment. However, they also found that Black neighborhoods had higher traffic stop search rates when other variables were held constant. Thus, the data both supported and refuted the hypothesis that Black neighborhoods would be subjected to differential treatment by the police when compared to majority White neighborhoods.

Reanalysis of Maryland State Police data

Although not a true multivariate study, Knowles, Persico, and Todd (2001) reanalyzed search data from the Maryland State Police using a variety of variables in an effort to determine whether searches were biased against minority drivers. Examining 1,590 searches by Maryland troopers from January 1995 through January 1999, they initially found that a substantially greater percentage of the total searches were performed on African-Americans (63%) than on Whites (29%) or Hispanics (6%). Moreover, the percentage of drivers found with contraband following a search was nearly identical among Blacks and Whites (34 % vs. 32%) but was substantially lower for Hispanics (11%). The hit rates themselves suggested a bias against Hispanics, as more "innocent" Hispanics were subjected to searches than Whites or Blacks.

Going further, however, the researchers examined the outcomes of searches and the amounts and types of drugs found on persons (or in vehicles) in the different racial groups. As drug seizures became more serious (either in amount or type), the proportion of "guilty" Black drivers increased relative to Whites and Hispanics. Thus, the hit rate for Blacks found in possession of felony amounts of drugs was more than four times higher than the hit rate for Whites and more than twice as high as the hit rate for Hispanics. These differences, which were statistically significant, imply a bias against White drivers at the upper end of the guilty spectrum and a continued bias against Hispanics as evidenced from the overall search analysis. They also suggest a rationale for why a greater percentage of Black drivers were searched when compared to Whites and Hispanics – police were more likely to find "hard" drugs and greater amounts of drugs during searches of Blacks than they were during searches of Whites or Hispanics.

Charlotte-Mecklenburg Study

In one of the most recent studies of police stop practices in an urban area, Smith et. al (2004) reported the results from a study of the traffic and pedestrian stop practices of the Charlotte-Mecklenburg, North Carolina Police Department. This study employed an area disparity analysis to determine what factors influenced the number of stops and consent searches performed by the Charlotte-Mecklenburg police in the 373 census block groups contained within the Charlotte-Mecklenburg area. Overall, the researchers found that the number of traffic and pedestrian stops was not predicted by the racial composition of the areas where the stops occurred. This suggests that the police did not conduct more stops in minority areas compared to mostly White areas when other factors were considered. However, census block outliers were identified where the number of African-American stops or searches exceeded what the regression models predicted in some cases and where the number of African-American stops was less than predicted in other cases.

Methodological Weaknesses in Benchmarking

One of the key methodological issues in racial profiling research is developing an appropriate benchmark against which to compare stop data (Ramirez, McDevitt, & Farrell, 2000). Knowing the percentage of minorities stopped, searched, or ticketed by police is meaningless unless those figures can be measured against some relevant comparison population. As discussed above, most of the published studies on racial profiling, most used census data as their benchmark (Cordner, Williams, & Zuniga, 2000; Decker et. al., 2001; Harris, 1999; New York Attorney General's Office, 1999; San Jose Police Department, 1999; Smith & Petrocelli, 2001), while at least one used licensed drivers (Zingraff et. al. 2000).

In contrast, Lamberth (1997) used field observation to generate *baseline data* on the racial composition of drivers and traffic violators on I-95 north of Baltimore. This represents a different approach to developing a comparison population than found in most other profiling studies. Although Smith and Petrocelli (2001) argued that census data will continue to be used as a benchmark in racial profiling research because of its low cost and ready availability, its reliability from a social scientific standpoint is questionable at best (Smith & Alpert, 2002).

Census data represent the residential population in a given area. Whether the driving population of the same area shares the demographic characteristics of the residential population is of key concern. In fact, transportation surveys and vehicle ownership rates suggest that the minority driving population may be significantly different from the minority residential population for a state or locality (Federal Highway Administration, 1995).

An improvement over census data as a benchmark in traffic stop studies is the population of licensed drivers for the political subdivision under study. Among other benchmarks, Smith et. al. (2003) used the racial breakdown of licensed drivers in North Carolina as a comparison population. Although licensed drivers arguably represent a more reliable comparison population than raw census data, this population too is potentially flawed. Comparing traffic stop data to the population of licensed drivers in a given state or political subdivision does not take into account the differential rates at which minorities and Whites utilize their automobiles, nor does it account for out-of-state drivers or drivers operating vehicles without a license.

Finally, using victim reports to the police of suspect race for comparative purposes, as researchers did in Denver and Sacramento, is also problematic. To begin with, such figures

only reflect crimes reported to the police. For some categories of crime (e.g. sexual assault), research has shown that more than half of all offenses are never reported. More fundamentally, although victim reports of suspect race may provide a rough estimate of criminality among various racial groups, they do not reflect traffic violation rates and thus have no connection to driving behavior. Since a substantial proportion of traffic stops are for moving violations (see Table 5 in Chapter 7), a benchmark is needed that provides both an estimation of the driving population and an estimation of the rates at which drivers of different racial groups violate the traffic laws.

Developing a Better Benchmark

Traffic Observations

Currently, two methods are available for providing reliable estimates of the driving and traffic violating populations. The first method is direct observation. Within certain limitations, this method provides a good estimate of the "populations available for stops and searches" (Miller, 2000).

Lamberth (1997) and Smith et. al. (2003) used direct observation to develop baseline data on what percentage of the driving population in a defined geographical area was comprised of Blacks and what percentage was comprised of Whites. In addition, both research teams also attempted to gauge the percentage of drivers of the two racial groups who violated the speed limit. The purpose of this second set of observations was to explore whether Blacks sped more frequently than Whites on a per capita basis and if so, whether this might help to explain differential stop rates among Whites and Blacks.

There are significant advantages in collecting baseline data as part of a racial profiling study rather than relying on unreliable benchmarks such as census data. Using

systematic observation to collect baseline data on the racial composition of drivers and traffic violators involves counting ordinary events in their natural settings. Moreover, the data collection can be designed to capture the specific populations of interest. As a result, the populations are not limited to previously collected data on overall populations or some other preconceived group. A study attempting to accurately determine the rate of stops and searches of a certain racial group requires information on the specific number of those available for these events or outcomes. The use of observational techniques allows researchers to count populations under study at specific places and at specific times, thus permitting researchers to focus on the racial group or groups in question and at the locations of interest (Smith & Alpert, 2002).

Not-At-Fault Traffic Crash Victims

The second method for developing a reliable estimate of the driving and violating population is through the use of traffic accident reports. Actuarial statisticians and safety engineers have utilized automobile crash data to establish the relative risks of causing an accident or being a crash victim that are associated with driver characteristics, types of vehicles, and roadway conditions, among other factors. Since the characteristics of not-at-fault drivers are of minimal value to the insurance industry, their involvement in crashes and demographic characteristics have been under-utilized. Nonetheless, some traffic safety engineers have theorized that not-at-fault drivers in two vehicle crashes represent a random sample of the driving population (Kirk & Stamatiadis, 2001). This theory called “quasi-induced exposure” is based on the premise that drivers who are struck by other motorists will, over time, provide a close estimate of the characteristics of the driving population as a whole.

Although the exposure method has never been applied in the context of racial profiling research, it has been subjected to limited empirical testing in other contexts. Stamatiadis & Deacon (1997) used accident data in Kentucky from 1990-92 to determine the association, if any, between age groupings of at-fault and not-at-fault drivers. They found that within some categories, persons of similar ages tended to get into accidents more frequently than expected. In particular, older at-fault drivers (age 55 or more) were over-involved in accidents with not-at-fault drivers of similar ages. They concluded that at-fault and not-at-fault drivers of similar ages probably exhibited similar travel patterns, which would account for the association between age groupings. Their analysis demonstrates that at least for some categories of drivers, accident data alone cannot be used to determine whether not-at-fault drivers represent a random sample of the driving population because those drivers will cluster with similar categories of at-fault drivers and thus will not appear evenly distributed across at-fault driver categories.

Associations between categories of at-fault and not-at-fault drivers, though, may vary according to the categories selected. DeYoung, Peck, and Helander (1997), conducted a category-type analysis using six years (1987-92) of fatal crash data from California. They compared the distribution of accidents involving three categories of at-fault drivers – those with valid driver's licenses, those with suspended driver's licenses, and those without licenses – to the same categories of not-at-fault drivers. If not-at-fault drivers represent a random sample of the driving population, then a given category of at-fault drivers should have approximately the same proportion of accident victims within each category of not-at-fault drivers (suspended, valid, unlicensed), assuming that at-fault and not-at-fault persons within the same categories do not exhibit similar driving patterns. Of course, this assumption

was not met in the Stamatiadis & Deacon (1997) data, which showed correlations between age-related categories of at-fault and not-at-fault drivers.

In contrast, the California fatal accident data showed no statistically significant differences in the proportions within each category of not-at-fault drivers struck by at-fault drivers. Thus, licensed, at-fault drivers struck licensed drivers 90 percent of the time, while suspended and unlicensed at-fault drivers struck licensed drivers 85 percent and 84 percent of the time respectively. Again, these small percentage point differences were not statistically significant in any of the categories, indicating that at least with respect to licensed, suspended, and unlicensed categories of drivers, not-at-fault accident data may provide a close approximation of how those groups are represented in the driving population.

As the Stamatiadis & Deacon (1997) age category analysis showed, however, accident data themselves may not be sufficient to answer the question of whether not-at-fault accident victims represent a random sample of the driving population. Simply because certain categories of not-at-fault drivers are associated with similar categories of at-fault drivers does not mean that accident victims do not approximate the driving population as a whole. As Stamatiadis & Deacon (1997) suggest, such findings may simply mean that similar categories of at-fault and not-at-fault drivers exhibit similar travel patterns and are thus more likely to be involved in accidents with one another. In order to more accurately assess the validity of the quasi-induced exposure method, another source of data external to the accident data themselves, must be identified against which to compare the characteristics of not-at-fault drivers (or their vehicles) to determine whether they approximate the characteristics of the driving population.

To begin to address this deficiency in relying solely on the accident data themselves to test the quasi-induced method, Stamatiadis & Deacon (1997) also used data on truck-involved accidents to ascertain whether the percentage of accidents involving trucks was associated with the percentage of trucks traveling on Kentucky roadways as measured by classification counts taken at representative locations. According to the Kentucky data, straight trucks were involved in 3.1 percent of accidents and constituted 3.2 percent of observed vehicles according to the classification counts. For combination trucks, the figures were 6.2 percent and 6.8 percent respectively.[3] Thus, the accident data closely approximated the percentage of trucks traveling the roadways as determined from classification counts and thus offered support for the validity of the quasi-induced method.

Subsequently, Kirk and Stamatiadis (2001) attempted to further validate the exposure method by using trip diaries to develop travel estimates among a sample of Fayette County, Kentucky residents. Data from 26 completed diaries were extrapolated to the population of licensed drivers in Fayette County and were then compared to 1996-98 Fayette County traffic accident records maintained in the Kentucky Accident Record System. Applying the exposure method, the not-at-fault drivers from two vehicle accidents were used as the benchmark (or exposure metric) against which the trip diary data were compared.

Comparisons were carried out for three age groups (18-34, 35-64, and over 64), five roadway types (interstate, major arterial, minor arterial, collectors, and local roads), and two time periods (daylight and nighttime). The results indicated that the diary-based data and traffic accident data were most similar among the 35-64 age group – 53 percent of kilometers traveled versus 44 percent of not-at-fault accident victims. Among this age group, kilometers traveled (as derived from the trip diaries) was most comparable to not-at-fault accident data

[3] Stamatiadis & Deacon did not define the terms “straight truck” or “combination truck.”

on roads designated as collectors – 43.6 percent of kilometers traveled versus 44.5 percent of not-at-fault accident victims. Differences were greater for other age groups and other roadway types, particularly interstates.

Given the small number of subjects involved in the trip diary project, further empirical validation of the exposure method is clearly required before not-at-fault accident data can be accepted as a proxy for the driving population. However, the few studies that have attempted to validate the method have showed that it holds promise as a potentially useful metric for approximating relevant characteristics of the driving population within a geographic area of interest.

To date, researchers have not applied the exposure method to estimate the racial or ethnic composition of the driving population. If this method can be validated as a reliable estimation of the racial composition of drivers, then not-at-fault accident data can serve as a reasonably valid benchmark against which to compare police traffic stop data.

Currently, the best method of developing a baseline comparison population – traffic observation – suffers from several weaknesses. First, our experience in conducting observations in Miami-Dade County and the experiences of other researchers (Greenwald, 2001) demonstrate that traffic observations cannot be carried out at night because observers cannot distinguish the racial characteristics of drivers in the dark. Second, because of the inherent difficulties in distinguishing racial and ethnic characteristics from a distance and within a moving automobile, observers can only determine whether the driver appeared Black or non-Black. Thus, counts of Hispanics, Native Americans, or even Asians, cannot be accomplished reliably. Finally, traffic observations are manpower intensive and thus can be prohibitively expensive to conduct throughout an entire jurisdiction.

In contrast, not-at-fault accident data are relatively easy to collect by officers investigating traffic accidents, and race and ethnicity data can be gathered on a more complete range of drivers by the investigating officers (not simply Black/non-Black). In addition, accident data do not suffer from the daytime bias inherent in observation data. However, traffic accident data have their own inherent biases. Most significantly, accident data will be concentrated on major thoroughfares, high-traffic intersections, and roadways that are unsafe because of engineering or environmental conditions. Thus, accident data will not necessarily reflect the driving population for an entire city, county, or state, but rather will reflect the driving population in those areas where accidents are most likely to occur. Nonetheless, in the context of a racial profiling study, the effect of this bias is minimized because police traffic stops tend to be concentrated on the same roadways on which accidents occur. Consequently, if they can be validated as an approximation of the driving population through traffic observation or other means, then not-at-fault accident data should provide an excellent benchmark against which to compare police traffic stop activity, most of which occurs conjointly with traffic accidents.

This “exposure” methodology may be the most effective and efficient way to estimate the characteristics of drivers on the roadways. The data can be captured on computerized crash records and kept by law enforcement agencies or state or local governments. This new approach promises to be a significant advancement in the analysis of police traffic stop data.

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Chapter 3

Racial Profiling and the Law

Although it is frequently used in the media as a term with legal significance, racial profiling is a political moniker that has little meaning within the confines of the law. In the popular lexicon, "racial profiling" generally describes the inappropriate use of race by the police in the exercise of their law enforcement authority, usually involving traffic stops. A publication by the Police Executive Research Forum has substituted the term “racially-biased policing” for racial profiling (Fridell, Lunney, Diamond, & Kubu, 2001). Whatever the descriptive term used, however, there is no widespread agreement on precisely what activities constitute the police practice commonly referred to as racial profiling. Although many law enforcement agencies have attempted to define racial profiling in recent administrative policies, the courts have not done so. Rather, they have applied existing legal doctrines to law enforcement practices that implicate race and, like the general public, have reached a variety of conclusions.

The purpose of this chapter is to discuss the legal standards applicable in the racial profiling arena and to help illuminate some of the points of agreement and departure among courts that have addressed the role of race and ethnicity in police decision-making. We begin by discussing the constitutional and statutory grounds for claims by citizens of discrimination or unequal treatment by the police. We then present the prevailing legal tests that courts apply in deciding Equal Protection-based claims. Finally, we discuss the case law that has emerged from federal and state court decisions in the context of racial profiling.

Legal Standards in Racial Profiling Cases

The Fifth and Fourteenth Amendments to the United States Constitution prohibit governmental agents, including law enforcement officers, from discriminating against citizens based upon their race, ethnicity, or national origin. In addition, Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d) prohibits any recipient of federal funds from engaging in racially discriminatory practices and allows citizens to sue under the statute for damages arising from intentional discrimination (Guardians Association v. Civil Service Commission, 1983). More specifically, the Omnibus Crime Control and Safe Streets Act of 1968 (42 U.S.C. § 3789d(c)) applies directly to law enforcement agencies that receive federal financial assistance and prohibits them from discriminating against citizens based on race, religion, sex, color, or national origin. Finally, 18 U.S.C. § 242 criminally punishes anyone, who under color of law, willfully violates a citizen's constitutional rights or subjects any person to a differential punishment because of the person's race or national origin.

Since the 1994 passage of 42 U.S.C. § 14141, the United States attorney general has been authorized to bring suit against state or local law enforcement agencies that engage in a pattern or practice of misconduct, including racial discrimination, that violates the Constitution or federal law. Over the last several years, the Department of Justice has entered into consent decrees with a number of agencies over allegations of racial profiling, including the Columbus, Ohio Police Department, the Highland Park, Illinois Police Department, the Los Angeles Police Department, the New Jersey State Police, the Montgomery County, Maryland Police Department, and others. In addition to these government lawsuits, private citizens also may have a legal cause of action under 42 U.S.C. § 1983 if their constitutional rights are violated by the police because of their race.

Generally speaking, the Fourteenth Amendment and the various federal statutes discussed above prohibit law enforcement officials from purposefully discriminating against persons *because of* their race (McCleskey v. Kemp, 1987). In United States v. Armstrong (1996), the Supreme Court reaffirmed a two-part test for deciding equal protection-based claims of selective prosecution. The Court held that a criminal defendant alleging selective prosecution under the Fourteenth Amendment must demonstrate that a prosecutorial policy had both a discriminatory effect and was motivated by a discriminatory purpose. Purposeful discrimination does not require proof of racial animus but does require evidence that the decision-maker "selected or reaffirmed a particular course of action at least in part `because of,' not merely `in spite of,' its adverse effects upon an identifiable group" (Wayte v. United States, (1985), p. 609 (quoting Personnel Administrator of Massachusetts v. Feeney, 1979)). Moreover, in proving the discriminatory effect prong of the test, the Court stated that defendants (or plaintiffs in civil lawsuits) must show that similarly situated persons of another race were not prosecuted.

After Armstrong, lower courts began applying the two-prong selective prosecution test to claims of selective *enforcement* by police in the racial profiling context (Anderson v. Cornejo, 2002; Bradley v.United States, 2002; Farm Labor Organizing Committee v. Ohio State Patrol, 2001; Flowers v. Fiore, 2003; United States v. Chavez, 2002). At least one court, however, has applied a different standard in a case involving a computer inquiry of a motorist's license plate. In State v. Segars (2002), the Supreme Court of New Jersey applied a burden-shifting type test analogous to that found under Title VII employment discrimination cases. In Segars, which involved a police officer running a registration check from his in-car computer, the court held that under the Title VII model, a defendant bears the

initial burden of proving that the officer had a racially discriminatory purpose in checking the defendant's vehicle registration. Once that prima facie showing is made, the burden of producing a race-neutral reason for the license plate check shifts to the State. To our knowledge, this is the only case to apply a Title VII-type burden-shifting test in a racial profiling case. Significantly, the Supreme Court of New Jersey applied this unique standard at the *pre-contact* stage of the police-citizen encounter and held that if race is the sole motivating factor in an officer's decision to run a registration check from his in-car computer, then any evidence resulting from that check must be suppressed under the New Jersey constitution.

Unlike cases that involve the selective enforcement of a facially neutral statute, a different rule applies if the statute or policy in question expressly classifies persons on the basis of race. Although written policies of this type are probably rare, they are subject to strict judicial scrutiny and will only be upheld if they are narrowly tailored to affect a compelling state interest (Brown v. City of Oneonta, 2000). Furthermore, a law enforcement agency is subject to liability for its unconstitutional policies, even if those policies are unwritten. Thus, in National Congress for Puerto Rican Rights v. City of New York (1999), the United States district court for the Southern District of New York refused to dismiss a racial profiling claim against the NYPD's Street Crime Unit because the plaintiffs alleged that the unit enforced an unwritten policy of stopping and frisking persons based solely on their race or national origin. Significantly, the court also held that in challenging a law or policy that contains an express racial classification, plaintiffs need not plead or allege the existence of a similarly situated racial group that was not subjected to being stopped because strict scrutiny analysis necessarily addresses this question.

Finally, although it is the primary mechanism for checking overly intrusive police behavior in most other contexts, the Fourth Amendment's prohibition against unreasonable searches and seizures is rarely applicable in racial profiling cases. This is due to the Supreme Court's decision on pretextual traffic stops in Whren v. United States (1996). The primary issue in Whren was whether a traffic stop made with reasonable suspicion of a traffic infraction was nonetheless unlawful if the officer had an ulterior motive in making the stop. A majority of the court held that for Fourth Amendment purposes, the relevant inquiry was an objective one -- did the officer have a legal basis for making the stop? Under this analysis, whether racial animus also played a role in the officer's decision to make a traffic stop is simply irrelevant for Fourth Amendment purposes.

Notwithstanding Whren, however, the Equal Protection-based claim of selective enforcement is still available to a citizen who can prove that a traffic stop was motivated by a discriminatory purpose and had a discriminatory effect, even if that stop also was supported by reasonable suspicion or probable cause. Although such a stop would not constitute a Fourth Amendment violation, it would still be offensive under the Equal Protection clauses of the Fifth or Fourteenth Amendments.

Case Law on the Use of Race in Police Decision-Making

Profiling-related activities by law enforcement officers usually fall into one of three categories – cases where officers use race as the sole reason for making a stop, cases where officers use race *along with other factors* in making a stop, and cases where officers use race (either alone or in combination with other criteria) in contacting or investigating a citizen in

some manner that does not amount to a "seizure" under the Fourth Amendment.[1] Stops within each of these three categories can be further subdivided, as discussed below.

With respect to the first category, courts have generally held that stops based solely on a person's race or ethnic appearance are unconstitutional. For example, in United States v. Brignoni-Ponce (1975), the Supreme Court held that the Hispanic-looking appearance of two men driving near the California-Mexico border did not, by itself, provide U.S. Border Patrol agents with legal grounds to make a traffic stop. Similarly, even if police have a previous description of a group of suspects that includes race, they may not stop such persons based on their race alone. The Fourth Circuit Court of Appeals recently held that a police officer did not have probable cause to stop a car containing four Black persons simply because the officer was searching for a group of four Black males who an anonymous caller had described as drinking in public and acting disorderly in the vicinity of where the traffic stop occurred (United States v. Jones, 2001).

Likewise, the Florida Court of Appeals has twice ruled that racial incongruity does not offer sufficient justification for police to conduct a forcible stop. In Lafontaine v. State (2000), a police officer observed a White female seated in her car in a predominantly Black neighborhood talking with two Black men who were leaning into the car window. The officer stopped the woman because she was a White female talking with two Black men in a Black neighborhood known for drug activity. In suppressing the fruits from the officer's search of her purse (which revealed a crack pipe), the court held that the initial stop of the woman was

[1] A person is seized under the Fourth Amendment if (1) the person is physically prevented from moving freely about or (2) if a "reasonable" person under the circumstances would not feel free to leave and the person submits to police authority. (California v. Hodari D, 1991).

not based on reasonable suspicion and thus the subsequent consent search of her purse was unconstitutional.

In Phillips v. State (2001), the court of appeals also ruled as unconstitutional the stop of a Black suspect seen in the vicinity of a burglary that had occurred in a predominantly White neighborhood. The officer who conducted the stop was responding to a look-out broadcast over the police radio by another officer who had seen the suspect a few minutes earlier and who had become suspicious because the suspect was a Black man walking through a White neighborhood. The court held that without other indicia of suspicion, "racial incongruity, a person being allegedly 'out of place' in a particular area, cannot constitute a finding of reasonable suspicion of criminal behavior" (Phillips, p. 479-480).

In contrast, police may, without violating constitutional guarantees of equal protection, consider race as one physical descriptor among others when searching for a suspect whose race is known to them (Brown v. City of Oneonta, 2000; Buffkins v. City of Omaha, 1990; United States v. Kim, 1994). For example in Brown, officers searching for the young, African-American male assailant of a 75 year old woman attempted to question all young, Black male students at a local university. Several persons stopped by the police sued, alleging a violation of their Fourth and Fourteenth Amendment rights. In partially upholding the district court's grant of summary judgment to the defendants, the Second Circuit Court of Appeals held that the actions of the police did not violate the Equal Protection Clause. The questioning of suspects was not based solely on race, and the plaintiffs did not sufficiently allege or prove discriminatory intent. Police in Oneonta questioned suspects based on their race, age, and gender in an attempt to locate a young, Black male with a cut on his hand. These actions, according to the court, did not violate equal protection principles.

However, recognizing that some of the police-citizen encounters in Brown may have been non-consensual stops, the court of appeals allowed the plaintiffs' Fourth Amendment claims to move forward for trial. A non-consensual stop by police must be based, at a minimum, on reasonable suspicion (Terry v. Ohio, 1968). Although in making a forcible stop "a police officer may legitimately consider race as a factor if descriptions of the perpetrator known to the officer include race," (United States v. Waldon, 2000, p. 604), rarely will suspect race provide sufficient legal grounds, *by itself*, for making a stop (Buffkins v. City of Omaha, 1990; United States v. Jones, 2001). Thus, the court's ruling allowed for the possibility that some of the plaintiffs were stopped by police without reasonable suspicion and in violation of their Fourth Amendment rights against unreasonable searches and seizures.

Despite the prohibition against using race as the sole criterion for making a stop, the Supreme Court has allowed Border Patrol agents to consider race while conducting brief inquiries at checkpoints geographically removed from the border. Thus, in United States v. Martinez-Fuerte (1976), the Court upheld the constitutionality of such Border Patrol checkpoints, even when agents used the Hispanic appearance of vehicle occupants as the primary reason for referring motorists to a secondary inspection area for further questioning. However, Martinez-Fuerte is limited to permanently-manned Border Patrol checkpoints and does not overrule Brignoni-Ponce in roving traffic stop situations.

When law enforcement officers make stops based partially on race and partially on individualized indicators of suspiciousness and they do not have a previous description of a suspect that includes race, the nation's courts have split on the appropriateness of using race in the decision-making calculus. Indicative of this split are several cases from the U.S. courts

of appeal. In U.S. v. Montero-Camargo (2000), Border Patrol agents stopped two cars because they turned around to avoid a Border Patrol checkpoint and because they were being driven by Hispanic-looking persons. The Ninth Circuit stated that the use of race as a factor in making the stops violated the Fourth Amendment. Nonetheless, the court upheld the stops because it believed that the agents had sufficient grounds, independent of race, to make the traffic stops.

Similarly, the Sixth Circuit Court of Appeals has recently held that the use of race by police as one factor among others in conducting a stop may violate the purposeful discrimination prong of the two part test for selective enforcement (Farm Labor Organizing Committee v. Ohio State Patrol, (2002)). In Farm Labor, an Ohio state trooper lawfully stopped a car for a defective headlight. Noticing that the driver and his passenger were Hispanic, the officer inquired about their immigration status and ultimately confiscated their valid green cards and held the cards for a period of four days. The trooper contended that he confiscated the green cards because the two motorists indicated that they had paid for the cards, which led the trooper to believe that they were forged. In fact, the cards were valid and the motorists were attempting to tell the trooper that they had paid the required *fees* necessary to obtain the residency permits.

In a subsequent § 1983 lawsuit against the trooper and the Ohio State Patrol, the court of appeals held that the purposeful discrimination prong of the two-part selective enforcement test requires only that a plaintiff show that a law enforcement action was taken *partially* because of the plaintiff's ethnicity and that the plaintiff need not show that the law enforcement officer had *no* race neutral reasons for his actions. In his deposition prior to trial, the defendant trooper testified that he would not have acted as he did during the traffic stop if

the two motorists were White. Thus, under the court's interpretation of the purposeful discrimination prong of the selective enforcement test, a factual dispute existed as to whether the trooper purposely discriminated against the plaintiffs. This factual dispute precluded the granting of summary judgment to the trooper on the ground of qualified immunity.

The leading case taking a different approach is United States v. Weaver (1992) from the Eighth Circuit Court of Appeals. In Weaver, narcotics officers working a drug interdiction detail at the Kansas City airport stopped a young, "roughly-dressed" Black male who had gotten off a flight from Los Angeles. The agents stopped the man based partly on his race – they had information that Black street gangs were importing drugs into Kansas City from L.A. – and partly on his suspicious behavior once he de-planed at the airport. The Eighth Circuit upheld the stop even though the suspect's race played a role in the officers' decision to detain him. Unlike the Ninth Circuit in Montero-Camargo, the Eighth Circuit Court of Appeals apparently was not offended by the use of race as one factor among others in making a stop when police possessed information that persons of a certain racial group were trafficking in drugs at a specific location.

Like courts that have disapproved of using race alone as the reason to make a stop, the Sixth Circuit Court of Appeals has similarly stated that police may not use race as the sole criterion for conducting even a consensual interview or search (United States v. Avery, 1997; United States v. Travis, 1995). However, the interviews and searches in these cases were ultimately upheld because the Sixth Circuit found that they were based on factors *in addition* to race. Thus, these cases seem to suggest that police may take race into account when deciding who to approach and question (at least consensually) so long as they do not use race as the sole reason for their decision. In fact, the Sixth Circuit discussed this holding

from Avery and Travis in the Farm Labor case but distinguished Avery and Travis as announcing a rule that only applied to consensual encounters between police and citizens.

The Ninth Circuit apparently has taken a different approach in consensual encounter cases. In United States v. Kim (1994), the defendant appealed his convictions of drug and firearm possession on the ground that he was subjected to an illegal, race-based stop by DEA agents. In reviewing the facts of the case, the court of appeals first held that the encounter between Kim and the DEA agent that resulted in the agent finding drugs was consensual in nature and did not involve a seizure under the Fourth Amendment. Thus, because the encounter did not implicate the Fourth Amendment, the court stated that the agent's motivation for approaching the defendant was irrelevant, even if Kim's racial appearance was the motivating factor for the stop. The United States District Court for Hawaii has followed Kim and has likewise stated that a law enforcement officer's reasons for approaching a suspect are irrelevant – even if they involve racial considerations – so long as the encounter between the officer and suspect is consensual (United States v. Matau, 2002).

Evidentiary Difficulties in Equal Protection Cases

In making out a case for selective enforcement either for the purpose of excluding evidence in a criminal case or as a theory for relief in a civil suit, a complainant often has difficulty proving either or both prongs of the selective enforcement cause of action. As to the first prong, intentional discrimination, a law enforcement officer is unlikely to admit targeting persons because of their race or nationality, nor is an explicit policy likely to be found that encourages racial discrimination. Therefore, a person alleging racial profiling by the police usually must rely upon circumstantial evidence to prove intent, which often takes the form of statistical evidence. For similar reasons, statistical evidence also becomes the de

facto proof of choice in establishing the second prong of a selective enforcement claim -- discriminatory effect. As discussed earlier, proof of discriminatory effect requires evidence that persons of a racial group other than the complainant's also violated the law but were not stopped, ticketed, or searched by police. Plaintiffs often search in vain for this type of statistical data, which most law enforcement agencies do not currently collect.

As noted it in McCleskey v. Kemp (1987), the Supreme Court has accepted the use of statistics as proof of an Equal Protection violation in limited contexts, most notably in cases involving the selection of jury venires and in employment discrimination cases under Title VII. Outside of these arenas, a few cases can also be found where a racial disparity was so egregious that the Court was willing to rely on statistical proof of the disparity to find a constitutional violation (Gomillion v. Lightfoot, 1960; Yick Wo v. Hopkins, 1886).

More common, however, are cases for which the Supreme Court has rejected statistical evidence as proof of an Equal Protection violation. In McCleskey, the Court held that a logistic regression analysis involving over 2,000 Georgia death penalty cases which showed that defendants charged with killing White victims were substantially more likely to receive a death sentence than defendants who killed Black victims was insufficient to make out the prima facie showing of intentional discrimination necessary to prove a Fourteenth Amendment violation.

The Use of Statistics to Prove Racial Profiling

Relatively few cases have squarely addressed the issue of what proof is necessary to create a constitutional violation in the racial profiling context or whether traffic stop statistics can be used for that purpose. However, in reviewing a grant of summary judgment to the defendants in a racial profiling suit against the Illinois State Police, the Seventh Circuit Court

of Appeals has provided perhaps the most comprehensive treatment by a court to date on the proof problems inherent in a racial profiling lawsuit alleging selective enforcement under the Equal Protection clause.

In Chavez v. Illinois State Police (2001), plaintiffs brought a lawsuit alleging racial profiling by the Illinois State Police in a drug interdiction program labeled Operation Valkyrie. Peso Chavez, an Hispanic private investigator hired by a criminal defendant arrested during Operation Valkyrie, was stopped and subjected to a search by Illinois state troopers. His presence in Illinois was part of a defense strategy to prove that illegal profiling was occurring. Indeed, the stop of Chavez was videotaped by an employee of the public defender's office who was following Chavez in a separate vehicle as he traveled along I-80. The second named plaintiff in the lawsuit, Gregory Lee, is an African-American man who alleged that he was illegally stopped on three occasions by Illinois state troopers.

Ultimately, the plaintiffs representing the class brought Equal Protection and other federal statutory and state law claims against the Illinois State Police and a number of its employees. In support of their claims, plaintiffs relied on two statistical databases maintained by the Illinois State Police. The first set of data, known as the "citations and warnings" database, contained entries from all traffic stops where an officer issued a citation or warning to a vehicle occupant. Although driver race was not included in this database, plaintiffs' experts estimated the number of Hispanic motorists through an analysis of Spanish surnames provided by the U.S. Census. Plaintiffs also relied on a second database of field reports that usually, but not consistently, were completed when a trooper found contraband, when a custodial arrest was made, when police equipment was damaged or a trooper was injured, or when a canine was used. These reports contained a field for the driver's race.

In reviewing the district court's grant of summary judgment to the defendants on the constitutional claims, the court of appeals first addressed the selective enforcement allegation under the Equal Protection clause. As to the discriminatory effect prong of this claim, the court noted that the plaintiffs could show that they were treated differently from other similarly situated persons by either naming such individuals or through the use of statistics. In the case of Chavez, the court held that the employee of the public defender's office who was following him when he was stopped was a similarly situated person, thus allowing the court to reach the second prong of the Equal Protection claim with respect to Chavez.

However, unlike Chavez, plaintiff Lee relied solely on the statistical databases and his experts' analyses of them to prove discriminatory effect. The court concluded that the statistics were insufficient as a matter of law to support this prong of his Equal Protection claim. To begin with, the databases themselves were flawed. The citations and warnings database contained no information on driver race. Although the number of Hispanic drivers could be estimated by analyzing surnames, no comparable information was available for Blacks and Whites. Thus, even an Hispanic plaintiff could not use this database to prove that he was stopped, searched, or arrested in a manner that differed from similarly situated Whites for which no traffic stop data existed.

The field report database was also flawed according to the court. Because field reports were not systematically completed and because so few stops resulted in a field report being written (less than five percent of stops that resulted in a citation or warning), the court concluded that the field report database did not provide a representative sample of all stops made by the Illinois State Police (Chavez v. Illinois State Police, 2001).

In addition to the flaws in the databases, the court stated that the comparison population benchmarks were unreliable. Plaintiffs used two benchmarks for comparison against the traffic stop data. First was the 1990 U.S. census. In addition to being outdated, the court correctly noted that census population data may not accurately reflect the racial make-up of motorists actually driving on Illinois interstate highways. The court cited with approval the methodology of John Lamberth (1997), who used systematic observation of driver and violator race on the interstates of New Jersey and Maryland in an effort to obtain reliable estimates of the racial composition of the driving public.

In addition to census data, the plaintiff's experts also relied on the Nationwide Personal Transportation Survey for comparison purposes. This survey, conducted at five year intervals by the Federal Highway Administration, contains national and regional estimates of trips taken by persons of various races, as well as the number of miles traveled by these groups. However, because of its relatively small sample size, the survey was not intended to provide accurate state-level information. Thus, the court of appeals dismissed the survey as invalid for the purpose of providing accurate data against which to compare traffic stops made by the State Police on Illinois interstate highways.

Having found that Chavez identified at least one similarly situated person of a different race who was not stopped by the Illinois State Police, thereby satisfying the discriminatory effect prong of his Equal Protection claim, the court of appeals next addressed the second prong of his claim -- discriminatory intent. As to this element, the court also found that the statistical evidence offered by Chavez was insufficient as a matter of law. The court noted that only in limited cases involving jury venires, employment discrimination under Title VII, and legislative redistricting has the Supreme Court accepted the use of

statistics to prove discriminatory intent. Because the Equal Protection claim in this case did not involve one of these allegations, the court held that the statistics, by themselves, could not be used to prove intentional discrimination in the context of a racial profiling suit against the Illinois State Police (Chavez v. Illinois State Police, 2001).

In contrast to the Chavez decision, Anderson v. Cornejo (2002) represents a case where statistics were found sufficient at the summary judgment stage to prove the discriminatory effect prong of a selective enforcement claim brought by African-American women against personnel of the United States Customs Service. Relying on Customs search reports of 102,000 airline passengers searched during 1997 and 1998, a General Accounting Office report found that Black women were the most likely racial and gender combination to be strip searched and were searched at a rate 73 percent higher than the next highest category of persons. The rate at which contraband was found during strip searches was higher for Black women than for White men or women but was substantially lower than for Black men and Hispanics of either gender. Moreover, Black women selected for nonroutine searches were subsequently chosen for strip searches and X-ray searches at a rate greatly disproportionate to their representation of persons in the nonroutine strip search pool.

Based on these statistics, the Eastern District Court for Illinois concluded that the plaintiffs had produced sufficient evidence to show that similarly situated persons of other racial groups had been treated differently by Customs Service inspectors, thus meeting the discriminatory effect prong of their selective enforcement claim. As a result, the court rejected some of the defendants' motions for summary judgment and allowed the case to move forward, recognizing that the plaintiffs would still have to produce evidence of

intentional discrimination at trial in order to fulfill the second prong of the selective enforcement test.

The Anderson case represents one of the few reported decisions where a court allowed an Equal Protection claim to move beyond the summary judgment stage based on statistical evidence of disparities in treatment among racial groups by law enforcement officers. Unlike the plaintiffs in Chavez who searched in vain for adequate statistical evidence to support their claim of racially biased stops, the plaintiffs in Anderson relied on analyses of post-stop search behavior to make out their racial profiling claims. These cases illustrate the difficulty inherent in many racial profiling-type claims – evidence of persons who commit traffic or other violations but who are not stopped is hard to come by and thus many plaintiffs have difficulty proving that the law was not enforced against similarly situated persons. From a statistical standpoint, the discriminatory effect prong of a selective enforcement claim is easier to prove in search-related cases because comparisons can be made among the similarly situated population of persons stopped and subjected to a search.

Conclusion

Using race as the sole criteria for a forcible stop or arrest is illegal under existing federal statutes and court decisions. However, the nation's courts are split on whether law enforcement officers can use race as one factor among others in making a stop. The courts are also divided on whether Equal Protection considerations apply in consensual encounters between police and citizens or in cases where police never contact a citizen. Generally speaking, courts have approved of the police considering race as a physical descriptor (like height, weight, or hair color) when searching for a suspect whose race is known to them. Florida courts have twice held that racial incongruity – a person seemingly out of place with

the racial characteristics of a neighborhood – does not, by itself, provide the police with justification to stop and question that person.

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Chapter 4

Study Methodology

Diverse sources of data requiring multiple methodologies were used to conduct the Miami-Dade Police Department Racial Profiling Study. This chapter is organized to explain and discuss the research strategies employed to collect these data. The overall goal of the project was to collect and analyze data relating to racial profiling.

Specifically, our study was designed to help the Miami-Dade Police Department understand how its officers make discretionary stops. With regard to such stops, we examine the importance of race as a reason to stop or search a citizen. Although we have collected and analyzed an enormous amount of information, these data cannot "prove" that officers are or are not involved in racial profiling. The data can, however, indicate whether or not officers are systematically using race to make decisions to stop and search a citizen by examining disparities in our outcome measures. In addition, we can observe police officers during the process of decision making to determine if race is used inappropriately. Perhaps the most serious challenge to the research team has been to identify a proper denominator or baseline to use as a comparison to the numerator, or information collected with regard to the stops.

Our data collection effort included observations of the police at work and the development of a contact card to be completed by the officers when they became suspicious and stopped a citizen. In addition, we collected information on the crime in unincorporated Miami-Dade County, the demographics of the residents, and detailed information on the officers who stopped the citizens. These data provide us with the ability to understand the officers' actions at various levels. First, we were able to examine, in a very clear way, the

police behavior at selected intersections in the unincorporated areas of the county. This analysis enabled us to use the benchmarks of traffic violators, non-at-fault drivers in two-car crashes, and racial composition of the areas to compare to the stops made by the police. Although this analysis was limited to specific intersections, it provides a clear understanding of who was available to be stopped and who was stopped. Second, we analyzed stop data from all of the unincorporated areas of Miami-Dade County and compared them to an estimate of who was driving in those areas. While these data (numerator) are from the entire county, the baseline (denominator) is an estimate based upon crash data. The strength of this analysis is the coverage of the unincorporated areas of the county but its weakness is the denominator on which the comparison is based. In other words, the first analysis provides a relatively clear picture of selected areas while the second analysis provides a less reliable picture of the whole county because we are only estimating the baseline. The remainder of the chapter reviews the various data collection processes.

Traffic Observation Component

Sampling of Areas

A two-part methodology was used for constructing the sample of neighborhoods to be studied. First, a list of intersections in White, Black and mixed areas of unincorporated Miami-Dade County was compiled by the Police Services Bureau of the Miami-Dade Police Department. These intersections were selected to represent areas of high volume traffic, crash, and service locations in the three types of areas in Miami-Dade County. The selection process was based on the perceptions of officers who were familiar with the patterns of calls for service, the demography of the county, and crime statistics. These areas encompass all eight police districts and include the highest volume crash locations and the Buckle-Up

Florida Campaign seat belt observation locations. As the list included more than thirty intersections, a sample of neighborhoods to be observed was drawn from this list. The final sample of 16 intersections was selected as explained below.

The second part of the methodology is the sampling of traffic observation sites from the list of thirteen intersections in homogeneous neighborhoods and twenty-one intersections in non-homogeneous neighborhoods. The goal was to reduce the overall number of sites but to maintain a racial balance of areas. The police identified three intersections in White neighborhoods and one in a Hispanic neighborhood. These were all included in our sample for observation. The police identified nine intersections in neighborhoods they considered predominately Black and three were selected out of them to match the three in predominately non-Black neighborhoods. The criteria used to choose the three included avoiding intersections that represented the same drivers, avoiding observations of traffic on the largest and most complex highways, such as US1 and State Road 826, and creating the best geographical distribution possible. Nine of the twenty-one intersections in racially mixed neighborhoods were selected based upon the same criteria mentioned above, providing a total of fifteen intersections to observe. After the initial data collection, an additional intersection in a Black neighborhood was added (79th Street and NW 27th Avenue) due to concern expressed in a community meeting that an important Black neighborhood was not included in the study. Our final sample includes the following sixteen intersections. A map of the selected intersections is presented in Appendix A.

	INTERSECTIONS SELECTED
1.	152 Street & SW 112 Avenue
2.	186 Street & NW 57 Avenue
3.	68 Avenue & NW 183 Street
4.	104 Street & SW 137 Avenue
5.	26 Street & SW 127 Avenue
6.	187 Street & NW 67 Avenue
7.	41 Street & NW 107 Avenue
8.	88 Street at Snapper Creek Expressway
9.	152 Street & SW 137 Avenue
10.	88 Street & SW 107 Avenue
11.	72 Street & SW 137 Avenue
12.	79 Avenue & NW 36 Street
13.	119 Street & NW 27 Avenue
14.	36 Street & NW 72 Avenue
15.	167 Street & NE 6 Avenue
16.	79 Street & NW 27 Avenue

Defining the Racial Makeup of the Neighborhoods

Focusing on the neighborhood context is important for at least two reasons. First, it is important to include a variety of neighborhoods so that the research findings are more representative of unincorporated Miami-Dade County. Second, research on police strategies and behavior demonstrates that policing varies according to neighborhood context. Although the police department managers selected the neighborhoods based upon their perception of

racial composition, we conducted our own in-depth demographic analysis of the areas. Four separate criteria were employed to define the racial makeup of the neighborhoods. The first is the characterization of the neighborhood defined by the police department. This is important because it captures the way the police think about the areas. The second and third criteria are the racial distribution in the census block and tract where the intersections are located. These criteria reflect the racial composition of the immediate (block-level) area and general area (tract). It is important to consider that the citizens who reside in the areas are likely to drive through the intersections frequently. However, these data reflect areas that may include contiguous neighborhoods with varying racial compositions. The fourth criterion is our data on the racial composition of drivers observed driving through the intersections. This measure captures the racial makeup of the drivers, which may vary somewhat from the police characterizations or the demographic composition of the residents in the areas.

Our demographic analysis is based in part on the 2000 Census figures. These figures indicate that the Black population in Miami-Dade County is 20.3%. If the Black population were evenly distributed throughout the county, all areas would be 20% Black. Therefore, it makes sense to use this figure as the basis for determining the racial characterization of each area. After a careful analysis of the demographic characteristics of the county and individual areas, we adopted the 10% over-under margin technique to best distinguish areas with significantly distinct racial characteristics from other areas. For our analysis, an area with a *substantial* Black population is one with 30% or more Black residents. Similarly, if the population were distributed evenly, Whites would comprise 80% of all areas. We have defined *predominantly* White areas as those with 90% or more White citizens in the census

tract. Mixed areas have less than 30% Black residents and less than 90% White residents. They are those areas that do not qualify as substantially Black or predominantly White.

One problem in labeling an area arises when there is a difference between the racial proportions of drivers in the intersection when compared to the proportion of residents in the larger census tract that includes the intersection. When there were large differences between these figures, we chose to characterize the area as neither White nor Black, but heterogeneous, on the ground that the area is not sufficiently distinct to be characterized as one or the other. Four sites have these large differences. For example, data collected at 186th Street and 57th Avenue show that 39% of the observed drivers were Black. This figure represents who drives through the intersection. However, the census figure indicates that 18% of the residents in the larger area surrounding the intersection are Black. Therefore, in these areas that have inconsistent racial population indicators, we conservatively characterized the population of the areas as heterogeneous or racially mixed. (See Table 1.)

Traffic Observation Procedures

Each intersection was observed during both a morning and an afternoon shift of four hours each, for a total of eight hours. The days of the observations were varied throughout the week, except Sunday. Originally, the study design called for three shifts per intersection, including day shifts (6am - 2pm), which were to be observed from 7am to 11am to include rush hour traffic, and evening shifts (2pm - 10pm), which were to be observed from 4pm to 8pm, and finally night shifts (10pm - 6am), which were to be observed from 10pm to 2am to avoid the lowest traffic hours. Once data collection began, however, shifts had to be rescheduled and limited to two shifts per day. Reasons for the changes were based on

Table 1. Racial Characteristics of the Neighborhoods

Neighborhoods Sampled	Police Dept. Definition	% Black Residents Block	% Black Residents Tract	% Black Drivers Observed	Designation of Intersection
152 St & SW 112 Ave	Black	52%	56%	53%	b
186 St & NW 57 Ave	Mixed	18%	17%	39%	m*
68 Ave & NW 183 St	Black	22%	24%	28%	m
104 St & SW 137 Ave	White	5%	7%	8%	w
26 St & SW 127 Ave	White	3%	<1%	1%	w
187 St & NW 67 Ave	Black	13%	18%	31%	m*
41 St & NW 107 Ave	Mixed	2%	2%	10%	w
88 St at Snapper Creek Exp	Mixed	1%	1%	7%	w
152 St & SW 137 Ave	Mixed	11%	11%	16%	m
88 St & SW 107 Ave	Mixed	4%	4%	11%	m*
72 St & SW 137 Ave	Mixed	2%	3%	6%	w
79 Ave & NW 36 St	Mixed	5%	3%	14%	m*
119 St & NW 27 Ave	Mixed	83%	68%	55%	b
36 St & NW 72 Ave	Mixed	1%	12%	11%	m
167 St & NE 6 Ave	Mixed	34%	31%	50%	b
79 St & NW 27 Ave	Black	13%	41%	71%	b

* Areas with different racial characterizations are defined above.
Intersection Legend: b= Black, m=Racially Mixed, w=White

darkness and the limited ability to determine drivers' gender and race, especially if car windows were tinted. Consequently, shift times were modified so that day shifts were observed from 9am – 1pm and evening shifts observed from 4pm to 8pm. Night shifts were simply eliminated, as reliable data collection on the race of the driver was impossible.

In order to prepare for traffic observations, interns were solicited and hired through the Miami-Dade County Police Department. Applicants were required to be full-time students at local colleges or universities. Fifty-seven applications were screened using a personal history questionnaire, a computerized background check, a physical exam, a drug test, and a personal interview. Thirteen applicants did not qualify for the position. One had a misdemeanor prostitution arrest, two lied during the interview, and one failed the drug screen. Nine more were not qualified for a variety of other reasons. Twenty-three applicants declined the position or did not complete fully the application. Thirty-one of the applicants were hired: thirteen females and nineteen males; eighteen White and fourteen Blacks (ten of whom were Hispanic). One of the Interns was terminated as she fell asleep while conducting a ride-along with an officer.

Before beginning observations, the Interns attended a training session at which time each was briefed on the purpose of the study, the tasks that were expected and how to complete them. Additionally, an officer from the Miami-Dade Police Department, who was a certified trainer on traffic radar, instructed them on the proper usage and handling of radar guns. After a thorough discussion and demonstration on how to use properly the radar gun, each intern was involved in simulation training. The training officer monitored each intern to ensure the proper use of the radar gun and interpretation of the output. Once this training session was complete, approved interns were authorized to begin traffic observations.

Six interns were assigned to work under a supervisor during each shift. All observers were expected to arrive at the designated intersection before the start of data collection. Once on the scene, they were briefed on their specific assignments for the observation period from the supervisor. Supervisors were instructed to provide five-minute breaks each hour on the hour and to rotate assignments within a shift so that observers were not working only one task for the entire four-hours of the observation.

The goals of the traffic observation protocol were to: 1) obtain a sample of all drivers at each intersection by race and gender, 2) record the race and gender of all speeders, defined as anyone exceeding the speed limit by at least five miles per hour, and 3) record the race and gender of drivers running red lights or making illegal turns at the controlled intersection. Two people were assigned to each data collection task. One person was expected to observe and call out the race and gender of the relevant driver, while the other recorded this information on forms that were distributed on clipboards at the start of each traffic observation.

Because of the difficulty in visually determining ethnic differences, we limited the observations to Black and non-Black. In Miami-Dade County, Hispanics comprise approximately 40 percent of the residential population. Previous research has shown that making determinations about ethnicity in observational settings is highly inaccurate (Bean & Tienda, 1987; Itzigsohn, 1998; Denton & Massey, 1989, and Bureau of Justice Statistics, 2003). These inaccuracies would be compounded in the present study, which required observation of drivers seated in automobiles moving through traffic. As a result, our observers were trained to observe skin color and record driver race in a simple dichotomy:

Black or non-Black. When the driver's race or gender was not obvious, observers were instructed to code the driver's race as "unknown."

To complete the first data collection task, two observers were positioned to collect baseline data. These observers recorded the race and gender of every driver who passed on the road. This site was positioned on the same side of the road as the observer with the radar gun to observe the same traffic flow. Observers were instructed to code data on all traffic. However, when the flow of traffic was too heavy to obtain accurate observations, the observers were instructed to focus only on the two fastest lanes of traffic. When the flow subsided, they resumed normal observation procedures. The observers coded four race-gender categories (Black males, Black females, non-Black males, non-Black females). There was only 1.7% (1,585) of the 93,251 observed drivers categorized as "race unknown" by the observers. In some instances, drivers were going too fast, had tinted side windows or it was impossible to see if the driver were White or Black. The ability to determine the race of the violator was a more difficult task, because of speed and location of car when a traffic violation was observed. There were 793 (6.1%) violators whose race could not be determined.

A secondary data collection site was located several blocks from each intersection to observe the traffic before it slowed down for the intersection. At this site, one observer would operate the radar gun while the other observed the gender and race of any driver who was speeding. Speeding was defined as any speed equal to or greater than five miles above the marked speed limit. When two or more cars were speeding, the radar gun selected the fastest car automatically. Observers were trained to identify the fastest moving car.

Finally, two observers were positioned at the intersection, and were instructed to report either of two violations: 1) drivers who went through a red light, and 2) drivers who made an illegal turn at the intersection. Illegal turns included turning from a non-turning lane, making a U-turn at intersections where such turns are prohibited, or turning without yielding to oncoming traffic. Standard criteria used to determine what constitutes a violation were distributed to each observer on his or her first day of observing. Only the most obvious violations were to be recorded, thus eliminating the inclusion of debatable violations, which may not actually qualify as infractions of the law or be serious enough to be issued a ticket by the police.

The final part of the methodology involved compiling an official record of all stops made by Miami-Dade Police patrol officers during the time period from August to November 2001 at or near the observed intersections. This record included a breakdown of all citizens stopped by race, gender and type of violation and allowed comparisons between the number of stops and the number of violators observed at the observation sites. Only the three types of violations that were observed (running a red light, illegal turns, and speeding) were analyzed from the intersection stop data.

Ride-Along Component

The ride-along component of the study was conducted to provide awareness and understanding of what police officers see as they patrol, and how they respond and react to those observations. We were specifically concerned with the ability of officers to determine the race of drivers or pedestrians about whom they become suspicious and stop. In addition to documenting race, observers also noted other actions the officers took and asked for the reasons that motivated those actions.

Sampling

Observers participated in 51 tours with officers that took place in all 8 districts. Each district was divided into shifts, using a model that approximated 60 percent on the afternoon shift, 20 percent on the midnight shift, and 20 percent on the day shift. The shifts were further broken down by day of the week so that afternoon and midnight shifts were observed on Friday and Saturday and day shifts were observed Monday through Thursday. Ten of the observations occurred in predominately White neighborhoods, 10 in predominately Black neighborhoods, 10 in predominately Hispanic neighborhoods, and 21 in racially mixed neighborhoods, giving us a grand total of 51 observations throughout the unincorporated areas of Miami-Dade County.

To ensure a representative selection of officers within each shift, the third officer on the shift list was chosen. The shift lists were made up in advance based upon permanent criteria (e.g. seniority) and could not be manipulated to select the best or most racially sensitive officers for observation. Ride-along observations were scheduled for a four-hour initial observation, when the observer would concentrate on building trust and rapport with the officer, in addition to filling out a general non-threatening officer background form. Then, a full eight-hour shift was observed at which time, the interview forms were completed.

Reliability and Validity of Ride-Along Data

An important question raised concerning the validity of the ride-along data is the potential for officer behavior to be affected once officers learn that the study would be assessing racial profiling among officers. Racial profiling had become a national issue during the startup of the research study, Miami-Dade County had passed an ordinance making racial

profiling by the police illegal, and the police department had a clear and well-articulated policy prohibiting racial profiling. We expected that the social climate surrounding the racial profiling issue at the beginning of the study would make it more difficult to obtain representative observations of officer behavior. Officers knew of the study and expressed interest in our objectives. Further, officers referred to the study as the "racial profiling study," to our interviewers as the "racial profiling people," and made jokes among themselves accusing each other of being guilty of racial profiling. For example, one female interviewer was having lunch with the officer she was observing when several other officers joined them. One officer asked who the observer was and was told, "She's the racial profiling lady." The officers then began to joke with each other, with one officer pointing to a Black officer and saying "You're Black, maybe I'll arrest you." Then they all laughed together.

While there is no way to counter completely this type of obtrusiveness on the study subjects, we trained the observers to spend considerable time and effort in building rapport with the officers and to insure them of the confidentiality of our observations. Our assessment of the validity of the observations is that any officers who engage in overt and blatant racial profiling would not display such behavior while being observed, and a few officers appeared to be a little apprehensive about the interviewers throughout the observation period and never really opened up to them. However, many officers became comfortable with the observers after the first day and seemed to trust the promise of confidentiality. These officers were interested in telling the observers their views on forming suspicion, and how they "see things that untrained and inexperienced civilians don't see." One officer admitted that, "sure I will stop a Black youth driving a cut-down Cadillac in Miami Lakes. But, I'll also stop a White middle class person driving a nice car through a

Black neighborhood, because I figure they are there either for sex or drugs." Another officer said, "let's go make some traffic stops." Then he drove to a nearby Black working-class neighborhood and began observing traffic from a special hidden spot. When asked why he chose this particular location, he replied that he always went into this neighborhood to make traffic stops because there were a lot of drug sales going on and sometimes he was able to make drug arrests.

One particular problem we were concerned about was that officers might engage in a work slow down to avoid being observed. In fact, assessments of the number of stops that officers make on a typical day, which were estimated by administrators, seemed higher than the number of stops made during our observations. To determine if there was, in fact, a work slow down, we selected a sample of officers (N=9 of 51 officers observed) to verify their pattern of stops before and after the observation period. Every officer has to complete a worksheet (Daily Activity Report) that includes notations of all the stops the officer made during each shift. We calculated the number of stops made by each officer during the period including ten days prior and ten days following our observation. This gives us an idea of the normal pattern of stops made by the officers before and after the observation which will help us determine if there was any work slowdown during the observations. The results of this examination indicate that there was no work slow down (see Table 2).

The daily average number of stops made by the officers prior to and after the ride-along observation is very similar to the number of stops made by the officer during the observation. Comparisons of the combined before and after averages with the number of stops made during the observations indicate that there was no consistent pattern of work slow down, only natural day to day variations. For example, more than half of the officers

Table 2. Stops Made by Ride-Along Officers Before, After, and During Observation with Difference Scores

Officer	Average Stops Per Day - Prior	Average Stops Per Day - After	Average Stops Per Day - Total	Stops During Observation	Total/Obsv. Difference
#1	2.00	3.00	2.17	4.00	1.83
#2	3.25	1.71	2.27	1.00	-1.27
#3	1.00	1.67	1.36	1.00	-0.36
#4	1.17	3.13	2.29	2.00	-0.29
#5	2.43	2.57	2.50	4.00	1.50
#6	2.00	3.00	2.67	3.00	0.33
#7	4.83	3.17	4.00	3.00	-1.00
#8	1.80	1.57	1.67	2.00	0.33
#9	2.00	0.80	1.25	2.00	0.75

included in the verification process had differences less than one stop, and differences ranged from a minus one to plus 1.83.

More than half of the officers had averages that differed by less than one stop. Further, five of the officers included in the verification made more stops while being observed than before and after the observation. Four of the observed officers made fewer stops while being observed when compared to stops made prior to and after the observation, but the differences were small.

Crash Data Analysis

These eleven sites included four predominantly non-Black, four mixed and three substantially Black areas in unincorporated Miami-Dade County. For this analysis, the race of the not-at-fault driver in two car crashes was recorded. Overall, four hundred and three crash records were reviewed. Seventy-eight percent (316) of the crash victims were non-Black and 22% (87) of the victims were Black drivers.

Tables 3 and 4 present the data on crashes and drivers in the different area types and among Blacks and non-Blacks respectively. As can be seen from these data, Black crash victims are represented in the three types of areas but at significantly different rates. For example, in substantially Black areas, 55.3 percent of the victims were Black, while in predominantly non-Black and mixed areas, Black drivers made up 5.8 percent and 14.1 percent of the victims respectively. When these data are compared to the proportion of Black drivers observed across the three area types, the ratios are remarkably similar. For example, 7.4 percent of the drivers observed in predominantly non-Black areas were Black, while 5.8 percent of the crash victims were Black. In racially-mixed areas, Black drivers represented 12.9 percent of all drivers and 14.1 percent of crash victims. Finally, 54.6 percent of drivers observed in substantially Black areas were Black, which compares favorably with the 55.3 percent of crash victims in Black areas. The percentage point difference across drivers and crash victims in predominantly non-Black areas is only 1.6 percent, while the comparable estimates in mixed and substantially Black neighborhoods are 1.2 percent and .69 percent respectively.

Among non-Black drivers, similarly substantive conclusions are reached. For example, the data in Table 4 show that in predominantly non-Black areas, 94.2 percent of the

crash victims were non-Black. In mixed areas 85.9 percent of the victims were non-Black, while in substantially Black neighborhoods 44.7 percent of the victims were non-Black. When these estimates are compared to the proportion of non-Black drivers observed across the three neighborhoods, the figures are very similar. For example, non-Blacks comprised 92.6 percent of all drivers observed in predominantly non-Black areas and 94.2 percent of crash victims in these areas. Of all drivers observed in racially-mixed areas, 87.1 percent were non-Black, while 85.9 percent of crash victims were non-Black in racially-mixed neighborhoods. In substantially Black neighborhoods, the difference between the percentage of non-Black drivers observed and non-Black crash victims was only .69 percent. Taken together, the data on non-Black drivers and crash victims is remarkably similar across the three types of neighborhoods which supports the accuracy of using crash data in estimating the driving population.

Table 3. Differences Between Percent Black Drivers and Percent Black Crash Victims By Area Type

Areas Sampled	**% Black Drivers Observed**	**% Black Crash Victims**	**Percentage Point Difference**
Predominately White	(1,231/16,558) 7.43%	(6/103) 5.8%	1.6%
Substantial Black Pop.	(12,366/22,636) 54.6%	(52/94) 55.3%	.69%
Racially Mixed	(33,40/25,831) 12.93%	(29/206) 14.1%	1.15%

Table 4. Differences Between Percent non-Black Drivers and Percent non-Black Crash Victims By Area Type

Areas Sampled	% Non-Black Drivers Observed	% Non-Black Crash Victims	Percentage Point Difference
Predominately White	(15,327/16,558) 92.57%	(97/103) 94.17%	1.6%
Substantial Black	(10,270/22,636) 45.37%	(42/94) 44.68%	.69%
Racially Mixed	(22,491/25,831) 87.07%	(177/206) 85.92%	1.15%

Citizen Contact Card Data Collection

Understanding the actions of the police, while interacting with citizens or Engaging in other activities, requires complete and comprehensive information. For example, to understand whether police officers stop Black citizens for traffic infractions more often than White or Hispanic citizens, information on all stops, and not a subset of stops that only result in tickets will be necessary. Many police departments maintain records of only those stops that result in tickets or written warnings and therefore lose information on all the other stops where officers issue verbal warnings or take other action. The Miami-Dade Police Department does not use warning tickets and does not maintain written documentation of all stops made by officers. Department policy does require that officers notify dispatch with a “Signal 19" radio call when making a stop. While the number of “Signal 19" calls would indicate the number of stops, no further information is captured about the stop. In order to

create a record of all vehicular stops, including who was stopped, where the stop was made, and what occurred after the stop, a new form for officers to complete had to be created.

An Advisory Board composed of community leaders and criminal justice professionals was created by the County Commission. The research team with strong guidance from this Board developed a list of data elements that would be necessary to collect in order to understand the decisions and actions of the police officers who were stopping citizens. The research team and Advisory Board were able to review other data collection instruments and protocols to guide these decisions. Concerning the question of racial profiling of drivers, two major issues must be considered: first, who is stopped, and second, what is the outcome of the stop. Regarding the stop, it is the *decision* to make a stop that is important, and by not including all stops the data could be systematically excluding stops of racial minorities generally and Blacks specifically. Data on selected stops, including those who were not issued tickets, could represent citizens who should not have been stopped. In other words, this group may represent citizens for whom there was no legal justification for the police to conduct a stop. Regarding post-stop activities, the rate at which groups of people who are stopped receive warnings, tickets, are searched, or arrested, are important activities to measure and explain.

Conceptually, the two issues of stops and post-stop actions are different. It may be methodologically sound to collect only information on the color of the person stopped, as officers may not be able to observe more than the color of the persons in the car. However, once the car is stopped and the officer has approached and spoken to the driver, information on the *perceived* ethnicity of the driver (and passengers) may become more apparent. As an officer contacts the driver, he or she may be able to determine the person's ethnicity by the

surname, accent, facial characteristics, bumper stickers, or some combination of the listed or other unlisted characteristics. For example, if an officer believes the person he is stopping is Black and approaches the driver only to hear him speak with a Hispanic accent and notices a Hispanic newspaper in the car, he may realize the person is Hispanic. Although the original impression was that he was stopping a Black, the officer may observe information to make him consider the person as Hispanic. At this point, ethnic differences can be recorded in the data, whereas these differences may not have been possible to determine before the stop was made. Therefore, the ethnicity of the citizen after the stop becomes more important than before the stop is made.

After a series of meetings, a Citizen Contact Card was developed for testing in the field. On February 12, 2001, police officers began completing the cards. In June 2001, minor changes were made on the Citizen Contact Card and version two was put into the field. One month later, a few more minor revisions were made to the card and version three was put into the field in July 2001. The third version was used until the end of the data collection period on November 1, 2001 (the final version is included in Appendix B**).** In total, the Miami-Dade officers completed 86,232 cards. Because the cards were new and unfamiliar to the officers, and new forms take a while to become a habit for the officers to complete, those that were completed during the months of February and March were not used in the analysis. Cards that were completed on April 1 through October 31 were sent to police headquarters where Miami-Dade County employees entered the data by hand into a computer file.

The entry of the data was checked for accuracy and cards were returned to officers to complete when missing or inappropriate data were included. Police commanders then used a random set of official arrest forms that corresponded to the cards to compare with the

computer-generated data. Several inconsistencies were found between the two sets of information, and in order to account for the inconsistencies, the police department decided to collect all the official forms completed by the officers that corresponded to the contact cards and re-verify the data set from the official police records. The Citizen Contact Cards and corresponding official agency forms were reviewed and the information was entered onto a new computer file. Although this process took more time than allotted in the research design, and was not completed until December 2003, the end result is a pristine data set that represents accurately the information provided by the police officers and entered by the county employees. The Miami-Dade Police Department officials were able to locate and enter proper information for all but 118 cards that were prepared by 11 officers. The only exception is the arrest data, which had a significant amount of missing information. Our analysis included 66,109 citizen contact cards that were collected from April 1, 2001 through October 31, 2001.

Validity Checks

Four checks were performed to determine if the data were valid. A workload analysis was conducted to determine if the number of traffic tickets issued by officers changed during the study period. An analysis of Signal 19 radio calls was conducted to ascertain whether the number of stops was consistent with the number of calls. Information on the citizen contact cards was checked to find out if the officers were reporting correctly the race of the drivers they stopped. Officers who stopped Black drivers disproportionately had their contact cards compared to other officers' cards to determine if the stops of Black drivers were proportionate.

Tickets

First, the workload was checked by comparing the number of traffic tickets that were issued in 2000 prior to the study to tickets issued in 2001 during the study period. The comparisons were made between years, between the specific data-collection months during the prior year and study year, and between traffic and criminal violations. Interestingly, there was a 9% decrease in the total tickets issued in 2000 and 2001. The difference was the same for traffic and criminal citations. An analysis of the monthly changes shows several months with increases and several with larger decreases. This pattern is similar to previous years and there is no reason to believe that major differences were attributable to the study. Importantly, the first month of card testing (February) showed a decrease in tickets but the second month (March) returned to a normal flow of tickets. In May, for example, there was an increase in tickets from the previous year.

Signal 19 Radio Calls

Second, the number of Signal 19 calls by officers was compared before and during the study dates. The data show that the number of calls corresponds very closely to the number of tickets issued before and during the study. There was an overall 9% decrease from the previous year to the study period, but the numbers of calls and tickets are proportionate. Just as the monthly ratio of tickets varied from more to less during the comparison period, so did the number signal 19 calls.

Further, a comparison of Signal 19 calls and Citizen Contact Cards for the months of April through August 2001 shows that 49,585 cards were submitted and 46,485 signal 19 calls

were made during that period. The difference of 3100 (6%) indicates a minor discrepancy between the numbered calls and cards.

Picture Checks

Third, a random sample of 30 badge numbers was drawn from the population of officers who wrote contact cards. Once the badge numbers were identified, a random sample of card numbers was drawn from each badge number. All the cards were used for those officers who issued less than five cards. Cards were randomly sampled for those officers who issued more than five cards. The sampling procedure involved the selection of five cards for each badge number. In other words, if an officer issued 100 cards, every 20th card was selected. If an officer issued 20 cards, every 4th card was selected.

The cards' numbers were used to create a list of names and license numbers. The names and license numbers were used to retrieve the color digital pictures from the vehicle operators' driver's licenses. Ninety-seven names were provided with a useable set of seventy-one pictures. Three cards were issued to out-of-state residents, sixteen names were not located in the data base, and seven did not have photographs available.

The available pictures were compared to the race and gender indicated on the citizen contact cards by a panel of citizens and members of the Advisory Board. Most of the cards indicated that the officers were filling out the forms properly and the racial and ethnic information was being entered properly onto the computer. However, there were two obvious discrepancies in the pictures that were reviewed. First, one Black citizen was coded as White and one female was coded as male (by different officers).

All data from the discrepant cards as well as all others completed by the two officers were checked to see if the cards were properly completed and coded. A check of the original

cards showed that they had been key punched correctly. The contact cards that were completed by the officers who incorrectly identified the race and gender of the driver were checked for further errors. In all, forty-five additional cards were checked against the driver's license picture to make sure no other errors were made.

Officers who Disproportionately Stopped Black Motorists

Although not a validity check, we analyzed the rate of stops and searches of Black suspects for all officers and isolated those officers who stopped Blacks disproportionately. We selected for further review the top 50 officers who stopped and searched Blacks most often compared to their total stops and searches. An analysis of the badge numbers showed that 67 officers stopped and searched Black suspects at a disproportionate rate compared to other officers.

Out of the 67 badge numbers, we were able to identify 59 that were useable. Eight of the badge numbers were duplicates or not on the Miami-Dade Personnel Profile System (PPS). Twenty of the officers were Black and twenty-two of the officers patrolled in predominately Black neighborhoods (30% or greater Black population in the Census tract data). Sixteen officers were eliminated because they were assigned to a district-wide area in a relief or a specialized position. These officers were assigned to different areas within the district at different times and days. Most of these officers were assigned to Neighborhood Policing Units and were often assigned to predominately Black neighborhoods. One White officer out of the original group had stopped Black suspects at a disproportionate rate. This officer was assigned in the Miami Lakes area.

Geographic Information System Analysis

Several data sets were merged into spatial and statistical software packages for the purposes of understanding the social context of the Miami-Dade County police department's activities. The police department provided data on relevant officer activities from the Citizen Contact Cards, crime data, personnel files, and the records maintained by at the Professional Compliance Bureau. This information was merged with the 2000 census data that was provided by the County and U.S. Census Bureau. The following describes each data set used in the geographic analysis.

Crime Data

The crime data files included Part I and Part II Uniform Crime Report (UCR) arrest data for four and one-half years (1997-2000 and the first six months of 2001). There were 121,763 cases in this file, which contained the incident date; UCR code; UCR description; incident details such as race, age and gender; address of incident; police district and police grid information; and census tract identifier. From these data, race-specific and total crime rates per 10,000 persons based on the 1997 - 2000 arrest data were computed. Rates for violent and property crimes, drug crimes, and total crimes were computed.

Census Data

The 2000 census information was obtained from the U.S. Bureau of Census web page (www.factfinder.census.gov) and Miami-Dade County. The data were used to compute various social, economic, and demographic indicators, many of which were race and ethnic specific.

Citizen Contact Data

The data from the Citizen Contact Cards containing 66,109 contacts were merged with the other information. The incident dates range from 4/01/01 to 10/31/01 and all three cards were represented in these data. The addresses for each of the incidents and home address of the citizen were included on the file and the match rate was 93.4% (or mismatch rate of 6.6%).

Officer Data

Demographic data on the 1659 officers in the citizen contact database were provided. The types of data included: officer race, age, rank, data hired, sex, employment status, among others.

Professional Compliance Bureau Data

Professional Compliance Bureau data included information on complaints, disciplinary actions, and use of force reports during the last five years (1997- 2002). These data on the officers cover the same time period as the arrest statistics. Seven hundred thirty-four officers in the Contact Card data base had records in the Professional Compliance Bureau.

All the data were merged together to create one comprehensive file. All identifiers (citizen and officer) were removed. This file was used in the spatial and statistical analysis, which is described below.

Spatial Analysis Using Global Information Systems (Arcview)

Using GIS/ARCVIEW, the street network data were merged with the U.S. Census tract-level data to spatially define and model all incidents in Miami-Dade County. GIS/ARCVIEW is an integrative software package that accepts data from multiple sources--local area maps, digital products, text data (police reports), and tabular data such as census data. This software

package is designed to produce spatial information on the location and characteristics of the incidents within the selected area. The software is designed to estimate: 1) the proximity of the incident to various locations within a given area; 2) the size or parameters of the area in which the incidents occur (census tract, street, city block, etc.); and 3) the proximity of the events to various tract level characteristics (e.g., racial, economic and social characteristics).

Limitations of the Research

All social science research has limitations. In the present study, we relied on several data sets to compute our findings. Although we have conducted multiple validity checks and audits on the stop data, and have a high level of confidence in the information we collected, there remain inherent limits to the study of racial profiling. For example, the officers completed the information from the citizen contact cards we designed. There is always the possibility that officers checked the wrong box inadvertently, left out important information, or purposely provided false information. In order to insure the most reliable data, we compared the information on the contact cards with that provided on the official police documents, conducted a validity check and audit of the race information provided, and checked the computer data with the original citizen contact cards several times. Our conclusion is that the computerized data reflect a very accurate reproduction of the information provided to us by the officers.

Benchmarking

Perhaps the most serious challenge to researchers engaged in studies of racial profiling is determining a baseline, benchmark, or some measure against which to compare the actions of the police. In many of the earlier studies, census data were used as a baseline measure from which rates of stops by racial groups were computed. Although these data are free and readily

available, they do not provide an accurate measure of those available to be stopped on the roadways. Census data are static and reflect the residents in a given area; they are not fluid and do not report those who drive through the area. For example, a recent report shows that the commuter traffic between Miami-Dade County and other areas represents more than 20% of the population (Henderson, 2003). Therefore, the use of the census figures for a baseline of traffic would likely result in an incorrect rate of drivers in a specific area. In recent years, researchers have abandoned the exclusive use of census data as a baseline because they do not accurately represent the driving population. In the present study, the use of the census was initiated because it was the standard measure in profiling research when the study began. In 2001, as more became known about its limitations, the use of census as a benchmark was discontinued in the present study. Because of these measurement concerns, we observed traffic patterns at specific intersections and used crash data to determine the baseline of drivers.

Identifying Hispanic Drivers

Another serious limitation in research of this type is the accurate identification of ethnic differences among drivers. As we noted above, it is uncomplicated to distinguish between a Black and White person in a moving car because the observer is looking for a color difference rather than an ethnic difference. Clearly, this difference in color has come to be regarded as a root cause of stereotypes directed at Blacks (Bobo and Massagli 2001 and Feagin, 1991).

Even in situations where drivers are stopped and observers have an opportunity to see them clearly, it is highly unlikely that an observer can distinguish an “Hispanic” from a member of another ethnic group. To make this type of identification on a person driving by an

observer at varying speeds is virtually impossible. In either case, such a designation is an exercise that is fraught with problems of imprecision and raises serious issues related to measurement validity and reliability. Although this is a measurement limitation, it doesn't detract from our ability to assess the officers' power of observation, as they experience the same limitation. Further, when this limitation exists, as it does with Cuban-Americans, it makes it difficult or impossible for officers to use race inappropriately when making a decision to stop a citizen.

As we mentioned above, Hispanics are often difficult to identify by both "insiders and outsiders" (Itzigsohn 1998; Bean and Tienda 1987). The failure of Hispanics in recent experimental psychological research to be able to "pick out" fellow co-ethnics in public places shows the significant problems any observer would have identifying a Hispanic driver (see Massey and Denton 1992).

The term "Hispanic" is a designation of the United States Census Bureau and encompasses individuals from across Latin America, the Caribbean, and even the United States (e.g. Puerto Rico). The diverse backgrounds, cultures, histories, and genetic stocks of those who comprise this ethnic category in the United States have produced a group which exhibits considerable variation in their language and appearance. Recent evidence of increasingly high rates of inter-marriage between Hispanics and Whites in major metropolitan areas is evidence that physical distinctiveness will be further diluted in generations to come (see Farley 1996).

The Bureau of Justice Statistics recently conducted a study to determine the inter-rater reliability of the identification of Hispanics at Border Patrol checkpoints and in airports (Bureau of Justice Statistics, 2003). At these checkpoints, the observers agreed

approximately 50% of the time on whether or not someone was Hispanic. In the vast majority of the disagreements, the observers thought the person was White. The observers agreed approximately 78% of the time on whether someone was White and 68% of the time on whether someone was Black.

The ability of observers to observe and document Hispanic drivers accurately has never been validated. Overall, the weight and findings from social research lead to an inescapable conclusion that attempts to conduct systematic or "scientific" observation research on the Hispanic population is problematic and should not be attempted until higher levels of interrater reliability can be achieved. However, this problem of identifying the Hispanic drivers extends to police officers and makes the profiling of Hispanics before stops difficult or impossible

Observations

Our observers were trained and tested on their ability to determine the race and gender of drivers. They were also trained to determine specific traffic violations. Those who used the radar guns were trained and tested on their use. We are confident that the observations made and recorded were appropriate and valid. That said, it is important to understand that the observations were made at sites selected for high volumes of traffic and crashes and not as a random or representative sample of intersections in unincorporated Miami-Dade County. These intersections were not nested in residential areas or on the back streets in business districts. They were major intersections, selected for their characteristics. Likewise, the observations were made at times and days that would present a high volume of traffic. It could be argued that traffic patterns for different racial groups differ by type of roadway, or time of day or night. However, it is likely that these intersections provide a good

distribution of the places that are patrolled consistently by the police and where most enforcement of traffic laws occurs. In any case, while we are convinced that these data represent accurate counts of traffic by race, gender, and behavior at the time and place the data were collected, there can be no claim of a random or representative sampling of places or times.

Racial Profiling Methodology

Our effort remains the one of the most comprehensive and sophisticated attempts to study the actions of the police involved in traffic stops of citizens. We have taken every precaution possible in the design and implementation of data collection. We have learned from the mistakes, oversight and shortcomings of studies that were conducted prior to ours. However, the study of racial profiling is fluid, and others will undoubtedly learn from our approach and improve upon our measures. While we are comfortable and confident that we have done everything possible to conduct the study using the highest standards of social science research, there are limitations in the data that may affect the accuracy and generalizability of our findings and conclusions.

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CHAPTER 4

APPENDIX A

Map of Observation Sites

Carol City
Palm Springs North
North Miami Beach
NW 167th St
NE 159th St
Ludlam Rd
NW 37th Ave
Hoy Ln
Miami Lakes
Opa-Locka
Opa Locka Airport
North Miami
The Everglades
W 68th St
Biscayne Park
Hialeah Gardens
Silver Blue Lake
NW 2nd Ave
NE 2nd Ave
Medley
Twin Lakes
Miami Shores
Hialeah
Lake Arcola
El Portal
NW 32nd Ave
E 9th St
Miami Springs
NW 54th St
N Miami Ave
MIAMI-DADE
Doral Blvd
Doral Park
NW 25th St
Virginia Gardens
Palmer Lake
Miami
Miami International Airport
NW 14th St
FLORIDA
NW 7th St
Sweetwater
West Miami
Westchester
Coral Way
S Douglas Rd
Coral Gables
SW 157th Ave
Bird Rd
SW 127th Ave
Westwood Lake
Lake Catalina
Coral Lake
SW 56th St
South Miami
Kendall
Key Biscayne
Kendall Lakes
N Kendall Dr
Old Cutler Rd
SW 104th St
Killian Dr
Pinecrest
Biscayne Bay
Chapman Field Dr
Lindgren Rd
SW 97th Ave
SW 136th St
SW 144th St
Richmond Heights
Biscayne National Park
Perrine
Richmond Dr
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CHAPTER 4

APPENDIX B

Citizen Contact Card

MIAMI-DADE POLICE DEPARTMENT

CITIZEN CONTACT CARD

Date (MM/DD/CCYY) / /	Time (24 HRS)	Off Duty ☐ Yes
Driver's Last Name: (as it appears on license)	First	MI:

House Number	Direction	Street Name	Street Type 1	Street Type 2	Sec. Dir.

City:	State/Country:	Zip Code:

Driver License Number:	State:	DOB (MM/DD/CCYY) / /	Race:	Hispanic ☐ Yes ☐ No	Sex:

Intersection:	Direction:	Street Name	Street Type 1	Street Type 2	Sec. Dir.
First Street					
Second Street	Direction:	Street Name	Street Type 1	Street Type 2	Sec. Dir.
House Number	Direction	Street Name	Street Type 1	Street Type 2	Sec. Dir.

Veh. Year	Veh. Make	Veh. Model	Color	Tag	State	Year

Primary Reason for Stop: *(Check Only One)*
☐ Equipment Violation ☐ Hazardous Moving Violation
☐ Investigative ☐ Non-Hazardous Moving Violation
☐ BOLO ☐ Traffic Detail
☐ Other: (Specify) _____

Searches: *(Check All That Apply)*
Search Conducted: ☐ of Driver ☐ of Vehicle ☐ of Passenger(s)
☐ Pat Down Consent Search Requested: ☐ Yes ☐ No
Duration of Search(es) *(in minutes)*: _____
☐ Other (Specify): _____

Reason for Searches: *(Check All That Apply)*
☐ Search Made by Consent ☐ Inventory Search
☐ Incident to Arrest ☐ Probable Cause
☐ Other: (Specify) _____

Items Found: *(Check All That Apply)*
☐ Instrumentalities of Crime ☐ Fruits of Crime
Contraband: ☐ Drugs and/or Paraphernalia ☐ Weapons
☐ Other: (Specify) _____
Plain View: ☐ Yes ☐ No

Disposition of Stop: *(Check All That Apply)*
☐ Citation Issued Primary Citation # _____
☐ Custody Arrest Number of Citations _____
☐ Verbal Warning ☐ Field Interview Card ☐ PTA
☐ Vehicle Towed
Records Check Conducted: ☐ Of Person ☐ Of Vehicle
Case # (If Applicable) _____

Comments:

Officer's Name/Rank (Print): Badge: Unit Number:

OFFICER'S COPY

Chapter 5

Traffic Observation Component

Introduction

As discussed in the Methods chapter, a complex procedure was used for constructing the sample of intersections to be included in the study. These intersections were located in all eight police districts and include the highest volume crash locations and the Buckle-Up Florida Campaign seat belt observation locations. The selected intersections represent high volume intersections where a large proportion of stops and ticketing takes place, and where the police target patrols because of the high volume of crashes. As such, they do not represent all of the roads in Miami-Dade County. An elaborate process involving several criteria was used to determine the racial characterization of neighborhoods surrounding the sixteen selected intersections. This process defined Black, White, and racially mixed neighborhood types. Each intersection was observed for eight hours. Observers were positioned to collect information on the gender, race, speed, and traffic violations committed by the drivers**.**

The purpose of this chapter is to present the findings from the analyses of the traffic observation data. The first analysis includes all areas observed and the second analysis is by type of area (White, Black, and mixed). The analyses involve two principal comparisons among three different rates. The **driving rate** was obtained by observing the traffic. The **violation rate** was determined during the same observations, but involved observers recording three different types of traffic violations (speeding, running a red light, and illegal turns) and by recording the race and gender of the driver.

The source of information for the **stop rate** was police officers filling out contact cards each time they stopped a vehicle. They recorded information regarding the stop and the race and gender of the driver. The **first comparison** was made between the various violation rates of groups and their proportions in the driving sample to determine if a group violates more or less than their driving rate. The **second comparison** was between the various stop rates of groups and the rates of violation to determine if police stop rates are more or less than the group's violation rate.

These measures and comparisons can be understood by the following diagram:

Sample of Drivers

Sample of Violators

Sample of Stops

The two comparisons were based on sample proportions. We calculated a series of Difference of Proportions Tests to determine whether the compared proportions were significantly different from each other. These test results provide a way of determining the level of confidence we can attach to the differences. The higher the level of significance of the tests, the greater degree of confidence we have that the comparisons were substantially different. If no differences existed, it would indicate that the police were stopping citizens proportionate to their violation rate. If

the differences were significant, this would indicate that the police were stopping citizens at a rate disproportionate to their rate of violation.

The significance tests were calculated using the following formula devised specifically for testing differences between proportions (Levin & Fox, 2000:233.)

$$P_1 = \frac{f_1}{N_1} \quad P_2 = \frac{f_2}{N_2} \qquad\qquad P^* = \frac{N_1 P_1 + N_2 P_2}{N_1 + N_2}$$

$$S_{P_1 - P_2} = \sqrt{P^*(1 - P^*)\frac{N_1 + N_2}{N_1 N_2}} \qquad\qquad z = \frac{P_1 - P_2}{S_{P_1 - P_2}}$$

<u>Combined Data</u>

There were 93,251 observed drivers. These drivers included 41,129 White males (44%), 28,074 White females (30%), 13,302 Black males (14%) and 10,746 Black females (12%). More than 12,000 violations were observed and 535 stops were made by the police in the observed locations. The remainder of this chapter explains the relationships among those observed, those who violated the traffic laws and those who were stopped by the police. Our emphasis is on the race and gender of the driver. It is difficult to understand the information presented in the tables without comparing the figures between tables. Therefore, our explanation will include the information in each table as well as the relationships among the data in the various tables.

Table 1 includes the number and percentage of violators who were in each of the race and gender categories. We can see that the percentages for each category were similar across the

types of violations. At the top of the table, the percentage of drivers in each race/gender group is recorded. 45% of the drivers were White males, 30% were White females, 14% were Black males, and 12% were Black females.

Table 1. Number and Percentage of Driving Violations and Stops by Race and Gender Groups.

Violations	**White Males** (44% of Drivers)	**White Fem.** (30% of Drivers)	**Black Males** (14% of Drivers)	**Black Fem.** (12% of Drivers)	**Total**
Speeding	4015 (52%)	2075 (27%)	1035 (14%)	565 (7%)	7690(100%)
Red Light	1740 (48%)	1007 (28%)	558 (15%)	362 (10%)	3667(100%)
Illegal Turn	480 (57%)	207 (25%)	107 (13%)	49 (6%)	843(100%)
Total Viol.	6235 (51%)	3289 (27%)	1700 (14%)	976 (8%)	12200(100%)
Stops	281 (53%)	141 (26%)	71 (13%)	42 (8%)	535 (100%)

of violations, so it makes sense to focus on total violations. At the bottom of Table 1 we provide the number and percentage of police stops by race and gender groups. Out of 535 police stops made at the specific sites observed for this study, 53% of the drivers were White males, 26% were White females, 13% were Black males, and 8% were Black females.

The next step in presenting the findings involves making the two comparisons explained above: 1) between drivers and violators, and 2) between violators and persons stopped by the police. The results of the first comparison are summarized in Table 2. For example, we learn from the information in Table 1 that White males accounted for 44% of the drivers and 51% of the total violations. Therefore, White males violated seven percentage points **above** their proportion in the driving sample, which is signified by the number seven in the total column in

Table 2 under White males. Recall in Table 1, White females accounted for 30% of the drivers and 27% of the violations. Therefore, they violated at three percentage points **below** their proportion in the driving sample, indicated by the minus three in the Total Column under White females (Table 2). Black males makeup 14% of the drivers and 14% of the violations, indicating that they violated at the same level as their proportion of the population. This is signified by a zero in the total column in Table 2 under Black males. Black females comprise 12% of the driving sample and only 8% of the violations, indicating that they violate four percentage points **below** their proportion of the driving sample. All of the three differences are statically signficant at the .001 significance level.

In sum, the data show that White males violated **above** their proportion in the driving sample, both White and Black females violated **less** than their proportion of the driving sample, and Black males violate proportionately to their representation in the driving sample. The results of the second comparison (between violators and persons stopped) are summarized in Table 3. We examined the stop figures to the proportions of each group in the violator sample (Table 1). For example, the data in Table 1 point out 51% of the total violations were made by White males. At the bottom of Table 1, the stop data show that

White males comprised 53% of the stops, two percentage points **above** their proportion in the violator sample**.** Table 1 indicates that White females account for 27% of the violators.

Table 2. Percentage Point Differences Between the Percentage of Driving Violations and the Percentage of Drivers by Race and Gender Groups

Violations	White Males	White Fem.	Black Males	Black Fem.
Speeding	8***	-3***	0	-5***
Red Light	4***	-2**	1*	-2***
Illegal Turn	13***	-5***	-1	-6***
Total	7***	-3***	0	-4***

** significant at .05 level ** significant at .01 level *** significant at .001 level*

Comparing this figure to the 26% of traffic stops with White female drivers, we can see that White females were stopped at one percentage point **below** their level of violations. Similar comparisons indicate that Black males made up 14% of the violations and 13% of the police stops, signifying that Black males were stopped one percentage point **below** their rate of violation. Black females accounted for 8% of the total violations (see Table 1) and 8% of the police stops, indicating that they were stopped at exactly their rate of violation. None of the differences are statistically significant.

Table 3. Percentage Point Differences Between the Percentage of Police Stops and the Percentage of Driving Violations by Race and Gender Groups

Violations	White Males	White Fem.	Black Males	Black Fem.
Total	2	-1	-1	0

** significant at .05 level ** significant at .01 level *** significant at .001 level*

We can conclude that while the rates of violation vary among the four race and gender categories, the rates of police stops are very close to the rates of violation for each of the groups. According to our data, White males have a slightly greater likelihood of being stopped by the

police than their rate of violation, and both White females and Black males have a slightly lower likelihood of being stopped by the police than their rate of violation. Black females are stopped at exactly their rate of violation. However, these small differences shown in Table 3, are not statistically significant, indicating they would not likely show up in a larger sample of stops. Therefore, when we combine the information from all 16 intersections, the data show that the four race and gender groups of citizens are all stopped at rates very close to the rate of violation and the differences are statistically not significant.

Neighborhood Analyses

Focusing on the neighborhood context is important for at least two reasons. First, it is important to include a variety of neighborhoods so that the research findings are representative of unincorporated Miami-Dade County. Second, research on police strategies and behavior demonstrates that policing varies according to the neighborhood context. The following analysis presents the data by the type of neighborhood in which they were collected. As noted above, we included Black, White and racially mixed neighborhoods in our study (see Methods chapter for details on how neighborhoods are defined).

Table 4 includes the number and percentage of observed drivers in each race and gender group, broken down by the type of neighborhood where the observations were made. A total of 93,251 drivers were observed. White males comprised 44% of the drivers, White females comprised 30%, Black males comprised 14% and Black females comprised 12%. The proportion of the four categories of drivers in each type of neighborhood was consistent with the racial characterization of the neighborhoods . Both White males and females drove

less in neighborhoods with substantial Black populations than in other neighborhoods. In

Table 4. Number and Percentage of Drivers by Race and Gender Groups for Neighborhood Types

Neighborhood Types	White Males	White Females	Black Males	Black Females	Total
Predominately White	14198 (53%)	10551 (39%)	1223 (5%)	707 (3%)	26679 (100%)
Substantially Black	6894 (27%)	4885 (19%)	7683 (30%)	6355 (24%)	25817 (100%)
Racially Mixed	20037 (49%)	12638 (31%)	4396 (11%)	3684 (9%)	40755 (100%)
Total	41129 (44%)	28074 (30%)	13302 (14%)	10746 (12%)	93251 (100%)

contrast, both Black males and females drove **more** in neighborhoods with substantial Black populations when compared to other neighborhoods.

Predominately White Neighborhoods

The number and percentage of driving violations and persons stopped in predominately White neighborhoods by race and gender groups is summarized in Table 5. Although there are some minor variations in the types of violations for each race and gender group, they are consistent enough to allow us to focus on the row for total violations. The data in Table 5 summarize the numbers of observed drivers, violators, and persons stopped by Miami-Dade police officers in predominately White neighborhoods. The next step in presenting the findings involves making the same two comparisons previously drawn: 1) between drivers and violators, and 2) between violators and persons stopped by the police. The results of the first comparison are summarized in Table 6. For example, we learn from the information in Table 5 that 53% of the drivers in predominately White neighborhoods were White males. Fifty-nine percent of the

violations were committed by White males, indicating that this group violated at six percentage points **above** their proportion in the driving sample. White females comprised 39% of the drivers in these neighborhoods, but only 34% of the violators, indicating they violated five percentage points **below** their proportion in the driving sample. Five percent of the drivers in predominately White neighborhoods were Black males, and they accounted for 5% of the violations, indicating that they violated in the exact same proportion as their makeup of the driving population. In a similar fashion, Black females made up 3% of the driving sample and accounted for 2% of the violations, placing them one percentage point **below** their proportion in the driving sample.

Table 5. Number and Percentage of Driving Violations and Stops by Race and Gender Groups in Predominately White Neighborhoods

Violations	**White Males** (53% of Drivers)	**White Fem.** (39% of Drivers)	**Black Males** (5% of Drivers)	**Black Fem.** (3% of Drivers)	**Total**
Speeding	1656 (59%)	984 (35%)	126 (5%)	61 (2%)	2827 (100%)
Red Light	563 (58%)	337 (34%)	45 (5%)	34 (4%)	979 (100%)
Illegal Turns	154 (61%)	75 (30%)	16 (6%)	6 (2%)	251 (100%)
Total Viol.	2373 (59%)	1396 (34%)	187 (5%)	101 (2%)	4057 (100%)
Stops	59 (53%)	47 (43%)	2 (2%)	2 (2%)	110 (100%)

To summarize the findings for predominately White neighborhoods (Table 6), White females violated at a rate substantially below their proportion in the driving sample, and Black females violated slightly below their proportion in the population. On the contrary,

Table 6. Percentage Point Differences Between Driving Violation Percentages and Percentages of Drivers by Race and Gender Groups in Predominately White Neighborhoods

Violations	White Males	White Fem.	Black Males	Black Fem.
Speeding	6***	-4***	0	-1***
Red Light	5***	-5***	0	1*
Illegal Turns	8**	-9**	1	-1
Total	6***	-5***	0	-1***

** significant at .05 level ** significant at .01 level *** significant at .001 level*

White males violated substantially more than their proportion in the driving population, and Black males violated proportionately to their driving rate.

The second comparison is between violations and persons stopped. Table 5, at the bottom, provides the number and percentage of police stops in predominately White neighborhoods by race and gender groups. For example, 53% of the stops in these neighborhoods involved White males. If we compare this figure to the proportion of White males in the sample of violators (59%)**,** we see that White males were stopped six percentage points **below** their rate of violation (see Table 7). Forty-three percent of the stops involved White females but they made up only 34% of the violators' sample, resulting in this group being stopped nine percentage points **more** than their proportion in the sample of violators. As noted in Table 5, Black males were involved in 2% of the police stops and made up 5% of the violators, indicating that they were stopped three percentage points **below** their rate of violation (see Table 7). Similarly, 2% of the police stops involved Black females and they

Table 7. Percentage Point Differences between the Percentage of Police Stops and Percentages of Violators by Race and Gender Groups in Predominately White Neighborhoods

	White Males	White Fem.	Black Males	Black Fem.
Predom. White Neigh.	-6	9*	-3	0

* *significant at .05 level* ** *significant at .01 level* *** *significant at .001 level*

were 2% of the sample of violators, indicating that this group was stopped by the police exactly proportionate to their level of violation.

A summary (see Table 7) of stops in predominately White neighborhoods shows White and Black males were stopped **below** their level of violation (White males twice the margin of Black males). White females were stopped substantially **above** their level of violation, while Black females were stopped exactly proportionate to their level of violation. It should be noted that most of the differences are not statistically significant, and may not show up in larger samples of stops.

Neighborhoods with Substantial Black Populations

The number and percentage of driving violations by race and gender groups in neighborhoods with substantial Black populations is summarized in Table 8. Although there were some variations in the types of violations for each race and gender group, they were also consistent enough to allow us to focus on the total violations. Following the same pattern of analysis for predominately White neighborhoods, here we present the findings for the two comparisons based on data from substantially Black neighborhoods: 1) between drivers and violators, and 2) between violators and persons stopped by the police. The results of the first comparison are summarized in Table 9. For example, we learn from the information in the top

of Table 8 that 27% of the drivers in Black neighborhoods were White males. Further, 33% of the violations were committed by White males, indicating that this group violates six percentage points **above** their proportion in the driving sample. White females comprise 19% of the drivers in these neighborhoods, and 15% of the violators, indicating they violate four percentage point **below** their proportion in the driving sample. Thirty percent of the drivers in Black neighborhoods were Black males, and they account for 34% of the violations, giving them a difference of four percentage points **above** their proportion of the driving sample.

Table 8. Number and Percentage of Driving Violations and Stops by Race and Gender Groups in Neighborhoods with Substantial Black Populations

Violations	**White Males** (27% of Drivers)	**White Fem.** (19% of Drivers)	**Black Males** (30% of Drivers)	**Black Fem.** (24% of Drivers)	**Total**
Speeding	446 (33%)	218 (16%)	427 (32%)	247 (19%)	1338 (100%)
Red Light	198 (31%)	85 (13%)	235 (37%)	125 (19%)	643 (100%)
Illegal Turns	48 (36%)	9 (7%)	51 (38%)	27 (20%)	135 (100%)
Total Viol.	692 (33%)	312 (15%)	713 (34%)	399 (19%)	2116 (100%)
Stops	30 (30%)	23 (23%)	31 (31%)	15 (15%)	99 (100%)

On the other hand, Black females made up 24% of the driving sample and accounted for 19% of the violations, placing them five percentage points **below** their proportion in the driving sample. All of these differences are statistically significant.

A summary (Table 9) of the findings in neighborhoods with substantial Black populations shows female drivers violated **below** their proportion in the driving sample, while

male drivers violated at a rate **more** than their proportion in the driving population, regardless of race.

Table 9. Percentage Point Differences Between Percentages of Driving Violations and Percentages of Drivers by Race and Gender Groups Neighborhoods with Substantial Black Populations

Violations	White Males	White Fem.	Black Males	Black Fem.
Speeding	6***	-3**	2	-5***
Red Light	4**	-6***	7***	-5**
Illegal Turns	9**	-12***	8*	-4
Total	6***	-4***	4***	-5***

** significant at .05 level ** significant at .01 level *** significant at .001 level*

The second comparison is between violations and persons stopped. The last row of Table 8 summarizes the number and percentage of police stops in neighborhoods with substantial Black populations by race and gender group. As before, we compare the stop figures to the proportions of each group in the violator sample. For example, 30% of the stops in these neighborhoods involved White males. If we compare this figure to the proportion of White males in the sample of violators (33%), we see that White males were stopped, three percentage points **below** their rate of violation (see Table 10). Twenty-three percent of the stops in Black neighborhoods involved White females while they made up only 15% of the violators' sample, resulting in this group being stopped eight percentage points **above** their proportion in the sample of violators. Black males were involved in 31% of the police stops and composed 34% of the violators, indicating that they were stopped three percentage points **below** their rate of violation in Black neighborhoods. Similarly, 15% of the police stops involved Black females

while they were 19% of the sample of violators, indicating that this group was stopped by the police four percentage points **below** their level of violation.

Therefore, in neighborhoods with substantial Black populations, White females were stopped substantially **above** their level of violation, while all other groups are stopped below their level of violation (see Table 10). These findings are very similar to the findings in predominately White neighborhoods, except that Black females are stopped below their level of violation in Black neighborhoods instead of the commensurate rates found in predominately White neighborhoods. Again, many of the differences were not statistically significant, probably due to the small sample of stops, so these differences may not show up in larger samples of stops.

Racially Mixed Neighborhoods

The number and percentage of driving violations in racially mixed neighborhoods by race and gender groups is summarized in Table 11. Although there are small variations in the

Table 10. Percentage Point Differences Between Percentage of Police Stops and Percentages of Violators by Race and Gender Groups in Neighborhoods with Substantial Black Populations

	White Males	**White Fem.**	**Black Males**	**Black Fem.**
Substantially Black	-3	8*	-3	-4

* *significant at .05 level* ** *significant at .01 level* *** *significant at .001 level*

types of violations for each race and gender group, they are also sufficiently consistent to allow us to focus on the combined violations. As we have done for other neighborhoods, we present the findings for the two comparisons based on data from racially mixed neighborhoods:

1) between drivers and violators, and 2) between violators and persons stopped by the police. For example, we can see in Table 11 that 49% of the drivers were White males. Fifty-three percent of the violations are committed by White males, indicating that this group violated at a rate four percentage points **above** their proportion in the driving sample (see Table 12). White females comprised 31% of the drivers in these neighborhoods, but only 26% of the violators, indicating that they violated five percentage points **below** their proportion in the driving sample. Eleven percent of the drivers in racially mixed neighborhoods are Black males, and they accounted for 13% of the violations, giving them a difference of two percentage points **above** their proportion of the driving sample. In a similar fashion, Black females made up 9% of the driving sample and accounted for 8% of the violations, placing them one percentage point **below** their proportion in the driving sample. All these differences are statistically significant.

Table 11. Number and Percentage of Driving Violations and Stops by Race and Gender Groups in Racially Mixed Neighborhoods

Violations	**White Males** (49% of Drivers)	**White Fem.** (31% of Drivers)	**Black Males** (11% of Drivers)	**Black Fem.** (9% of Drivers)	**Total**
Speeding	1913 (54%)	873 (25%)	482 (14%)	257 (7%)	3525 (100%)
Red Light	979 (48%)	585 (29%)	278 (14%)	203 (10%)	2045 (100%)
Illegal Turns	278 (61%)	123 (27%)	40 (9%)	16 (4%)	457 (100%)
Total Viol	3170 (53%)	1581 (26%)	800 (13%)	476 (8%)	6027 (100%)
Stops	192 (59%)	71 (22%)	38 (12%)	25 (7%)	326 (100%)

The summary (see Table 12) of the findings in racially mixed neighborhoods shows that males typically violated **above** their proportion of the driving sample (White males violated at twice the rate of Black males), while females violate **below** their driving rate (White females five times the rate of Black females).

Table 12. Percentage Point Differences Between Percentages of Driving Violations and Percentages of Drivers by Race/Gender Groups. (Racially Mixed Neighborhoods)

Violations	White Males	White Fem.	Black Males	Black Fem.
Speeding	5***	-6***	3***	-2***
Red Light	-1	-2*	3***	1
Illegal Turns	12***	-4*	-2	-5***
Total	4***	-5***	2***	-1***

** significant at .05 level ** significant at .01 level *** significant at .001 level*

The second comparison for racially mixed neighborhoods is between violators and persons stopped by the police. The data in Table 13 summarizes the number and percentage of police stops in racially mixed neighborhoods by race and gender group. For example, 59% of the stops in these neighborhoods involved White males. If we compare this figure to the proportion of White males in the sample of violators (53%) we see that White males were stopped six percentage points **above** their rate of violation (see Table 13). Twenty-two percent of the stops involved White females while they made up 26% of the violators' sample, resulting in this group being stopped four percentage points **less** than their proportion in the sample of violators. Black males were involved in 12% of the police stops and made up 13% of the violators, indicating that they are stopped at one percentage point **below** their rate of violation. Similarly, 7% of the police stops involved Black females while they made up 8% of the sample

of violators, indicating that this group was stopped by the police at one percentage point **below** their level of violation.

To summarize the findings in racially mixed neighborhoods, White males were stopped well above their level of violation while all of the other groups were stopped **below** their level of violation (White females were stopped at four times the rate of Black males and females) (see Table 13). Therefore, the differences for Black males and females were not statistically significant and may not occur in larger samples of stops.

Table 13. Percentage Point Differences Between Percentage of Police Stops and Percentages of Violators by Race and Gender Groups in Racially Mixed Neighborhoods

	White Males	**White Fem.**	**Black Males**	**Black Fem.**
Racially Mixed Neigh.	6**	-4*	-1	-1

** significant at .05 level ** significant at .01 level *** significant at .001 level*

Summary: Neighborhood Comparisons

Table 14 presents a summary of the first comparison between violation rates and driving rates for each of the neighborhood type. This table allows a direct comparison of violation rates among the types of neighborhoods. The data in Table 14 indicate that, on average, males violated **above** their proportion of the driving population and females violated **below** their proportions. There was one exception. Black male drivers in predominately White neighborhoods violated proportionately to the rate that they drive. White males violated above their proportion in the driving population and at a higher rate than Black males. White females violated below their proportion of the population and at a lower rate than Black females (except in substantially Black neighborhoods). As a result, White drivers vary from the mean more than

Black drivers. These differences are fairly large and statistically significant. Consequently, we have confidence that these same differences would show up in other samples of drivers.

Table 14. Percentage Point Differences Between the Percentage of Driving Violations and the Percentage of Drivers by Race and Gender Groups

Neighborhood Type	White Males	White Females	Black Males	Black Females
Predominately White	6***	-5***	0	-1***
Substantially Black	6***	-4***	4***	-5***
Racially Mixed	4***	-5***	2***	-1***

** significant at .05 level ** significant at .01 level *** significant at .001 level*

Neighborhood comparisons (see Table 14) indicate that violation rates were fairly consistent among different neighborhoods for White drivers, but some major inconsistencies existed for Black drivers. Black males violated above their driving rate in substantially Black and racially mixed neighborhoods, but not in predominantly White neighborhoods. Black females violated much less than their driving rates in substantially Black neighborhoods, but only slightly less in racially mixed and predominately White neighborhoods. Of course, we should realize that some of the differences in driving and violating the traffic laws among drivers in the different neighborhoods may reflect unmeasured characteristics of people driving in those areas (e.g. social-economic status, age, etc.) rather than simply their race and gender.

Table 15. Percentage Point Differences Between Percentages of Police Stops and Percentages of Driving Violations by Race and Gender Groups for Neighborhood Types

Neighborhood Type	White Males	White Females	Black Males	Black Females
Predominately White	-6	9*	-3	0
Substantially Black	-3	8*	-3	-4
Racially Mixed	6**	-4*	-1	-1

** significant at .05 level ** significant at .01 level *** significant at .001 level*

Table 15 is a summary of the second comparisons, which examines the relationship between police stops and violation rates for each of the three types of neighborhoods. This table allows a direct comparison of stops in the types of neighborhoods. White female drivers were stopped at a higher rate than others, for a given level of violation in predominately White and substantially Black neighborhoods. In racially mixed neighborhoods, the opposite was true for White females. They were stopped at a rate lower than their violation rate. Black drivers were stopped below their violation rate in most areas, and never at a rate higher than their violation rate. Also, stops more closely matched the violation rates for Black drivers than for White drivers. White females had the highest rates of stops over their violation rate (9 points in predominately White neighborhoods and 8 points in substantially Black areas), and White males had the lowest rates of stops below their violation rate (minus 6 points in predominately White neighborhoods). Recall that when the neighborhood data are combined, citizens in all four racial

and gender groups were stopped at rates very close to their violation rate, and the differences were not statistically significant.

References

Levin, J. and J. A. Fox. 2000. Elementary Statistics in Social Research. Boston: Allyn and Bacon.

Chapter 6

Ride-Along Component

Two data collection instruments were used in the current research component. These forms included an Officer Form (see Appendix A) and a Suspicion Form (see Appendix B). The Officer Form was comprised of two sections. Section A was completed during or shortly after the end of each observational session, and included demographic information on the observed officer, such as gender, race, age, and education level. Section B was completed at the conclusion of the observation. In this section, the observer recorded his/her assessment of the officer's general style of decision-making. This assessment was based on an observer's perception of the officer's *overall* style of decision-making, not specific to any one particular incident. Observers were required to indicate the role (high priority, medium priority, low priority, or not relevant) that four factors played in the officer's decision to follow or stop a person: (1) appearance, (2) behavior, (3) time and place, and (4) information. After indicating the level of importance an officer placed on these factors in his/her decision-making, the observer provided a narrative that further explained this rating. In this section, observers also noted whether the officer reported any "working rules" that guided his/her decision-making and behavior.

Observers completed the Suspicion Form during and/or shortly after an officer "formed suspicion." "Forming suspicion" occurred any time an officer became distrustful or otherwise suspicious of an individual. Typically, this involved observing something about a citizen, which resulted in more than a glance, or passing thought. On the one hand, the observation made by the officer may have involved following a person or vehicle, or stopping to question the citizen. On the other hand, the concern may have passed quickly and

the officer may have disregarded the person and began observing other people. The student observers were trained to watch the officer and ask questions about looks, movements, and actions that were suggestive of being concerned about a citizen or an action. Any time a suspicion was formed during the course of a ride the observers noted a variety of information on the Suspicion Form. Demographic characteristics (e.g., gender, race, age, class) of the person(s) about whom suspicion was formed was recorded. Information about the locations where suspicion was formed, and any vehicles involved, was also noted. Observers captured information regarding actions the police took in response to forming suspicion (e.g., stopping individual) and the nature of any resulting interactions (e.g., cooperative, disrespectful) was recorded. Observers were also asked to provide a description of the reason(s) officers had for becoming suspicious, reason(s) why they stopped the person/vehicle, and the reason(s) they gave suspects for the stop. These explanations were also provided in narrative format.

Statistical Analyses

The forms used in this study included quantitative and qualitative data. The qualitative information involved long blocks of narrative or text that did not adhere to a pre-existing coding scheme. For example, observers were asked to provide descriptions of officers' decision-making styles (Officer Form) or the reasons upon which suspicion was formed (Suspicion Form). In these cases, there were no pre-existing coding schemes that would have adequately captured the complexity of the topics at hand. As a result, these data were coded after data collection. This process, called qualitative data analysis, is a three-step process that involves: (1) data reduction, (2) data display, and (3) conclusion/verification (Berg, 2001; Huberman & Miles, 1994). In the first step, researchers reduce large volumes of textual data to a manageable level. Typically, this involves coding the data by identifying

thematic categories (Berg, 2001). The second step involves displaying the qualitative data. Data display (involving the use of tables, matrices, and other pictorial illustrations) shows the relationships and linkages between thematic categories (Berg, 2001; Crabtree & Miller, 1999; Creswell, 1994). This part of the data analysis procedure organizes data that have been reduced or transformed into a manageable format ready for further analysis. Finally, qualitative researchers must draw conclusions and verify results (step three). Conclusions are drawn and verified by using confirmatory techniques (Berg, 2001).

The qualitative data analysis performed in this study was conducted using Microsoft Access. The data from the open-ended questions on the data collection instruments were entered into Access. After entering the data, the program facilitated the identification of categories and themes used to convert the qualitative data to quantitative form. Once this was completed, the data were analyzed. In the following section, results from the quantitative and qualitative data analyses are presented

Findings

Our discussion of the findings from the ride-along component is presented according to the questions asked on the Suspicion Form and the Officer Form. First, descriptions for all responses to the questions on the Suspicion Form will be presented. Second, findings from the multivariate analyses of the factors associated with the decision to stop are discussed. Finally, following the data from the Suspicion Form, we present the descriptive information from the questions on the Officer Form. Since many of the questions on the Officer Form required open-ended responses, we have provided a qualitative analysis with numerous examples of comments made by the officers to the observers.

Description of Rides

In the Miami-Dade Racial Profiling Study, observers accompanied officers on 51 rides. These rides were distributed among officers in 8 districts: Carol City, Cutler Ridge, Doral, Hammocks, Intracoastal, Kendall, Miami Lakes, and Northside (see Maps Number 1, 2, 3 and 4 in Appendix C). The rides took place on all three shifts, with over half taking place on the afternoon shift. The remaining rides were split almost evenly between the day shift and the night shift.

Table 1. District Where Ride Occurred

	Frequency	Percent
Carol City	4	7.8
Cutler Ridge	9	17.6
Doral	8	15.7
Hammocks	5	9.8
Intracoastal	6	11.8
Kendall	8	15.7
Miami Lakes	8	15.7
Northside	3	5.9
Total	51	100.0

Table 2. Shift of Ride

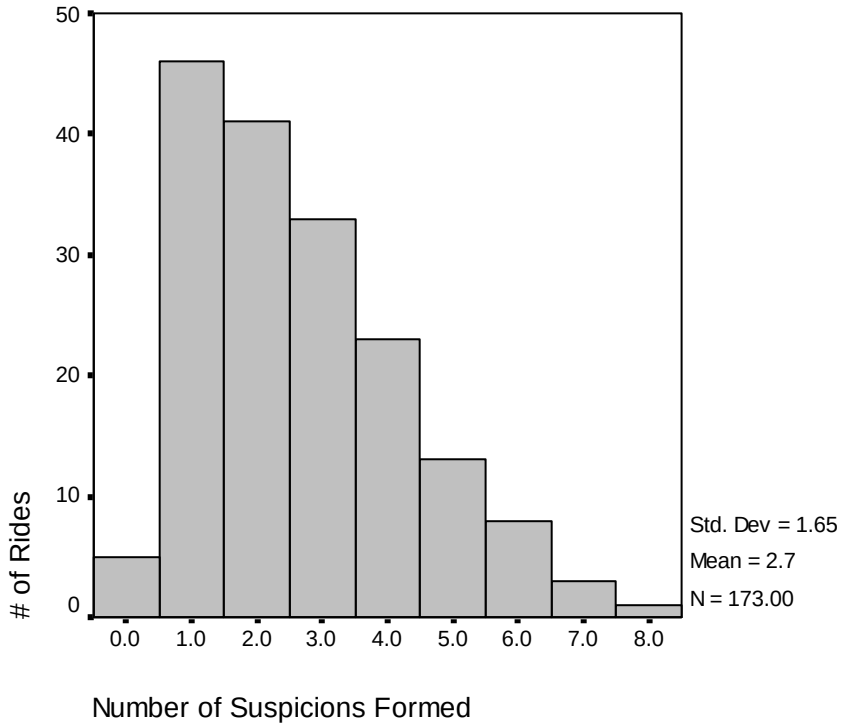
	Frequency	Percent
Day	12	23.0
Afternoon	27	54.0
Night	12	23.0
Total	51	100.0

Description of Suspicion

For this set of analyses, we refer to the instances in which an officer "formed suspicion." Over the course of 51 rides, officers formed suspicion 168 times. "Forming

suspicion" occurred any time an officer became distrustful, curious or otherwise suspicious of an individual. On the average ride, an officer would form suspicion almost 3 times (X = 2.67; S.D. = 1.65). On five rides, officers failed to form suspicion. At the other extreme, on one ride, an officer formed suspicion 8 times. This information is shown graphically in Figure 1.

Figure 1. Number of Times Suspicion Was Formed by Number of Rides



Characteristics of the Area in Which Suspicion Was Formed

Officers were asked for their perceptions of the neighborhoods in which suspicion was formed or where stops were made. As shown in Table 3, the majority of cases of suspicion were formed in residential areas. Suspicion was formed less often in commercial areas, secluded areas, and "other" areas (most often a combination of residential and commercial). It is noteworthy that most suspicions were formed in residential areas, the same

areas considered to be “trouble” spots by officers. As depicted in Table 4, officers indicated that the area in which suspicion was formed was a “trouble” area (i.e., usually a high crime or drug area) in more than two-thirds of cases.

Table 3. Type of Area in which Suspicion Was Formed

	Frequency	Percent
Residential	102	60.7
Commercial	49	29.2
Secluded	6	3.6
Other	11	6.5
Total	168	100.0

Table 4. Officer Indicated Area Was a Trouble Spot

	Frequency	Percent
No	55	32.7
Yes	103	67.3
Total	165	100.0

Officers were also asked for their opinion regarding the predominant racial make-up of the area(s) in which they formed suspicion. In approximately one-third of the cases (33.5%; n = 56), suspicion was formed in Hispanic areas of unincorporated Miami-Dade County. An approximately equal number of cases (31.7%; n = 53) of suspicion were formed in Black areas. Fewer cases of suspicion occurred in mixed areas (28.1%; n = 47) or White areas (6.6%; n = 11).

Characteristics of the Individuals about Whom Suspicion Was Formed

Whenever an officer formed suspicion of an individual or vehicle, observers recorded information about the individuals under suspicion. With the exception of the social class of the suspect, the characteristics of citizens were recorded according to the observer’s

perceptions, although observers often confirmed their perceptions by asking officers about the person(s) encountered. For instance, while an observer might have believed an individual to be a Hispanic male of approximately 45 years of age, observers were instructed to ask officers if they were able to determine the race and age of the suspect (e.g., by conducting a driver's license check). To assess a suspect's class, observers were explicitly instructed to ask officers for their opinion of the socioeconomic status of the individual with whom they had come into contact. Observers then probed to determine what factors the officer was taking into account when making his/her assessment.

Table 5. Number of Individuals about Whom Suspicion Was Formed

	Frequency	Percent
1	84	50.0
2	57	33.9
3	13	7.7
4	9	5.4
5	2	1.2
6	2	1.2
7	1	0.6
Total	168	100.0

As Table 5 indicates, almost half the time, officers became suspicious of only one individual. The officers become suspicious of more than two people in less than one-fifth of all cases. Tables 6 through 9 provide an indication of the demographic characteristics of the primary individual about whom officers formed suspicion. In almost all cases, these individuals were driving vehicles at the time suspicion was formed. As Table 6 indicates, the vast majority of persons who aroused the suspicion of officers were male. 34% of the suspects were Black and 48% were Hispanic, while less than 13% were White. (see Table 7), and the average age of the person about whom suspicion was formed was thirty-two years

old (see Table 8). Table 9 presents officers' assessments of the social status or class of the primary individual about whom s/he became suspicious. As this table indicates, officers most often rated the person about whom they became suspicious as having middle-class status.

Table 6. Suspect Gender

	Frequency	Percent
Male	127	79.4
Female	33	20.6
Total	160	100.0

Table 7. Suspect Ethnicity

	Frequency	Percent
Black	54	33.8
Hispanic	76	47.5
Anglo	25	15.6
Mixed	2	1.3
Other	3	1.9
Total	160	100.0

Table 8. Average Age of Suspect

	N	Minimum	Maximum	Mean	Std. Deviation
Age	161	14.00	76.00	32.69	13.32

Table 9. Suspect Class

	Frequency	Percent
Low	38	33.3
Medium	68	59.6
High	8	7.1
Total	114	100.0

An integral component of a profiling study is the determination of whether the officer was able to observe the race (or gender) of the person(s) under suspicion. Whether or not the officer could determine the race and gender of the driver (or primary suspect on foot) is depicted in Figures 2 and 3. Figure 2 shows officers were not able to determine the gender of the driver/primary suspect at the time suspicion was formed in most cases. Similarly, in 71% of the cases, officers were unable to determine the race of the driver/primary suspect at the time that suspicion was formed (see Figure 3).

Figure 2. Officer Was Able to Determine Gender of Driver/Suspect Prior to Forming Suspicion

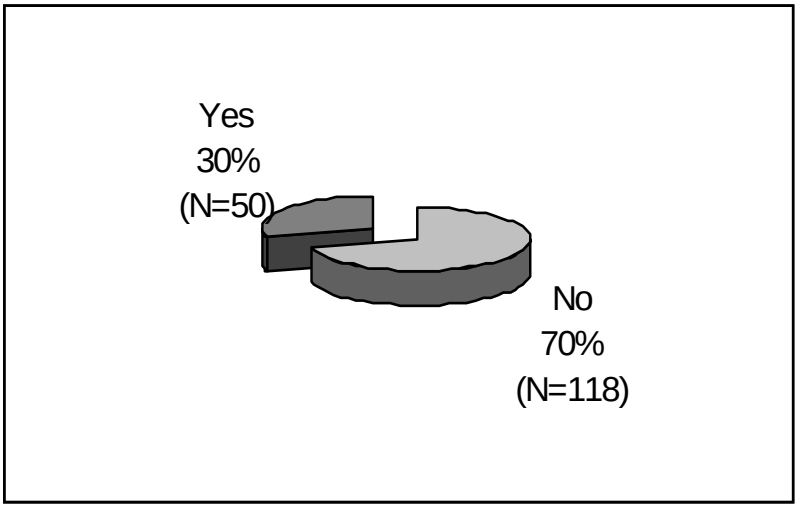
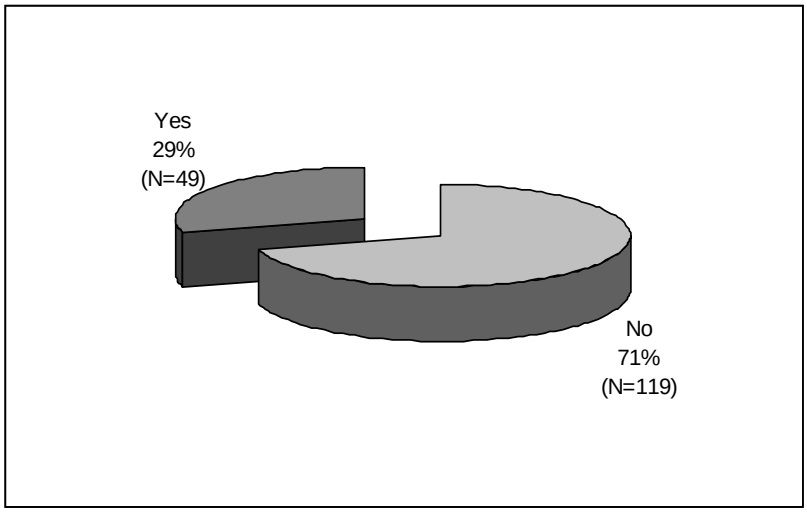


Figure 3. Officer Was Able to Determine the Race of the Driver/Suspect Prior to Forming Suspicion



Officers were also asked whether they were able to determine the gender and/or race of additional suspects/passengers (when applicable). Results mirrored those reported above; most often, officers were not able to determine the gender or race of additional passengers prior to forming suspicion.

Similarly, officers were asked whether they could determine any distinguishing characteristics in terms of dress or appearance of the person(s)/vehicle(s) under suspicion. In most cases, officers were not able to see the manner in which the driver or primary suspect was dressed prior to forming suspicion (see Table 10).

Table 10. Officer Could See What Driver Was Wearing Prior to Forming Suspicion

	Frequency	Percent
No	133	79.6
Yes	34	20.4
Total	167	100.0

Bases for Suspicion

To this point, we have discussed the places in which suspicion was formed, and the characteristics of the persons about whom officers formed suspicion. It is still necessary to discuss the reasons that these individuals (in these places) became of interest to the officers. When officers formed suspicion, observers asked officers to provide them with the reason(s) that they became suspicious. The reasons provided by observers were coded according to the following categories: (1) appearance, (2) behavior, (3) time and place, and (4) information. "Appearance" refers to the appearance of an individual and/or vehicle, and can refer to things such as distinctive dress, indicators of class, vehicle type, color, condition, and the like. "Behavior" refers to any overt action taken by an individual or vehicle that seemed inappropriate, illegal, or bizarre. "Time and place" refers to an officer's knowledge of a particular location (e.g., park, warehouse district) and what activities should or should not be expected there after a particular time (e.g., after hours). Finally, "Information" refers to details provided by either a dispatcher or at roll call or by a fellow officer (e.g., BOLO). As depicted in Figure 4, the main reason for forming suspicion was the behavior of the suspect(s). In the overwhelming majority of cases, the officer told the observer that the behavior of the suspect(s) was the primary reason for forming suspicion. An analysis of the observers' descriptions of behavior revealed that the most likely behavioral reason for forming suspicion was a traffic violation.

It is important to note that "forming suspicion" did not necessarily entail stopping an individual/vehicle. As depicted in Figure 5, officers did stop the individual/vehicle under suspicion the majority of the time. In the remaining incidents, the officers failed to make contact with the individual(s) under suspicion. This may have happened because other calls

took the officer away from the scene, or because additional observation of the suspect(s) revealed that the initial suspicion was unwarranted.

Figure 4. Main Reason for Forming Suspicion

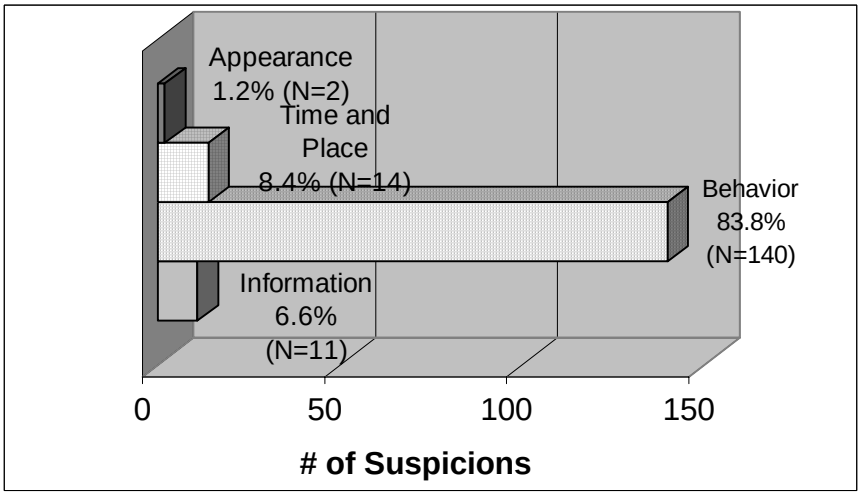
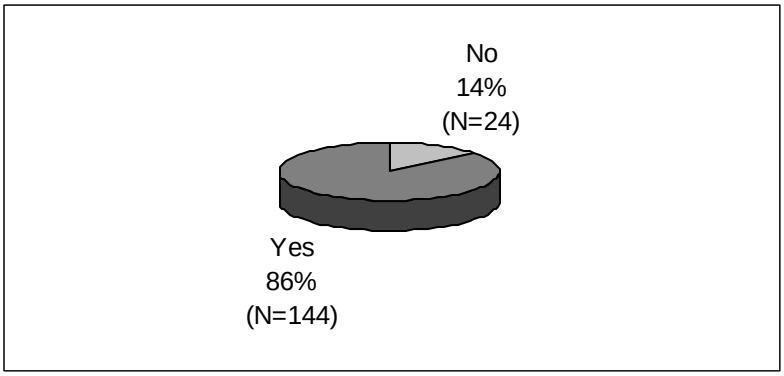


Figure 5. Number of Times Suspicion Resulted in Person/Vehicle Stop



Officer and Citizen Respect

Data on what occurred after the police officer made a stop were also collected. One outcome was the nature of the interaction between the police officer and primary suspect. After observing the interaction between the police and the citizen(s), observers were asked to code whether the officer, the citizen, or both individuals, were disrespectful to one another.

As portrayed in Tables 11 and 12, disrespect on either the part of the citizen or officer was fairly rare. Of the twenty-one cases in which there was disrespect on either the part of the citizen or the officer, only 3 cases (14.3%) involved mutual disrespect. However, citizens showed disrespect to officers more than 3 times as often as officers showed disrespect to citizens.

Table 11. Citizen Was Disrespectful to Officer

	Frequency	Percent
No	152	90.5
Yes	16	9.5
Total	168	100.0

Table 12. Officer Was Disrespectful to Citizen

	Frequency	Percent
No	163	97.0
Yes	5	3.0
Total	168	100.0

Another outcome is whether the officer conducted a search subsequent to the stop. Most often (74.5%; N=152), the officer did not request a voluntary search of the individual/vehicle. Regardless of whether the request was granted, officers conducted a search of the person/vehicle in 6.9% (n = 14) of the cases. Officers gave various reasons for conducting searches; the majority had to do with the fact that the officer was still suspicious of the individual (38.5%; n = 5). Other reasons given by officers included: incident to arrest (23.8%; n = 3), after obtaining consent (23.8%; N=3), based on probable cause (.08%; n = 1), and because of safety concerns (.08%; n = 1).

Additional analyses were conducted to determine if there were any suspect characteristics (i.e., gender, age, race, or class) that were significantly correlated with the

likelihood of a search. These analyses revealed that officers were significantly more likely to search younger persons (r = -.174; p < .05) or persons who they assessed as being of a lower socioeconomic class (r = -.384; p < .01).

Factors Associated with the Decision to Stop a Suspected Individual/Vehicle

As depicted in Figure 5, for the majority of occasions that officers formed suspicion, they also initiated a stop of the individual/vehicle. Table 13 presents the correlations between the decision to stop an individual/vehicle and many of the variables in the previous section (i.e., reason for forming suspicion, basis for suspicion, type of area, racial makeup of area, officer indicated area was a trouble spot, officer could determine the gender of suspect prior to stop, officer could determine race of suspect prior to stop, total number of suspects, gender of suspect, race of suspect, age of suspect, and class of suspect). Only 3 of the variables were significantly correlated to the decision to stop a citizen: officer could determine the citizen's gender prior to the stop, the suspect's gender, and suspicious behavior.

Table 13. Factors Correlated with the Decision to Stop a Suspected Individual/Vehicle

Variable	**Correlation**	**Significance Level**
Type of Area	-.11	
Racial Makeup of Area	-.08	
Trouble Spot	.06	
Officer Could See Gender Prior to Stop	-.19	*
Officer Could See Race Prior to Stop	-.14	
Number of Suspects	.03	
Suspect Gender	-.26	***
Suspect Age	.03	
Suspect Race	.03	
Suspect Class	.00	
Reason for Forming Suspicion		
Appearance	-.10	
Behavior	.16	*
Time and Place	-.01	
Information	.00	

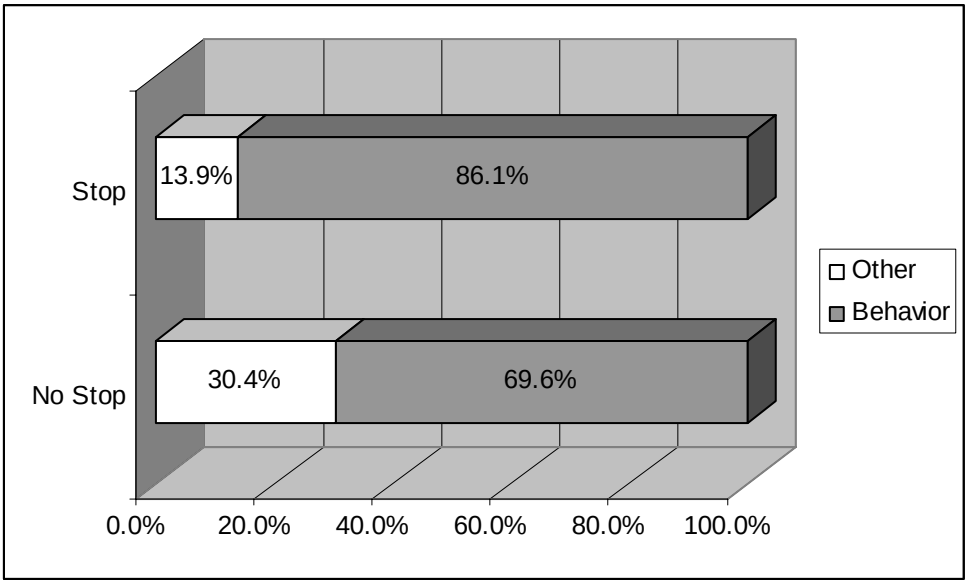
* p < .05; ** p < .01; *** p < .001

In order to more fully examine the impact of key variables, we conducted crosstabular analyses. In the following paragraphs, we present the analyses for variables that significantly impacted on whether or not police officers made stops.

Type of Suspicion and the Decision to Make a Stop

We conducted Crosstabular analyses for each of the four reasons for forming suspicion (i.e., appearance, behavior, time and place, and specific information) and for the decision to stop a suspected individual. As shown in Figure 6, only one of these reasons—behavior—was significantly related to the decision to stop an individual. When officers were suspicious of an individual because of their behavior, they were significantly more likely to make a stop than when they were suspicious for another reason ($X^2 = 4.006$, df =1, $p < .05$).

Figure 6. Behavior Was the Reason for the Stop



Gender, Race, and the Decision to Make a Stop

A series of crosstabular analyses were conducted to shed additional light on the role that gender and race played in determining whether officers went from merely being

suspicious of an individual to making a stop of that individual. In these analyses, we examined the racial categories of Black and "other" (i.e., White, Hispanic, and other), since it is unlikely that officers are able to distinguish between Whites and Hispanics prior to making a stop. Tables 14 and 15 show the results of bivariate analyses conducted concerning whether officers could determine the race and gender of the suspect (prior to the stop) and whether the officer made a stop of the individual under suspicion.

Table 14. Crosstabulation of "Gender of Suspect Could be Determined Prior to the Stop" and the Decision to Make a Stop.

Officer Could Determine Gender Prior to Stop	No Stop	Stop	Total
No	12 (10%)	107 (90%)	119 (100%)
Yes	12 (25%)	37 (76%)	49 (100%)
Total	24 (14%)	144 (86%)	168 (100%)

Chi Square = .017

The data in Table 14 indicate that when the gender of the suspect could be determined prior to the stop, officers made the stop 76% of the time. When the gender of the suspect could not be determined prior to the stop, officers made the stop 90% of the time. Therefore, officers were more likely to make a stop when they could not determine the gender of the driver. This difference is statistically significant.

Table 15. Crosstabulation of "Race of Suspect Could be Determined Prior to the Stop" and the Decision to Make a Stop.

Officer Could Determine Race Prior to Stop	No Stop	Stop	Total
No	13 (11%)	105 (89%)	118 (100%)
Yes	11 (22%)	39 (78%)	50 (100%)
Total	24 (14%)	144 (86%)	168 (100%)

Chi Square = .980

The information in Table 15 indicates that when the race of the suspect could be determined prior to the stop, officers made the stop 78% of the time. When the race of the suspect could not be determined prior to the stop, officers made the stop 89% of the time. Therefore, officers were slightly more likely to make a stop when they could not determine the race of the driver. However, this difference is not statistically significant.

Description Of Officers

In the Miami-Dade Racial Profiling Study, fifty-one officers were observed over the course of fifty-two rides. Most officers in this study were male. Hispanic officers were the most common racial/ethnic group of officers, followed by White officers. Black officers represented the smallest racial group. The officers in this study had an average of 6.9 years on the police force. Nearly half of officers had a high school diploma as their highest level of education; the remaining officers had either an associate's degree or a bachelor's degree. More detailed information is provided in Tables 16-19.

Table 16. Officer Gender

	Frequency	Percent
Male	41	80.4
Female	10	19.6
Total	51	100.0

Table 17. Officer Race

	Frequency	Percent
Anglo	13	25.5
African-American	4	7.8
Hispanic	29	56.9
Mixed/Other	5	9.8
Total	51	100.0

Table 18. Officer Years of Service

	N	Minimum	Maximum	Mean	Std. Deviation
Tenure	51	1.00	24.00	6.90	6.37

Table 19. Officer Education

	Frequency	Percent
H.S. diploma	24	47.1
Associate degree	11	21.6
Bachelor's degree	16	31.4
Total	51	100.0

Officer Decision Making Style

After officers were observed for a shift, each observer filled out Section B of the Officer Form. In this section, the observer recorded the officer's overall style of decision-making, or more specifically, the factors that the officer took into account when forming

suspicion. Note that this was an *overall* assessment of the officer, not of any one particular incident.

Figure 7 shows the observers' perceptions of the importance of appearance in officer decision-making. “Appearance,” referring to things such as distinctive dress, indicators of class, and the like, appeared to be irrelevant (57.1%; n = 28) to the majority of officers in forming suspicion. In contrast, appearance appeared to be a high priority in forming suspicion for only one officer (2%).

Observers' explanations of these ratings were qualitatively analyzed to provide some insight into the possible reasons that appearance was unimportant to the officers in this study. First, the case where the observer rated appearance as a "high priority" in forming suspicion was examined. In this case, the officer claimed that "Most people who live in Doral look a certain way, so I notice deviations.” Next, cases where observers reported that appearance was not relevant were examined. In these instances, explanations fell into two general categories: (1) appearance could not be determined prior to stop (e.g., “In most of the cases where vehicles were stopped, we could not see the people inside before the decision was made to stop”), or (2) observed officer did not form suspicion during the ride (e.g., “police officer did not make any stops or follow anyone; only took calls from dispatcher,” “PO did not stop anyone during observation, but when asked, PO said appearance had nothing to do with it”).

Figure 7. Importance of Appearance in Forming Suspicion

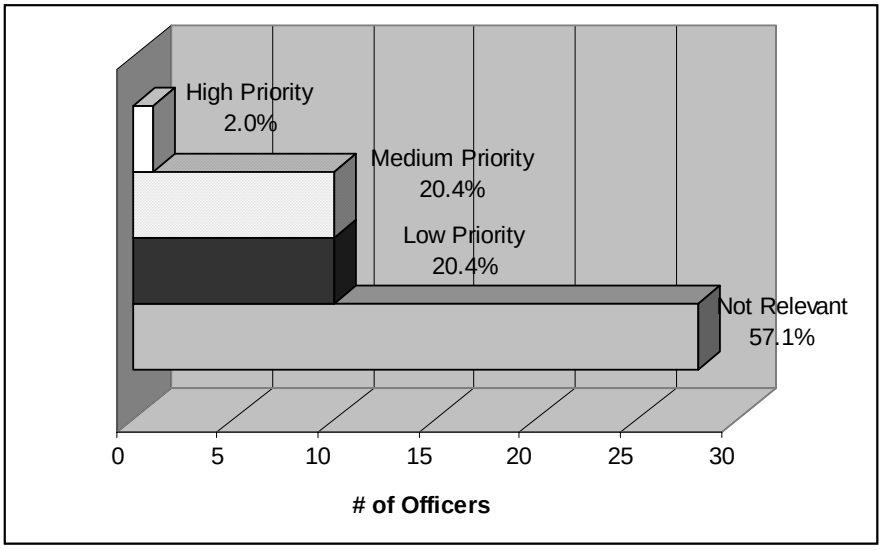


Figure 8 depicts the relative influence of behavior in the formulation of suspicion by the police officers in this study. Most observers perceived behavior as playing a significant role in officer decision-making: over two-thirds (69.4%; n = 34) of observers reported that behavior was a high priority in forming suspicion. Again, observers' explanations of their ratings were qualitatively analyzed to provide some insight into the importance of behavior in forming suspicion. For approximately one-third (n = 11) of the 34 officers for whom observers rated behavior a "high priority," the explanations concerned explicitly illegal behavior. For example:

- "Traffic violations were the most important factor to the officer."
- "Making an illegal U-turn, having an expired tag, or displaying tag improperly, were behaviors that first created suspicion."

For almost half of these officers (n = 16), however, reasons did not involve references to illegal behavior, but behavior the officer found sufficiently unusual to attract additional attention. For example:

- “If the person would slow down or act in any other suspicious fashion, he would follow them. He said they were nervous for a reason.”

- “PO asked lots of questions very quickly. When people got nervous or aggravated, he became suspicious.”

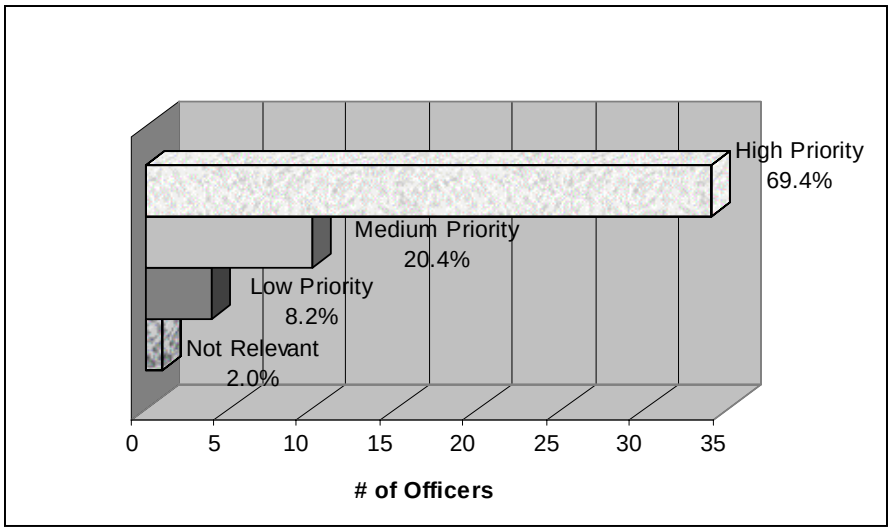
- “Cars that drive slowly or look lost make PO suspicious.”

- “If a suspect was avoiding eye contact, acting nervous, or acting agitated, the officer would become more suspicious.”

- “He is always looking for suspicious behavior (e.g., immediately go inside house after he drives by).”

- “If a person is acting out of the ordinary, that is cause for alarm. The person will be questioned about the events.”

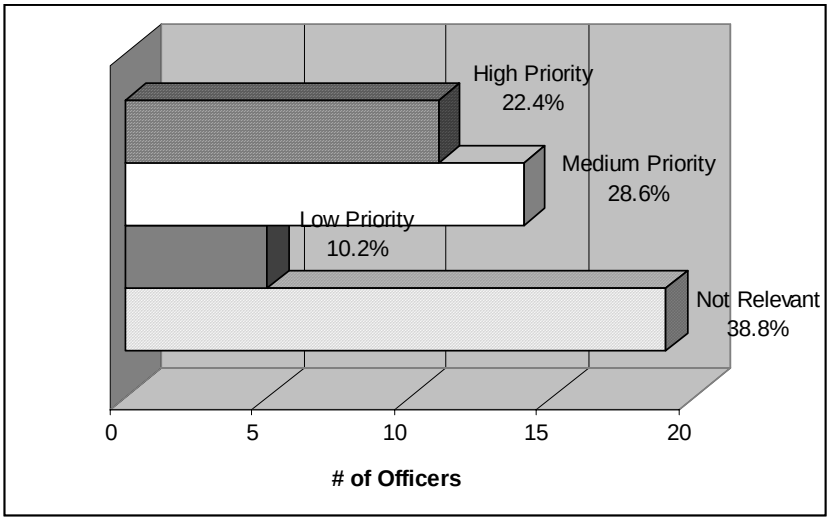
Figure 8. Importance of Behavior in Forming Suspicion



Analyses conducted on the importance of time and place in officer decision-making (see Figure 9) revealed that, in a little over one-third of cases, time and place were irrelevant with regard to whether officers formed suspicion (38.8%; n = 19). An examination of narrative descriptions of the reasons observers gave for their ratings showed that when observers rated time and place as being unimportant, it was usually because officers were not

observed forming suspicion or making stops, or because the officers appeared to be driven solely by the behavior of individuals.

Figure 9. Importance of Time and Place in Forming Suspicion



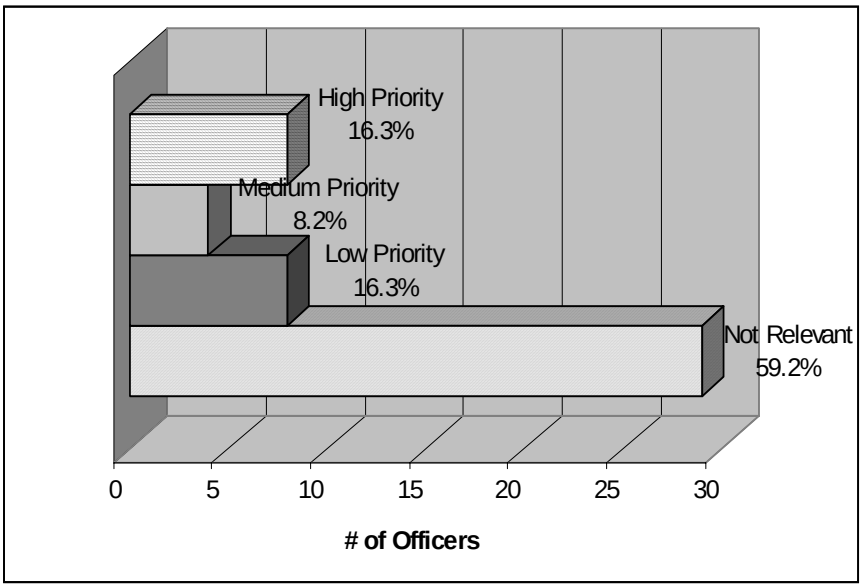
On the other hand, time and place was either of medium (28.6%; n = 14) or high (22.4%; n = 11) importance in almost half the cases where suspicion was formed. Most often, this was related to people/vehicle(s) being out of place given a particular location at a given time. For instance, officers often relied on their knowledge of a particular location (e.g., park, warehouse district) and what activities should or should not be expected there after a particular time (e.g., after hours). For example:

- "Officer paid more attention to particular place (known drug houses) at night, when houses are open for business."
- "This officer takes notice of people who don't belong in the neighborhood, particularly when it's a high drug selling area."
- "Anyone hanging around storage companies after 7 or 8 pm (closing time) would be suspected, given the high crime in the area."
- "Police officer patrolled drug dealing areas, which are problematic primarily at night. These were areas where people were 'up to no good.'"

Observers were also asked to rank the importance that information might play in determining the decision-making of police officers. As shown in Figure 11, the majority (59.2%; n = 29) of observers felt that information rarely played a role in whether officers formed suspicion. In six of the eight cases where observers rated information as a high priority for officers, the observers referenced the officers' use of information, provided by the dispatcher prior to or after a stop, to guide behavior.

Observers were instructed to inquire as to whether officers relied on any "working rules" that guided officers' decision-making or behavior during a shift. Approximately three-fourths (74.5%; n = 38) of the officers observed in this study reported using some type of working rule(s) that help them identify suspicious persons or determine how to handle a particular situation. The working rules that officers described to observers were categorized according to the nature of these rules. Forty-four of the forty-seven rules described by officers could be classified according to the categories used to describe the formation of suspicion (i.e., appearance, behavior, and time and place). The rules provided by officers are listed below and are categorized under the aforementioned headings.

Figure 10. Importance of Information in Forming Suspicion



Appearance (N = 4)

- Officer becomes suspicious of cars in which the subject (driver) is not visible.
- Police officer reported being suspicious of large, unmarked vehicles.
- Officer focuses on appearance of tags (e.g., clean tag on a dirty car signals that a theft has probably occurred).
- Officer was suspicious of cars with extremely dark, tinted windows.

Behavior (N = 24)

- Officer was suspicious of cars going under the speed limit, or people driving with expired tags.
- Police officer likes proactive work; he will keep an eye out for traffic violations (e.g., expired tags, lights not working, etc.).
- Officer said that the "scatter effect" (i.e., when a group of kids/people scatter once they see the police) is cause for suspicion.
- Officer is suspicious of persons who will not make eye contact with him.
- Officer always stops people who are: 1) going over 15 mph above speed limit, 2) who run red lights, 3) cut him off, 4) swerve (may be on cell phone), and 5) avoid eye contact.
- Officer looks for expired tags – they usually lead to something else.
- Officer becomes suspicious of cars cruising at low speeds.
- This officer pulls over anyone going 15 mph or more above speed limit.
- If someone is breaking the law and it is dangerous or hazardous, he will stop him/her.
- Officer usually looks for expired tags and for people trying to cut through traffic illegally.
- Officer stated that he doesn't usually stop people unless they are going twenty or more miles over the posted speed limit, and unless they pass him (these people are disrespectful to him and he will most likely give them a ticket).
- Officer said she likes to stop people with expired tags because it "always leads to something else."

- Officer makes stops in this order: 1) speeding violations, 2) expired tags, and 3) faulty working equipment.

- Anyone going over 15 MPH over the speed limit would be issued a ticket by this officer.

- Officer said he takes the attitude of the person into consideration, particularly when the case might go to court.

- When the officer is having a slow day (in terms of calls for service), he will go to certain roads where there are speeders or intersections where many people run stop signs.

- When this officer stops someone, he has already made up his mind whether to ticket or not.

- Officer stops people who run away when they see her coming.

- Officer will always stop civilians with their license tags on back window, persons driving with their head or tail lights out, and anyone going 15 + mph over speed limit.

- This officer treats each situation individually when it comes to speeding.

- Officer pulls over people who blatantly run stop signs and people who drive irresponsibly with children in their car.

- Officer does not usually stop drivers for running stop signs if they slow down, look, and continue. But if there is no attempt to slow down, he will pull them over. This officer only makes traffic stops for speeding if the driver is going more than eleven miles over the speed limit.

- Officer likes to look for traffic stops (e.g., expired tags, lights not working).

- Officer likes to look for traffic infractions when the shift is slow.

Time and Place (N = 16)

- Officer will stop cars driving slowly around warehouse area at night.

- Officer will pull over a car driving slowly in the warehouse district at night.

- Police officer said that he follows cars or people on foot at drug houses, because they are up to no good. He is also very likely to stop juveniles who are out past curfew.

- Officer likes to do proactive work; officer said he patrols drug areas constantly.

- Officer likes to patrol certain trouble spots whenever he gets the chance.

- Officer is suspicious of groups of youths in high crime areas and of people who look out of place during peak crime hours.

- Police officer is suspicious of groups of youths at night and of people driving old, beat-up cars in nice residential neighborhoods

- PO said that he checks certain parks a few times during the shift because many drug deals occur there. He will also pass known drug areas to look for suspicious activity.

- PO knows which areas are bad and known for drug dealing, etc. The PO is more prone to stop people in these areas for "any little thing."

- PO said he patrols certain drug neighborhoods and watches to see what cars pull up to certain houses. If they approach drug houses, he will stop them and ask them what they are doing there.

- Check the parks because when there are cars there at night, people are usually doing things in them that they shouldn't be doing.

- Police officer is suspicious of persons loitering in the industrial area after hours and of people driving beat up cars in nicer residential areas.

- He follows vehicles in the warehouse area during non-business area; tends to stop vehicles that have something wrong with them (e.g., broken lights, tinted windows, illegal lights).

- There are many burglaries in the warehouse district, so PO will stop any vehicles or people in this area at night during non-business hours.

- In the all Black area, whenever they see a new vehicle they will check it out to make sure it’s not stolen. Also because it's a low-income housing area.

- Whites in Black neighborhoods are either buying drugs, soliciting prostitutes, or lost. Blacks in "beat up" cars in White neighborhoods between 9am-12pm might be getting ready to rob a house.

Other (N = 3)

- PO said that he actively avoids traffic stops because they are "too much paperwork."

- Officer stated that he only makes stops he thinks will lead to an arrest.

- Officer doesn't like giving tickets to people who are really poor, so instead he gives them a warning. Also, he doesn't give seat belt tickets because he doesn't wear one either.

Of particular interest are the two "working rules" that have been italicized under the heading of "Time and Place." Given that the main focus of this study is the practice of racial profiling, it is noteworthy that only two of the fifty-one (4%) officers observed in this study made explicit mention of race as a factor that helps them identify persons worthy of more attention. As these quotes indicate, it is not an individual's race alone that makes a particular individual suspicious; instead, it is an individual's race relative to other factors (e.g., the racial composition of the neighborhood) that will draw the officer's attention.

Conclusion

The current study collected multiple types of data in order to provide an assessment of whether police officers in the Miami-Dade Police Department are explicitly using race as a criterion for stopping citizens. The observational component of this study, outlined in this chapter, was important in providing greater insight into the factors that influence whether or not the police become suspicious of individuals, and what factors the police use when deciding to stop individuals.

The results outlined in this chapter demonstrate that suspicion was most often formed in residential, predominantly Hispanic areas, which officers considered to be "trouble spots." Overwhelmingly, individuals drew police attention to themselves on the basis of their behavior, such as committing a traffic violation. Most persons about whom the police became suspicious were male, Hispanic, assessed to be of middle class socioeconomic status, and approximately 33 years of age.

Importantly, the suspect characteristics of gender and race were most often *unknown* to the police prior to their decision to stop an individual. Analyses conducted on those cases in which the police knew the citizen's gender and race prior to a stop, revealed that neither of these characteristics was significantly related to the decision to stop an individual. Once an individual was stopped, persons who were younger or believed to be of a lower socioeconomic status were more likely to be searched. Race was not significantly correlated with the decision to search a suspect.

The results provided in this chapter indicate that police officers in the Miami-Dade Police Department became interested in the behavior of citizens more than any other observed concern. The race of suspects was unrelated to the two major police decisions examined in this portion of the study—the decision to stop and the decision to search a suspect.

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CHAPTER 6

APPENDIX A

Officer Form

Date _____ **Observer # _____**

Time _____ **Observation # ____**

MIAMI-DADE POLICE RIDE-ALONG STUDY
OFFICER FORM

INSTRUCTIONS: There are two ride-along forms. The first is the **Officer Form**. This form is comprised of two sections: (A) Officer Background Section, and (B) the Officer Decision-Making Section. The Officer Background Section includes information on the officer's background characteristics and is to be filled out in the beginning of the ride-along. The Officer Decision-Making Section includes an overall characterization of the officer's decision-making patterns over the course of the ride-along. This section (B) should be filled out at the end of the ride-along or shortly after the ride-along. The second form is the **Suspicion Form** which includes information about each stop/search the officer makes on the shift. This form must be filled out during and shortly after each specific observation/stop.

Section A. Officer's Background: (fill out during beginning of ride-along)

1. Officer's Gender: Male ____ Female ____

2. Years in the Department: _____ years.

3. Officer's highest degree (circle one):
    a. High School Diploma
    b. Associate Degree (2 year degree)
    c. Bachelor Degree (4 year degree)
    d. Masters Degree or higher

4. Officer's Race: (circle one)
    a. Anglo
    b. African-American
    c. Latino
    d. Mixed Specify _____
    e. Other

Section B. Officer's Decision-Making Style: (fill out at the end of the ride-along)
Now that you have observed the officer for a full shift and have observed him/her make several stops/searches, we want you to give your overall assessment of the officer's style of decision-making in deciding who should be stopped/searched. These questions refer to the officer's overall decision-making style, not for a specific stop. Fill out at end of or shortly after the ride-along.

5. In deciding who to follow or stop, generally how important was the **appearance** of the person or passengers to this officer? (high, medium, low priority, or not relevant to the officer) **Explain** what specific aspects of a person's appearance were relevant to the officer.

6. In deciding who to follow or stop, generally how important was the **behavior** of the person or passengers to this officer? (high, medium, low priority, or not relevant to the officer) **Explain** what specific aspects of a person's behavior were relevant to the officer.

7. In deciding who to follow or stop, generally how important was the **time and place** of the person or passengers to this officer? (high, medium, low priority, or not relevant to the officer) **Explain** what specific aspects of a person's time and place were relevant to the officer.

8. In deciding whom to follow or stop, generally how important to this officer was **information** about the person or situation given the officer by a dispatcher or other officers? (high, medium, low priority, or not relevant to the officer) **Explain** what specific types of information were most relevant to the officer.

9. Did this officer tell you of any working rules he/she uses in deciding who to follow or stop?

Yes _____ No _____

If yes, explain in detail the officer's working rules.

CHAPTER 6

APPENDIX B

Suspicion Form

Date _____ **Observer # _____**

Time _____ **Observation # ____**

MIAMI-DADE POLICE RIDE-ALONG STUDY
SUSPICION FORM

INSTRUCTIONS: A **Suspicion Form** should be filled out each time the officer forms a suspicion or follows a suspect, either in a vehicle or on foot (even if the officer decides not to stop the suspect). All the information on this form refers only to the specific incident. An officer may give different reasons for different incidents and use different decision-making criteria. Record only the information given during the specific "suspicion" for which this form is completed.

A. Forming Suspicion (answer for each occasion the officer watches or follows a vehicle or suspect.

1. What were the reasons the officer gave for being suspicious of or **following** this vehicle? (List each specific reason and circle the one the officer considered to be the main reason) (e.g. appearance, behavior, time and place, specific information, BOLO) Be Specific.

2. Did the officer receive any information about the status of the vehicle/suspect before the officer became suspicious? No_____ Yes _____

If yes, what information was given to the officer about the vehicle or the suspect, and how was it received? (e.g. radio, conversation)

B. Context:

3. In what type of area did the observation occur? (Circle one)
   a. residential
   b. commercial
   c. secluded area
   e. other (specify) _____

4. What is the predominant racial/ethnic makeup of the area where the observation occurred?
   a. African American
   b. Latino
   c. Anglo
   d. Mixed

5. What was the officer's assessment of the area where the observation occurred? (e.g. trouble spot, high class area, rough area)

C. Acting on Suspicion

6. Could you determine the **gender** of the suspect(s) **before** the officer decided to make the stop?
(circle the best answer for each passenger)

Driver: Yes _____ No _____

Front Side Passenger: Yes _____ No _____

Back Seat Passenger(s): Yes _____ No _____

7. Could you determine the **race** (Black/white) of the suspect(s) **before** the officer decided to make the stop?
(circle the best answer for each passenger)

Driver: Yes _____ No _____

Front Side Passenger: Yes _____ No _____

Back Seat Passenger(s): Yes _____ No _____

8. Did the officer stop the vehicle/suspect? Yes _____ No _____ (If No, skip to Section F)

9. What were the reasons the officer gave for **stopping** this vehicle? (List each reason and circle the one the officer considered to be the main reason) Be specific.

10. Did anyone else see the stop? Yes _____ No _____

11. What reason(s) did the police officer give **to the driver** for stopping his/her vehicle?

D. Searching the Vehicle/Suspect (Fill out this section if the vehicle/suspect was **searched** by the officer. If the officer did not search the vehicle/suspect, skip to Section E.)

12. Did the officer request a voluntary search of the vehicle? Yes _____ No _____

13. Did the officer conduct a search of the vehicle? Yes _____ No _____

If yes, what were the reasons the officer gave for **searching** this vehicle? (List each reason and circle the one the officer considered to be the main reason) Be specific.

14. Did the officer pat down or search any occupants in the vehicle? Yes _____ No _____

E. Officer/Suspect Interaction

15. Describe the officer's general attitude/language toward the suspect (respectful, helpful, antagonistic, rude).

16. Describe the officer's behavior toward the suspect (rough, aggressive, force).

17. Describe the officer's assessment of the social status or importance of the suspect (low, medium, high).

18. Were any police officers disrespectful to any of the occupants in the vehicle?
Yes _____ No _____

If yes, how was he/she disrespectful? (e.g. language, behavior?) (Be specific)

If yes, describe the disrespectful language and/or behavior? (Be specific) _____

19. Were any occupants disrespectful to the police? Yes _____ No _____
If yes. What form did the disrespect take? Language? Behavior? (Be specific)

If yes, describe the language and/or behavior? (Be specific)

20. Did the driver or passengers say anything or act in any way that gave an indication of their opinion of the legitimacy of the stop/search/arrest? Yes _____ No _____

If yes, explain specifically what they said or did.

F. Suspect and Vehicle Characteristics:

21. How many passengers were in the car at the time of the stop/observation? _____

For each passenger, fill out the information in the chart below. Give your best approximations, but if you cannot determine any answers, put **unsure.**

	Age (best est.)	**Gender** (M or F)	**Race or Ethnicity** (Anglo, Black, Latino or Mixed)
Driver			
Passenger (front)			
Passenger (rear)			
Passenger (rear)			
Passenger (rear)			
Passenger (rear)			

22. Could you see from the police car what the **driver** was wearing? Yes _____ No _____

If yes, describe the drivers clothes (e.g. formal, casual, sloppy, dirty)

23. Did the **driver** have/wear any distinctive clothing/ornaments such as an earring, a bandana, or a gold chain? Yes _____ No _____
If yes, describe the drivers clothes/ornaments.

24. Could you see from the police car what a **passenger** was wearing?
Yes _____ No _____
If yes, describe the passenger's clothes (e.g. formal, casual, sloppy, dirty)

25. Did any **passenger** have/wear any distinctive clothing/ornaments such as an earring, a bandana, or a gold chain? Yes _____ No _____
If yes, describe the passenger's clothes/ornaments.

26. Describe the car that was stopped/observed.
Manufacturer:
Model:
Year:
Color:
Distinctive features: (e.g. loud music, extra lights, distinguishing markings or stickers, top down, yelling)

G. Officer's Assessment of the Stop/Search (Answer only if a stop occurred)

27. How would you (the officer) assess the cooperation of the suspect(s)?
a. Cooperative
b. Somewhat Cooperative
c. Somewhat Uncooperative
d. Uncooperative

28. How would you (the officer) assess the attitude of the suspect(s)?
a. Respectful
b. Somewhat Respectful
c. Somewhat Disrespectful
d. Disrespectful

29. What about the suspect's attitude or demeanor made you feel this way?

Chapter 7

Citizen Contact Card Component: Stop Analysis

In this chapter, we present the findings from our analysis of the citizen contact card data as they relate to the decision to initiate a traffic stop. Later chapters explore officer behavior *after* a stop was initiated and examine issues related to searches, arrests, and citations. In contrast, this chapter focuses on the variables associated with the *initial* decision to undertake a traffic stop, including the reasons for stops and the interaction of variables that resulted in a traffic stop.

Distribution of Stops

Table 1 shows the breakdown by race and ethnicity of drivers stopped by the MDPD during the data collection period. Following the U.S. census protocol, the citizen contact card contained five race categories (Black, White, Asian, Am. Indian or Alaska Native, Hawaiian or Pacific Islander) and two ethnic categories (Hispanic and non-Hispanic). For the purpose of parsimony, several racial and ethnic categories were combined in Table 1. For example, Asians, Native Americans, and Pacific Islanders were collapsed into an "other" category. Together, the number of drivers stopped in these three categories comprised less than one percent of all traffic stops recorded during the data collection period. As a result, these categories were not subjected to further analysis because the number of cases was too small to provide meaningful results.

The Hispanic category in Table 1 contains all drivers of Hispanic ancestry regardless of race. Of the 29,805 Hispanic drivers stopped, a very small proportion were Black Hispanics (n=817), while the remainder were White Hispanics. Overall, Hispanic drivers

(45.1%) constituted the largest percentage of drivers stopped. Blacks (26.8%) and Whites (27.8%) were evenly distributed among the remainder of drivers.

Table 1. Distribution of Stops by Driver Race

Driver Race	Number of Stops	Percent of Stops
Black (non-Hispanic)	17,701	26.8
White (non-Hispanic)	18,360	27.8
Hispanic*	29,805	45.1
Other	202	.3
Missing	41	.06
TOTALS	**66,109**	**100%**

*Includes Hispanics of any race

Benchmark Comparisons

As discussed in the Methods chapter, we used a random sample of not-at-fault drivers involved in two vehicle traffic crashes to estimate the racial composition of drivers in Miami-Dade County. Our limited empirical test of this methodology at 11 high-crash intersections indicated that not at-fault drivers represent a reasonably accurate estimate of the driving population, as identified through field observation of drivers. In order to account for roadway or other conditions that may disproportionately influence accident rates among racial groups, we aggregated the crash data into three groups according to the racial composition of the census tract where the crash occurred. For this analysis, an area with a *substantial* Black population is one with 30 percent or more Black residents – 10 percent above the overall county population of 20 percent Black. Similarly, we define *predominantly* non-Black areas

as those with 90 percent or more non-Black citizens. Mixed areas are those that do not qualify as substantially Black or predominantly non-Black and which have less than 30 percent Black residents and less that 90 percent White residents.

As Table 2 indicates, approximately 21 percent of the crashes from our randomly drawn sample occurred in predominately non-Black areas and approximately 22 percent occurred in substantially Black areas. An additional 47 percent of the crashes occurred in racially mixed areas. Furthermore, approximately 11 percent of the crashes from the sample could not be geocoded by area type because of problems with the crash location on the accident report. These crashes were not included in the subsequent comparisons of crash and contact card data that appear below.

Table 2. Distribution of Crashes by Area Type

Area Type	Number of Crashes	Percent of Crashes
Predominately non-Black	486	21.5
Substantially Black	574	22.5
Racially Mixed	1,197	46.9
Missing	294	11.5%
TOTALS	**2,551**	**100%**

After aggregating the traffic crash data by area type, we undertook a similar effort with the citizen contact card data. The 66,109 traffic stops included in the data file were also geocoded and assigned to area type using the same coding scheme as the crash data. The results of this analysis are presented in Table 3 (below). As with the crash data, a small

percentage of contact card stops (7.2%) could not be geocoded because of bad addresses. They too were not included when comparing stop data to the traffic crash benchmark.

Table 3. Distribution of Stops by Area Type

Area Type	Number of Stops	Percent of Stops
Predominately non-Black	13,925	21.1
Substantially Black	19,609	29.7
Racially Mixed	27,815	42
Missing	4,760	7.2
TOTALS	**66,109**	**100%**

Once the crash and citizen contact card data were aggregated by area type, comparisons were made between Black and non-Black drivers stopped, and not-at-fault Black and non-Black drivers involved in traffic crashes within each of the three area types. Because not-at-fault drivers appear to represent a reasonably accurate estimate of the racial composition of the driving population, these data serve as the benchmark against which the contact card data are measured.

Table 4. Comparison of Black Crashes to Stops by Area Type

Area Type	Percent of Black Crashes	Percent of Black Stops	t	Sig.
Predominately non-Black	4.9	7.2	2.26	.024
Substantially Black	57.7	61.3	1.68	.094
Racially Mixed	12.1	15.9	3.86	.000

As the results from Table 4 show, Black drivers were stopped at rates that exceeded their estimated representation in the driving population in all area types. The observed differences between stops and crashes were tested using an independent samples t-test and were found to be statistically significant in predominately non-Black and racially mixed areas. The greatest difference between stops and crashes was found in predominately non-Black areas, where Black stops exceeded the driving population estimate by 47 percent. The smallest difference observed was in substantially Black areas, where the difference between stops and crashes was a statistically insignificant 6.2 percent. In racially mixed areas, the difference between stops and the driving population estimate was 31.4 percent, which was highly significant.

It is important to note that the driving population estimate derived from the not-at-fault traffic crash data is just that – an estimate. Based on the traffic crash sample sizes, the margin of error in estimating the percentage of Blacks involved in crashes is two percent in predominately non-Black areas, four percent in substantially Black areas, and two percent in racially mixed areas. Moreover, even if the traffic crash sampling strategy produced no margin for error, traffic crashes themselves are merely an estimate of the driving population and will undoubtedly vary somewhat from the true percentage of Black drivers on the roadways of Miami-Dade County. Thus, caution must be exercised in concluding that Blacks were stopped disproportionately to their representation in the driving population, a finding based on the differences observed in Table 4.

Reasons for Stops

In the analyses that follow, we explore whether differences existed among Blacks, Whites, and Hispanics, regarding the reasons for a stop, as well as the interplay of officer

race and ethnicity in the stop decision. We examine Black and Hispanic drivers separately to account for the possibility that either or both racial and ethnic groups were subjected to disparate stop practices when compared to Whites. However, our field observations of drivers and violators, as well as our informal discussions with MDPD officers, lead us to believe that officers will rarely be able to ascertain driver ethnicity at the time a decision to stop is made. If officers are targeting drivers for stops because of their race, it is much more likely that *skin color* is the salient racial variable rather than Hispanic ancestry, which is extremely difficult if not impossible to identify from a distance, and when the driver is seated in a moving automobile. Nevertheless, we examine driver ethnicity separately in order to err on the side of caution and account for the possibility that Hispanic motorists were subjected to disparate stop practices, relative to non-Hispanic Whites.

Table 5 shows the differences between racial groups regarding the reasons for a traffic stop (see Maps 1 and 2 in Appendix A). An early version of the citizen contact card contained fewer stop reason categories for officers to choose from than later versions. In particular, the first version contained a “traffic violation” category that was later subdivided into hazardous and non-hazardous moving violation categories. Table 4 contains data from all available categories on both the earlier and later versions of the contact card.

The most common reason for a stop among all drivers was a traffic violation of some sort (see Map 3 in Appendix A). The later version of the card indicates that, within racial groups, White drivers (34.2%) were stopped more frequently than Black drivers (29.9%) for hazardous moving violations, while Hispanic drivers (53.4%) were significantly more likely than either of the other two racial categories to be stopped for hazardous violations. Blacks, on the other hand, were more likely than Whites or Hispanics to be stopped for equipment

violations and for non-hazardous moving violations. Blacks were also more likely than Whites or Hispanics to be stopped for investigative purposes and in response to a BOLO ("Be On the Look Out").

Table 5. Reason for Stop by Driver Race and Ethnicity

		Driver Race and Ethnicity			
		Black	**White**	**Hispanic**	**TOTALS**
Reason for Stop	**Investigation**	313 (1.8%)	211 (1.1%)	345 (1.2%)	**869**
	Traffic Violation	5,777 (30.9%)	9,524 (51.9%)	6,558 (22.0%)	**21,559**
	Equipment Violation	3,406 (19.2%)	1,760 (9.6%)	3,613 (12.1%)	**8,779**
	BOLO	32 (.2%)	8 (.04%)	30 (.1%)	**70**
	Hazardous Moving Violation	6,060 (34.2%)	5,488 (29.9%)	15,903 (53.4%)	**27,451**
	Non-Hazardous Moving Violation	1,766 (10.0%)	926 (5.0%)	2,610 (8.8%)	**5,302**
	Other Violation	647 (3.7%)	443 (2.4%)	746 (2.5%)	**1,836**
	TOTALS	**17,701 (100%)**	**18,360 (100%)**	**29,805 (100%)**	**65,866**

Chi-Square = 6,058.46**
** $p \leq .01$

Officer Race as a Variable

Table 6 examines the relationship between officer race and citizen race in traffic stops. Black and Hispanic officers were more likely to stop drivers of their own race than drivers of other races. Forty-four percent of stops made by Black officers were of Black

drivers, which represented a significantly higher percentage of their total stop activity than any other racial group. Similarly, half of all stops made by Hispanic officers were of Hispanic drivers. The stop pattern among White officers was somewhat different than among Black and Hispanic officers. Like Hispanic officers, White officers stopped more Hispanics than any other race, but they also stopped fewer Black drivers (22.9%) than Black or Hispanic officers. The differences observed in Table 5 are likely the result of officer deployment patterns, with Black officers probably being more frequently assigned to predominantly Black areas of the county, where they were more likely to encounter Black motorists. Likewise, Hispanic officers were probably deployed disproportionately in predominantly Hispanic neighborhoods, which would account for the higher percentage of Hispanics drivers stopped by Hispanic officers. The maps below further explore the intersection of officer and driver race by examining the demographic characteristics of the areas where officers of different racial groups made traffic stops.

Table 6. Stops by Officer and Citizen Race/Ethnicity

		Officer Race and Ethnicity				
		Black	**White**	**Hispanic**	**Other**	**TOTALS**
Citizen Race and Ethnicity	**Black**	4,435 (44.2%)	5,812 (22.9%)	7,736 (24.7%)	96 (16.1%)	**17,679**
	White	2,438 (24.3%)	8,131 (32.0%)	7,606 (25.6%)	163 (27.4%)	**18,338**
	Hispanic	3,161 (31.5%)	11,451 (45.1%)	14,809 (49.8%)	336 (56.5%)	**29,757**
	TOTALS	**10,034 (100%)**	**25,394 (100%)**	**29,751 (100%)**	**595 (100%)**	**65,774**

Chi-Square = 2,180.7**
** $p \leq .01$

Figure 1 below shows stops made by Black officers overlaid against census tracts comprised of predominately Black, mainly White, and mostly Hispanic residents. As the map indicates, stops by Black officers cluster in and around areas with a substantial Black population. This suggests a deployment pattern that disproportionately places Black officers in neighborhoods with relatively high Black populations. In contrast, stops by Hispanic officers (Figure 2) are more evenly dispersed and occur more often in White and mostly Hispanic census areas. Stops by White officers (Figure 3) follow a pattern similar to that of Hispanic officers, although they make fewer stops in mostly Hispanic areas. These patterns help explain why Black officers stop a greater percentage of Black drivers than drivers of other races, and why as a percentage of their total stops, White and Hispanic officers stop more White and Hispanic motorists, than Black officers. Again, officer deployment patterns likely account for these observed differences.

Figure 1. Stops by Black Officers

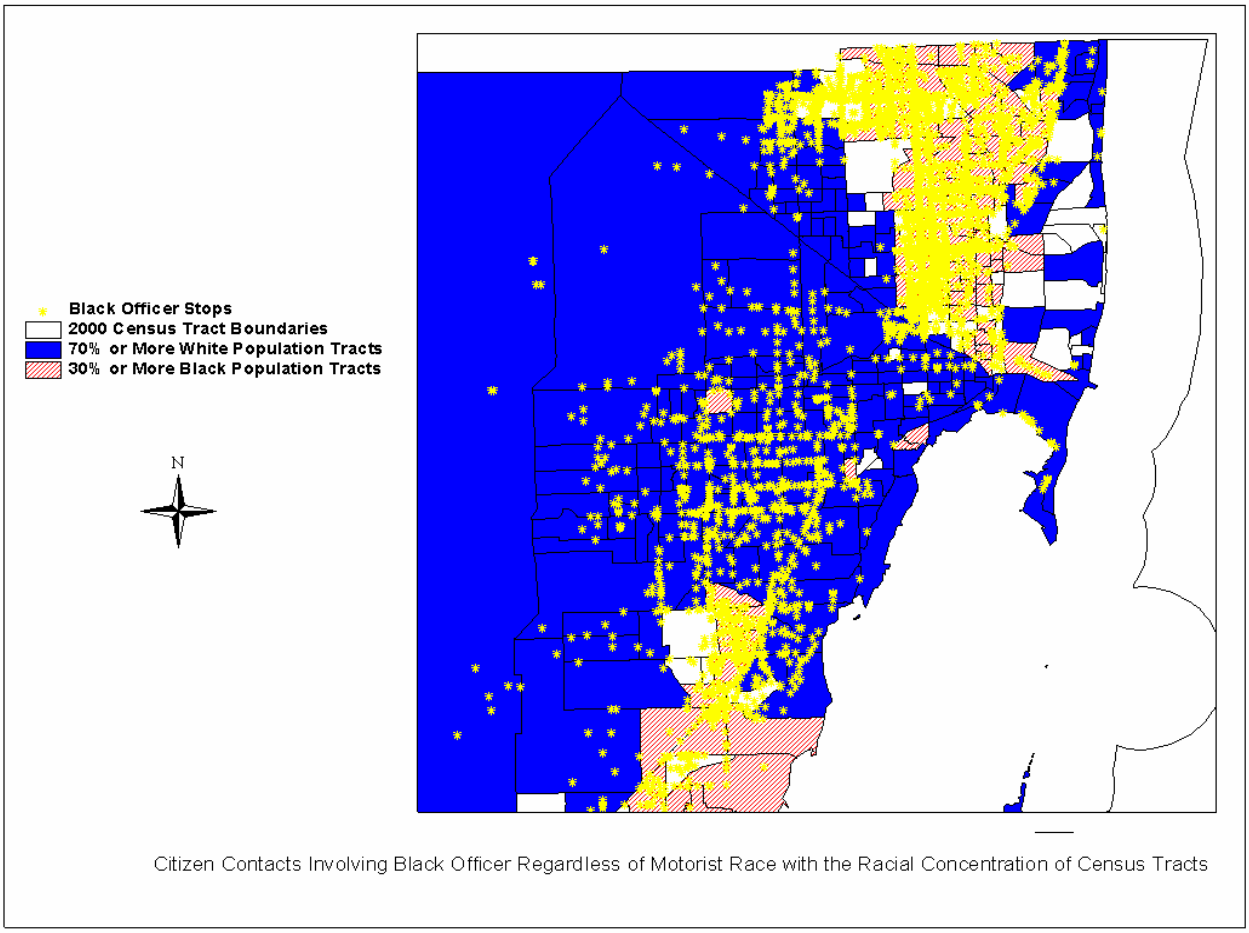


Figure 2. Stops by Hispanic Officers

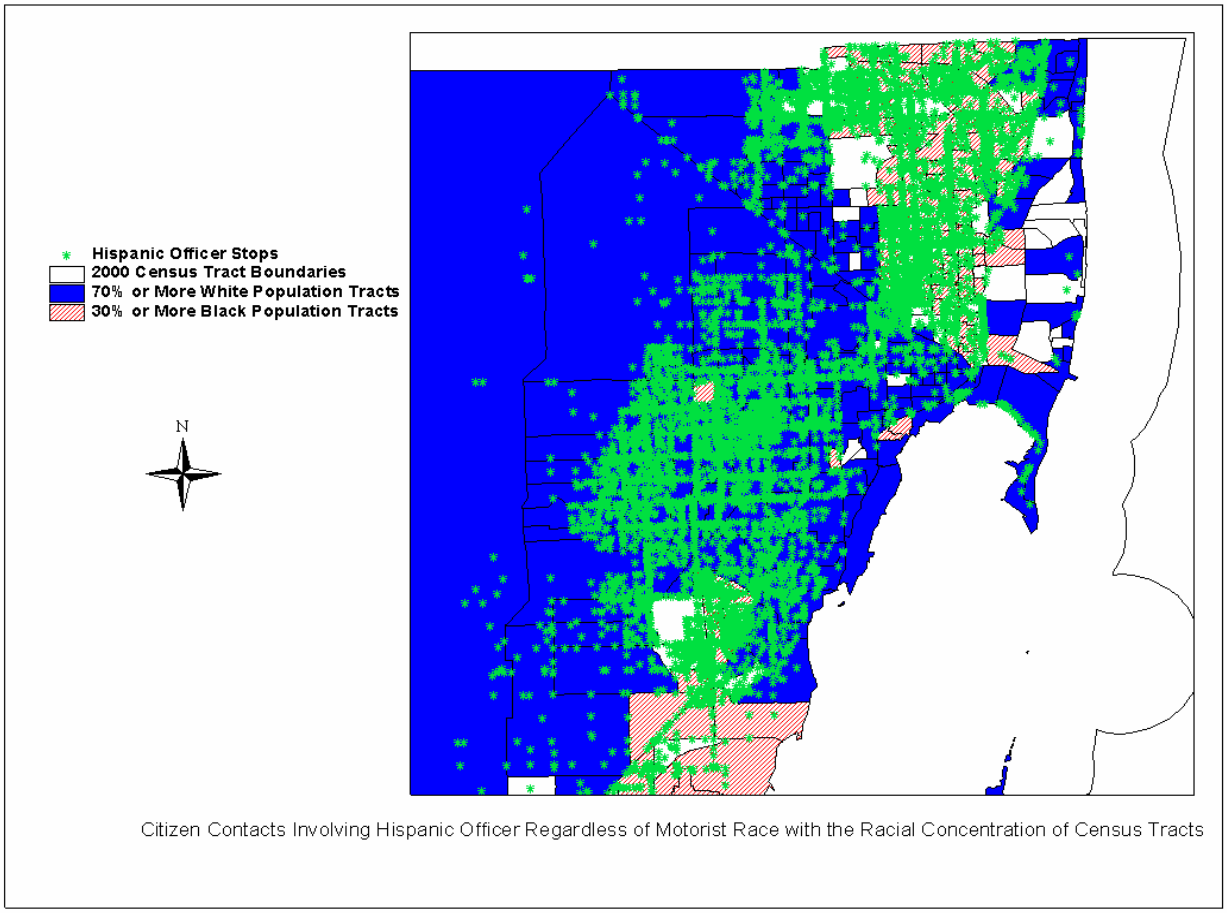


Figure 3. Stops by White Officers

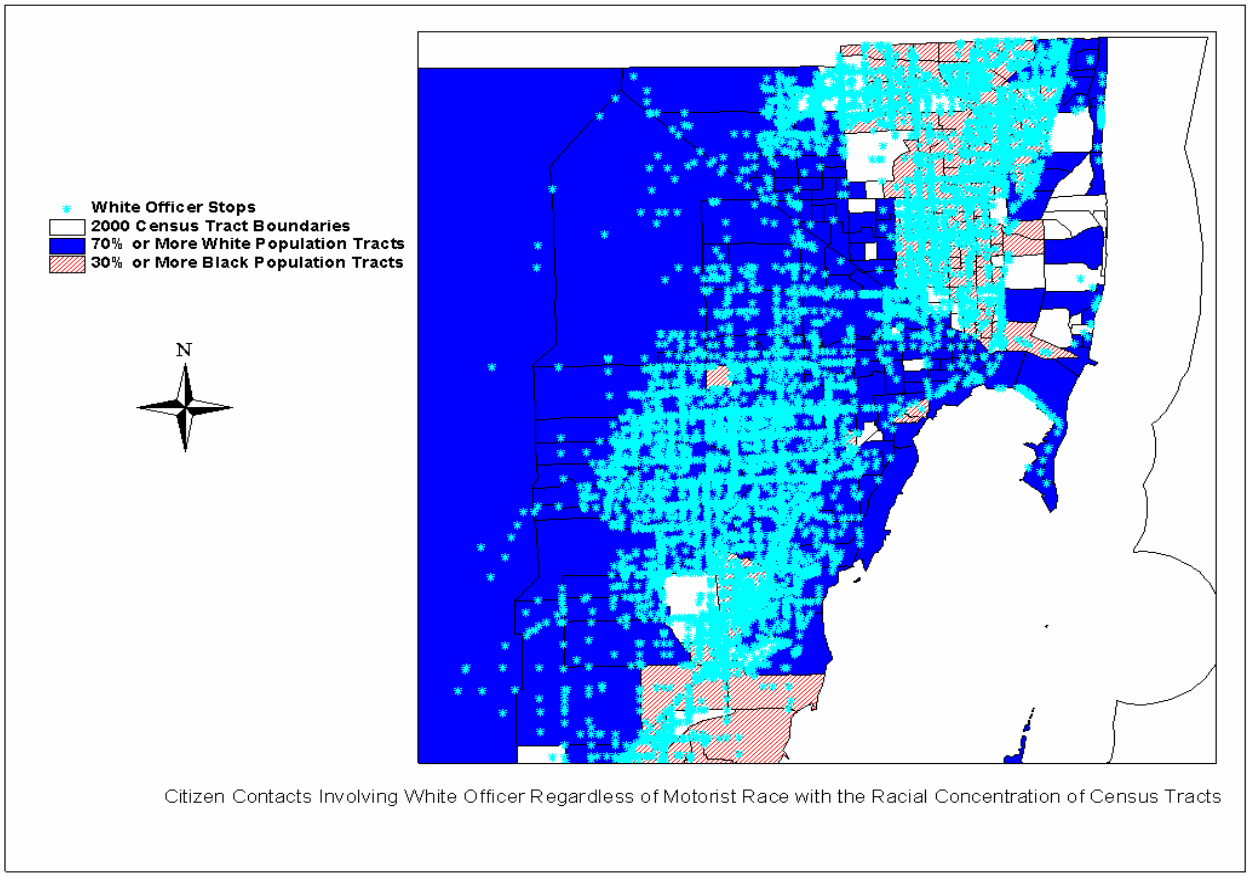


Table 7 examines whether officer race influenced the type of traffic stop made. In this cross-tabulation, Black officers were more likely than White or Hispanic officers to stop motorists for investigative purposes (see Maps 4 and 5 in Appendix A). White officers were more likely than officers of other races to make stops for hazardous moving violations, while Hispanic officers were the most likely to make stops for equipment violations. Significantly, these data indicate that White officers made fewer investigative stops as a percentage of their total stops than Black officers, demonstrating that White officers did not use investigation stops to "profile" drivers in a more aggressive manner than Black officers. We examine whether officer race predicts the race of the motorist stopped when additional relevant factors are taken into consideration in the next table.

Multivariate Analyses

Table 8 presents a logistic regression analysis of variables that predict whether a stopped motorist was Black. The most useful column for interpreting the outcome of this and other logistic regression analyses is the Odds Ratio. Odds ratios greater than 1.00 indicate a positive relationship between the independent variable (left-hand column) and the outcome (or dependent) variable. Thus, as the dependent variable changes in value (e.g. increases from 0 to 1), an odds ratio greater than one indicates an increased probability that the value of the outcome variable will increase as well. For example, in Table 7, a stop for an equipment violation (0=other reason, 1=equipment violation) increased the odds that a driver was Black (non-Black=0, Black=1) by 41 percent. In contrast, an odds ratio smaller than

Table 7. Reason for Stop by Officer Race

		Officer Race				
		Black	**White**	**His-panic**	**Other**	**TOTALS**
Reason for Stop	**Investigation**	203 (2.0%)	268 (1.1%)	395 (1.3%)	4 (.7%)	**870**
	Traffic Violation	3,617 (35.9%)	8,460 (33.2%)	9,335 (31.3%)	204 (34.2%)	**21,616**
	Equipment Violation	1,170 (11.6%)	2,823 (11.1%)	4,719 (15.8%)	83 (13.9%)	**8,795**
	BOLO	5 (.05%)	27 (.1%)	33 (.1%)	5 (.8%)	**70**
	Hazardous Moving Violation	3,923 (39.0%)	11,385 (44.6%)	12,014 (40.3%)	195 (32.7%)	**27,517**
	Non-Hazardous Moving Violation	710 (7.1%)	2,000 (7.8%)	2,503 (8.4%)	94 (15.8%)	**5,307**
	Other Violation	437 (4.3%)	553 (2.2%)	841 (2.8%)	11 (1.8%)	**1,842**
	TOTALS	**10,065 (100%)**	**25,516 (100%)**	**29,840 (100%)**	**596 (100%)**	**66,017***

*Data missing from 92 cases (.1%)
Chi-Square = 680.6**
** $p \leq .01$

1.00 indicates a negative relationship between the independent and outcome variables. This means that as the independent variable increases in value, the probability that the outcome variable will increase diminishes. Thus, in Table 7, if an officer was White (0=non-White, 1=White), the odds that the driver stopped was Black decreased by 9.9 percent (1-.874), which indicates a slight negative relationship between these two variables.

Table 8. Predictors of Black Driver Stops

	B	Sig.	Odds
Percent White Population	-.039**	.000	.962
Percent Owner-Occupied Housing	.002**	.002	1.002
Violent Crime Arrest Rate	.000**	.000	1.000
Residential Stability	.003**	.010	1.003
Officer's Gender (male=1)	-.118**	.000	.888
Officer's Age	-.010**	.000	.991
Officer's Years of Service	.000	.896	1.000
No. of Complaints Against Officer	-.022**	.008	.978
No. of Use of Force Reports	.023*	.032	1.023
No. of Disciplinary Actions	.035**	.001	1.036
White Officer	-.104**	.002	.901
Hispanic Officer	-.191**	.000	.826
Investigative Stop	.157	.088	1.170
Equipment Violation	.343**	.000	1.409
Vehicle Age	.000	.851	1.000

n = 58,370
Model Chi-Square = 17,138.7**
Pseudo-R Square = .368
* $p \leq .05$
** $p \leq .01$

All variables in the model were statistically significant with the exception of officer years of service, stops for investigative purposes, and vehicle age. However, as indicated by the odds ratios, most of the predictive effects for the statistically significant variables were negligible. The variables with the largest effects included Equipment Violation, officer gender, and officer race (White and Hispanic), but even these effects were fairly small.

Importantly, stops for equipment violations were more likely to involve Black drivers (by an odds increase of 41 %) even when controlling for vehicle age. Thus, although Blacks drove older cars than Whites (as indicated by the mean age of vehicle), this did not explain why they were stopped more frequently for equipment violations. On the other hand, once other relevant variables were held constant, stops for investigative purposes were no longer a statistically significant predictor of the race of the driver stopped. Likewise, and probably because of the deployment differences between officers discussed above, White and Hispanic officers were less likely to stop Black drivers than non-White or non-Hispanic officers (see Figures 1-3 above). Interestingly, male officers were slightly less likely to stop Black drivers than female officers.

Table 9 presents a similar analysis to the one presented in Table 8 but uses Hispanic motorists as the dependent variable. It also replaces several independent variables in the Black driver model with others that better fit an examination of factors that may influence the police to stop Hispanic motorists. Unlike Table 7, a larger number of variables included in this model were insignificant. Of the remaining variables that reached statistical significance, the strongest correlates of a Hispanic driver stop were officer race (Black and Hispanic) and the number of disciplinary actions filed against an officer. Consistent with probable deployment patterns, Black officers were less likely to stop Hispanics than non-Black officers, while Hispanic officers were significantly more likely than officers of other races to stop Hispanics. As the number of disciplinary actions against an officer increased, the odds that an officer would stop an Hispanic driver decreased.

Table 9. Predictors of Hispanic Driver Stops

	B	Sig.	Odds
Percent White Population	.025**	.000	1.026
Percent Owner-Occupied Housing	-.003**	.000	.997
Violent Crime Arrest Rate	.000**	.003	1.000
Residential Stability	.000	.573	1.000
Officer's Gender (male=1)	.042	.095	1.043
Officer's Age	.006**	.001	1.006
Officer's Years of Service	-.003	.095	.997
No. of Complaints Against Officer	.011	.065	1.012
No. of Use of Force Reports	.-.007	.434	.993
No. of Disciplinary Actions	-.059**	.000	.943
Black Officer	-.075*	.012	.927
Hispanic Officer	.266**	.000	1.345
Investigative Stop	-.028	.733	.973
Equipment Violation	.017	.526	1.017
Vehicle Age	.000	.915	1.000

n = 58,370
Model Chi-Square = 7,773.17**
Pseudo-R Square = .167
* $p \leq .05$
** $p \leq .01$

Summary

At approximately 45 percent of the stops recorded during the data collection period, Hispanic motorists represent the largest category of drivers stopped by the MDPD. White and Black drivers each constituted about one quarter of all traffic stops. Compared to an estimate

of the driving population derived from not-at-fault traffic crash data, Blacks were overrepresented among drivers stopped in predominately non-Black and racially mixed areas of unincorporated Miami-Dade County. Drivers of all racial and ethnic groups were stopped most often for traffic violations, but Blacks were more likely than Whites or Hispanics to be stopped for equipment violations and BOLOs (Be On the Look-Out). On the other hand, Hispanic drivers were much more likely than Black or White drivers to be stopped for hazardous moving violations. Black drivers made up a greater portion of stops made by Black officers than of White or Hispanic officers, mainly due to officer deployment patterns. Similarly, Hispanic officers were more likely than Black or White officers to stop Hispanic drivers.

CHAPTER 7

APPENDIX A

Maps	Content	Page Number in Chapter
Maps 1 and 2	Equipment Violations	Page 136
Map 3	Moving Violations	Page 136
Map 4 and 5	Investigative Stops	Page 143

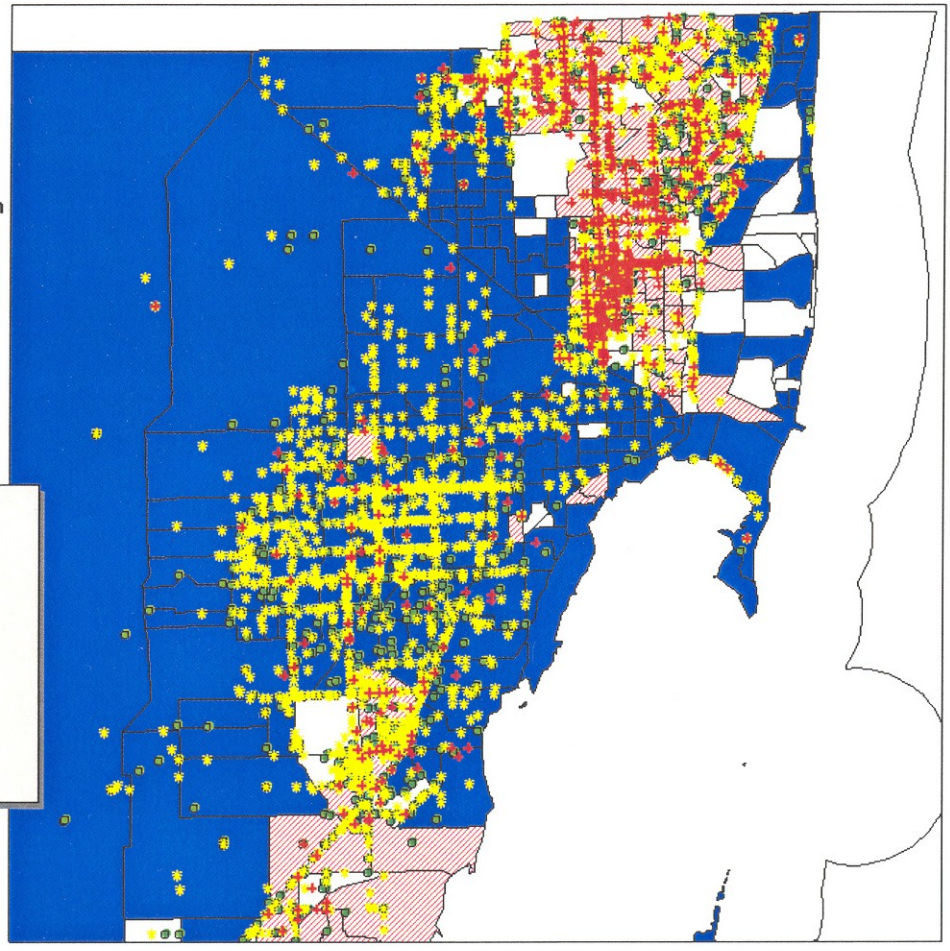
Map 1

- Black Officer, Equipment Violation
- Hispanic Officer, Equipment Violation
- White Officer, Equipment Violation
- 2000 Census Tract Boundaries
- 70% or More White Population Tracts
- 30% or More Black Population Tracts

FINDING:

Black and Hispanic officers made stops for equipment violations more than White Officers;

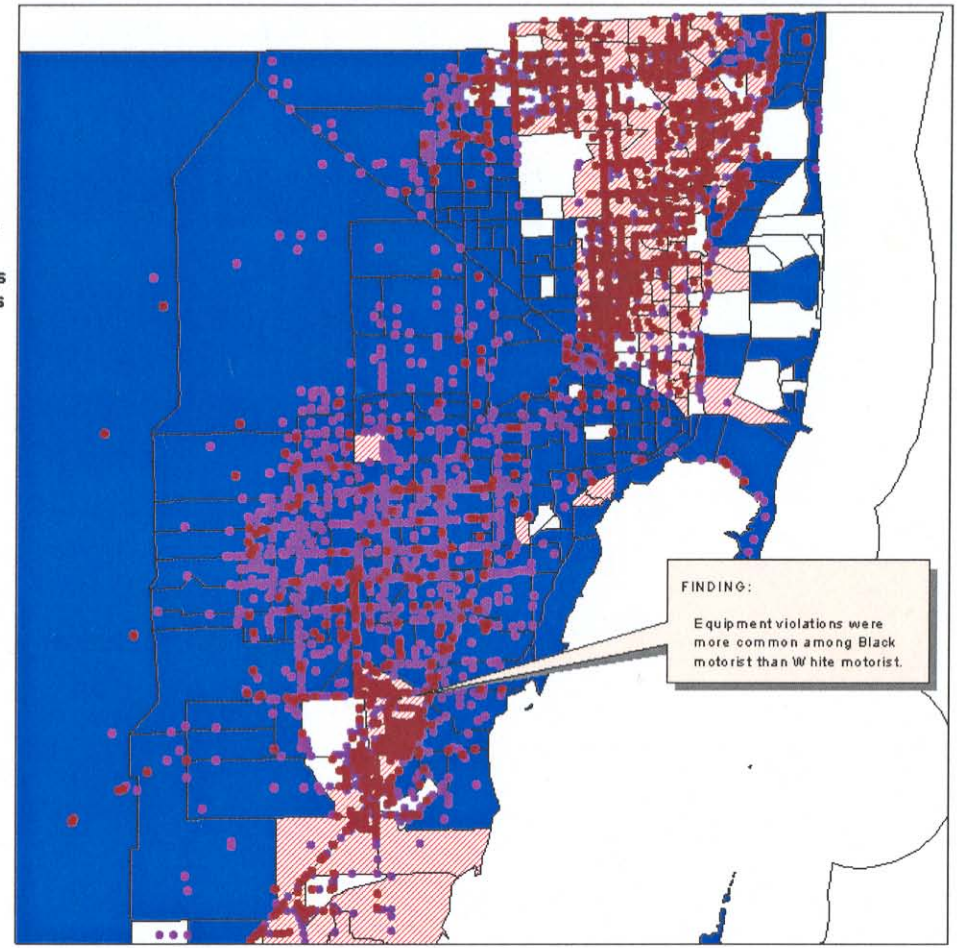
Black officers were more likely to make stops for equipment violations in areas of Black Concentration



Citizen Contact for Equipment Violations by Race of the Officer

Map 2

- Black Motorist, Equipment Violation
- White Motorist, Equipment Violation
- 2000 Census Tract Boundaries
- 70% or More White Population Tracts
- 30% or More Black Population Tracts



Citizen Contact for Equipment Violation by Race of the Motorist

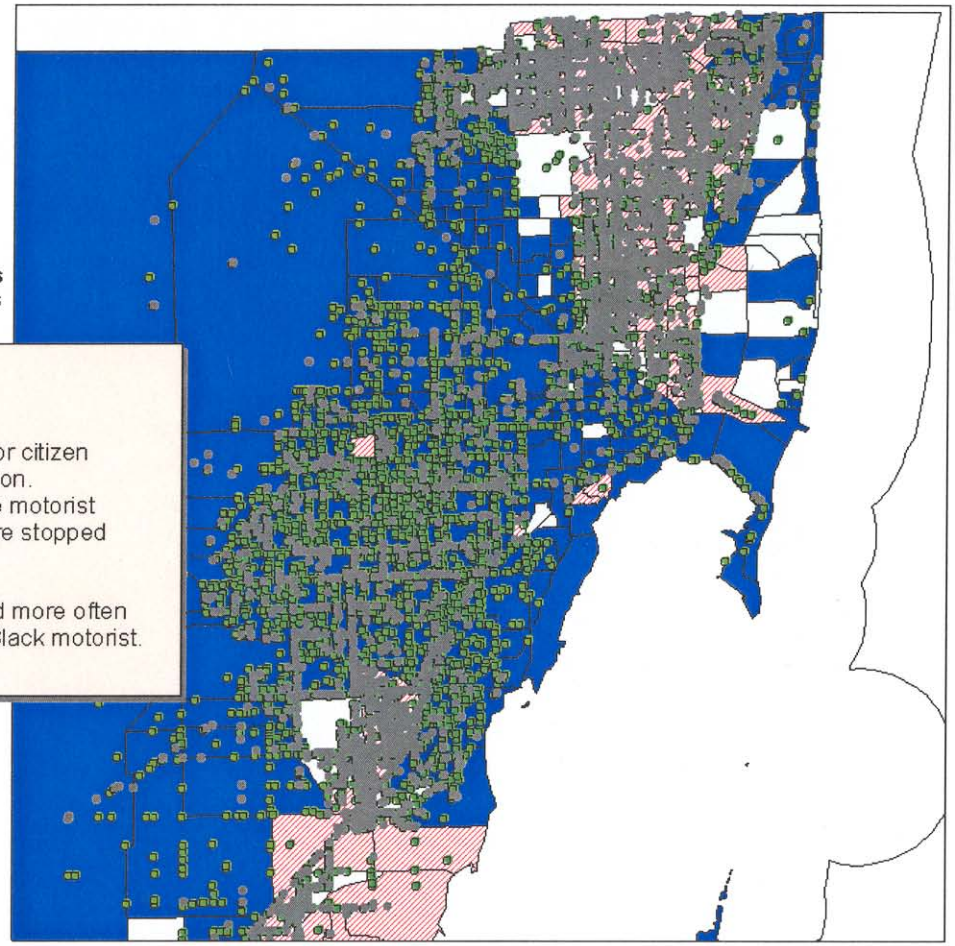
Map 3

- Black Motorist, Moving Violation
- White Motorist, Moving Violation
- 2000 Census Tract Boundaries
- 70% or More White Population Tracts
- 30% or More Black Population Tracts

FINDING:

The most common reason for citizen contact was a moving violation. Approximately 79% of White motorist & 65% of Black motorist were stopped for this reason.

White motorist were stopped more often for moving violations than Black motorist.



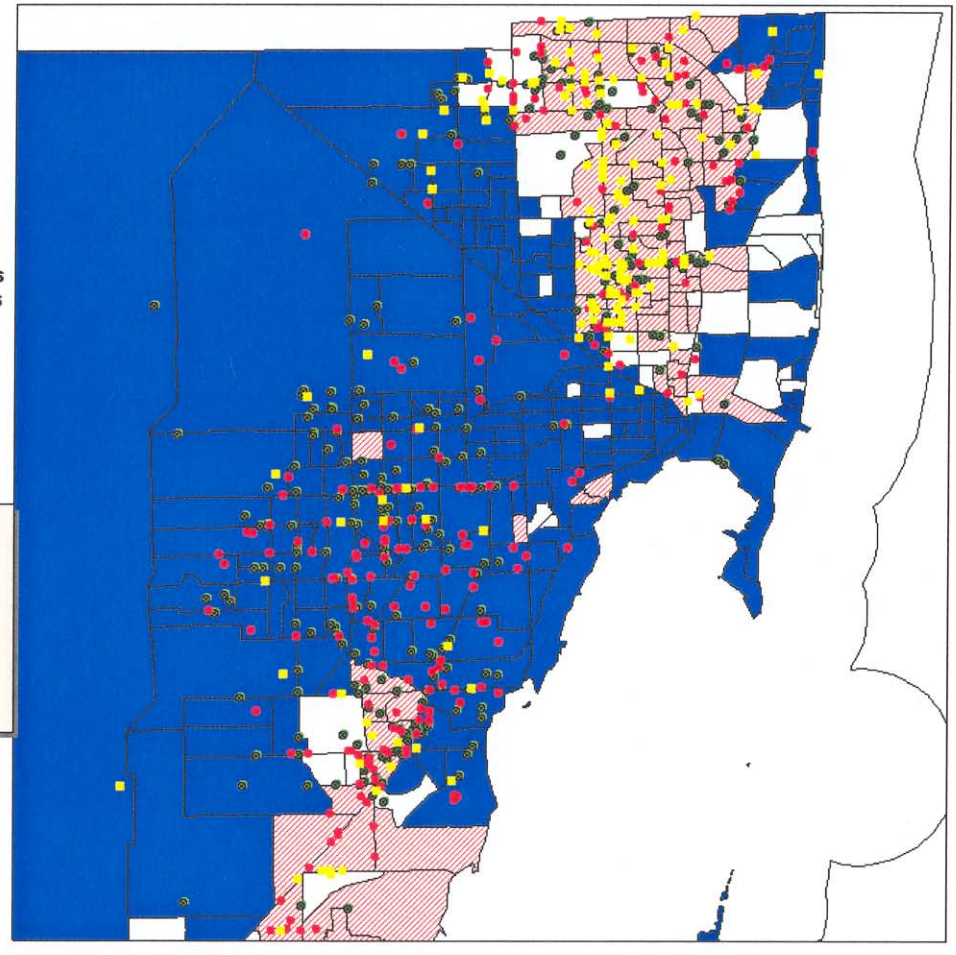
Citizen Contact for Moving Violation by Race of the Motorist

Map 4

- Black Officer, Investigative Stop
- White Officer, Investigative Stop
- Hispanic Officer, Investigative Stop
- 2000 Census Tract Boundaries
- 70% or More White Population Tracts
- 30% or More Black Population Tracts

FINDING:

Black officers were more likely to stop motorists for investigative reasons than Hispanic or White officers.



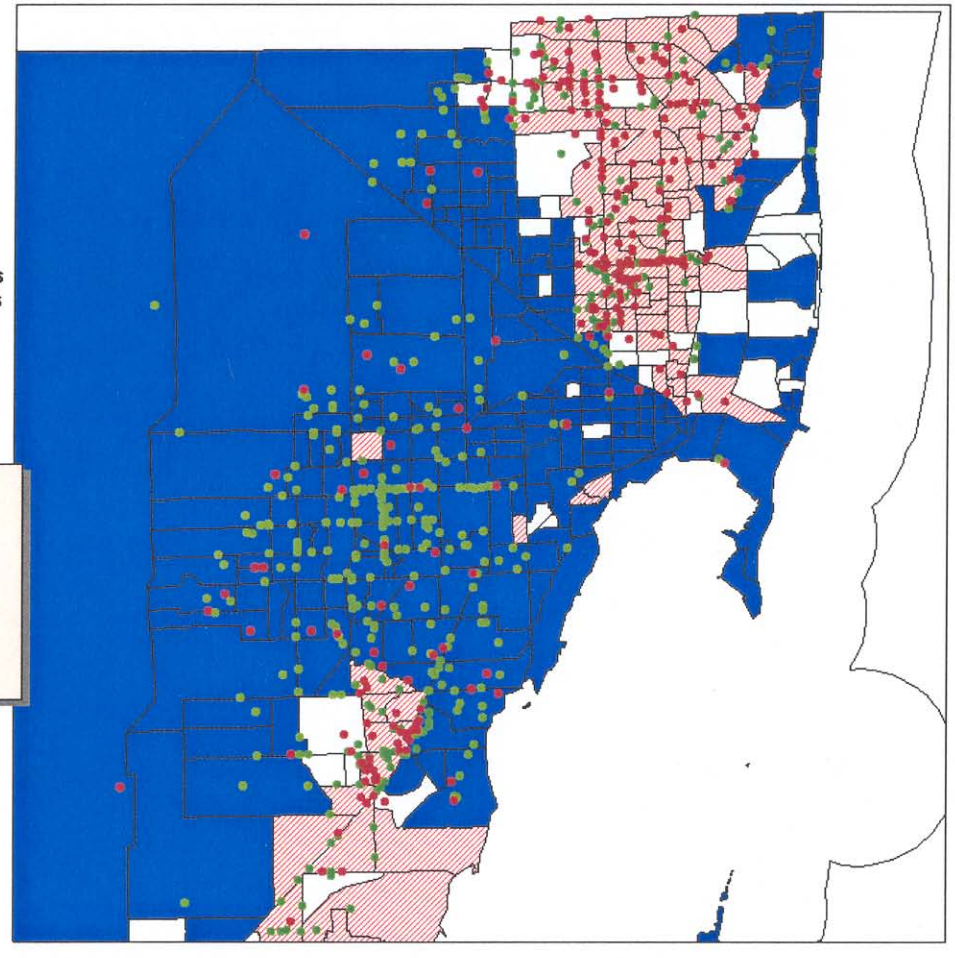
Citizen Contact for Investigative Reason by Race of the Officer

Map 5

- Black Driver Investigative Stop
- White Driver, Investigative Stop
- 2000 Census Tract Boundaries
- 70% or More White Population Tracts
- 30% or More Black Population Tracts

FINDING:

Black motorists were 50% more likely to be stopped for investigative reasons than White motorist.



Citizen Contact for Investigative Reason by Race of the Motorist

Chapter 8

Citizen Contact Card Component: Search Analysis

The analyses in this section examine patterns in police searches of all vehicles stopped by Miami-Dade police officers and the occupants during the study period. Previous studies of police traffic stop practices have shown significant disparities among racial groups with respect to searches. In most previous studies, minority drivers were searched at rates that exceeded those of Whites. The analyses that follow explore the differences, if any, in how Blacks, Whites, Hispanics, and non-Hispanics, were searched by the Miami-Dade Police. They also examine how officer and situational variables predict searches, and whether some racial or ethnic groups were more likely than others to be found in possession of contraband.

Table 1. All Searches by Driver Race and Ethnicity

		Driver Race and Ethnicity			
		Black	**White**	**Hispanic**	**TOTALS**
Any Search	**Yes**	718 (4.1%)	491 (2.7%)	780 (2.6%)	**1,989**
	No	16,983 (95.9%)	17,869 (97.4%)	29,025 (98.5%)	**63,877**
	TOTALS	**17,701 (100%)**	**18,360 (100%)**	**29,805 (100%)**	**65,866**

Chi-Square = 88.9**
**p ≤ .01

Table 1 shows the breakdown of all searches by driver race. It includes data on searches of drivers, passengers, and vehicles, for any reason, including consent. Passenger

race was not captured on the citizen contact cards. Consequently, searches of passengers reflect the race of the driver and not the race of the passenger searched. The data indicate that Black drivers and their passengers were searched at rates higher than both White drivers and their passengers, and drivers and passengers of Hispanic ancestry. No differences were observed between the search rates of Whites and Hispanics.

The next two tables compute the likelihood of a search for each racial and ethnic group by dividing the number of stops resulting in a low discretionary or high discretionary search by the total number of stops for each group. Because some searches, specifically inventory searches and those conducted incident to arrest, involve little if any discretion, it is important to examine them separately from other searches that involve a much greater degree of discretion. Table 2 presents the findings with respect to these low discretion searches.

Slightly less than 3 percent of stops involving Black drivers resulted in a low discretion search, a rate that was 69 percent higher than for Whites and Hispanics, whose search rates were equivalent to one another at 1.6 percent. These differences between Blacks on the one hand, and Whites and Hispanics on the other, were significant at the .01 level. Later analyses explore whether the higher search rate among Blacks is explained by a higher arrest rate among this racial group.

Table 3 below presents a similar analysis to Table 2 but with high discretion search data only. High discretion searches include pat-downs and probable cause searches. Because these two categories of searches are highly discretionary, there is greater opportunity for racial or ethnic bias to influence officer decision-making than with low discretion searches that necessarily follow a custody arrest or the towing of a vehicle. Again, the data show that Blacks were searched at higher rates than Whites and Hispanics. However, the percentage of

Table 2. Low Discretion* Searches by Race and Ethnicity

Race [a] or Ethnicity	Number Stops Involving at Least One Search	Total Number of Stops	Percentage of Stops Involving Searches
Black	474	17,701	2.7%
White	297	18,360	1.6%
Hispanic	474	29,805	1.6%

*Low discretion searches include inventory searches and searches incident to arrest
[a] Statistically significant difference among racial groups, chi-square = 81.0, $p \leq .01$

persons searched within each racial and ethnic group in high discretion situations is actually lower than the percentage of persons searched in low discretion situations. Almost three percent of Blacks stopped were searched under conditions of low discretion, compared to only two percent of Blacks searched under conditions of high discretion. Overall, the data indicate that officers did not search Blacks at higher rates under conditions of high discretion than they were searched under conditions of low discretion. Relative to low discretion searches, the data do not indicate a pattern of biased decision-making in high discretion search situations. However, as is the case with low discretion searches, Blacks were searched more often than Whites and Hispanics under conditions of high discretion.

Target of Search

When MDPD officers conducted a search, they indicated on the citizen contact card whether the search was of a driver, a vehicle, or a passenger. In addition, the first version of the contact card captured information on whether a "person" was searched following a traffic stop. The two later versions of the card further subdivided searches of persons into searches of drivers or passengers. Table 4 below presents the results from an analysis that combines

Table 3. High Discretion* Searches by Race and Ethnicity

Race [a] or Ethnicity	Number of Stops Involving at Least One Search	Total Number of Stops	Percentage of Stops Involving Searches
Black	358	17,701	2.0%
White	261	18,360	1.4%
Hispanic	391	29,414	1.3%

*High discretion searches include pat-down searches and probable causes searches
[a] Statistically significant difference among racial groups, chi-square = 39.3, $p \leq .01$

all searches of persons from all three versions of the contact card. Thus, it includes searches of drivers and passengers cross-tabulated by the race and ethnicity of the driver. Race and ethnicity data were not collected separately for passengers on any of the contact cards.

Table 4. Searches of Persons by Driver Race and Ethnicity

		Driver Race and Ethnicity			
		Black	**White**	**Hispanic**	**TOTALS**
Search of Person	**Yes**	371 (2.1%)	245 (1.3%)	441 (1.5%)	**1,057**
	No	17,330 (97.9%)	18,115 (98.7%)	29,364 (98.5%)	**64,809**
	TOTALS	**17,701 (100%)**	**18,360 (100%)**	**29,805 (100%)**	**65,866**

Chi-Square = 38.5**
**$p \leq .01$

Table 4 indicates that Black drivers and the passengers associated with them were more likely to be searched than White or Hispanic drivers and their passengers. Approximately two percent of Black drivers or their passengers were searched, compared to

1.3 percent of White drivers or their passengers, and 1.5 percent of Hispanic drivers and their passengers.

The racial disparities seen in the search rates of all persons were not mitigated when passengers were eliminated from the analysis. As the data in Table 5 show, Black drivers were more likely to be searched than White or Hispanic drivers, independent of passenger searches. Again, later analyses explore whether differential arrest rates, searches incident to arrest, or other factors, may account for these differences.

Table 5. Searches of Drivers by Race and Ethnicity

		Driver Race and Ethnicity			
		Black	**White**	**Hispanic**	**TOTALS**
Search of Driver	**Yes**	315 (1.8%)	209 (1.1%)	332 (1.1%)	**865**
	No	17,386 (98.2%)	18,151 (98.9%)	29,473 (98.9%)	**65,010**
	TOTALS	**17,701 (100%)**	**18,360 (100%)**	**202 (100%)**	**65,866**

Chi-Square = 43.5**
**p ≤ .01

As the data from Table 6 below indicate, very few passengers were searched, regardless of the race of the driver. The passenger search rates among Black, White, and Hispanic drivers were small, at .3%, .3% and .4% respectively. Although these slight differences achieved statistical significance, this is indicative of the sensitivity of the chi-square test when samples are large, rather than of any substantive differences in passenger search rates among the racial and ethnic groups.

Table 6. Searches of Passengers by Driver Race and Ethnicity

		Driver Race and Ethnicity			
		Black	**White**	**Hispanic**	**TOTALS**
Search of Passenger	**Yes**	55 (.3%)	48 (.3%)	128 (.4%)	**231**
	No	17,646 (99.7%)	47,198 (99.7%)	29,677 (99.6%)	**65,635**
	TOTALS	**17,701 (100%)**	**18,360 (100%)**	**29,805 (100%)**	**65,866**

Chi-Square = 10.3**
**p ≤ .01

Table 7 shows that Black drivers were more likely to have their vehicles searched than White or Hispanic drivers. Vehicle search rates were also slightly higher among Hispanic drivers than White drivers. Approximately 2 percent of vehicles driven by Black motorists were searched, compared to 1.5 percent of vehicles driven by White motorists, and 1.7 percent of vehicles driven by Hispanic drivers. Thus, Black drivers were about one third more likely than White drivers to have their vehicles searched and about 20 percent more likely to have their vehicles searched than Hispanic drivers.

Reasons for Searches

The tables in this section present bivariate analyses of the legal justifications for searches, as indicated by officers completing the citizen contact cards. If a search was conducted following a traffic stop, officers were required to indicate whether the search was (1) a pat down search, (2) conducted incident to arrest, (3) an inventory search, (4) based on probable cause, or (5) made by consent. In addition, officers were provided an "other" category to capture unusual searches that did not fit properly into the other five categories.

Table 7. Search of Vehicle by Driver Race and Ethnicity

		Driver Race and Ethnicity			
		Black	**White**	**Hispanic**	**TOTALS**
Vehicle Searched	**Yes**	357 (2.0%)	281 (1.5%)	510 (1.7%)	**1,148**
	No	17,344 (98.0%)	18,079 (98.5%)	29,295 (98.3%)	**64,718**
	TOTALS	**17,701 (100%)**	**18,360 (100%)**	**202 (100%)**	**65,866**

Chi-Square = 12.8**
**p ≤ .01

A pat down search is a limited frisk of a suspect's outer clothing and is permissible when officers have reasonable suspicion to believe that a person may be armed and dangerous. The evidentiary standard of reasonable suspicion is highly discretionary and represents a lower legal threshold than probable cause, which is required for a more intrusive search. The citizen contact card captured information on pat down searches but did not allow for the identification of the target of the search (driver or passenger).

Table 8 below presents an analysis of pat down searches broken down by the race and ethnicity of the driver who was stopped. According to the data from Table 8, approximately 2 percent of stops involving Black drivers resulted in a pat down search. This compares to a pat down search rate for White drivers of 1.4 percent, and a slightly lower pat down search rate of 1.2 percent for Hispanic drivers. Blacks were subjected to pat down searches 43 percent more often than Whites and 66 percent more often than Hispanics.

Table 8. Pat Down Searches by Driver Race and Ethnicity

		Driver Race and Ethnicity			
		Black	**White**	**Hispanic**	**TOTALS**
Pat Down Search	**Yes**	348 (2.0%)	255 (1.4%)	372 (1.2%)	**975**
	No	17,353 (98.0%)	18,105 (98.6%)	29,433 (98.8%)	**64,891**
	TOTALS	**17,701 (100%)**	**18,360 (100%)**	**29,805 (100%)**	**65,866**

Chi-Square = 40.7**
**p ≤ .01

Table 9 analyzes inventory searches by driver race. Inventory searches typically involve less discretion than other types of traffic stop-related searches because police will usually inventory all vehicles that are towed. Conceptually, therefore, inventory searches represent a good baseline search category against which to compare other types of more discretionary searches. Disparities between racial groups, if they exist at all, should be small with this type of search. As expected, the data show no differences in the treatment of Black, White, and Hispanic drivers, with respect to inventory searches.

Searches based upon probable cause are subject to the minimum legal standards of evidence necessary to support them. However, probable cause is a low evidentiary standard. Probable cause searches therefore involve a high decree of discretion. If racial bias is present, it is most likely to appear in high discretion decisions such as probable cause searches.

Table 9. Inventory Search by Driver Race and Ethnicity

		Driver Race and Ethnicity			
		Black	**White**	**Hispanic**	**TOTALS**
Inventory Search	**Yes**	131 (.7%)	118 (.6%)	177 (.6%)	**426**
	No	17,570 (99.3%)	18,242 (99.4%)	29,628 (99.4%)	**65,440**
	TOTALS	**18,529 (100%)**	**18,360 (100%)**	**202 (100%)**	**65,866**

Chi-Square = 3.7

Table 10 presents a bivariate analysis of probable cause searches by driver race and ethnicity. Overall, probable cause searches resulting from traffic stops are exceedingly rare events. Although the number of probable cause searches is too small to reach definitive conclusions, the data show no statistically significant differences in search rates between Black, White, and Hispanic drivers.

Table 10. Probable Cause Search by Driver Race and Ethnicity

		Driver Race and Ethnicity			
		Black	**White**	**Hispanic**	**TOTALS**
Probable Cause Search	**Yes**	18 (.1%)	17 (.1%)	48 (.2%)	**83**
	No	17,683 (99.9%)	18,343 (99.9%)	29,757 (99.8%)	**65,783**
	TOTALS	**17,701 (100%)**	**18,360 (100%)**	**29,805 (100%)**	**65,866**

Chi-Square = 5.4

One profiling-related issue of concern is that police may use consent searches to intimidate (and discriminate against) minority populations. The MDPD citizen contact card captured information on whether an officer *requested* consent to search and whether a consent search was ultimately *conducted*. The data from Table 11 indicate that police did not request consent searches from Blacks or Hispanics in a manner that differed from Whites. Requests to search were made of drivers of all racial and ethnic groups at statistically equivalent rates – .6 percent for Blacks, .7 percent for Whites, and .6 percent for Hispanics.

Table 11. Consent Search Requested by Driver Race and Ethnicity

		Driver Race and Ethnicity			
		Black	**White**	**Hispanic**	**TOTALS**
Consent to Search Requested	**Yes**	104 (.6%)	120 (.7%)	191 (.6%)	**415**
	No	17,597 (99.4%)	18,240 (99.3%)	29,614 (99.5%)	**65,451**
	TOTALS	**17,701 (100%)**	**18,360 (100%)**	**29,805 (100%)**	**65,866**

*No missing data
Chi-Square = .209

Table 12 examines whether there were differences between Blacks and Whites in the number of consent searches actually conducted. Only cases where officers asked for consent were included in this analysis (n=415). As with the results from Table 11, no significant differences were found between Blacks, Whites, and Hispanics, with respect to consent searches conducted. Approximately one half of all drivers consented to a request to search, regardless of race.

Table 12. Consent Search Conducted by Driver Race and Ethnicity

		Driver Race and Ethnicity			
		Black	**White**	**Hispanic**	**TOTALS**
Consent Search Conducted	**Yes**	51 (49.0%)	59 (49.2%)	98 (51.3%)	**208**
	No	53 (51.0%)	61 (50.8%)	93 (48.7%)	**207**
	TOTALS	**104 (100%)**	**120 (100%)**	**191 (100%)**	**415**

Chi-Square = .200

Miscellaneous Search Analyses

Using ANOVA, Table13 examines whether, on average, Blacks, Whites, or Hispanics, were subjected to longer search times. The analysis only included searches for which duration data were recorded (n=394). The analysis showed no differences among the racial groups with respect to the duration of searches. Search times averaged approximately five minutes for Blacks, Whites, and Hispanics.

Table 13. Differences in Duration of Search by Driver Race and Ethnicity

Driver Race and Ethnicity	N	Mean Duration of Search	Standard Deviation	F	Significance
Black	108	5.44 mins.	9.4	.006	.994
White	73	5.38 mins.	6.7		
Hispanic	213	5.36 mins.	4.5		

Table 14 examines the bivariate relationship between searches and officer race for stops of Black drivers. Members of the MDPD command staff stated that they sometimes

receive complaints about White and Hispanic officers disproportionately targeting Black drivers for stops and searches. The result of the analysis in Table 14 indicates that White and Hispanic officers do indeed search Black motorists at higher rates than Black officers. White officers searched 3.9 percent of the Black drivers whom they stopped, while Hispanic officers searched 4.9 percent of the Black drivers they stopped. In contrast, Black officers searched only 2.9 percent of Black drivers they stopped, a difference from White and Hispanic officers that was lower and statistically significant.

Table 14. Searches of Black Motorists by Officer Race

		Officer Race				
		Black	**White**	**Hispanic**	**Other**	**TOTALS**
Search of Black Motorist	**Yes**	130 (2.9%)	229 (3.9%)	357 (4.9%)	2 (2.1%)	**718**
	No	4,305 (97.1%)	5,583 (96.1%)	6,979 (95.1%)	94 (97.9%)	**16,961**
	TOTALS	**4,435 (100%)**	**5,812 (100%)**	**7,336 (100%)**	**96 (100%)**	**17,679**

Chi-Square = 27.9**
**p ≤ .01

However, as the data from Tables 15 and 16 indicate, White and Hispanic officers also search White and Hispanic motorists at higher rates than Black officers. Thus, across all racial groups, White and Hispanic officers are more active “searchers” than Black officers. Moreover, search rates are highest among Black drivers, regardless of the race of the officer. Black officers search almost twice as many Black drivers as they do drivers of other racial or ethnic groups. Search rates of Black drivers are also higher among White and Hispanic officers. Taken as a whole, the data from Tables 14, 15, and 16, do not indicate that, when

compared to Black officers, White and Hispanic officers disproportionately target Black drivers for searches. White and Hispanic officers are simply more likely than Black officers to search motorists of any race.

Table 15. Searches of White Motorists by Officer Race

		Officer Race				
		Black	**White**	**Hispanic**	**Other**	**TOTALS**
Search of White Motorist	**Yes**	37 (1.5%)	216 (2.7%)	230 (3.0%)	8 (4.9%)	**491**
	No	2,401 (98.5%)	7,915 (97.3%)	7,376 (97.0%)	155 (95.1%)	**17,847**
	TOTALS	**2,438 (100%)**	**8,131 (100%)**	**7,606 (100%)**	**163 (100%)**	**18,338**

Chi-Square = 19.2**
**p ≤ .01

Table 16. Searches of Hispanic Motorists by Officer Race

		Officer Race				
		Black	**White**	**Hispanic**	**Other**	**TOTALS**
Search of Hispanic Motorist	**Yes**	49 (1.6%)	281 (2.5%)	439 (3.0%)	11 (3.3%)	**780**
	No	3,112 (98.4%)	11,170 (97.5%)	14,370 (97.0%)	325 (96.7%)	**28,977**
	TOTALS	**3,161 (100%)**	**11,451 (100%)**	**14,809 (100%)**	**336 (100%)**	**29,757**

Chi-Square = 22.9**
**p ≤ .01

Contraband Analyses

Given that Blacks (and Hispanics to a lesser degree) were more likely than Whites to be searched in a number of search categories, it is important to examine whether minorities were more or less likely than Whites to be found in the possession of contraband following a search. Table 17 presents a simple computation of the search "hit rate" by race and ethnicity. It divides the number of searches where any type of contraband was found by the total number of searches for each race and ethnicity category shown. The data indicate that Blacks (at 7.8%) were the least likely of the racial and ethnic groups examined to be found in the possession of contraband following a search. The "hit rate" for Whites was the highest of the three categories at 13.2 percent, and was approximately seventy percent higher than the hit rate for Blacks. The hit rate among Hispanics fell in the middle of the three groups. At 10.1 percent, it was approximately 30 percent higher than the hit rate for Blacks.

Table 17. Total Search Hit Rates* by Race and Ethnicity

Race or Ethnicity	Number of Searches Where Contraband Found	Total Number of Searches	Hit Rate
White	65	491	13.2 % [a]
Black	56	718	7.8 %
Hispanic	79	780	10.1 %

*Hit Rate = # of searches where contraband found/total number of searches
a Statistically significant difference among racial groups, $p \leq .01$

As with the results from Table 17 above, Table 18 shows that Blacks were less likely than Whites or Hispanics to be in possession of contraband when searched under conditions of low discretion (searches incident to arrest and inventory searches). Although the

differences among the racial groups were not statistically significant, they approached significance (p=.098), indicating that the differences in hit rates between Black suspects and White and Hispanic suspects are probably not coincidental or the result of chance.

Table 18. Low Discretion Search Hit Rates* by Race and Ethnicity

Race or Ethnicity	Number of Searches Where Contraband Found	Total Number of Searches	Hit Rate
White	42	297	14.1%[a]
Black	45	474	9.5 %
Hispanic	62	474	13.1 %

*Hit Rate = # of searches where contraband found/total number of searches
a Difference among racial groups was not significant.

Although Black motorists were also less likely than Whites and Hispanics to be found with contraband following a high discretion search (probable cause and pat down), the differences observed in Table 19 were also not statistically significant. However, they are consistent with the findings from the previous hit rate analyses.

Table 19. High Discretion Search Hit Rates* by Race and Ethnicity

Race or Ethnicity	Number of Searches Where Contraband Found	Total Number of Searches	Hit Rate
White	36	225	13.8 %[a]
Black	31	358	8.7 %
Hispanic	38	391	9.7 %

*Hit Rate = # of searches where contraband found/total number of searches
a Difference among racial groups was not significant.

Tables 20 and 21 compare citizen racial and ethnic groups according to the types of contraband recovered during searches. For example, Table 20 examines whether Blacks, Whites, or Hispanics, were more likely to be found in possession of drugs following a search. Of the 491 searches involving Whites, 59 (12.0%) resulted in the discovery of illegal drugs. Among Blacks, only 6.3 percent of searches resulted in drugs being found. The drug hit rate among Hispanics was 9.2 percent. Thus, Whites were almost twice as likely as Blacks to be found in possession of drugs, while Hispanics were almost fifty percent more likely than Blacks to have drugs on them when searched. These differences are large and significant and are consistent with the disparities in overall hit rates depicted in Table 17.

Table 20. Discovery of Drugs by Driver Race and Ethnicity

		Driver Race and Ethnicity			
		Black	**White**	**Hispanic**	**TOTALS**
Drugs Found Following Search	**Yes**	45 (6.3%)	59 (12.0%)	72 (9.2%)	**176**
	No	673 (93.7%)	432 (88.0%)	708 (90.8%)	**1,813**
	TOTALS	**718 (100%)**	**491 (100%)**	**780 (100%)**	**1,989**

Chi-Square = 12.2**
**p ≤ .01

Table 21 indicates no differences among Blacks, Whites, and Hispanics, regarding the likelihood of illegal weapons being found during a search. Approximately one percent of persons searched among all racial groups was found in possession of weapons after a search.

Table 21. Discovery of Weapons by Driver Race and Ethnicity

		Driver Race and Ethnicity			
		Black	**White**	**Hispanic**	**TOTALS**
Weapon Found Following Search	**Yes**	7 (1.0%)	5 (1.0%)	7 (.9%)	**19**
	No	711 (99.0%)	486 (99.0%)	773 (99.1%)	**1,970**
	TOTALS	**718 (100%)**	**491 (100%)**	**780 (100%)**	**1,989**

Chi-Square = .051

Multivariate Analyses

Table 22 presents a multivariate analysis of variables that predict whether or not a search (of any kind) occurred. By far the strongest predictor was Custody Arrest. This is to be expected, since the vast majority of arrests resulted in searches incident to arrest. Similarly, stops made for investigative purposes also significantly increased the odds of a search.

Custody arrest was included in the model to determine whether Black drivers were more likely to be searched when this variable was held constant. In fact, the Black Driver variable was no longer statistically significant (and the effect was also negative) when controlling for Custody Arrest. Thus, it appears in the aggregate, the greater likelihood of Blacks being searched (see Table 1) is accounted for by the higher rates of arrest and searches incident to arrest among Blacks. Similarly, driver ethnicity was not a statistically significant predictor of searches once other variables were held constant, although this variable came close to reaching significance. The direction of the relationship between ethnicity and the probability of search, however, indicates that searches of Hispanics may

have been *less likely* to occur than searches of non-Hispanics. Driver gender was also a strong predictor: male drivers were substantially more likely to be the target of a search than female drivers.

In terms of officer-related variables, officers with more experience were less likely to engage in a search than officers with fewer years of experience, although the overall effect for the Years of Service variable was quite small. Consistent with some of the multivariate findings from earlier chapters, officers with a greater number of complaints, and those who used force more often, were also more likely to engage in a search than officers with fewer complaints and fewer use of force reports. In contrast, an increase in the number of disciplinary actions against an officer decreased the likelihood of a search. Consistent with the bivariate analyses from Tables 26 and 27, White and Hispanic officers were significantly more likely to search than Black officers.

Table 23 further explores the decision to search by examining vehicle searches separately from other types of searches. The findings from Table 23 are similar to those from Table 22. Among the officer-related variables, male officers were more likely to conduct vehicle searches than female officers. As the number of complaints against an officer rose, so too did the likelihood that the officer conducted a vehicle search. The number of use of force reports was also positively correlated with the likelihood of a vehicle search. In contrast, disciplinary actions were associated with a decrease in the odds of a vehicle search. Among the strongest predictors of a vehicle search were investigation stops, and custodial arrests. Importantly, after controlling for other relevant variables, including custody arrest, neither Black nor Hispanic drivers were more likely than White drivers to have their vehicles searched. In fact, the logit coefficient for Blacks approached significance and indicated a

Table 22. Predictors of Any Search

	B	Sig.	Odds
Percent Black Population	-.001	.266	.999
Percent Owner Occupied	-.013**	.000	.987
Violent Crime Arrest Rate	-.001**	.000	.999
Residential Stability	.019**	.000	1.019
Officer's Gender (male=1)	.102	.257	1.107
Officer's Age	-.008	.180	.992
Officer's Years of Service	-.028**	.000	.972
No. of Complaints Against Officer	.152**	.000	1.164
No. of Use of Force Reports	.204**	.000	1.227
No. of Disciplinary Actions	-.073*	.013	.930
White Officer	.668**	.000	1.951
Hispanic Officer	.571**	.000	1.771
Black Driver	-.046	.609	.955
Hispanic Driver	-.143	.063	.867
Driver's Gender (male=1)	.950**	.000	2.586
Investigative Stop	2.027**	.000	7.595
Custody Arrest	5.064	.000	158.152

n = 60,254
Model Chi-Square = 6,903.60**.
Pseudo-R Square = .451
* $p \leq .05$, ** $p \leq .01$

negative relationship between vehicle searches and Black drivers; Blacks were less likely than Whites to have their vehicles searched after controlling for other relevant variables.

In Table 24, which examines predictors of pat-down searches, Custody Arrest was not included as a control variable because arrests typically *follow* rather than precede pat-

Table 23. Predictors of a Vehicle Search

	B	Sig.	Odds
Percent Black Population	.000	.748	1.000
Percent Owner Occupied	-.010**	.000	.990
Violent Crime Arrest Rate	-.001**	.001	.999
Residential Stability	.012**	.002	1.012
Officer's Gender (1=male)	.252*	.023	1.287
Officer's Age	.000	.982	1.000
Officer's Years of Service	-.031**	.000	.970
No. of Complaints Against Officer	.169**	.000	1.184
No. of Use of Force Reports	.254**	.000	1.289
No. of Disciplinary Actions	-.132**	.000	.877
White Officer	.591**	.000	1.806
Hispanic Officer	.424**	.001	1.529
Black Driver	-.213	.053	.808
Hispanic Driver	.076	.405	1.079
Driver's Gender (1=male)	.752**	.000	2.122
Investigative Stop	1.636**	.000	5.135
Custody Arrest	4.438	.000	84.603

n = 60,254
Model Chi-Square = 3,949.61**
Pseudo-R Square = .389
* $p \leq .05$
** $p \leq .01$

down searches. From a legal standpoint, officers must have reasonable suspicion to believe that a person is armed or dangerous in order to conduct a limited pat-down search for

weapons. An examination of pat-down searches is useful for identifying variables that influence an officer's perception of a threat.

The data from this table indicate that once other variables were held constant in the model, Black drivers were no more likely than White drivers to be the subject of a pat-down

Table 24. Predictors of a Pat-down Search

	B	Sig.	Odds
Percent Black Population	-.001	.576	.999
Percent Owner Occupied	-.015**	.000	.985
Violent Crime Arrest Rate	-.001**	.001	.999
Residential Stability	.022**	.000	1.022
Officer's Gender	-.119	.220	.888
Officer's Age	-.017*	.013	.983
Officer's Years of Service	-.029**	.000	.971
No. of Complaints Against Officer	.143**	.000	1.154
No. of Use of Force Reports	.161**	.000	1.174
No. of Disciplinary Actions	.012	.699	1.012
White Officer	.302*	.012	1.353
Hispanic Officer	.472**	.000	1.603
Black Driver	.121*	.211	1.129
Hispanic Driver	-.225**	.009	.798
Driver's Gender	1.673**	.000	5.326
Investigative Stop	1.635**	.000	5.128

n = 60,254
Model Chi-Square = 844.60**
Pseudo-R Square = .096
* $p \leq .05$, ** $p \leq .01$

search. This finding adds context to the result from Table 8, which, in a bivariate analysis, found that Blacks were more likely than Whites to be patted down by officers. Differences between Hispanics and non-Hispanics remained, however, as the odds of an Hispanic driver being subjected to a pat-down were considerably lower than for a non-Hispanic. By far the strongest predictor variable was driver gender, which followed the expected pattern of disparity between male and female drivers. Officers were much more likely to pat-down a male driver than a female driver. As one might expect, stops for investigative reasons were strongly predictive of whether a pat-down search occurred. Finally, older and more experienced officers were less likely than younger and less experienced officers to frisk drivers for weapons.

The multivariate model presented in Table 25 indicates that the odds of contraband being found following a search were lower for Black and Hispanic drivers than for White and non-Hispanic drivers, even after controlling for searches incident to arrest. Not unexpectedly, pat-down and consent searches greatly increased the likelihood of finding contraband, independently of whether a search incident to arrest was conducted.

Several officer-related variables were significant in the model. First, officers with fewer years of service were slightly less likely to discover contraband than officers with more experience. Second, the discovery of contraband was positively associated with both the number of citizen complaints against an officer and the number of use of force reports completed by an officer. Conversely, the odds of contraband being found went down as the number of disciplinary actions against an officer increased. The effect for this variable was not statistically significant, but it was close to being so. Taken together, these findings suggest that more aggressive officers may also be the most productive in seizing contraband.

Officers who have been disciplined, on the other hand, are perhaps less likely to engage in the discretionary searches or arrests necessary to produce contraband.

Table 25. Predictors of Contraband Being Found

	B	Sig.	Odds
Percent Black Population	.002	.481	1.002
Percent Owner-Occupied Housing	-.008	.074	.992
Violent Crime Arrest Rate	-.001	.407	.999
Residential Stability	.010	.262	1.010
Officer's Gender (male=1)	.137	.590	1.146
Officer's Age	-.024	.157	.977
Officer's Years of Service	-.051*	.020	.950
No. of Complaints Against Officer	.146**	.000	1.158
No. of Use of Force Reports	.200**	.000	1.222
No. of Disciplinary Actions	-.156	.064	.855
White Officer	.552	.088	1.737
Hispanic Officer	.414	.182	1.513
Black Driver	-.771**	.001	.463
Hispanic Driver	-.429*	.028	.651
Driver Gender (male=1)	.314	.201	1.369
Pat-Down Search	.500*	.012	1.649
Search by Consent	1.658**	.000	5.249
Investigative Stop	1.261**	.000	3.530
Search Incident to Arrest	4.017**	.000	55.523

n = 60,254
Model Chi-Square = 1,017.08**
Pseudo-R Square = .403
* $p \leq .05$
** $p \leq .01$

Summary

Assessing the differences among racial and ethnic groups with respect to searches by the MDPD is complex. Overall, Blacks (4.1%) were statistically more likely to be searched than Whites (2.7%) or Hispanics (2.6%). When different types of searches were examined, Black drivers were more likely than White drivers to be the subjects of pat-down searches, and vehicle searches but were equally likely to be the subjects of consent search requests or inventory searches. Blacks also were more likely than Whites or Hispanics to be the subjects of both high discretion and low discretion searches. However, when custody arrests were controlled for in a multivariate model, driver race (Black) no longer predicted whether a search occurred. Thus, the overall difference in the percentage of Blacks searched, relative to Whites and Hispanics, is primarily a function of the higher custody arrest rates and search incident to arrest rates among Blacks. It should be noted, however, that a smaller percentage of Blacks (7.8%) were found in possession of contraband following a search than Whites (13.2%) or Hispanics (10.1%). No differences were found regarding searches of Whites and Hispanics. Thus, Hispanic motorists did not appear to be the targets of searches any more frequently than White motorists. Similarly, the data did not indicate that, for searches, officers of a particular race or ethnicity targeted drivers of an identified racial or ethnic group.

Chapter 9

Citizen Contact Card Component: Stop Disposition Analysis

The analyses in this chapter examine the outcomes and dispositions of traffic stops by race and ethnicity. We examine variables such as citations, warnings, custodial arrests, records checks, and vehicle towing. The purpose of these analyses is to explore racial disparities (if any) in stop outcomes and to examine the variables that may help explain those disparities if and where they exist.

Table 1 shows that a slightly larger percentage of White and Hispanic drivers received a citation as compared to Black drivers. Approximately 83 percent of White motorists stopped received a citation while 79 percent of Black motorists were ticketed. Although the observed differences between racial and ethnic groups were statistically significant, the absolute differences between the categories were quite small.

Table 1. Likelihood of Receiving a Citation by Driver Race and Ethnicity

Race or Ethnicity[a]	Number of Stops Where Citation Issued	Total Number of Stops	Percentage of Stops Resulting in Citations
Black	13,959	17,701	78.9 %
White	15,316	18,360	83.4 %
Hispanic	24,870	29,805	83.4 %

[a] Statistically significant difference among racial groups, $p \leq .01$

In contrast to the findings in Table 1 for citations, Table 2 shows that Blacks (3.7%) were substantially more likely than Whites (2.0%) and Hispanics (1.9%) to be arrested. In

absolute terms, arrest rates for Blacks exceeded those for Whites and Hispanics by 85 percent. Again, these differences were significant at an alpha level of less than .01.

Table 2. Likelihood of Being Arrested by Driver Race and Ethnicity

Race or Ethnicity[a]	Number of Stops Where Custody Arrest Occurred	Total Number of Stops	Percentage of Stops Resulting in Custody Arrests
Black	654	17,701	3.7 %
White	360	18,360	2.0 %
Hispanic	584	29,805	2.0 %

[a] Statistically significant difference among racial groups, $p \leq .01$

Consistent with the findings from other racial profiling studies, Table 3 indicates that Blacks were more likely than other racial groups to receive a verbal warning. Approximately 12 percent of Blacks drivers received a warning while only 7 percent of White drivers and 8.5 percent of Hispanic drivers were warned.

Table 3. Likelihood of Receiving a Verbal Warning by Driver Race and Ethnicity

Race or Ethnicity[a]	Number of Stops Where Verbal Warning Given	Total Number of Stops	Percentage of Stops Resulting in Verbal Warnings
Black	2,070	17,701	11.7 %
White	1,313	18,360	7.2 %
Hispanic	2,519	29,805	8.5 %

[a] Statistically significant difference among racial groups, $p \leq .01$

According to the findings in Table 4, Blacks (1.2%) were about fifty percent more likely than Whites (.8 %) to have their vehicles towed and were about one third more likely

than Hispanics to be the subject of towing. Overall, though, few drivers of any race had their vehicles towed. Given the disparities in arrest rates among Blacks, Whites, and Hispanics, it is not surprising that Black drivers also were more likely to have their vehicles towed. In most cases, vehicles are towed after the driver is arrested for some offense.

Table 4. Likelihood of Having Vehicle Towed by Driver Race and Ethnicity

Race or Ethnicity[a]	Number of Stops Where Vehicle Towed	Total Number of Stops	Percentage of Stops Resulting in Vehicle Towing
Black	211	17,701	1.2 %
White	146	18,360	.8 %
Hispanic	266	29,805	.9 %

[a] Statistically significant difference among racial groups, $p \leq .01$

Table 5 shows a statistically significant difference of considerable magnitude between Blacks, Whites, and Hispanics, with respect to whether a record check of the person was conducted. Officers were 65 percent more likely to conduct a record check of a Black motorist (34%) than of a White motorist (21.6%). Hispanic motorists were also slightly more likely than White motorists to be the subjects of a record check.

Table 5. Likelihood of Conducting a Record Check of a Person by Driver Race and Ethnicity

Race or Ethnicity[a]	Record Check of a Person	Total Number of Stops	Percentage of Stops Resulting in a Record Check
Black	6,012	17,701	34.0 %
White	3,789	18,360	20.6 %
Hispanic	6,655	29,805	22.3 %

[a] Statistically significant difference among racial groups, $p \leq .01$

Similar to the findings in Tables 5, Table 6 shows that Black drivers (16.5%) were significantly more likely to have a record check conducted on their vehicles than White (9.3%) or Hispanic (9.1%) drivers. In contrast, MDPD officers conducted record checks on the vehicles of White and Hispanic drivers at essentially the same rates.

Table 6. Likelihood of Conducting a Record Check of a Vehicle by Driver Race and Ethnicity

Race or Ethnicity[a]	Record Check of a Vehicle	Total Number of Stops	Percentage of Stops Resulting in a Record Check
Black	2,913	17,701	16.5 %
White	1,715	18,360	9.3 %
Hispanic	2,721	29,805	9.1 %

[a] Statistically significant difference among racial groups, $p \leq .01$

Officers were more than twice as likely to complete a field interview (FI) card for a Black driver (21.4%) than for a White driver (9.4%) according to the data from Table 7. Hispanic drivers, too, were more likely to be the subjects of FI cards than White drivers, although the absolute difference (27%) between Whites and Hispanics was much smaller than the difference between Whites and Blacks (12%).

Table 7. Field Interview Card Completed by Driver Race and Ethnicity

Race or Ethnicity[a]	Record Check of a Vehicle	Total Number of Stops	Percentage of Stops Resulting in a Record Check
Black	3,790	17,701	21.4 %
White	1,726	18,360	9.4 %
Hispanic	3,544	29,805	11.9 %

[a] Statistically significant difference among racial groups, $p \leq .01$

Table 8 examines whether race or ethnicity makes a difference in the number of citations issued to a motorist. An ANOVA test was employed in the below analysis to determine whether, among drivers who received at least one citation, Blacks, Whites, or Hispanics were issued the greater average number of citations. The descriptive data indicate that Black drivers were issued the highest mean number of citations at 1.66 citations per stop. Whites and Hispanics were both issued, on average, 1.42 citations per stop. The difference in the number of citations issued to Blacks when compared to Whites and Hispanics was statistically significant at the .000 level; however, the absolute difference between the groups was quite small.

Table 8. Differences in Number of Citations by Race and Ethnicity

Citizen Race and Ethnicity	N	Mean No. of Citations	Standard Deviation	F	Significance
Black	11,792	1.66	.974	239.63	.000
White	11,812	1.42	1.33		
Hispanic	21,218	1.42	.824		

Stop Outcomes Considering Driver and Officer Race Together

In this section, we consider the effect of officer race on stop outcomes to determine whether officers of different racial groups treat citizens differently according to their (the citizens') race or ethnicity. In particular, we focus on the treatment of Black and Hispanic drivers in three areas – arrests, citations, and the completion of FI cards. Again, FI cards are completed at an officer's discretion when he or she believes that a citizen appears suspicious and wishes to document the encounter with the citizen for investigative tracking purposes.

Table 9 indicates that Hispanic officers were more likely than White or Black officers to arrest Black motorists. Hispanic officers arrested 4.3 percent of Black motorists, while White and Black officers arrested 3.2 and 3.3 percent of Black motorists respectively. The difference in the percentage of Blacks arrested by the different racial categories of officers was statistically significant.

Table 9. Custody Arrests of Blacks by Officer Race

		Officer Race				
		Black	**White**	**Hispanic**	**Other**	**TOTALS**
Custody Arrest of Black Motorist	**Yes**	146 (3.3%)	187 (3.2%)	316 (4.3%)	4 (4.2%)	**653**
	No	4,289 (96.7%)	5,625 (96.8%)	7,020 (95.7%)	92 (95.8%)	**17,026**
	TOTALS	**4,435 (100%)**	**5,812 (100%)**	**7,336 (100%)**	**96 (100%)**	**17,679**

Chi-Square = 13.5**
**p ≤ .01

Although some differences existed among officers with respect to arrests of Hispanic motorists, those differences were not statistically significant (Table 10). Non-Black and non-Hispanic minority officers ("Others") were the most likely to make an arrest of Hispanic motorists, followed by Hispanic, White, and then Black officers. Again, the differences among officers did not reach statistical significance.

Table 10. Custody Arrests of Hispanics by Officer Race

		Officer Race				
		Black	**White**	**Hispanic**	**Other**	**TOTALS**
Custody Arrest of Hispanic Motorist	**Yes**	46 (1.5%)	217 (1.9%)	311 (2.1%)	10 (3.0%)	**584**
	No	3,115 (98.5%)	11,234 (98.1%)	14,498 (97.9%)	326 (97.0%)	**29,173**
	TOTALS	**3,161 (100%)**	**11,451 (100%)**	**14,809 (100%)**	**336 (100%)**	**29,757**

Chi-Square = 7.75

According to the data in Table 11, White officers, Hispanic officers, and officers of other races issued citations to Black motorists more often than Black officers. “Other” officers were the most likely to cite a Black motorist (81.3%), while Black officers were the least likely to cite a Black motorist (76%). The small differences in citation rates of Hispanic motorists by officers of different racial groups were not statistically significant (see Table 12).

Table11. Citations Issued to Black Motorists by Officer Race

		Officer Race				
		Black	**White**	**Hispanic**	**Other**	**TOTALS**
Citation Issued to Black Motorist	**Yes**	3,369 (76.0%)	4,660 (80.2%)	5,831 (79.5%)	78 (81.3%)	**13,938**
	No	1,066 (24.0%)	1,152 (23.7%)	1,505 (20.5%)	18 (18.8%)	**3,741**
	TOTALS	**4,435 (100%)**	**5,812 (100%)**	**7,336 (100%)**	**96 (100%)**	**17,679**

Chi-Square = 30.40**
**p ≤ .01

Table 12. Citations Issued to Hispanic Motorists by Officer Race

		Officer Race				
		Black	**White**	**Hispanic**	**Other**	**TOTALS**
Citation Issued to Hispanic Motorist	**Yes**	2,597 (82.2%)	9,595 (83.8%)	12,366 (83.5%)	272 (81.0%)	**24,830**
	No	564 (17.8%)	1,856 (16.2%)	2,443 (16.5%)	64 (19.0%)	**4,927**
	TOTALS	**3,161 (100%)**	**11,451 (100%)**	**14,809 (100%)**	**336 (100%)**	**29,757**

Chi-Square = 6.34

According to the data from Table 13, Hispanic officers (24.2%) and officers of other races (24.2%) were the most likely to complete FI cards for Black motorists, while White officers (18.5%) were the least likely to complete such cards for Blacks. Regarding Hispanic motorists (see Table 14), Black officers were substantially more likely than officers of any other race to complete an FI card for Hispanics. They were three times more likely than officers of "other" races to complete FI cards for Hispanic drivers, more than twice as likely to complete such cards compared to White officers, and 50 percent more likely to complete FI cards for Hispanic drivers than Hispanic officers. The magnitude of these differences is further explored in a multivariate model in Table 18.

Table 13. FI Cards Completed for Black Motorists by Officer Race

		Officer Race				
		Black	**White**	**Hispanic**	**Other**	**TOTALS**
FI Card Completed for Black Motorist	**Yes**	921 (20.8%)	1,073 (18.5%)	1,772 (24.2%)	19 (24.2%)	**3,785**
	No	3,514 (79.2%)	4,739 (81.5%)	5,564 (75.8%)	77 (80.2%)	**13,894**
	TOTALS	**4,435 (100%)**	**5,812 (100%)**	**7,336 (100%)**	**96 (100%)**	**17,679**

Chi-Square = 64.11**
**p ≤ .01

Table 14. FI Cards Completed for Hispanic Motorists by Officer Race

		Officer Race				
		Black	**White**	**Hispanic**	**Other**	**TOTALS**
FI Card Completed for Hispanic Motorist	**Yes**	595 (18.8%)	1,032 (9.0%)	1,893 (12.8%)	21 (6.3%)	**3,541**
	No	2,566 (81.2%)	10,419 (91.0%)	12,916 (87.2%)	315 (93.8%)	**26,216**
	TOTALS	**3,161 (100%)**	**11,451 (100%)**	**14,809 (100%)**	**336 (100%)**	**29,757**

Chi-Square = 256.8**
**p ≤ .01

Using logistic regression, Table 15 examines a variety of variables that predict whether or not a citation was issued. The strongest predictors include officer gender, officer race (Black officer), type of violation (hazardous or equipment violation), and whether the driver was Black. Officer gender was coded "1" for male and "0" for female. Thus, a stop by a male officer *increased* the odds that a citation was issued by almost 30 percent. A stop by a Black officer decreased the odds that a citation was issued by slightly more than 10 percent. Predictably, a hazardous moving violation increased the likelihood for a citation, while an equipment violation decreased the odds for a citation. Finally, consistent with the findings from Table 1, Black drivers were less likely to receive a citation than White drivers when controlling for other relevant variables. Interestingly, male drivers were no more likely to receive a citation than female drivers when holding other variables constant.

Table 15. Predictors of a Citation Being Issued

	B	Sig.	Odds
Percent Black Population	-.002**	.000	.998
Percent Owner-Occupied Housing	-.002**	.005	.998
Total Violent Arrest Rate	.000**	.000	1.000
Residential Stability	.001	.255	1.001
Officer's Gender (male=1)	.250**	.000	1.284
Officer's Age	-.019**	.000	.981
Officer's Years of Service	.021	.000	1.022
No. of Complaints Against Officer	.079**	.000	1.082
No. of Use of Force Reports	-.034**	.001	.967
No. of Disciplinary Actions	-.011	.313	.989
Black Officer	-.122**	.000	.885
Hispanic Officer	.-.026	.320	.974
Hazardous Moving Violation	.250**	.000	1.284
Equipment Violation	-.454**	.000	.635
Black Driver	-.162**	.000	.851
Hispanic Driver	-.048	.081	.953
Driver's Gender (male=1)	.018	.450	1.018

n = 60,254
Model Chi-Square = 1,138.39**
Pseudo-R Square = .031
* $p \leq .05$
** $p \leq .01$

Table 16 explores the effect of a number of relevant variables on whether a warrantless custodial arrest was made. For the purposes of this analysis, arrests made pursuant to warrants were excluded on the theory that officers have virtually no discretion in

making these types of arrests. Although Blacks were more likely to be arrested by the MDPD than Whites or Hispanics (see Table 2 above), they were also substantially more likely than the other racial groups to have warrants on file – .9% for Blacks versus .2% for Whites and .4% for Hispanics.[1] Consequently, removing warrant-based arrests from the analysis allows for an examination of whether driver racial characteristics influence police behavior under conditions of discretion.

Significantly, neither driver race nor ethnicity was a statistically significant predictor of warrantless arrests in the logistic regression model. The apparent racial disparities in arrests reflected in Table 2 were eliminated once discretionless, warrant-based arrests were removed and other relevant variables were held constant. As one would expect, the odds of arrest increased substantially if contraband was found or if a record check was conducted of the driver or of the vehicle itself. Likewise, males were significantly more likely to be arrested than female drivers. None of the officer-related variables was statistically significant.

Table 17 shows variables that predict a verbal warning. Although many of the variables in the model were statistically significant, the strongest predictors include investigative stops, non-hazardous moving violations, and equipment violations. Each of these variables significantly increased the likelihood that a verbal warning would be given. As for officer-related variables, male officers were less likely to give verbal warnings than female officers. Hispanic officers were less likely than officers of other races to give verbal warnings, while Black officers were more likely than other officers to issue verbal warnings.

[1]The MDPD was able to provide charge and warrant information on 1,000 (62%) of the 1,614 arrests reflected in the traffic stop data. The logistic regression analysis presented in Table 16 is based on the classification of arrests as either warrantless or warrant-based. Because we were unable to classify 614 arrests as either warrantless or warrant-based, readers should exercise caution when interpreting the results from Table 16.

Table 16. Predictors of a Custody Arrest

	B	Sig.	Odds
Percent Black Population	.000	.950	1.000
Percent Owner-Occupied Housing	-.013**	.000	.987
Total Violent Arrest Rate	.000	.092	1.000
Residential Stability	.009*	.042	1.010
Officer's Gender (male=1)	-.160	.153	.853
Officer's Age	-.004	.662	.996
Officer's Years of Service	.001	.944	1.001
No. of Complaints Against Officer	.031	.251	1.031
No. of Use of Force Reports	.058	.094	1.060
No. of Disciplinary Actions	.042	.287	1.043
Black Officer	-.070	.616	.932
Hispanic Officer	.078	.433	1.082
Black Driver	.108	.365	1.114
Hispanic Driver	-..011	.917	.989
Driver's Gender	1.287**	.000	3.620
Investigation Stop	-.258	.321	.772
Contraband Found	2.646**	.000	14.094
Record Check of Person	1.912**	.000	6.766
Record Check of Vehicle	.720**	.000	2.055

n = 60,254
Model Chi-Square = 1,295.96**
Pseudo-R Square = .194
* $p \leq .05$
** $p \leq .01$

Table 17. Predictors of a Verbal Warning

	B	Sig.	Odds
Percent Black Population	.000	.978	1.000
Percent Owner-Occupied Housing	.002**	.008	1.002
Total Violent Arrest Rate	.000**	.000	1.000
Residential Stability	.004**	.009	1.004
Officer's Gender (male=1)	-.323**	.000	.724
Officer's Age	.010**	.000	1.011
Officer's Years of Service	-.024**	.000	.976
No. of Complaints Against Officer	-.058**	.000	.943
No. of Use of Force Reports	-.005	.753	.995
No. of Disciplinary Actions	-.037*	.015	.963
Black Officer	.113*	.012	1.119
Hispanic Officer	-.154**	.000	.857
Investigative Stop	1.530**	.000	4.617
Non-Hazardous Moving Violation	.818**	.000	2.266
Equipment Violation	.976**	.000	2.655
Black Driver	.292**	.000	1.339
Hispanic Driver	.129**	.001	1.138
Driver's Gender (male=1)	-.115**	.000	.891

n=60,254
Model Chi-Square = 1,713.85**
Pseudo-R Square = .062
* $p \leq .05$
** $p \leq .01$

The presence of a Black or Hispanic driver increased the odds of a verbal warning being given when compared to a White driver. Not unexpectedly, male drivers were less likely to receive verbal warnings than female drivers.

Table 18 indicates that the odds of a field interview card being completed increased by almost 70 percent when a Black driver was the subject of a traffic stop. Hispanic drivers were also more likely to be subjects of an FI card than White drivers, although the effect was half as strong as for Blacks. By far the strongest predictor of a field interview card being completed was whether a pat-down search was conducted. Officers who conducted a pat-down search during a traffic stop were six times more likely to complete an FI card than if no pat-down was conducted. Investigative stops were also significantly more likely to result in the completion of an FI card than other types of traffic stops. As with previous analyses of stop dispositions, male drivers were much more likely to be the subjects of FI cards during traffic stops than female drivers. Finally, both Black and Hispanic officers were more likely to complete an FI card than officers of other races.

Table 19 regresses a variety of predictor variables on whether a record check of a person was conducted. The data show that officers were significantly more likely to conduct a record check of a person during investigative-type stops or if they conducted a pat-down search during a traffic stop. Interestingly, male officers were less likely than female officers to conduct a record check of the motorists in a vehicle. Similarly, Black and Hispanic officers were less likely to conduct a record check than officers of other races. Consistent with the finding in Table 5, the odds of a Black driver being the subject of a record check were approximately 50 percent higher than for a non-Black driver. Although the logit coefficient for Hispanic drivers also was significant and positive, the effect for Hispanic

motorists was quite small, indicating that they were at slightly greater risk for having a record check conducted on them than non-Hispanics. An increase in the number of use of force

Table 18. Predictors of a Field Interview Card Being Completed

	B	Sig.	Odds
Percent Black Population	.010**	.000	1.010
Percent Owner-Occupied Housing	-.005**	.000	.995
Total Violent Arrest Rate	.000**	.007	1.000
Residential Stability	.005**	.000	1.005
Officer's Gender (male=1)	-.232**	.000	.793
Officer's Age	-.001	.830	.999
Officer's Years of Service	-.028**	.000	.972
No. of Complaints Against Officer	-.038**	.000	.963
No. of Use of Force Reports	.046**	.000	1.047
No. of Disciplinary Actions	.012	.301	1.013
Black Officer	.130**	.001	1.138
Hispanic Officer	.177**	.000	1.194
Investigative Stop	1.146**	.000	3.147
Pat Down Search Conducted	1.973**	.000	7.190
Black Driver	.516**	.000	1.675
Hispanic Driver	.264**	.000	1.303
Driver's Gender (male=1)	.779**	.000	2.180

n=60,254
Model Chi-Square = 4,540.28**
Pseudo-R Square = .131
* $p \leq .05$
** $p \leq .01$

Table 19. Predictors of a Record Check (Person) Being Conducted

	B	Sig.	Odds
Percent Black Population	.005**	.000	1.005
Percent Owner-Occupied Housing	-.005**	.000	.995
Total Violent Arrest Rate	.000	.716	1.000
Residential Stability	.007**	.000	1.007
Officer's Gender (male=1)	-.172**	.000	.842
Officer's Age	.009**	.000	1.009
Officer's Years of Service	-.055**	.000	.946
No. of Complaints Against Officer	-.029**	.000	.971
No. of Use of Force Reports	.124**	.000	1.132
No. of Disciplinary Actions	-.036**	.000	.964
Black Officer	-.126**	.000	.882
Hispanic Officer	-.115**	.017	.892
Investigative Stop	.902**	.000	2.465
Pat Down Search Conducted	2.045**	.000	7.726
Black Driver	.375**	.000	1.456
Hispanic Driver	.067**	.008	1.069
Driver's Gender (male=1)	.676**	.000	1.967

n=60,254
Model Chi-Square = 5,477.13**
Pseudo-R Square = .128
* $p \leq .05$
** $p \leq .01$

Table 20. Predictors of a Record Check (Vehicle) Being Conducted

	B	Sig.	Odds
Percent Black Population	.007	.000	1.007
Percent Owner-Occupied Housing	-.003	.001	.997
Total Violent Arrest Rate	.000	.919	1.000
Residential Stability	.001	.667	1.001
Officer's Gender (male=1)	-.041	.252	.960
Officer's Age	-.010**	.000	.990
Officer's Years of Service	-.040**	.000	.961
No. of Complaints Against Officer	-.020*	.037	.980
No. of Use of Force Reports	.194**	.000	1.214
No. of Disciplinary Actions	-.062**	.000	.940
Black Officer	-.247**	.000	.781
Hispanic Officer	-.215**	.000	.807
Investigative Stop	.889**	.000	2.432
Pat Down Search Conducted	1.910**	.000	6.753
Black Driver	.309	.000	1.362
Hispanic Driver	-.017**	.620	.983
Driver's Gender (male=1)	.405**	.000	1.500

n=60,254
Model Chi-Square = 3,305.17**
Pseudo-R Square = .106
* $p \leq .05$
** $p \leq .01$

reports completed by an officer was associated with a 13 percent increase in the likelihood of a record check being conducted. Lastly, male drivers were much more likely to be the subjects of a record check than female drivers.

Table 20, which examines record checks of vehicles, shows a similar pattern to that in Table 19 with respect to record checks of persons. Black drivers were more likely to have their vehicles subjected to a record check than drivers of other races. Likewise, an officer's propensity to use force was positively correlated with an increased chance that a vehicle record check was conducted. Investigative stops and pat-down searches remained the strongest predictors of a vehicle record check. Again, Black and Hispanic officers were less likely to conduct a record check of a vehicle than other officers.

Summary

The foregoing analyses explored differences and similarities in the treatment of White and minority drivers by the Miami-Dade Police Department following a traffic stop. White motorists (83%) and Hispanic motorists (83%) were more likely to receive a summons following a traffic stop than Black motorists (79%). Black drivers, on the other hand, were more likely than White or Hispanic drivers to receive a verbal warning. A similar pattern existed with respect to custodial arrests. Approximately four percent of Black drivers were arrested following a traffic stop compared to only two percent for Whites and Hispanics.

Black drivers also fared less well than White or Hispanic drivers in most other measures of post-stop outcomes. Blacks were more likely than Whites or Hispanics to have their vehicles towed or to have record checks conducted on them or their vehicles. Similarly, Blacks were substantially more likely than Whites or Hispanics to be the subjects of an FI card, which is a documented record of a police-citizen encounter that officers complete when

they believe that the citizen is suspicious in some way. Differences in the treatment of Whites and Hispanics were either minimal or inconsistent, indicating that members of these two racial and ethnic groups were not treated substantially different from one another. The effect of officer race on post-stop outcomes also was inconsistent. Generally speaking, Black officers were less punitive than White or Hispanic officers, regardless of the race of the motorist. For example, they were less likely to arrest a driver or issue a citation than White or Hispanic officers. The completion of FI cards stands as an exception to this general rule. Black officers were more likely than White or Hispanic officers to complete FI cards for Black or Hispanic drivers. Overall, though, the data did not indicate that officers of a particular race or ethnicity targeted drivers of an identified racial or ethnic group for differential treatment.

Chapter 10

Citizen Contact Card Component: District Analyses

In addition to analyzing data and reporting findings for the entire county of Miami-Dade, it is also important to assess police stop, search, and arrest patterns at the district level. If they are severe enough, racial disparities in one or two districts can skew the results for the police department as a whole, when, in reality, some districts may show no evidence of disproportionality at all in their contacts with citizens. The analyses below examine police-citizen contacts within the eight main patrol districts operated by the MDPD. They do not include data on stops made at the Miami International Airport or other specialized police districts

Stops

Table 1 below presents the frequency of stops by district. Out of the eight patrol districts represented, the Kendall district made the most stops, with 19.6 percent of the total. Hammocks was second, with 15 percent of the total stops. Carol City made the fewest number of stops, with 3,723, which accounted for 6.9 percent of all stops made during the data collection period.

Tables 2 presents frequency data on stops for each district broken down by race and ethnicity. Carol City represents the most heavily Black district. More than 70 percent of the traffic stops made in Carol City involved a Black driver. Out of all the districts, Hispanics made up the largest proportion of stops in the Doral District at almost 70 percent. Cutler Ridge recorded the largest percentage of White motorist stops at 33 percent of the total stops made in that district. Whites also comprised approximately one third of the stops made in the Kendall District.

Table 1. Frequency of Stops by District

District	Number of Stops	Percent of Total Stops
Cutler Ridge	6,471	12.1
Doral	7,035	13.1
Carol City	3,723	6.9
Hammocks	8,039	15.0
Intracoastal	5,769	10.8
Kendall	10,485	19.6
Miami Lakes	7,240	13.5
Northside	4,861	9.1
TOTALS	**53,623**	**100 %**

Examining the relationship between officer and citizen race or ethnicity is important in a study of possible bias in police-citizen contacts. It has been reported in public meetings that some Miami-Dade citizens perceive racial profiling as a problem involving primarily White and Hispanic police officers targeting Black citizens. Table 3 shows the percentage of Black motorist stops made by White, Black, and Hispanic officers, in each of the eight police districts. If White or Hispanic officers were disproportionately targeting Black citizens for traffic stops, then a greater percentage of their stops compared to Black officers would likely involve Black motorists.

Table 2. Frequency of Stops by District and Driver Race

DISTRICT	DRIVER RACE (% within District)			
	Black	**White**	**Hispanic**	**TOTALS**
Cutler Ridge	2,065 (32.0%)	2,131 (33.1%)	2,248 (34.9%)	6,444 (100%)
Doral	372 (5.3%)	1,780 (25.4%)	4,853 (69.3%)	7,005 (100%)
Carol City	2,629 (70.7%)	500 (13.5%)	587 (15.8%)	3,716 (100%)
Hammocks	915 (11.4%)	2,219 (27.7%)	4,876 (60.9%)	8,010 (100%)
Intracoastal	3,052 (53.1%)	1,594 (27.7%)	1,103 (19.2%)	5,749 (100%)
Kendall	1,009 (9.7%)	3,310 (31.7%)	6,126 (58.7%)	10,445 (100%)
Miami Lakes	2,093 (29%)	1,749 (24.2%)	3,379 (46.8%)	7,221 (100%)
Northside	2,738 (56.4%)	705 (14.5%)	1,412 (29.1%)	4,855 (100%)

The data from Table 3 fail to show such a pattern. In fact, in all but two districts (Cutler Ridge and Kendall), Black officers stop Black citizens in greater proportions than White or Hispanic officers. For example, in Doral, approximately 12 percent of traffic stops made by Black officers involved Black motorists, while White and Hispanic officers stopped Black motorists about half as frequently as a percentage of their total stops. When compared to White or Hispanic officers, this pattern of higher Black stop rates among Black officers persists in seven out of eight districts.

Among the districts that showed statistically significant differences for Black motorist stops among officer racial groups, all but the Kendall and Cutler Ridge districts showed that a *greater* percentage of Black stops were made by Black officers as opposed to than by White or Hispanic officers. In Kendall, Black officers stopped a greater percentage of Black drivers (9.4%) than did White officers (8.4%) but stopped a somewhat smaller percentage than Hispanic officers (11.4%). Similarly, in Cutler Ridge, White officers stopped a slightly higher percentage of Black drivers than Black officers, but Black officers were more likely than Hispanic officers to stop Black drivers in that district.

Table 3. Percent Black Motorist Stops by Officer Race

DISTRICT	OFFICER RACE		
	Black	**White**	**Hispanic**
Cutler Ridge*	32.2	32.7	31.0
Doral*	10.8	5.5	4.8
Carol City*	73.8	67.7	70.0
Hammocks*	28.1	10.3	10.8
Intracoastal*	63.3	49.6	53.3
Kendall*	9.4	8.4	11.4
Miami Lakes*	32.7	26.1	28.9

*Differences among officer racial groups were statistically significant, p # .01

Again, these were the only districts where such a pattern existed, and in both cases, the difference in the stop rates of Black drivers among Black, White, and Hispanic officers was small.

Table 4. Percent Hispanic Motorist Stops by Officer Race

DISTRICT	OFFICER RACE		
	Black	**White**	**Hispanic**
Cutler Ridge*	32.7	33.5	38.3
Doral*	63.9	58.0	75.1
Carol City*	13.8	16.8	16.8
Hammocks*	34.8	61.8	62.3
Intracoastal*	14.0	20.0	20.5
Kendall*	52.8	59.5	58.2
Miami Lakes*	43.9	48.7	47.1
Northside*	23.8	33.6	31.4

*Differences among officer racial groups were statistically significant, p # .01

Like the findings above which showed that Black officers were more likely than White or Hispanic officers to stop Black citizens, Table 4 shows a relationship between officer and citizen ethnicity. In most districts, Hispanic officers were more likely to stop Hispanic motorists than were non-Hispanic officers. In Cutler Ridge, Doral, Hammocks, and Intracoastal, Hispanic officers stopped Hispanic motorists at rates greater than either Black

or White officers. In the Kendall, Miami Lakes, and Northside districts, Hispanic officers were significantly more likely to stop Hispanic drivers than were Black officers, but were no more likely than White officers to stop Hispanics. In none of the districts did Black officers stop Hispanic motorists at rates that exceeded those of Hispanic officers. Overall, the traffic stop patterns of the Miami-Dade Police Department show remarkable continuity between officer and citizen race and ethnicity.

Arrests

Recall that in the county-wide analysis, Black motorists were significantly more likely than White or Hispanic motorists to be arrested following a traffic stop. Table 5 examines the differences in arrest percentages among racial and ethnic groups by district. In all districts, Black drivers were more likely than White or Hispanic drivers to be arrested following a traffic stop. These differences were statistically significant in all districts except Doral, Intracoastal and Northside. In the Intracoastal District, Blacks were more likely to be arrested than Whites but were equally likely as Hispanics to be arrested. The Northside District showed only a slightly higher arrest rate among Blacks when compared to Whites but a much higher arrest rate than Hispanics. In some districts, most notably Carol City, Kendall, and Miami Lakes, Blacks were almost two or three times more likely to be arrested than Whites.

Unlike the clear pattern of higher arrest rates for Blacks, when compared to other racial groups, the differences between Whites and Hispanics were inconsistent. In some districts, Hispanics were arrested more often than Whites, while in other districts, the reverse was true. Cutler Ridge, Carol City, Intracoastal, and Miami Lakes showed higher arrest rates for Hispanics than for Whites. However, in Doral, Hammocks, and Northside, Hispanics

were less likely than Whites to be arrested. Finally, the arrest rates among Whites and Hispanics were essentially equivalent in the Kendall District.

Table 5. Percentage of Stops Resulting in an Arrest by Race and Ethnicity

District	Black	White	Hispanic
Cutler Ridge**	4.1	2.1	2.6
Doral	3.0	2.2	1.9
Carol City*	3.1	1.0	1.9
Hammocks**	3.6	1.6	1.2
Intracoastal	2.2	1.3	2.1
Kendall**	4.7	1.7	1.8
Miami Lakes**	3.9	1.4	1.9
Northside	5.8	5.4	4.1

*Differences among racial groups were statistically significant, p # .05
**Differences among racial groups were statistically significant, p # .01

Table 6 shows the district-level odds ratios for predictor variables associated with custody arrests. Although the findings with respect to Black drivers generally reflect those from the county-wide analysis – Blacks were more likely than non-Blacks to be arrested – only Kendall and Miami Lakes achieved statistical significance on that variable. Thus, only in those districts were Black drivers more likely to be arrested than non-Black drivers after controlling for other relevant variables. As for Hispanic motorists, this variable failed to achieve statistical significance in every district except Doral. In Doral, Hispanic motorists

were less likely than drivers of other races to the subjects of a custodial arrest. In all the districts, as was the case in the aggregate analysis, female drivers were significantly less likely than males to be custodially arrested. As for officer-related variables, no clear patterns emerged. Most variables were non-significant in most districts. In the few cases where statistical significance was achieved, the effects were generally small. The one exception was in the Cutler Ridge District where male officers were significantly less likely to make an arrest than female officers.

As expected, record checks and the discovery of contraband were the strongest and most consistent predictors of a custody arrest. The Arrest on a Warrant variable produced very large odds ratios in all districts but only achieved statistical significance in the Kendall and Northside Districts. This is probably because arrests pursuant to a warrant only accounted for about one quarter (n=387) of the custodial arrests (n=1,605) made during the data collection period.

FI Cards and the Number of Citations

Two additional analyses were performed at the district level to further explore post-stop outcome disparities among racial and ethnic groups uncovered in the county-wide analysis. The first of these two analyses examines the rate at which officers completed FI cards for drivers of different races and ethnicities. Whether an officer elects to fill out an FI card for a motorist provides an indication of suspicion on the part of the officer and signals whether the officer believes that the motorist may be involved in criminal activity.

Table 6. Odds Ratios for Predictor Variables of a Custody Arrest

	Cutler Ridge	**Doral**	**Carol City**	**Hammocks**	**Intracoastal**	**Kendall**	**Miami Lakes**	**Northside**
Percent Black Population	1.001	1.008	1.012	.996	1.003	.994	.999	1.005
Percent Owner-Occupied Housing	.981	1.003	.985	.987	.993	1.004	1.011	.993
Total Violent Arrest Rate	.998	1.000*	1.001	1.000	1.005	1.008*	1.004	1.000
Residential Stability	1.032	.997	.996	1.003	.977	.999	.997	.988
Officer's Gender (male=1)	.523**	1.987	.956	.744	1.349	.978	1.536	1.089
Officer's Age	1.000	.978	.936*	1.031	1.045*	.974	.969	.979
Officer's Years of Service	.990	1.021	1.091*	.928**	.991	1.003	1.071*	.979
No. of Complaints Against Officer	1.074	.987	.975	1.104	1.316**	1.031	.998	1.089
No. of Use of Force Reports	1.080	1.183	1.236	.976	.813	1.069	.806*	.999
No. of Disciplinary Actions	1.036	1.290*	.838	1.208	.865	1.097	.909	1.133
Black Officer	.658	.751	1.521	.282	1.823	.370	1.030	1.121
Hispanic Officer	1.077	1.445	1.642	.742	2.509**	.740	.706	.958
Investigation Stop	.833	1.407	1.502	.297	2.318	.687	.845	.740
Record Check of Person	4.969**	8.915**	6.794**	3.512**	9.092**	8.071**	8.503**	2.662**
Record Check of Vehicle	2.157**	2.681**	2.499*	3.300**	1.497	2.471**	2.880**	2.888**
Arrest on Warrant	166899.35	226121.31	121168.66	300763.83	762978.35	4203.852**	818373.23	2178.627**
Contraband Found	28.664**	71.116**	85.697**	18.745**	231.243**	50.747**	42.432**	14.842**
Black Driver	1.446	.764	2.376	1.538	.938	2.144**	2.364**	1.047
Hispanic Driver	1.047	.554*	1.331	8.41	.991	1.106	1.186	.744
Driver's Gender (male=1)	2.998**	2.699**	4.792*	3.295**	4.633**	1.902*	4.195**	2.386**

* p # .05
** p # .01

Table 7. Percentage of Stops Resulting in an FI Card by Race and Ethnicity

District	Black	White	Hispanic
Cutler Ridge*	21.2	14.6	19.1
Doral*	14.2	5.2	9.3
Carol City*	28.0	18.2	20.4
Hammocks*	14.6	5.5	5.3
Intracoastal*	19.5	9.7	16.3
Kendall*	15.8	7.9	9.6
Miami Lakes*	18.2	10.3	16.2
Northside*	27.8	21.6	25.1

*Differences among racial groups were statistically significant, p # .01

The data from Table 7 above indicate that officers completed FI cards for Black motorists at a higher rate than Whites in every patrol district. Likewise, FI cards were completed more often for Hispanic motorists than for Whites in all districts except for one (Hammocks). Generally speaking, FI completion rates were highest for Blacks and lowest for Whites, with Hispanic motorists falling somewhere in between the other two racial groups.

Table 8. Odds Ratios for Predictor Variables of an FI Card

	Cutler Ridge	Doral	Carol City	Hammocks	Intracoastal	Kendall	Miami Lakes	Northside
Percent Black Population	.991**	1.012**	1.020**	1.010**	1.002	1.009**	1.009*	1.005**
Percent Owner-Occupied Housing	.991**	.991**	.994	.994*	.983**	.992*	1.000	.992**
Total Violent Arrest Rate	1.005**	1.000	.999	1.004	.996*	.999	.994**	1.000
Residential Stability	1.036**	1.003	1.018*	.995	1.019**	1.002	1.005	.996
Officer's Gender (male=1)	.872	1.358	.704**	.552**	.784*	.891	1.751**	.638**
Officer's Age	.973**	.995	1.006	.998	.997	1.000	.960**	1.020**
Officer's Years of Service	1.026**	.983	.924**	.962**	.970**	.986	.962**	.956**
No. of Complaints Against Officer	.871**	.1093**	1.193**	1.015	.827**	.939*	.897**	1.064
No. of Use of Force Reports	1.061	1.135**	1.009	.896**	1.306**	1.101**	1.151**	.986
No. of Disciplinary Actions	1.021	.880*	.804**	.937	1.097*	.925	1.214**	1.085
Black Officer	1.024	1.081	.849	.987	.512**	1.008	2.333**	1.032
Hispanic Officer	1.367**	1.937**	1.357**	1.197	.488**	1.922**	.715**	1.739**
Investigative Stop	3.059**	7.112**	1.176	3.639**	1.942*	4.024**	2.617**	3.643**
Pat Down Search Conducted	6.216**	9.793**	6.321**	8.754**	7.441**	11.201**	7.675**	5.195**
Black Driver	1.577**	2.552**	1.264	1.851**	2.000**	1.738**	1.806**	1.276*
Hispanic Driver	1.382**	1.668**	1.147	1.028	1.570*	1.191*	1.787**	1.290*
Driver's Gender (male=1)	2.397**	2.651**	1.911**	3.433**	1.888**	4.014**	1.957**	1.511**

* p # .05
** p # .01

Table 8 shows the district-level odds ratios for predictor variables associated with the completion of FI cards. Consistent with the bivariate data reported in Table 7, Black and Hispanic motorists are more likely to be the subjects of FI cards than drivers of other races. In the Doral District, the presence of a Black motorist increased the odds that an FI card would be completed by 150 percent. Only in the Carol City District did the Black Driver

variable fail to reach statistical significance. Similarly, Hispanic motorists were more likely than non-Hispanics to the subjects of FI cards in all districts except Carol City and Hammocks. In the Intracoastal District, the presence of a Black driver increased the probability of an FI card more than the presence of a male driver, which was also a consistent predictor of an FI card in all districts. As expected, investigative stops, and stops resulting in a pat-down search, were positively and significantly correlated with the completion of FI cards in all districts. Most other variables in the models achieved statistical significance in most districts, although no consistent patterns emerged in the direction or strength of the effects.

The final district-level analysis explores differences in the number of citations issued to motorists by race and ethnicity. The county-wide analysis found that Black drivers, on average, received more citations per stop than Whites and Hispanics. Table 9 presents the standardized regression coefficients (beta weights) for a series of OLS regression models completed for each district. The dependent variable in these models was the number of citation issued. Independent variables included vehicle age (in years) and a series of dummy variables for driver race, ethnicity, and type of violation.

Table 9. Standardized OLS Regression Coefficients for Number of Citations Issued

	Cutler Ridge	**Doral**	**Carol City**	**Hammocks**	**Intracoastal**	**Kendall**	**Miami Lakes**	**Northside**
Hispanic Driver	.045*	-.006	-.038	.006	.035	.021	.033	.019
Black Driver	.111**	.051**	-.024	.058**	.121**	.075**	.102**	.112**
Equipment Violation	.103**	.088**	-.007	.073**	.009	.090**	.036**	-.008
Vehicle Age	.015	-.011	-.004	-.004	.009	.004	-.001	.018
Hazardous Moving Violation	-.064**	-.048**	-.074**	-.059	-.075**	-.061**	-.081**	-.080**

* p # .05
** p # .01

As the regression coefficients indicate, the presence of a Black driver was consistently and positively correlated with an increase in the number of citations issued net of the effects of other relevant variables. In several districts (Cutler Ridge, Intracoastal, Miami Lakes, and Northside) the Black Driver variable was a stronger predictor of the number of citations issued than any other variable in the model. Only in Carol City did the Black Driver variable fail to achieve statistical significance. In all districts except Cutler Ridge, the presence of an Hispanic driver was not associated with an increase in the number of citations issued. In the Cutler Ridge District, the Hispanic variable was positively correlated with the number of citations issued, but was the weakest of the statistically significant variables, and had a much weaker effect than the Black driver variable.

Summary

The purpose of this chapter was to determine whether significant differences in police stop, search, and arrest practices, existed between patrol districts. Among the questions explored was whether officers of different racial or ethnic groups showed different patterns of stopping minority drivers. In particular, we examined whether White and Hispanic officers were more likely than Black officers to stop Black motorists in the various districts. We found no such evidence of this practice. With the exception of the Cutler Ridge and Kendall districts, Black officers were *more likely* than White or Hispanic officers to stop Black motorists. In Cutler Ridge, the differences in Black motorist stop percentages between Black, White, and Hispanic officers were very small. In Kendall, Hispanic officers stopped a slightly higher percentage of Black drivers than Black officers, but Black officers stopped a higher percentage of Black motorists than White officers. Taken as a whole, the data show

no pattern of White officers targeting Black motorists for stops in any of the eight patrol districts.

In the county-wide analysis, Black citizens were more likely to be arrested than White citizens in the aggregate. However, arrest disparities were not consistent across districts. In only two of the eight districts (Kendall and Miami Lakes) did the Black Driver variable positively and significantly predict an arrest outcome. In several districts where the driver race variable did not achieve statistical significance, the direction of the relationship between race and arrest was actually *negative*. Thus, the overall arrest disparities uncovered in the county-wide analysis were primarily driven by the Kendall and Miami Lakes Districts, although Cutler Ridge, Carol City, and Hammocks, also evidenced positive race-arrest effects that were not statistically significant in the district-level models.

In contrast, Black and Hispanic drivers were more likely to be the subjects of FI cards in almost all districts. Only Carol City (Blacks and Hispanics) and Hammocks (Hispanics only) did not show a positive and significant relationship between race and ethnicity and the odds of being the subject of an FI card. Overall, the strength of the relationship with the FI outcome was stronger for Blacks than for Hispanics.

Finally, the presence of a Black driver was associated with an increase in the number of citations issued per stop in all districts except Carol City. Black drivers received more tickets than White drivers, even after controlling for the type of traffic violation and the age of the vehicle. The presence of an Hispanic driver was not associated with an increase in the number of citations issued (except in Cutler Ridge). In Cutler Ridge, the positive correlation between Hispanic ancestry and the number of citations issued was quite weak.

Chapter 11

Summary and Policy Recommendations

This final chapter includes a brief summary of the major findings of our research and then turns to several policy recommendations that, if implemented, would help officers and supervisors maintain professional standards with respect to the fair and equal treatment of all citizens. Finally, we propose that further research on pedestrian stops be undertaken.

Our policy recommendations involve modifying specific procedures to guarantee equal treatment to all citizens, and to ensure accountability. Although the Miami-Dade Police Department has an excellent Early Identification System that has been functioning since the late 1970s, there are several modifications that could enhance its operation in the area of racial-biased policing. Similarly, the Metropolitan Training Institute in the department has an excellent reputation throughout the country. Nevertheless, there are courses that could be modified or created to assist officers in avoiding the practice or perception of racially-biased policing.

Findings From the Three Study Components

Here, we must emphasize the most salient findings in the report. It is important to realize that these overall patterns may differ in the eight districts that make up the MDPD. If disparities exist in only two or three of the districts, these disparities may show up in the overall analyses even if there are no disparities within the other five or six districts. Our discussion of the findings must be prefaced by noting that there is a difference between disparate impact and discriminatory intent. A finding of disparate impact certainly calls for further study and analysis, but there may be valid reasons for disparities that are not

explained by discriminatory intent. The major findings are grouped into our three research components.

Ride-Along Component

- Observers accompanied officers on 51 shifts.
- During these shifts, officers formed suspicion 168 times.
- Observers were unable to determine the race of the driver in 71% of the incidents when suspicion was formed.
- In most cases, the behavior of the suspect (140 cases: 84%) led the officer to become suspicious.
- Once an officer formed a suspicion, a stop was conducted in most cases (86%: 144 cases).
- The decision to make a stop was based predominantly upon the behavior of the driver (86%).
- Observers were unable to determine the race of the driver in 73% of the stops.
- Driver's race was not a significant factor in the officer's decision to make a stop.

Traffic Observation Component

- The observers recorded 93,251 drivers and more than 12,000 violations in White, Black and racially mixed neighborhoods.
- Five hundred and thirty-five traffic stops were made by the police at the 16 observed locations.
- Rates of violation vary among the four race and gender categories.
- Rates of police stops were very close to the rates of violation for each of the groups.
- White males had a slightly higher likelihood of being stopped by the police when compared to their rate of violation.
- White females and Black males had a slightly lower likelihood of being stopped by the police in comparison to their rate of violation.

- Black females were stopped at exactly their rate of violation.

- When we combine the information from all 16 intersections, the four race and gender groups of citizens were stopped at approximately the same rate at which they violated the traffic laws.

- There were variations in the stop rates among different groups in the different types of neighborhoods.

- White female drivers were stopped at a higher rate than other race and gender groups in predominately White and substantially Black neighborhoods.

- White females were stopped at a rate lower than their violation rate in racially mixed neighborhoods.

- Black drivers were stopped below their violation rate in most areas and never at a rate higher than their violation rate.

- Stops more closely match the violation rates for Black drivers than for White drivers.

- White females had the highest rates of stops over their violation rate.

- White males had the lowest rates of stops below their violation rate.

Citizen Contact Card Component: Stop Analysis

- Black drivers were not stopped at disproportionate rates in substantially Black areas but were stopped at rates that exceeded their estimated representation in the driving population in predominately non-Black and racially mixed areas.

- The most common reason for a stop among all drivers was a traffic violation.

- Black drivers were more likely than Whites to be stopped for equipment violations and in response to a BOLO.

- Hispanics were more likely to be stopped for hazardous moving violations than non-Hispanics.

Citizen Contact Card Component: Stop Disposition Analysis

- White and Hispanic motorists were more likely to receive a summons following a traffic stop than Black motorists. Black drivers, on the other hand, were more likely than White or Hispanic drivers to receive a verbal warning.

- Differences in arrests between Black and white citizens were mostly explained by the disproportionate number of Black citizens who are stopped with outstanding warrants. These findings are based on warrant and charge information on 62% of the total arrests.

- Black drivers were twice as likely to be arrested following a traffic stop as White and Hispanic drivers.

- Black drivers were more likely than White or Hispanic drivers to have their vehicles towed and to have records checked on them or their vehicles.

- Black suspects were more likely than Whites or Hispanics to have Field Interrogation cards completed on them.

- Generally, Black officers were less punitive than White or Hispanic officers, regardless of the race of the motorist. For example, Black officers were less likely to arrest a driver or issue a citation than White or Hispanic officers.

- Black officers were more likely than White or Hispanic officers to complete FI cards for Black or Hispanic drivers.

Citizen Contact Card Component: Search Analysis

- Black suspects were more likely to be searched than Whites or Hispanics.

- Black drivers were more likely than White drivers to be the subjects of pat-down searches and vehicle searches, but were equally likely to be the subjects of consent search requests or inventory searches.

- Blacks were more likely than Whites or Hispanics to be the subjects of both high discretion and low discretion searches.

- The overall difference in the percentage of Blacks searched, relative to Whites and Hispanics, is primarily a function of the higher custody arrest rates and search incident to arrest rates among Blacks.

- A smaller percentage of Blacks were found in possession of contraband following a search compared to Whites or Hispanics.

- Officers of a particular race or ethnicity did not target drivers of any racial or ethnic group.

Citizen Contact Card Component: District Analysis

- With the exception of the Cutler Ridge and Kendall districts (6 of 8), Black officers were *more likely* than White or Hispanic officers to stop Black motorists.

- Taken as a whole, the data show no pattern of White officers targeting Black motorists for stops in any of the eight patrol districts.

- The Black Driver variable positively and significantly predicted an arrest outcome in only two of the eight districts (Kendall and Miami Lakes).

- Overall arrest disparities uncovered in the county-wide analysis were primarily driven by the Kendall and Miami Lakes Districts, although Cutler Ridge, Carol City, and Hammocks, also evidenced positive race-arrest effects that were not statistically significant in the district-level models.

- The presence of a Black driver was associated with an increase in the number of citations issued per stop in all districts (except in Carol City), Black drivers received more tickets than White drivers, even after controlling for the type of traffic violation and the age of the vehicle.

- The presence of a Hispanic driver was not associated with an increase in the number of citations issued (except in Cutler Ridge). In Cutler Ridge, the positive correlation between Hispanic ancestry and the number of citations issued was quite weak.

Policy Recommendations

The focus of our policy recommendations is to help guarantee equal treatment to all people in Miami-Dade County. These recommendations include two specific procedural modifications and several broad oversight concerns.

Procedural Modifications

Two specific practices appear to have influenced a portion of the disparities we found in the search and arrest statistics between racial groups. First, it is apparent that officers completed Field Interrogation Cards (FI) disproportionately for Black suspects compared to non-Blacks. This practice may not have significant consequences for the suspect, but it may signify that race is being used inappropriately as a criterion in the decision to complete and submit an FI card. While each FI card may be legitimate, the overall pattern might indicate that officers perceive Blacks as more suspicious than non-Blacks. As a result, we suggest that the Miami-Dade Police Department specify the procedures to complete an FI card more clearly, train officers to identify suspicious persons using legitimate criteria, and also hold officers accountable for the potential use of race inappropriately in these decisions and actions.

Second, the data showed that officers conducted record checks on Black drivers at significantly higher rate than non-Black drivers. While this can be seen as good police work, it also raises the question of whether race is being used inappropriately as a criterion to conduct a record check. Unfortunately, the analysis of individual decisions by officers to conduct record checks is beyond the scope of our data and study.

Although we cannot assess each decision to conduct a record check, in the aggregate, the consequence of conducting more checks on Blacks than Whites creates a greater likelihood of arresting and searching Blacks. It may be argued that the discovery of any criminal activity and the arrest of the suspect is therefore appropriate. While we undoubtedly agree with this point of view, we also recognize the importance of equal enforcement of the

law for all individuals. While it is important for police officers to act on suspicion, it is more important for them not to enforce the law more vigorously on one group than another.

As we have seen, the disparate rate of searches between Blacks and non-Blacks is accounted for by the decision to make an arrest, which requires the officer to search the suspect, and may be explained by the disproportionate number of Black citizens who are stopped with outstanding warrants. Clearly, the criteria used by officers to conduct a record check needs to be standardized and fair to all citizens. In other words, race must not be used inappropriately to determine when a record check should be conducted. It is our recommendation that the Miami-Dade Police Department specify the criteria to initiate a record check more clearly, that they train officers, and ultimately hold them accountable for the potentially inappropriate use of race in these decisions and actions.

Early Intervention and Performance Evaluation

Although only a very small number of officers may have breached the public trust, the actions of these few can create an environment that negatively impacts the department's public image. This potential for problematic conduct creates the need for supervision and accountability. In order to assure the community that the Miami-Dade Police Department takes the issue of racially biased policing seriously, steps should be taken to strengthen current management strategies. First, a continued data collection effort is needed to monitor the actions of officers. The type of information reported on the citizen contact card should be collected routinely. These data can be imported into the Early Identification System or a performance-based management system. Either strategy will provide first-line supervisors with the information necessary to determine the rates at which officers stop citizens, conduct record checks, complete FI cards, issue tickets, conduct searches, seize contraband, and arrest

individuals from different racial or ethnic groups. Perhaps the best comparative measure is the rate of actions taken by other officers assigned to the same areas and who work the same shifts. This internal comparison would provide supervisors with the ability to see if any officers are acting in ways that are different from other similarly situated officers. The objective of this type of oversight is to provide first-line supervisors with the tools to manage their officers properly.

Training

All police officers should understand the need to protect individual rights and dignity. The Police Executive Research Forum (PERF) (Fridell et al., 2001) has published a report that suggests the need for training in the area of racially biased policing. The authors of this report made numerous recommendations and provided specific topics for training. Below are three recommendations with selected examples that are noteworthy and that have been quoted from the report:

1. Education and training programs relating to racial bias in policing should more precisely define the numerous dimensions, complexities and subtleties of the problem (2001: 82-83).

    - applying discretionary enforcement on the basis of race;
    - tolerating different degrees of disorder and deviance on the basis of race
    - assuming someone is dangerous on the basis of race.

2. Education and training programs relating to racial bias in policing should identify the key decision points at which racial bias can take effect, at the incident level (2001:91, 92).

    - Deciding who is worth surveilling for criminal activity - who is worth paying close attention to (including which vehicle tags to run);
    - deciding whom to contact or detain to investigate suspicions;

- deciding what attitude to adopt during contacts and stops (i.e., firm, friendly, confrontational);

- deciding whether to search, or request consent to search, people and vehicles, and how extensive and intrusive the search will be

- deciding what enforcement action to take (e.g., no action, verbal warning, citation or summons, custody arrest).

3. Education and training programs should review how operational strategies can contribute to racially biased policing and the perception thereof (2001: 92, 94):

    - laws and policies that specifically address how officers may and may not use race as a factor in enforcement decisions; and

    - departmental policies governing police discretion, and the factors offices may and may not take into account in the exercise thereof.

Beyond the PERF recommendations, there are a number of areas that should be incorporated into officer training. These include strong guidance on when to conduct a record check, search criteria, the time required to conduct a search and the alternative uses of that time, the social costs associated with a search of an innocent person (to both the department and the citizen), and balancing those costs with the enforcement of laws and protection of public safety. In particular, officers should receive regular retraining on the law of search and seizure, and on objective race-neutral criteria for conducting searches.

Communication

There will be times when the police encounter citizens who are upset by the interaction. When an officer stops a motorist but is impolite or does not inform the person why he or she was stopped, the citizen could form a negative impression of the officer or of the department. Similarly, if an officer has heard a BOLO referencing a young Black male who is wanted for questioning in a convenience store burglary, and the officer stops a person

in the area who fits the description, should the officer explain his reasons for the intervention? While the officer may not feel comfortable divulging the information at the front end of the encounter, if the officer releases the person, would it not be a good idea to explain the stop to the citizen?

The need to communicate politely and sensibly is imperative in police-citizen encounters. Many officers have the skills to defuse potentially unfavorable situations, while others need training, reinforcement, and encouragement. Training in proper communication can help officers alleviate some potentially negative situations and turn others from a bad to a neutral or positive experience.

Expanding the Scope of the Investigation

While the present study looked only at discretionary traffic stops, future studies should investigate stops of pedestrians performed by MDPD officers. Currently, it is unknown how many pedestrians are stopped, questioned, or searched, and whether disparities exist in the treatment of minority or White citizens in these contacts. Although this research would present its own unique challenges, it would be an important step in understanding the operations of the Miami-Dade Police Department and in ensuring that it is maintaining high standards of integrity in all of its face-to-face contacts with citizens. In addition, the Miami-Dade Police Department should take advantage of other research opportunities, including the use of recently developed methods for measuring attitudes and stereotypes. Previous studies using these measures indicate that they may predict biased behavior, and might, therefore, help to identify officers who would benefit from additional training or supervision.

References

Fridell, Lorie, Robert Lunney, Drew Diamond and Bruce Kubu. 2001. Racially Biased Policing: A Principled Response. Washington, DC: Police Executive Research Forum.