Recommendations on How to Use Technology to Make
Racial Profile Monitoring Systems Cost Effective

Approved by Dr. Susan Hilal
Advisor

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How Technology Makes Racial Profiling Monitoring Systems Cost Effective

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Scott S. McCullough
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The road to completing this paper and this degree has been long and truly spanned a 20 career in law enforcement. Since my first day in the police academy, through field training, long and unpredictable hours in law enforcement, advancement in the chain of command my family has been shield from the stress this job creates. With all my heart I want to thank my family as I continue this journey in my chosen profession.

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Abstract

How Technology Assists in Benchmarking for Racial Profiling

Early Warning Systems

Scott S. McCullough

Under the Supervision of Dr. Susan Hilal

Statement of the Problem

For several decades law enforcement agencies across the country have been faced with accusations that their officers were improperly using race when determining whether to stop someone. These accusations were not without merit as many law enforcement agencies had actually incorporated race into its operating procedures when creating a profile of people they would like to stop (Schmalleger, 2005). When this came to light instead of being considered good police work, the opposite occurred with accusations in the form of law suits and the negative public perception all pointing to the fact that the use of race was improper and that these practices needed to change immediately. Not only did these practices become abolished but departments were forced to prove that their officers were not guilty of biased policing. The problem with this was the difficulty of establishing effective/accurate benchmarks to get a full picture of the situation.

Methods of approach
The method of approach for this paper will be from secondary sources gathered through a review of state and departmental statistical studies on racial profiling, and recommendations by accepted published experts in the field. Recent events in Wisconsin and recommendations from earlier studies will be used to demonstrate how technology can influence stake-holder’s opinions on racial profiling studies or early warning systems.

Results

This technology will track an officer’s activities whether they belong to a large agency or small. The same GPS that works in the Los Angeles Police Department will work in any sized department in the country and will track where and how an officer patrols while cameras will record how they treat their contacts. These same technological advances will track an officer’s activities as a whole (the specifics of people they contact and the outcome of those contacts) which can be compared against any number data sets. Although the initial outlay of funds may be daunting to smaller agencies it can also give these smaller agencies the ability to make its officers and their supervisors time more effective. Specifically it will identify different technologies or software that will make it less costly, improve the speed and increase a department’s ability to track what officers are doing and who they are contacting. This paper shows that technology now makes it possible for a department’s supervisors to track its officer’s activities. Anything from how fast they drive, to how they interact with citizens and what corrective action was given. Although not able to see into an officer’s inner motivation it will show the end result of a citizen contact, which when tracked and compared will be able to warn that supervisor of possible problems with racial profiling, or other improper practices.
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SECTION I: INTRODUCTION

Statement of the problem

Since the early 1990s and in reaction to public pressure, law enforcement agencies have become increasingly concerned about ensuring that their organizations, and specifically their officer’s have a high level of integrity and accountability. This public pressure can be demonstrated by the public’s perceptions that their police departments, to at least some degree were guilty of racial profiling and this idea threatened to undermine the integrity of law enforcement nationally. Although allegations that police target people of color is nothing new, with media coverage of law suits or other negative publicity it has become more publicized and almost universally believed as occurring in police work. As a result of such perceptions, addressing racial profiling concerns has become vital to ensure a law enforcement agency’s integrity. The impact and threats that improper racial profiling by its officers has to overall police operations is not lost on the leadership or oversight organizations for the law enforcement agencies across the country.

At the same time as the issue of racial profiling has been evolving, the technology that is available for everyday use by police officers on patrol has evolved. The computerization and other modernization of police equipment have seemingly had a profound effect on patrol officers. With the incorporation of computers in the squad cars it has enabled officers to do data searches, type incident reports, receive assignments, complete patrol logs, dispatched to calls, completion of contact reports and even enabled officers to issue citations in a software
program. This computerization can also be seen in the dispatch offices. In many cases these two separate computing systems are actually not separate at all but rather are tied together and in many cases officers are being dispatched by computer with the radio being used as a backup or supplement to the computer. It will be shown that most of the information that a modern racial profiling program will analyze is collected by the officer or dispatcher in these “routine” programs and that any additional information will only take seconds for the officer to collect (Antlfinger, 2011). The impact that this additional information will have on an officer’s daily activities can be even more minimized by building this “new” data into already used forms.

Racial profiling brings to mind many things to many people. Historically racial profiling has seen many changes as it pertains to law enforcement. By the 1990s many law enforcement agencies had actually incorporated race into its operating procedures. In the effort to identify drug couriers the US Customs Service and Drug Enforcement Agency used profiles they had identified through daily operational trends to identify those people (or their luggage) to be searched. Although this included being male, staying for a short time in the US it also used being from Central or South American countries or speaking Spanish (Schmalleger, 2005). These federal agencies were not the only law enforcement agencies using race as part of an overall “profile” that would be used to identify individuals to stop, in fact at one time profiling was considered nothing more than good police work (Schott, 2001). Although never accepted in court as reaching the level of reasonable suspicion, let alone probable cause, it never the less saw wide acceptance in law enforcement as an arguably legitimate police technique. That is to say that if the police believe an Asian male is the suspect in a crime spree that they can’t use
this information, on the contrary they should, just as they would use long hair or general age of a suspect. Perhaps it is explained best by stating profiling in law enforcement, which takes in the totality of the circumstances of a situation (including training, and experience) and has a legitimate use in police work, is entirely different from racial profiling which has been defined as the action taken by law enforcement officers based solely on an individual’s race (Schott, 2001).

Racial profiling based solely on an individual’s race came to the forefront of the nation in the 1990s with public accusations and lawsuits followed by reviews of contacts made by state police troopers in both New Jersey and Maryland (Schott, 2001). As Schmalleger notes these studies or reviews showed a disturbing trend, African Americans comprised 13.5 percent of the users on the highways and 15 percent of the speeders yet they represented 35 percent of the speeders stopped and over 73 percent of the people arrested during these stops (Miller, Ramey, Stone, Torres, & Zoubek, 1999). Wisconsin has been criticized in the last decade by Human Rights Watch and the National Sentencing Project which showed that African-Americans received prison sentences for drug crimes 42 times more frequently than whites show a severe discrepancy among races. Another disturbing statistic is that nearly half of inmates in Wisconsin prisons are African-American, but represent only 6 percent of Wisconsin’s population (Traffic Stop Data Collection, 2011)

Numbers such as these fueled lawsuits, suppression of evidence and public outcry over the “driving while black” debate intensified, all of which deteriorated the public’s belief in its law enforcement agencies. Media coverage of these studies has been shown to adversely affect how the public perceives their police (Graziano, Schuck, & Martin, 2010). This in turn affects the level of trust the public has for its police which makes involving the public in any
type of community policing efforts that much harder. This history unfortunately formed the perception of the public is that police routinely racially profile minorities (Schott, 2001). In fact national surveys as recently as 2003 indicated the majority of Americans (regardless of their race) at various levels as low as 60 percent to a high of 83 percent believe that racial profiling in law enforcement is a significant social problem (Farrell, Rumminger, & McDevitt, 2003). In their guide COPs (Community Oriented Policing) states that “...the widely held concerns about racial profiling represent a significant threat to police legitimacy” (Ramirez, McDevitt, & Farrell, 2000, p. 6). As can be seen by these quotes the public does have a concern/belief that police use race in their decision making and that it is a problem.

As has been noted, the importance of insuring police departments are able to identify officers that may be inappropriately using race to profile people to stop or identifying department strategies that may unintentionally lead to the same ends or have the same results has been established. One of the factors that affect whether a department will monitors its data for these trends is the cost of the actual data collection and analysis of the data. Time translates into to money. As will be noted later most studies already completed were conducted by large police agencies or were a statewide effort usually coordinated by the state’s justice departments. Undoubtedly one of the reasons is that these large departments find it easier to conduct the studies or more precisely easier to fund the studies. If smaller law enforcement agencies are to replicate acceptable benchmarks (or at least the methods of identifying them) that have been established by these larger departmental studies the cost
savings may be significant. All these factors contributed in making racial profiling an important issue to not only the public but criminal justice leaders across the country.

Purpose of the study

The purpose of this paper is to review modern innovations in law enforcement, namely the use of the computer in both dispatching and within the squad car itself to collate information for a multitude of comparative data for multitude of different reasons or purposes. By making this data collection and review easier as well as cheaper will provide police administrators easier way to monitor their officers. With the advent of computerization of police operations, the ease of data collection cannot be understated. As will be noted the initial outlay of funds for this computerization of the squads used by patrol officers may be considerable (no different than the use of cameras) and done for other reasons than data collection (officer safety, efficiency, accuracy, and crime detection) the end result is profound. What would take an officer several minutes to complete by hand, turn into the office/police station and then likely be entered by another person into a computer program can now be completed in a few extra seconds and transmitted directly into the analysis software.

Specifically this paper will provide suggestions that law enforcement agency can implement to not only increase its efficiency, but also to monitor its officers. It will show how these improvements can establish a warning system to detect if an officer is disproportionately targeting a type of person or group, or inconsistently enforcing the law. In addition, it may help determine if a department may have systematic problem in its assignments or staffing levels that may generate numbers which may lead people to believe that racial profiling is supported
or promoted by the agency. It will also provide a means to establish more reliable benchmarks for comparison purposes.

Methodology

It has been stated that collecting racial profiling data is expensive and difficult to collect. In addition establishing benchmarks has been a problem since the first survey of police work, so any attempt to use new methods to establish these benchmarks will be looked on with skepticism. This leaves many smaller law enforcement agencies wondering how they can ensure that their individual officers are not inappropriately using race when stopping individuals whether it is during traffic stops or when making self initiated contacts with pedestrians (Bobb, Miller, Davis, & Root, 2002). This paper shall review various studies and reports in order to learn how to establish credible benchmarks that any agency can use to identify racial profiling by its individual officers. Once these viable benchmarks have been identified, departments will be able to collect viable data while minimizing the cost and hopefully making it easier which in turns makes it more likely for a department to create this early warning system for racial profiling. The ability to tailor benchmarks to local populations (both transient and resident) and compare data from one officer against all the officers working in the same area, assignment or agency will make comparisons more accurate.
SECTION II – LITERATURE REVIEW

Section II will be divided into four sections. The definitions section will come first. Next a look at the historical perspective of racial profiling legislation will be provided. The next sections will examine four racial profiling studies starting in chronological order. As a means to establish the best practices, past mistakes will be reviewed and explained. Following a review of these early studies will be a look at more contemporary effort in Wisconsin and what went wrong. The conclusion will take the positives of studies and combine them with the possibilities that technology provides for a cost effective recommendation.

Definitions

The definition of racial profiling and biased policing has evolved as much as the public’s and professional’s perception of this issue has changed over time. A review of significant studies in this area also produced variety of definitions. Having a working definition is the first step in evaluating if a department and its officers are actually racially profiling.

The Minnesota Legislature went to great lengths to statutorily define racial profiling but it resulted in a longer definition that described more what wasn’t racial profiling as what specifically, it was defined as: “[A]ny action initiated by law enforcement that relies upon the race, ethnicity, or national origin of an individual rather than: (1) the behavior of that individual; or (2) information that leads law enforcement to a particular individual who has been identified as being engaged in or having been engaged in criminal activity. Racial profiling includes use of racial or ethnic stereotypes as factors in selecting whom to stop and search. Racial profiling
does not include law enforcement’s use of race or ethnicity to determine whether a person matches a specific description of a particular subject.”

The Miami-Dade study looked at the issue of racial profiling on a department wide basis. Although the study defined four major influences that affect racial profiling they basically attempted to differentiate between a department practice that resulted in the unfair targeting of minorities (such as what is theorized as happening with mandatory minimum sentencing for rock cocaine) and the actual targeting based on “…bias or stereotyping prejudice or animus” (Bobb, Miller, Davis, & Root, 2002). In 2000 Kansas Legislature directed that a system be developed that would collect and report statistics relating to race, ethnicity, sex, age, and residency by county and state of those who come in contact with law enforcement activities. In this study the state of Kansas defined racial profiling as the use of race or ethnicity as a basis for making decisions involving law enforcement activities (The Police Foundation, 2003).

Racial profiling has also been described as when a law enforcement officer uses “mere stereotypes (a black man driving a BMW is a mismatch) or loose generalizations (a black man does not belong in this predominately white neighborhood) are used to justify a stop” (Bobb, Miller, Davis, & Root, 2002).

For this paper a concise definition that encompasses the spirit and technical aspects of all the definitions thus far reviewed is used. In this paper, racial profiling will be defined as the inappropriate use of race or ethnicity in deciding with whom and how to intervene in an enforcement capacity (Dunham, & Alpert, 2005).
Next there are some terms used in racial profiling that need to be defined. A benchmark is a measurement that serves as a standard against which the data collected in the data collection program can be judged. In terms of racial profiling there has been a distinction made between two different types of benchmarks. An internal benchmark is defined as a standard against which to judge the data that is generated from within the data set, such as a comparison between the percentages of persons searched and the hit rates. The other type of benchmark is external is a comparative benchmark external to the data set, such as a benchmark generated through a road survey, census or residential population data (Data Collection Resource Center Glossary of Terms, 2001).

History of legislation

In what can be called ground breaking litigation of racial profiling the State of New Jersey vs. Pedro Soto (1996), it was one of, if not the first case, which accused law enforcement of racially profiling and therefore violating their client’s rights. What is known is this case brought a lot of negative attention to the State of New Jersey’s State Police force. Specifically the state was charged with biased policing against people of color during the prosecution of several high profile criminal cases. This accusation of biased policing was in the form of a “study” that was presented by the public defender’s offices accepted as evidence during the course of State (of New Jersey) versus Pedro Soto lawsuit. This was the first time that a judge accepted evidence that racial profiling was systematic, which in the case of this study showed evidence which supported the supposition that people were likely being stopped for no other reason than being black. The State had nothing with which to dispute the accusation and when further evidence was brought forward they were forced into a consent decree with US Department of Justice. Under these pressures the New
Jersey attempted to start its own study. Likely due to this pressure the study appeared to be rushed in its preparation, selection of data to collect and the establishment of benchmarks.

As already noted, racial profiling gained the public’s attention as a result of a series of complaints across the country. These included San Jose California in 1996 that resulted in legislation in 1999. Also in 1996 North Carolina faced up to the frequent and longstanding accusation that blacks were being stopped for flimsy reasons. As a result North Carolina became the first state to pass legislation in April 1999 that made it mandatory for law enforcement agencies to collect racial profiling data. Community leaders in San Diego brought their concerns to the chief of police in 1997. The Chief of police in conjunction with the community were able to work together over a period of years to start a monitoring program that was coupled with a study in January of 2000. New Jersey’s problems in this area started as early as 1989 with local media drawing attention on their own “study” which showed people of color were being stopped disproportionately than white drivers. What really brought the issue to a critical point in the country came in 1996 when the New Jersey Supreme Court dismissed 19 cases after they accepted testimony presented by the public defender’s office that state police were stopping minorities at twice the rate of their representation in the driving population (Ramirez, McDevitt, & Farrell, 2000). What followed was the continued rise in the negative public opinion on this issue across the country. This in turn pushed the start up of a variety of studies on the subject, policy changes, training on how to avoid racial profiling and legislation all pertaining to racial profiling.

It is reported that more than twenty states have passed legislation prohibiting racial profiling and/or requiring jurisdictions within the state to collect data on law enforcement stops
and searches (Data collection resource center legislation and litigation, 2001). Following statements by President Clinton in 1999 and President Bush in 2001 the Department of Justice banned racial profiling in all law enforcement agencies. It then awarded funds to Northeastern University to create a web-based resource center designed to be a central repository for police agencies, legislators, community leaders, social scientists, legal researchers, and journalists to access information about current data collection efforts, legislation and model policies, police-community initiatives, and methodological tools that can be used to collect and analyze racial profiling data. (Data collection resource center background and current data, 2001).

Other strategies

It is important to discuss other accepted recommendations to combat racial profiling. The last thing to discuss before getting into the specifics of a study it is important to discuss a few issues. Whether due to a complaint or simply because a department is planning a racial profiling study/system, identifying and then involving all stakeholders from beginning to end is important (Ramirez, McDevitt, & Farrell, 2000). The accountability of officers during their contacts is considered important and so it is recommended the use of video recorders in squads and crosschecking data generated with dispatchers’ data (McDevitt, Farrell, & Wolff, 2008). For new officers it is recommended that training on impropriety of racial profiling be incorporated into training for new officers. It is also recommended that psychological evaluations include racial profiling in their pre-employment screening. There should also be a plan for racial profiling training during in-service for existing officers as well as when an early warning system detects a problem and awareness training is needed (McDevitt, Farrell, & Wolff, 2008). Next the development of department policies if not actual state laws that abolish racial profiling are also considered important in any effort to address racial profiling (Fridell & Scott, 2005).
Basic data to collect

As racial profiling has gained in importance, many departments and their stakeholders have become frustrated in their attempts at studying their own activities (Fridell, 2004). The racial profile of contacts is important to the establishment of a data-driven process that helps managers to identify officers who may have recurring problematic behavior of biased policing and to intervene through counseling and additional training (Fridell, 2004). This type of early warning system will identify officers but may not recognize improper behavior unless it is identified and brought to the attention to supervisors. Once these are identified they will be given the opportunity to improve their performance and correct the conscious or unconscious racially biased. The data collected by these systems also offer an overall picture of an officer’s activity that can provide context when addressing allegations of biased policing and can indicate that racial disparities are associated with factors other than an officer’s bias, for example, deployment allocations (Ramirez, McDevitt, & Farrell, 2000).

Much of the information that is collected is basic, has little controversy and is information/data that officers are already collecting in most circumstances. A basic racial profiling study will collect the date, time, and length of time for stop as well as the location of the stop. Other data will be the officer, reason for the stop, whether a search was conducted, and final outcome of the stop. Lastly it is important to collect data on the person stopped who usually includes their gender, age, and most importantly for this study their race (Fridell, 2004).

What has been of interest are studies that collect only partial information or use unworkable benchmarks which for comparison purposes creates questions in any conclusions the study attempts make. At the time, the cost of these studies may have been an issue and
could have affected the level of data collection or analysis on multiple levels. Studies that will be looked at in this paper were conducted by the City of Wichita, the consolidated Department of Miami-Dade, and the States of New Jersey, Minnesota, and Wisconsin. Consistently these types of studies have been criticized for a variety of reasons. One area of criticism has consistently been of concern is the establishment of benchmarks. Next this paper will look at how some studies attempted to determine their benchmarks. Another concern, although maybe not to anyone but the administrators of law enforcement agencies, is the cost associated with these racial profiling studies.

**Benchmarking in past studies**

The New Jersey study was ongoing, but an interim report was released within just a few months. This interim study did in fact show there were serious issues of racial profiling/biased policing occurring on the New Jersey Turnpikes (Miller, Ramey, Stone, Torres, & Zoubek, 1999). What wasn’t clear was whether it was systematic to the entire organization, limited to a few officers, was it sanctioned by the supervisors, or even the department as a whole.

The data collected in the New Jersey study will resemble many of the studies that followed it in that it collected the race of people stopped while in a vehicle, and whether they were arrested and searched. Specifically, this study looked at all the stops that New Jersey Troopers conducted in two “stations” and then determined the race of the occupants.

The New Jersey studies and audits disclosed many troubling things as simple as officers positioning their cars at night to illuminate the drivers as that drove by and the fact that of the 1,200 searches over 77 percent were Black or Hispanic occupants and only 21 percent were
White. From this and many other rudimentary, but disparate numbers it was clear the State Police in New Jersey had significant issues. Being the first agency to look at such a complex issue can be challenging, especially with outside pressure being exerted. As a result, mistakes are to be expected but were the mistakes serious enough to negate the results? Of concern was the fact this study “reused” the data collected in a public defenders study of population breakdown for its benchmarks. A plus was this study attempted to do a self analysis to assist in finding out how to improve future studies in New Jersey.

Another concern was “... the fact that some troopers falsified data concerning the race of the occupants of stopped vehicles.” (Miller, Ramey, Stone, Torres, & Zoubek, 1999, p. 29). So whether deliberate or a simple mistake, the accuracy of the data collected was questioned. Additionally, it can be inferred that the data form used was collected and collated/evaluated by hand. It should also be noted in the case of New Jersey that this study specifically looked at a state police agency that largely patrols interstate highways which are narrow corridors between landmarks. As a result, their benchmarks would be easier to set than say an agency that patrols broader more diverse areas with residential neighborhoods, highways or regional destinations such as colleges, malls/business district or industrial complexes.

In their own self analysis and recommendations for future studies, New Jersey stated that automation was crucial to solving the cost/work load and in their case the problem of falsified reports that were important to an early warning system or any kind of racial monitoring system for their officers. Specifically, the New Jersey report states that automation in the form of computers in their officers’ squads and computer aided dispatching would greatly increase the cost effectiveness of future programs (Miller, Ramey, Stone, Torres, &
Zoubek, 1999). They also stated that this automation would assist in the accuracy of the data collected by linking both the computers that dispatchers and the officers used.

This study stated the importance of improved benchmarks. Since they were using someone else’s numbers, the New Jersey study suggested using a benchmark of likely violators, not just users of the highways gathered by observational surveys during various times of the day as well as days of the week.

So in summary, although considered a groundbreaking study, the New Jersey study was rushed due to outside pressure, and despite being an agency that should have found it easier to set benchmarks than a municipal police department it had serious shortcomings in this area. Although in all fairness and for the same reasons it should not be surprising that they stated they needed to improve their benchmarks and the method/accuracy/cost of the data collection. The importance of racial profiling was the fact that the courts showed this was not a valid reason to stop people so cases were overturned and dismissed. If opened the agency up to oversight from the federal government, and arguably the most important was the loss of faith and trust with the people they served. This distrust can lead to anger and when this flare up you can see violence that culminated in the LA riots of 1994 after four police officers were found not guilty in the beating of a black motorist by the name of Rodney King. Next we will look at studies that followed New Jersey in order to see what was learned from the earlier study and what wasn’t.

Similar to New Jersey the next studies to be conducted were all following the litigation and subsequent “reforms” resulting from them. Something to note is that the next studies conducted were by municipal police departments. As mentioned, since police departments
have a broader area of responsibility they will create different problems in regards to establishing reliable and accurate benchmarks. The studies in Wichita and Miami-Dade were conducted at roughly the same time and both were conducted for the subject agency by an outside group. The Wichita study was done by a university while the Miami-Dade study was done by a consulting firm. As will be seen these studies made significant improvements from New Jersey. What is unknown is if these improvements were due to learning from the New Jersey study, or because they used outside organizations that had experience in the field of statistics/surveys. What can be seen is that these early studies started continued the debate on how these types of studies should/could be conducted.

The Wichita Study collected some new data which included; the reason/decision to stop, the length of the stop itself, the decision to search and what was the result of the stop. In addition the stop it also looked at more detailed demographic information beyond just the race/ethnicity of the person being stopped. It collected the sex, age of the people stopped in the vehicle and the race of the officer(s) who stopped the vehicle. It also looked at all officer initiated contacts with citizens, not just traffic stop. In another change this early study used the US census data to determine the proportion of its population that is made up of minorities or in other words to establish benchmarks for this study (Withrow, 2002).

Miami-Dade in particular had a stated its goal of “...was to assess the aggregate agency data on traffic stops and to examine general patterns of stops with respect to the race of drivers” (The Alpert Group, 2004). This study was conducted by the consulting firm Alpert Group in 2002 and 2003. In a step backwards this study only looked at traffic stops while it made improvements in establishing benchmarks.
The improvement that Miami-Dade made in establishing its benchmarks was in not only using traditional census data, but it looked at licensed drivers, traffic observation, no fault traffic accident report data, and officer ride along observations. Their traffic observation portion was done direct monitoring/surveying at “strategic” locations which were busy traffic intersections that were located in a variety of demographically (as determined by the census and call analysis) representative neighborhoods. They took all this information and blended it to generate their benchmarks. This is an obvious improvement in benchmarking over New Jersey but also over Wichita.

The Wichita study used the US Census Bureau population statistics as their benchmark. The University that conducted the Wichita study stated that they found that the Wichita Police Department deployed officers to beats based on crime rates and there was no specific indication that race played a role. The University believes they proved this by showing through a statistical analysis based on activity reports that compared officers from different beats rather than looking at just totals for beats. In other words they compared the activity of one officer in a high crime rate beat against the activity of an officer deemed to be in a lower crime rate beat and found no substantive difference. In addition this study did not show any conclusive data that the Wichita Police Department was racially profiling when stopping people.

Of concern, the Wichita study found there was a significant drop during the study in citations issued. There was a concern that officers were modifying their behavior because of the study and/or possibly covering up instances of racial profiling. To allay these fears the University looked at data from surrounding jurisdictions that were not involved in the racial
profiling study and discovered a similar drop (to varying degrees) in these surrounding jurisdictions during the same time frame. The difficulty with Wichita is that of having questionable benchmarks (i.e. just using census data). Even though they had improved data (ie from all police contacts) it was somewhat negated or at least put into question by only using census data. Coupling the use of census data and the fact that the Wichita study only spot checked to verify the race information supplied by the officers can at the very least put a question mark on the study’s results.

The outcome of these two studies was interesting, but irrelevant when simply looking at how the study was done. The exception is one piece of data that is supported in a roundabout way by New Jersey. The New Jersey study/audit showed that the officers working at night positioned the squads in such a way as to illuminate the driver which in turn shows they had a hard time determining the race of the driver as the vehicle was in motion, or at least at night. Interestingly the Miami-Dade study learned that in the majority (71%) of the cases and regardless of day or night the race of the driver was unknown at the time that suspicion was formed and a stop initiated. Another illustrative statistic was that although black drivers were twice as likely to be arrested as any other race this was found to be entirely due to the fact of outstanding warrants. If this single reason for arrest was removed from the equation there rate of arrest matched that of other demographics. This is an interesting statistic which could be indicative of a greater disparity in the criminal justice system as a whole or be a simple statistical anomaly. More importantly it illustrates how simply collecting numbers may not answer the questions being asked, but instead create new ones. It also shows that statistics are based on numbers that affected by a variety of factors and outside influences. As noted these
studies are not being conducted in a fishbowl, but rather in a dynamic environment which will have unforeseen factors influencing the data collected.

The data collected was done with the form shown in Appendix 1. As can be seen it was a unique form and collected a large amount of information. Importantly to this study much of this information would be the same as contained in a citation, field interview/contact card or even a records check on a vehicle or drivers license which made the form and the information it collected redundant or duplicative. Making these forms handwritten and redundant it created more work for the officers, command staff and the office staff who collated the information. This added work translates into more cost for the department. It also alerted the officer of the study which may have created the same issues of officers altering their behavior that the Wichita study was so concerned about.

So in summary the Wichita study gave us improved the benchmarks from New Jersey while the Miami-Dade study greatly improved their benchmarks by using a variety of sources that blended together and as a result was more accurate than simply using census data. Although both were police departments Wichita tallied all police initiated stops which is obviously an improvement while Miami-Dade like New Jersey only did traffic contacts. Both, like New Jersey stated that automation would be imperative to future studies being cost effective, more accountable, and accurate. The evolution of these recommendations becomes important when attempting to make contemporary studies that are not only more accurate but also cost effective.
Although these studies were down in police departments the agencies all had limited jurisdictions or in other words the study ended at the city limits. So in regards to determining how widespread racial profiling is these studies had limited value. Even though New Jersey was looking at its State Police which has statewide jurisdiction their duties and responsibilities were limited either in focus (traffic) or by areas of responsibility (highways). It is obvious that the best study would be nationwide and include all agencies. In a move towards this we start to see some states looking at racial profiling and making efforts to study it as well as legislate it away.

At roughly the same time as the Miami-Dade study was being done the state of Minnesota initiated a study in a statewide (but non-mandatory) racial profiling study that their legislature had initiated. The Minnesota Study collected similar information as Miami-Dade study to include: the location, date, time of the stops, the age, gender, race, of the driver, the reason for the stop, the disposition of the stop, whether a search was conducted, and if a search was conducted under what authority, and finally whether anything was found in the search (Minnesota Department of Public Safety, 2003). Something that was new and apparently unique was the Minnesota study was the first to ask the officer if they had determined the race of the driver before stopping the car. The Miami-Dade Study only monitored this during the ride along portion of the study and used the independent observer to see if they could determine the race of the driver.

But like so many studies before, the Minnesota study was notable more by its’ problems and significant shortcomings. First and foremost was that although this was espoused to be a “statewide” study this did not translate into all the agencies in the state participated since it
was not mandatory. In fact it became a study of 68 agencies from around the state.

Interestingly, those 68 agencies were almost evenly split between sheriff departments and police departments but it also included a police department for the Leech Lake Indian Reservation. But when given an opportunity to see what such a unique police department (covered several counties and may have had a unique demographic) may reveal in its activities the MN study falls short by clumping the department together with all the other agencies considered to be in rural counties and so was not shown individually (Minnesota Department of Public Safety, 2003).

In a state with hundreds of law enforcement agencies the poor level of participation in the study was likely due not only to no legal obligation but also that little or no funding was made available the participating agencies. What is somewhat interesting is the agencies were promised some funding for squad cameras which when talking about accountability of police officers (much like racial profiling) is the ultimate tool. Other things of note occurring in Minnesota was that the state legislature had recently made it illegal for the state’s Department of Transportation to list a person’s race on the DOT record (whether drivers license or vehicle registration). This was an early effort on the part of the state to make it more difficult for officers to determine the race of a person before they stop them by checking the registration of a vehicle either through dispatch or on their mobile squad computers (Minnesota Department of Public Safety, 2003).

In addition to its problems with participation, funding and legislation the study had significant problems with how it collected, verified and analyzed the data from the study. Specifically the study was not able to evaluate whether officers filled out forms every time they
made a traffic stop. The study was unable to evaluate whether the information provided on the forms was accurate, nor were they able to evaluate whether forms submitted by jurisdictions accurately reflected the data recorded by their officers. This total lack of basic validation was not seen in any other study including New Jersey where “spot” checks in fact caught officers doing just what this study noted they were concerned with (Miller, Ramey, Stone, Torres, & Zoubek, 1999). Not only was data validation a problem but the Minnesota study had problems in establishing their benchmarks. The Minnesota study used census data which was only narrowed down by those people of legal driving age. The problems of only using census data has already been discussed at length, and although a good starting point is not likely to produce the accurate benchmarks needed to develop an early warning system that would be of any use to a department conducting this type of study.

As noted in all the studies discussed so far, Minnesota asked officers who were participating to collect data on a handwritten and unique form. Although not specifically detailed it must be assumed that the handwritten form was turned into the appropriate administrative office that then collated the information and forwarded to the central collecting agency which in the case of the State of Minnesota was the Council on Crime and Justice and the Institute on Race and Poverty (Minnesota Department of Public Safety, 2003). Although the study never made recommendations to automate the data collection process the benefits would have been obvious.

As can be seen, Minnesota made significant moves, as did most states, to legislate racial profiling out of the equation but did so before knowing if there was a problem. This is not unusual and in fact happened in most states. But what this does not address is how to monitor
officers and departments to see if they are inadvertently or deliberately circumventing these efforts. As can be seen the need for proper data collection, validation of the data being collected and accurate benchmarks developed from a variety of sources are imperative to a racial profiling program/study.

**Wisconsin’s statewide effort**

The last and most contemporary study to be reviewed was done in Wisconsin in 2011. Because the history and current developments in this state seems to sum up many of the frustrations, challenges, and opportunities that affect racial profiling efforts it is important to look at the history of racial profiling in Wisconsin and see what led to the study in the form that was ultimately attempted.

The accusations of racial profiling in the State of Wisconsin are nothing new and have been made for years. As noted earlier but is important enough to repeat statistics and reports like those released by the Human Rights Watch and the National Sentencing Project showed that African-Americans received prison sentences for drug crimes 42 times more frequently than whites show a severe discrepancy among races. Another disturbing statistic is that nearly half of inmates in Wisconsin prisons are African-American, but represent only 6 percent of Wisconsin’s population (Traffic Stop Data Collection, 2011). In response to these reports and public pressure the State of Wisconsin took notice and addressed the issue on multiple levels. Like Minnesota, Wisconsin passed laws that outlawed racial profiling in law enforcement. In addition the state started to include racial profiling awareness education into police academy training and in-service. In addition over a decade, through two separate governorships, two separate advisory groups, numerous public listening sessions and the passage of
preparatory legislation (banning racial profiling) all led to the Wisconsin Legislature passing a law in 2009 that took effect in January of 2011.

This law stated that on January 1, 2011, all Wisconsin law enforcement officers in all the law enforcement agencies in the state were required to begin collecting and submitting data from traffic stops to determine:

1) Whether the number of traffic stops between minorities and non-minorities is disproportionate.

2) Whether the number of traffic stop searches between minorities and non-minorities is disproportionate (Traffic Stop Data Collection, 2011).

By covering the entire state and submitting the form to a central collection entity in the state this is by far the most expansive study that has been conducted to date. As will be seen, despite only covering traffic stops conducted by law enforcement, the data collected was going to compare to other studies. The state was going to use an external benchmark compiled from census information and DOT records. They suggested that local agencies could utilize not only external benchmarks but also internal benchmarks where they compared officers with similarities in duties and shifts when setting up an officer monitoring system. Before getting into the specifics of the data collected let us review how the state prepared the law enforcement agencies for this major initiative.

The State of Wisconsin appeared to be preparing for this study for years and whether on purpose or by chance seemed to be preparing the state’s law enforcement agencies for the future. They had been doing this by assisting law enforcement agencies with modernizing their squads. This modernization included squad cameras, interoperable radios but most importantly to this study they assisted in the purchase of computers for the squads. It wasn’t hard to convince the departments to
modernize because they looked at the automation of their squads as improving accountability of its officers, improve the efficiency of not just its officers but also the supporting administrative processes, improved the accuracy of citations/reports generated, and even increasing officer safety through this effort. So needless to say the money that came from these grants was in many cases considered too good to pass up. At the same time as they were “computerizing” squads the Department of Justice was also looking at software programs that police departments used and how to make them more compatible with each other.

Until this initiative, a law enforcement agency in Wisconsin may have had different software for its mobile data browsing, its report writing, and computer aided dispatching program with none being able to talk to each other. With the advent of new software for issuing citations there was now in many departments four separate software programs and most were not able to talk/operate with each other. As can be seen there was an immediate need to get these systems within a department to be interoperable but also for them to be able to talk with comparable programs in other departments. The state of Wisconsin recognized this and did several things.

With the decision to attempt to make statewide ticket writing software they established a small state unit that specialized in the software within the Department of Transportation. The software that was chosen was Traffic and Criminal Software (TraCS), an application first developed by the state of Iowa in partnership with the Federal Highway Administration (FHWA), and serves as a national model for the development of automated reporting systems for law enforcement. TraCS is designed to share data among forms but also providing the capability of incorporating information on crash, citation, OWI, commercial motor vehicle inspection and incident forms with outside agencies. They believed that automated reporting
improves the accuracy, timeliness and ease with which incident data is collected and made available for analysis (TraCs, 2009).

They made the software free to all law enforcement, established free training to those agencies participating, established a statewide patch so that the software could talk with the software being used by clerk of courts, a help line for officers/departments, the ability to improve/tailor the software to specific departments and finally free upgrades into the future. These stakeholders included not only other law enforcement agencies but also the clerk of courts, department of justice, department of corrections, department of transportation and numerous other agencies across the country and even nation (TraCs, 2009). Funding for the new equipment was contingent upon using equipment and software that was compatible with other stakeholders. The state also assisted agencies in building software patches that made their report writing software programs (RMS) compatible to TraCs software.

Although not universally undertaken by all agencies, this modernization, including the use of computers and the already mentioned TraCs software was well underway across the state (and currently continuing) as the law took effect in January of 2011. Because not all agencies had made the investment in this new equipment and the law made no exception for the agencies lagging behind the state came up with the almost traditional handwritten forms that earlier studies had used. As will be found the efforts in automation/modernization were vital in how police administrators viewed the racial profiling data collection requirement. The law only made the collection of information on traffic stops mandatory and as can be seen by the form that is shown on pages 28 and 29 was extensive. It included driver and passenger information, vehicle information, specifics on the stop, whether a search was made, the outcome of the stop, the reason for the stop and the list goes on. The data gathered on the automated form and the handwritten form was identical as in fact the form was.
Guidelines for officers included that they not ask people they stopped (or the passengers in the car) what race they were but rather the officer should guess the race of the people involved. Although the form appears to be extensive with a lot of information to be entered/gathered by the officer the actual information is imported or auto populated into the form by the officer. This left just a few questions to be answered by the officer. This new information could be selected by the officer in a drop down menu list that appeared. As can be seen, the number of questions the officer must complete is somewhat dependant on whether a search was conducted. The Wisconsin Office of Justice Assistance was also clear when advising officers the form could be done at anytime during their shift (or even another day) as time allowed.

When an officer was completing the electronic form with the punch of one button they could auto populate the form, answer the few additional questions and send the form electronically through his agency’s process. The extra time for the officer to complete the form electronically, and their supervisors to send it to the state’s clearinghouse for this data was minimal and hence the cost was negligible as well. As noted by Chief Mike Jungbluth of the West Allis Police Department, he believed the electronic form added maybe a minute per stop (Mcilheran, P., 2010). Taking into account how the automation of the citation writing had already cut the time of most traffic stops by 50% to more than 100% the extra minute was a good trade off (NLECTC, 2004). In contrast the resistance from the agencies that were not automated and were forced to use the hand written forms faced added costs at all levels of the process could be substantial. The Chief Jungbluth recognizes that departments who manually input the data will potentially have a “huge impact” (Mcilheran, P., 2010). Although certainly not scientific these views are none the less important as will become clear.

So to summarize, Wisconsin had recognized the importance of modernizing the equipment of its law enforcement agencies for a variety of reasons, including data collection. At roughly the same time
they came to realize that there were indications that there may be racial profiling occurring. They looked at other studies, took into consideration their citizens concerns, and after looking at other studies decided to only look at traffic stop data but from the entire state. Although not the first state it would have placed Wisconsin in the ranks of just a few states (eight) that did (Data collection resource center background and current data, 2001). They passed laws making racial profiling illegal and started to educate the state’s law enforcement officers on how to avoid racial profiling, and finally passed a law that required all the state’s agencies to collect and report traffic stop data. They set up a system that would work not only with automated systems and those agencies that had not modernized their squads. These efforts were not met with universal approval and some agencies publicly stated their open defiance of the data collection or their concern at the added costs. This public debate made the issue of state wide data collection into a political issue albeit a minor one. Despite this opposition everything was ready to go January 1st, 2011.

The story of Wisconsin efforts in this field took a dramatic turn as a result of a change in governorship and state legislative branches. Almost immediately the law was repealed that required the collection of the data. This move was supported by a few often quoted Law Enforcement Administrators around the state that included Sheriff David Beth from Kenosha County who ordered his officers to not follow the law, even before it was repealed. Specifically Waushara County Sherriff Hardel represented the only agency in the county that complained of the new law citing costs and loss of time (Wisconsin senate passes repeal to racial profiling law, 2011). When signing the new bill that repealed this law the Governor referenced fiscal reasons when he stated that during these tight budget times we should let police simply do their job (Roller, E., 2011). Whether being used to used to show how one political entity/philosophy was tough on crime, or more sympathetic to a certain block of voters, or simply as a way to save money; any such effort is subject to the whims and spin control of
the politicians and leaders of the day. So after years of preparatory studies and effort it only took an election to change the entire course of racial profiling studies for an entire state.

Wisconsin serves as an example in many ways, but also a warning to other entities who wish to start such studies. With a combination of incentives and laws Wisconsin appeared to have good handle on how to prepare the entire state with only limited funding available. The use of both external and internal benchmarks, the collection of the appropriate data from the stop, the collection of data from the entire state, and using validation through automation; the State of Wisconsin seemed to have the ingredients of a legitimate study. Regardless of the recent developments, in many ways Wisconsin provides others with a good outline to follow when planning their own study. With the evaluation of New Jersey, Wichita, Miami-Dade, Minnesota and Wisconsin complete, it is time to take the pieces of value from each study and to make recommendations which an agency interested in this type of study can use.

Based on these studies it is possible to theorize several significant improvements can be made in racial profiling studies and racial profiling warning systems. As was noted in most of the studies automation/modernization will have several positive effects on racial profile. It will make the collection of the data cost effective by incorporating this data collection with what officers are already doing during citizen contacts. Modernization will improve the accuracy of the data by automatically correlating the data the police officer gives to dispatch against what is reported. Modernization will not only assist in establishing as well as comparing internal benchmarks but also in collecting data for external benchmarks.
Section III: Recommendations and Conclusion

Protect and serve is not just a saying. A challenge exists for police departments across the nation to enhance their legitimacy in the eyes of the people they serve. Proactively addressing racial profiling issues has been identified as a way to help with this. But to accurately provide this response and enhance their legitimacy the study must be accurate or it will look more like the department is covering up their activities than addressing them.

With the knowledge that has been gained from the earlier studies we can move into the recommendations this paper will be making. As was already discussed, when talking about the accountability of law enforcement officer, whether it is in racial profiling or some other area, the solution must approach the issue from multiple levels. So whether due to a complaint or simply because a department is planning a racial profiling study/system, identifying and then involving all stakeholders from beginning to end is important (Ramirez, McDevitt, & Farrell, 2000). Accountability of officers during their contacts is considered important. As a result it is recommended that all officers use video recorders in squads or on their person. Not only does it give the officers excellent evidence in court and as such protection from frivolous complaints it gives the Department and its citizens a measure of protection from improper police actions (Fridell & Scott, 2005). Crosschecking data generated with dispatchers’ data against those supplied by the officers is important (McDevitt, Farrell, & Wolff, 2008).

Many of these next recommendations are being incorporated already but are important enough to be mentioned individually. It should be required that new officers receive psychological evaluations which include racial profiling in their pre-employment screening (Fridell & Scott, 2005). An example is in Wisconsin, Minnesota, and many other states where it is required that new officers receive training on the impropriety of racial profiling is incorporated into training for new (Minnesota Department of Public Safety, 2003). There should also be a plan for racial profiling training during in-service for existing
officers as well as when an early warning system detects a problem and awareness training is needed (McDevitt, Farrell, & Wolff, 2008). Next the development of department policies, if not actual state laws, that abolish racial profiling are also considered important in any effort to address racial profiling (Fridell & Scott, 2005). This paper recommends that agencies use their modernization efforts to create accurate benchmarks, accurate reporting methods and cost effective racial profile tracking programs.

Because such a study requires analysis of a variety of data, attention to detail is important so that the factors that influence stop rates, citations, and searches are taken into consideration. A good way to approach this type of analysis and ensure that nothing is missed is through a partnership between local police experts and social science researchers who versed in applying analytical methods. This type of partnership can only enhance the study and the processes of data collection, analysis, and interpretation (McMahon & Krause, 2005).

As can be seen by each consecutive study, the methods of collecting the data, the actual data to be collected and benchmarking have continued to evolve and become more accurate. Independently but during much the same time, law enforcement agencies have been incorporating computers into their patrol vehicles and daily operations. The benefits are many fold and too numerous to document in this paper but the use of computers can have a profound effect on accountability, whether it is the area of racial profiling, time management, or information sharing. As was seen in Wisconsin the fact that a department uses computers or doesn’t, plays a role in how the study is perceived and accepted. For this reason the use of the computer and associated software is not only recommended but should be considered baseline equipment for the simple reasons of fiscal responsibility and to save on the officers’ time (Miller, Ramey, Stone, Torres, & Zoubek, 1999). This automation will also assist in validation efforts, and timely analysis of the data collected (Ramirez, McDevitt, & Farrell, 2000).
It is recommended that racial profiling studies should cover the largest area possible including the most law enforcement agencies as possible. Statewide studies are not unheard of and give local agencies good benchmarks to use in an early warning system. In order to recommend the most accurate and cost effective racial profiling early warning system we must take the best from each study and use them as the final recommendation for this paper. The least debatable or most accepted part of a study is the data to be collected by the officer/agency.

**Citizen/Officer/Stop Characteristics**

Like the data on the Wisconsin Traffic Stop Form shows in Appendix 2, current standards would include collecting basic demographic data such as; age, gender, race of the people being contacted by the law enforcement agency. It is recommended that the same information for adult/driving age passengers be recorded in addition to that of the driver. Regardless of whether this is purely a traffic-stop analysis or a study on all self initiated police contacts then it is important to include the age and type of vehicle when a vehicle is involved as is the reason for the contact.

For example, the Wisconsin’s form and the Miami Dade study both asked the make and year of the vehicle being stopped. In the context of vehicle stops the year and make of the car could show if officers stop cars of an apparent economic class more, or in other words do they stop older cars that are likely being driven by people of lower income brackets. Although this does not translate to all police contacts it will prove useful for traffic stops.

Although gender is usually easy to determine and always on a person’s state ID the same cannot be said of the race of a person. The race of the person(s) who is being stopped is also important to collect but can be more difficult to determine. There are states, such as MN, which does not list the race or ethnicity of the drivers on a drivers license record while in WI if the race of the person(s) they are reporting as contacting is unknown, the officer was supposed to guess (Traffic stop data collection
As stated in Wisconsin officers were supposed to guess on the race of person when it was unknown and it was further believed that these instances would be few and not affect the outcome of the overall evaluation (Traffic stop data collection FAQ, 2010).

Next it is obviously important to record the date, time, location and length of the stop. Of equal importance (and especially for an early warning system) is to record the officer initiating the contact. The eventual outcome of the stop is also important.

In this area the key data to collect include whether a search was conducted, under what authority the officer was conducting the search, what if anything was found and what the overall outcome of the stop was. By collecting whether a search is being conducted a department can determine if there is a racial disparity between who is being searched and outcome of the stop. The last and likely the most important piece of information to be captured is the reason for the stop. This could be anything from suspicious activity, a traffic violation or some other violations. All this information is important for an accurate analysis for comparison purposes.

With this basic information identified we can now move into the two areas that this section will address more in depth which is the use of technology in the data collection and the identification of accurate benchmarks for a study.

**Recommendations for technology**

The use of technology to save time and money in police work has been recognized and commented on since the early days of racial profiling studies such as New Jersey (Miller, Ramey, Stone, Torres, & Zoubek, 1999). How technology was going to be used and in what form was never specifically discussed. The TraCs system used in Wisconsin gives a good starting point and is a proven system being used in multiple states around the country and Canada (TraCs, 2009). By speeding the gathering,
retrieval and processing of all information, this type of new technology allows law enforcement to become more efficient and analytical in its approach to this and other community problems. A system with similar capabilities coupled with the supporting computer hardware is also recommended. Earlier revolutions in law enforcement’s use of technology, such as the transition to automobile patrol and the use of two-way radio communication, are today considered basic necessities as well as the foundation for more recent innovations (e.g., computer-aided dispatch, mobile data terminals) that continue to change the way policing is carried out (McDevitt, Farrell, & Wolff, 2008). Law enforcement need to be receptive to the new technologies that are being developed every day and the advantages it can bring.

Continuity of data collection is important. The recommendation of study after study is to make the collection of this type of data to be a daily activity for officers. This allows the use of this data in an early warning system, allow officers to become accustomed to the effort which should allow officers to become proficient and less suspicious of the effort. By making this a everyday process the officer will be less likely to change their normal operations and that consequently negatively alter the data that a study produces. officers will change their citizen contacts Like the use of squad cameras, officers will come to see this as an effort to not only evaluate the activities of the department but also gives them the ability to show they are doing their job professionally.

Also, if officers are already collecting the data (or most of it) that can be used in a study or incorporate the data collection into an established form or data base the savings would be substantial. When the data is collected electronically, the analysis could be as easy as collating the information by a few key strokes on a computer. Automation or in this case as computers are being used more often in squad cars the task of data collection will become easier.
For the purposes of racial profiling analysis researchers are only interested in officer initiated contacts and not those calls for service that they are directed to handle by some sort of dispatch service/center. But even in those situations where an officer initiates contact with a person, the dispatching service is still involved. Standard operating procedures would call for officers to contact their dispatcher and advise them of a number of key things on self initiated stops. An officer will advise the dispatcher of their location, and the type of contact (traffic stop, out with party, etc.). At the same time the dispatcher will note the officer(s) involved as well as the date/time the contact is initiated. This will allow the dispatch center to validate the contact information the officer is generating/recording.

Like any system there will likely be ways for officers to deliberately mislead or fabricate information in any study or monitoring system. But with proper supervision and validation it is likely that such behavior would become none. Any such behavior would be a violation of policy and possibly even law which regardless would be indicative of behavior that should abhorrent to any officer. Any such behavior that is detected would be reason enough for discipline or even dismissal as a law enforcement officer regardless of the results of an early warning system.

The need to use technology in modern policing is unquestioned. That this positively affects racial profiling data collection is also clear as is the need for continuous monitoring. It is recommended that the use of mobile data computers, automated forms, data collection software, computer aided dispatch systems backed up with squad cameras and monitoring by supervisors are all crucial to making a cost effective early warning system.
Identify Benchmarks

The importance of establishing credible benchmarks was noted in all the studies that were reviewed for this paper. A criticism has been that police departments often base their conclusions on comparing preliminary data on traffic stops to aggregate city demographics without establishing credible benchmarks for comparison purposes. These superficial evaluations are dangerous, in that they may foster incorrect conclusions and generate inappropriate corrective measures. (McMahon & Kraus, 2002). Police departments do not work in a fish bowl (closed environment), but rather a lake with streams in and out that affects its characteristics. Law enforcement agencies work in an environment that may have a large local population but with transients from suburbs, tourisms, or other short term residents. This creates a challenge when attempting to establish benchmarks in a confined or limited area such as a city. Knowing the percentage of minorities stopped, searched, and/or ticketed by police is useless unless those percentages can be measured against some relevant comparison population.

As important as accuracy and relevance is, there is another factor that is at least to police administrators and that is the cost. Establishing benchmarks must not be prohibitive in cost to establish if it is to be used widely by smaller law enforcement agencies. Many agencies have used easily available census data. Although census data is easy and may work better with larger geographic areas such as states, it doesn’t necessarily reflect an accurate picture of those people available to be stopped by a law enforcement officer. As has been shown, cities may have regional draws such as factories, hospitals and shopping districts or universities with transient populations. All of these can be independently assessed with short
limited data collection efforts at those locations (Fridell, 2004). These assessments may be no more than a review of a college’s demographic make-up, a traffic survey, or a pedestrian survey of people entering a shopping center or crossing a busy street entering a subway.

In addition to these observational studies law enforcement managers should continue to be open to how new technology may play a role in the future. With the advent of surveillance cameras in large cities at dense population locations, facial recognition software, or other as yet unknown technology, there may become an opportunity to use any or all in an observational study.

**Conclusion**

Today’s law enforcement managers see the collection and analysis of officer contacts as simple good management. Traffic stops maybe the most frequent form of contact that law enforcement has with the citizenry but it is not the only contact, while self initiated contacts are one area of policing where systematic information has been gathered. The daily collection of statistics and information regarding law enforcement activities can provide important information about the characteristics and results of police enforcement action. This information is critical for law enforcement managers who must effectively monitor and manage the traffic-stop activities within their department. Trying to unravel the cause of racial disparities in the enforcement activity of a department is a complex and challenging task. It requires law enforcement managers to identify and address the causes of illegitimate or racially disparate traffic enforcement practices. The analysis and reporting of stop data is a necessary first step in this process.

The use of a combination of external benchmarks such as simple observational studies, census data and DMV data files can provide a good basis for comparison. This can only be assisted by
developing internal benchmarks within a department. With this multi leveled comparative data for comparison, a department has the base line information to develop an early warning system as well as the means for a department-wide look at its operations.

To make this first step affordable and accountable on a day to day basis for police agencies is the use of automated police software in conjunction with computers in the squad and dispatch centers. Although the initial outlay of resources is significant the other uses of this equipment in day to day police operations make this investment cost effective as well as good management.


# Appendix 1 – Miami-Dade Collection Form

![Miami-Dade Police Department Citizen Contact Card](image-url)

**Miami-Dade Police Department**

**Citizen Contact Card**

<table>
<thead>
<tr>
<th>Data (MM/DD/YYYY)</th>
<th>Time (24 HRS)</th>
<th>Off Duty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

Driver’s Last Name (as it appears on license): [First] [M£]

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

City: [State/Country:] [Zip Code:]

Driver License Number: [Data: DOL/SS# (MM/DD/YYYY)]

Intersection: [First Street]

Section Street

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
- Investigative
- BOLO
- Other: (Specify)

**Searches:** (Check All That Apply)

- Search Conducted: of Driver
- Consent Search Requested: Yes
- Duration of Search(es) (in minutes):
- Other: (Specify)

**Reason for Searches:** (Check All That Apply)

- Search Made by Consent
- Inventory Search
- Probable Cause
- Other: (Specify)

**Items Found:** (Check All That Apply)

- Instrumentalities of Crime
- Drugs and/or Paraphernalia
- Other: (Specify)
- Plain View: Yes

**Disposition of Stop:** (Check All That Apply)

- Citation Issued
- Custody Arrest
- Verbal Warning
- Vehicular Tow
- Records Check Conducted: Of Person
- Of Vehicle

**Comments:**

Officer’s Name/Rank: [Print:] [Badge:] [Unit Number:]
# Appendix 2 – Wisconsin Collection Form

## WISCONSIN TRAFFIC STOP DATA COLLECTION FORM

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<td></td>
<td>06/24/2011</td>
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<table>
<thead>
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<th>4 - Time of Stop</th>
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<th>6 - Municipality</th>
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</table>

<table>
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<th>7 - On Hwy Dir</th>
<th>7 - On Street Name</th>
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<td></td>
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</table>

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<th>8 - From/At Hwy Dir</th>
<th>8 - From/At Street Name</th>
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<table>
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<th>9 - Roadway Type</th>
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<th>13 - Plate Type</th>
<th>14 - State</th>
<th>15 - Expiration Year</th>
<th>16 - Body Style</th>
<th>17 - Color</th>
<th>18 - Vehicle Year</th>
</tr>
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</table>

<table>
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<th>19 - Make Code</th>
<th>19 - Make Description</th>
<th>20 - Model Code</th>
<th>20 - Model Description</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>21 - # Of Passengers Observed (Driver Excluded)</th>
<th>22 - At Least One Non-White Passenger Observed</th>
</tr>
</thead>
<tbody>
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<table>
<thead>
<tr>
<th>23 - Driver Zip Code</th>
<th>24 - Driver Date of Birth</th>
<th>25 - Driver Sex</th>
<th>26 - Driver Race/Ethnicity</th>
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<tbody>
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<table>
<thead>
<tr>
<th>27 - Reason for Stop</th>
<th>28 - Detailed Reason</th>
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<tbody>
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<table>
<thead>
<tr>
<th>27 - Other Reason for Stop</th>
<th>28 - Other Detailed Reason</th>
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<table>
<thead>
<tr>
<th>29 - Event Outcome</th>
<th>30 - Event Duration</th>
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## Vehicle Search

<table>
<thead>
<tr>
<th>31 - Consent Requested</th>
<th>34 - Search Basis</th>
</tr>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>32 - Consent Received</th>
<th>34 - Other Search Basis</th>
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</thead>
<tbody>
<tr>
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<table>
<thead>
<tr>
<th>33 - Search Conducted</th>
<th>34 - Other Search Basis</th>
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</thead>
<tbody>
<tr>
<td>NO</td>
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<table>
<thead>
<tr>
<th>35 - Contraband Found</th>
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<table>
<thead>
<tr>
<th>36 - Other Contraband</th>
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## Driver Search

<table>
<thead>
<tr>
<th>36 - Consent Requested</th>
<th>39 - Search Basis</th>
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<table>
<thead>
<tr>
<th>37 - Consent Received</th>
<th>39 - Other Search Basis</th>
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<tbody>
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<table>
<thead>
<tr>
<th>38 - Search Conducted</th>
<th>39 - Other Search Basis</th>
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<table>
<thead>
<tr>
<th>40 - Contraband Found</th>
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<table>
<thead>
<tr>
<th>40 - Other Contraband Found</th>
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Page 1 of 2
<table>
<thead>
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<th>Passenger Search</th>
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<tbody>
<tr>
<td>41 - Consent Requested</td>
<td>44 - Search Basis</td>
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<tr>
<td>42 - Consent Received</td>
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<td>43 - Search Conducted</td>
<td>44 - Other Search Basis</td>
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<td>45 - Contraband Found</td>
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</tr>
<tr>
<td>45 - Other Contraband Found</td>
<td>46 - Passenger Race/Ethnicity</td>
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