

**Lansing Police Department  
MATS Data  
Forty Eight Month Analysis**

**March 2005**

*Prepared by*

**David L. Carter, Ph.D.  
Andra Katz-Bannister, Ph.D.  
Joseph Schafer, Ph.D.**



**ANALYSIS OF THE LANSING POLICE DEPARTMENT MATS DATA:  
A FORTY EIGHT MONTH STATUS REPORT**

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**A Report Submitted to  
Chief Mark Alley  
Lansing, Michigan Police Department**

**March 22, 2005**

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*Submitted by:*

**David L. Carter, Ph.D.  
Andra Katz-Bannister, Ph.D.  
Joseph Schafer, Ph.D.**

**Abstract**

**ANALYSIS OF THE LANSING POLICE DEPARTMENT MATS DATA:  
A FORTY EIGHT MONTH STATUS REPORT**

For the first three years of the Lansing Police Department MATS program, analytic reports were prepared every six months to detect any pattern of officer behavior that may suggest evidence of “racial profiling”: No patterns emerged to suggest such a problem. Findings were remarkably consistent across the six analytic periods. As a result, the Chief of Police and Consultants agreed that in the fourth year of the program, analysis of the data would encompass a twelve month period, rather than the six-month research interval.

While during the fourth year there was a decrease in the total number of citations issued and an increase in the rate of citation issuance in traffic stops, those changes were consistent across all analytic variables and demographics. Moreover, the traffic stop search data, which is an important indicator of problematic behavior, did not change. Collectively, these findings suggest that there is no evidence of a pattern of racial profiling occurring by members of the Lansing Police Department. These, and associated details, are discussed in the following report.

## ANALYSIS OF THE LANSING POLICE DEPARTMENT MATS DATA: A FORTY EIGHT MONTH STATUS REPORT

In response to a national debate, the Lansing Police Department (LPD) began a voluntary and comprehensive process of ensuring LPD officers did not practice what has become known as “racial profiling” or “racially biased policing.”

This is the seventh report of the MATS data analysis. While some reference is made to the first six reports, the data analysis reflects only those findings from the last twelve-month time period of MATS data collection. In order to place the issues in proper perspective, some background information is warranted.<sup>1</sup>

### BACKGROUND

As a result of incidents around the country – most notably involving the New Jersey Highway Patrol – it was learned that some police officers were using race and ethnicity as a primary factor of “suspicion” that certain people may be involved in crime. There are several historical factors that contributed to this:

1. **Cultural Distinction.** The idea of “cultural distinction” influences the behavior of all people; not just police officers. People tend to draw conclusions about members of different cultures based on erroneous assumptions and misinterpretations of the culture. If someone is “different”, this may seem “unnatural” or “suspicious”. Perhaps the best contemporary example – notably since the terrorist attacks of September 11, 2001 – is the reaction directed toward Muslims and people perceived to be Muslims or from the Middle East, regardless of their religion. There have been cases where Arab-American businessmen were denied passage on airlines because their appearance – and the assumption they could be a terrorist – made passengers and/or flight crew nervous. This cultural distinction makes people of one race/ethnicity suspicious of others, thereby causing stereotyped conclusions – this is a form of

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<sup>1</sup>The material in the “Background” section of this report is an update of the “Background” in the six previous reports. The authors believe it is necessary to provide this context to the reader in case this report is read by someone without the benefit of being aware of the background as provided in the first report. The authors are sensitive to the issue of redundancy, however, it would be irresponsible to provide a “stand alone” data report without the full context.

“racial profiling” that is a social-psychological reaction experienced by virtually everyone at one time or another.

2. **Police Training Legacy.** In past generations, officers were taught in training that if, while on patrol, they observed a person “who did not fit the area” it was “good police work” to stop the individual “to find out what they are up to”. In practice, this usually meant that a Black or Hispanic person driving an older vehicle in a predominantly White middle- or upper-class area would be stopped for questioning under the assumption that the “suspect” was planning a burglary, auto theft, or burglary of a vehicle. On the other hand, a White driver in an expensive vehicle driving slowing through a predominantly disadvantaged minority community would come under suspicion as well. Importantly, the only criteria was that “the person did not fit the area”; a factor that does not meet the test of lawful criminal procedure. While this practice is no longer taught to new police officers, the practice still remains to an extent, informally passed between generations of officers, under the guise that “it’s good police work.” The implications are that ongoing training and supervision are needed to eliminate the practice.
  
3. **Operation Pipeline.** In order to respond to drug trafficking and distribution in the U.S., the Drug Enforcement Administration (DEA) and Arizona Highway Patrol, jointly developed a lengthy protocol designed to “profile” drug couriers. The protocol gave officers a wide range of variables to look for which, in combination, suggested that the person possessing those variables was a probable drug trafficker. When employed correctly, the protocol identified drug traffickers with a reasonable degree of consistency. However, the process was time consuming and awkward to employ, particularly if an officer was following a target and attempting to assess variables in the protocol while traveling down the road. In the allegations of profiling by the New Jersey Highway Patrol (NJHP), it was alleged that NJHP officers would select variables such as a young black male driving a rental car as a person to stop as a probable drug courier. Even though the protocol may include these variables, the protocol would include additional variables such as location, time, furtive conduct, position of the car (suggesting weight), and other factors. These were essentially ignored; hence many innocent people were stopped by the police, largely as a result of their race or ethnicity.

Even though officers may have become suspicious of a person largely as a result of their race or ethnicity, it was understood that there had to be probable cause to stop the vehicle. Thus, officers would typically use some form of traffic violation—e.g., improper lane usage, license expiration, vision obstruction, etc.—as the legal reason to stop the vehicle. This is known as a “pretext stop” because the motivating reason to stop the vehicle was for the officer to question the “suspicious driver”; it was not primarily traffic law enforcement. The traffic violation becomes the means, not the end. Interestingly, the United States Supreme Court has affirmed that the use of a pretext stop is lawful.<sup>2</sup> The subsequent debate associated with racial profiling has been whether police officers use pretext stops with greater frequency involving non-White drivers than they do with White drivers.

This allegation—disproportional use of pretext traffic stops involving racial and ethnic minority drivers—fueled a response among policy makers. With support from Civil Rights leaders, both policy pronouncements and legislation began to mandate that police departments collect data on the demographic characteristics of drivers stopped for traffic violations, as well as, the circumstances surrounding the stop. The intent was to find a measure that would indicate the *unjustified* demographic disproportionality of drivers stopped for traffic violations.

It is important to note that demographic disproportionality of drivers stopped by the police is not a problem, per se. Rather, the issue is whether that disproportionality is based on legally justifiable criteria (i.e., no profiling) or whether that stop was the product of an officer’s conclusions about the driver based on the driver’s race or ethnicity (i.e., racial profiling). This presents a problem that is compounded by a different interpretation of facts by the officer and the citizen. Poor communications, different perceptions of facts, and a legacy of distrust between the police and minority community (nationwide) aggravate the problem.

There are some important concerns about the simple review of data reporting the demographic proportionality of drivers stopped by officers. First, it is virtually impossible to determine if an officer’s behavior is motivated by lawful actions or unjustified pretext stops, without confirmation by the officer him/herself. Assumptions cannot be made about an officer’s motivation by simply reviewing the demographic data of traffic stops. For example, it is unlikely that an officer is “profiling” when s/he stops a

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<sup>2</sup>*Whren v. U.S.*, 517 U.S. 806, (1996).

demographically disproportionate number of drivers for speeding as a result of radar speed measurement. Conversely, if an officer has a high demographic disproportionality of traffic stops involving minority drivers for which few citations are issued, this may warrant closer examination of the officer's reasons for the stops and lack of citations.

Other factors contribute to the equation in trying to determine if an officer's demographically disproportionate traffic stops—including pretext stops—are justified or not. For example, if a police officer has received a crime analysis report about a burglary trend with evidence that the burglars may be young, Black males committing daytime burglaries, then the officer would be justified in using pretext stops in the burglary areas to target individuals meeting the characteristics of the burglars. With this information, the officer is acting on reasonable grounds with explicit criteria for the stop related to known crimes. Race/ethnicity may become one of these factors if there is reliable evidence, such as a witness. The officer is not acting on mere suspicion because of race/ethnicity. In this illustration, there is demographic disproportionality in traffic stops, but it is legally and ethically justifiable based on the crime data.

The important aspect to note is that this is not a simple process of comparing traffic stops to census demographics. There is no universal standard of comparison to determine if officers are "racial profiling" or not. Similarly, a conclusive judgment cannot be made about an officer's motivations simply by looking at his/her "numbers". Rather, the data serve as a barometer to suggest if there are policies or practices, which should be examined more closely to ensure that there is no discrimination.

There are other compounding issues. The lay reader should note that the United States Supreme Court has held that a police officer may stop, detain, and frisk a person when the officer has reasonable grounds, based on his/her experience, to believe that the person has committed, is committing, or is about to commit a crime.<sup>3</sup> This is an investigatory stop that may begin with a pretext traffic stop. Thus, as long as the officer can articulate the reasonable grounds—which may be a collection of circumstantial facts—the officer can ask the driver and passengers to step out of the car, frisk them, and interview them. Police officers should carefully document the cases because they are often the focal point of a complaint about racial profiling.

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<sup>3</sup>*Terry v. Ohio*, 392 U.S., 1 (1968).

Finally, this report is an analysis of aggregate data trends—not an assessment of individual officers’ behaviors. Once again, data cannot be reviewed on the stops of an individual officer to draw conclusions about whether or not the officer has “racially profiled” drivers. The process is far more complicated. If an officer works in an area where the residents are predominantly minorities, it is reasonable to assume most drivers encountered by the officer will be minority drivers. The determination of whether an individual officer is “profiling” is found neither in the numbers of persons stopped by the officer nor the demographic characteristics of the drivers. Rather, it is found in the reasons used by the officer to make the traffic stops. Thus, the responsibility for monitoring this comes largely from the officer’s immediate supervisor, not a data analysis.

## THE LANSING MODEL

It is recognized that data alone—particularly when there is no conclusive standard of comparison—does not necessarily provide the most accurate picture of the existence, or lack thereof, of racial profiling problems. Most importantly is the organizational culture in the police department, the quality of supervision, and leadership. The unique aspect of the Lansing Police Department’s approach to this issue is that the department did not rush into a traffic stop data collection study, just to “get the numbers”. Instead, under the leadership of Chief Mark Alley, the department took a comprehensive view of the issues associated with racial profiling and sought to implement a plan for organizational change.

This approach is certainly more time-consuming than the approaches taken by other police departments—it is also more effective. In summary form, what has become known as “The Lansing Model” contains the following elements:

**Philosophy:** Racial profiling must be operationally defined and empirically measured to determine its character and existence in the department. Whatever forms the practice may take—and it may take multiple forms—it cannot be remedied by simple mandate nor controlled through monitoring demographic data of traffic stops. Rather, there must be substantive change in the organizational culture. As such, there are four philosophical tenets to the LPD Management Analysis of Traffic Stops (MATS) initiative.

1. To address police profiling of minorities, we must fully understand the concept of racial profiling; social-psychological dynamics of both officer and community behavior; legal issues; implications of police procedure; and the interactive behavioral dynamics of the police and community in such incidents.
2. There must be a mechanism to document such incidents, assess any discernible trends, and identify and investigate individual improprieties.
3. If overt, insidious cases of racial profiling are identified, the disciplinary process must be imposed.
4. Prevention and remedial strategies for improper institutionalized behavior requires changes in organizational attitudes, values and beliefs.

**Protocol:** In order to operationalize this philosophy, a multi-stage protocol has been developed.

1. The first step was to create an Implementation Team that included management personnel who were critically involved in policy implementation; representatives of the police collective bargaining units; the city Human Relations Director, and external advisors. Using a participatory management style, the Committee's role was to provide guidance for the total implementation process.
2. Research was conducted on national issues and trends related to police profiling of minorities.
3. Focus groups of uniformed personnel were conducted representing all shifts and geographic assignments to determine issues and concerns as well as gain practical information on accountability models/processes.
4. Community meetings were held to gain insight on how citizens explicitly view racial profiling in the city and gain insight on issues and processes that must be addressed from the perspective of citizens.

5. A White Paper on Policy was prepared which discussed both the broad national issues and those specific to Lansing. This paper served as a learning document for both the police and community providing a foundation for:
  - a. Policy and procedures
  - b. Organization change
  - c. Police training
  - d. Community education
6. A data collection form, policy and procedure were developed to serve as the mechanism to monitor demographic trends in traffic stops.
7. Training was provided to all uniformed personnel on:
  - a. The issue of racial profiling, generally.
  - b. Current law and policy associated with officer behavior that has led to profiling allegations.
  - c. Perceptions, relations, and interactions with minority communities.
  - d. Use of the LPD MATS data collection form and related procedures.
8. Training was provided to uniformed supervisors concerning their responsibilities specifically related to the racial profiling issue and the new MATS process.
9. Community education sessions were held to discuss police procedure and minority relations and the racial profiling issue.
10. Evaluation includes:
  - a. Processes used in the MATS program
  - b. Institutional (aggregate) accountability outcomes
  - c. Individual accountability

In sum, the Lansing Model attempted to mold the organizational culture so that officers could understand and adhere to both policy and law.

As noted in the original LPD Racial Profiling Paper<sup>4</sup>, when racial profiling by the police occurs it is typically a subconscious act. This model is to bring awareness to the forefront in order to ensure that unacceptable practices do not occur.

## METHODOLOGY

Beginning February 12, 2001, following the developmental steps described above, uniformed LPD officers working in marked units were required to complete a MATS data form describing the driver's demographic characteristics and the circumstances related to each officer-initiated traffic stop and for each traffic accident to which they were dispatched. Since there is difficulty in establishing a standard of comparison, one idea was to compare the demographic characteristics of drivers stopped for traffic violations to those drivers involved in accidents. This experiment was to determine if this was a useful standard by which comparisons could be made.

By the end of each shift, officers submitted completed MATS forms to their supervisor who, in turn, reviewed and "signed off" on completed forms and forwarded them for processing. Part of the supervisors' responsibility is to monitor officers' behaviors and be alert to any potentially anomalous problems.

## SUMMARY FINDINGS FROM PREVIOUS REPORTS

To provide the reader with some perspective, critical findings from the previous MATS data analysis are provided below.

### Key Findings From the Six Month Report

An analysis of the first six months of MATS data was completed with a report submitted to Chief Mark Alley. While a synopsis of those findings is presented below, the reader is referred to the actual reports before drawing any comparative conclusions.<sup>5</sup>

Based on the first six month analysis of the MATS data collection, there were no trend data suggesting Lansing police officers stopped

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<sup>4</sup>The paper is available on the Lansing Police web site at <http://www.lansingpolice.com>, under the menu item "Special Projects" followed by "Profiling Project".

<sup>5</sup>All previous reports are available on the Lansing Police Department web site, <http://www.lansingpolice.com>.

demographically disproportionate drivers without legal justification. A slightly higher proportion of Black and Hispanic drivers were stopped by police officers compared to the demographic proportions reported in the 2000 Census for Lansing. The differences (approximately 5%) do not appear to be significant because (1) Census data do not account for transient drivers who do not live within the city and (2) police officers are deployed more densely to areas within the city which have higher call and service demands for the police. These areas in Lansing tend to have a disproportionately higher number of minority residents; hence the probability of officers stopping minority drivers increases.

With respect to the issue of “racial profiling”, it was found that both arrests and warnings were more commonly noted in stops involving minority drivers, while citations were more commonly observed in stops involving White drivers. Moreover, an important finding was that in over 80% of traffic stops where a search was involved, the legal authority was a “search incident to arrest”, indicating little discretion for the search by the officer. As discretion for officers’ actions decreases, so does the probability of profiling.

### **Key Findings From the One Year Report**

The one year data suggest that LPD officers follow law and policy for traffic stops and that neither the character of the traffic stops nor the circumstances associated with the traffic stops reflect inappropriate targeting of any racial or ethnic group. Perhaps the most insightful data are related to searches. These data suggest that while there are a disproportionate number of minority drivers who are searched when compared to White drivers, the searches are those, which have, clear justification in law (e.g., searches incidental to an arrest) rather than being discretionary searches (e.g., request for consent.)

When compared to the 2000 Census data for the City of Lansing, there were minor disproportionalities noted in the LPD traffic stops when compared to the Census proportions. Men were stopped disproportionately more frequently when compared to women; young drivers (in their teens and twenties) were stopped disproportionately more frequently when compared to older age groups. While there are not specific MATS data to explain these differences, there is a strong legacy of research and actuarial insurance data that suggests younger drivers and men commit more traffic violations.

When comparing the proportion of drivers stopped to the proportionality of residents based upon race/ethnicity, there were slight differences: 2.2% more Black drivers were stopped than Lansing residential proportionality; 1.3% less White drivers were stopped than residential proportionality. These differences are not significant and can be attributed to a wide range of variables unrelated to any form of profiling of drivers. Interestingly, there was 3.5% fewer Hispanic and 1.0% fewer Asian-Pacific Islander drivers stopped than the residential proportionality.

### **Key Findings From the Eighteen-Month Report**

During this six month increment of analysis (months 13-18 of the LPD MATS program), there were two noticeable changes in the data. First, there was an approximate 8% fewer traffic stops compared to the previous two six month intervals. Second, there were a smaller proportion of formal dispositions, (e.g., citations) during this analysis period compared to the previous periods. An analysis of the data does not reveal the cause of these reductions, however that is not surprising. The variables measured in the MATS program are necessarily limited, because they seek to identify patterns of discriminatory behavior, not measure other causal dynamics. Intuitively, one could conclude that some type of environmental and/or policy factors contributed to these reductions.

Regardless of these reductions, the findings of this six month period are consistent with those in the previous six and twelve month reports. From these data, no anomalies emerge which would suggest that officers are treating minorities any differently than whites on matters of traffic stops. As in the previous reports, the data suggest that LPD officers follow law and policy for traffic stops and searches. Moreover, it appears that neither the character of the traffic stops nor the circumstances associated with the traffic stops reflect inappropriate targeting—i.e., “profiling”—of any racial or ethnic group.

### **Key Findings From the Twenty-Four Month Report**

On the whole, the results of 24-month analysis do not suggest a significant shift in the nature of traffic stops in Lansing from the 18-month report submitted by this evaluation team. While this assessment focused only on analysis of the data received during the months 19-24 of the MATS program rather than specifically making comparisons over the previous two

years, few changes appear to have occurred in the traffic enforcement behaviors of LPD officers during this timeframe. The number of traffic stops and searches during months 19 to 24 of data collection is similar to the same time frame the previous year (months 7 to 12). Although month-to-month differences and variation are noted, the evaluation team finds no evidence that MATS reporting behaviors were impacted by the release of any of the three prior status report. Variance is likely the product of increased traffic enforcement by motorcycle officers, most of whose enforcement involves speeding violations.

During the course of the data collection period, LPD officers used MATS forms to report data for 19,351 traffic stop encounters. Of these encounters, 15,741 (81.3%) were non-accident related (traffic stops not initiated because of a traffic accident). The remaining 3610 (18.7%) encounters were accident-related (traffic stops pursuant to the investigation of a traffic accident).

The data suggest that LPD officers follow law and policy for traffic stops and that neither the character of the traffic stops nor the circumstances associated with the traffic stops reflect inappropriate targeting of any racial or ethnic group. When compared to the 2000 Census data for the City of Lansing, there were minor disproportionalities noted in the LPD traffic stops when compared to the Census proportions. Men were stopped disproportionately more frequently when compared to women; young drivers (in their teens and twenties) were stopped disproportionately more frequently when compared to older age groups. While there are not specific MATS data to explain these differences, there is a strong legacy of research and actuarial insurance data that suggests younger drivers and men commit more traffic violations.

When comparing the proportion of drivers stopped to the proportionality of residents based upon race/ethnicity, there were slight differences: 1.3% more Black drivers were stopped than Lansing residential proportionality; 0.1% more White drivers were stopped than residential proportionality. These differences are not significant and can be attributed to a wide range of variables unrelated to any form of profiling of drivers. Interestingly, there was 4.0% fewer Hispanic and 0.9% fewer Asian-Pacific Islander drivers stopped than the residential proportionality.

### **Key Findings From the Thirty Month Report**

During the course of this six-month period of months 25 to 30, LPD officers used MATS forms to report data for 16,759 traffic stop encounters. Of these encounters, 13,718 (81.9%) were non-accident related (traffic stops not initiated because of a traffic accident). The remaining 3041 (18.1%) encounters were accident-related (traffic stops pursuant to the investigation of a traffic accident). The number of traffic stops and searches during this period of data collection is similar (although slightly lower) to the same time frame the previous year (months 18 to 24). Despite variation in the rate of completed MATS forms across the five reports prepared by this research team, the proportion of accident to non-accident stops has remained stable (approximately 1 to 4). The evaluation team finds no evidence that MATS reporting behaviors were impacted by the release of any of the four prior status report. The data analysis revealed no patterns or evidence to suggest improprieties by LPD officers related to traffic stops and the issue of racial profiling.

### **Key Findings From the Thirty-Six Month Report**

After three years of collecting data on the demographic characteristics of drivers stopped by Lansing police officers as well as the analysis of circumstances associated with these stops, there continues to be no evidence to suggest any pattern of racial profiling by LPD officers. It is possible that spurious incidents of profiling occur, but this is a probabilistic conclusion based on the experience of the authors, not a conclusion drawn from the MATS data analysis. Spurious incidents are typically idiosyncratic to an officer's circumstances at the time of the stop and are not characteristic of any trend behavior.

The data suggest that LPD officers follow law and policy for traffic stops and that neither the character of the traffic stops nor the circumstances associated with the traffic stops reflect inappropriate targeting of any racial or ethnic group. Perhaps the most insightful data are related to searches. These data suggest that while there is a disproportionate number of minority drivers who are searched when compared to White drivers, the searches are those which have clear justification in law (e.g., searches incidental to an arrest) rather than being discretionary searches (e.g., request for consent). It is also worth noting that searches, in particular discretionary (e.g., consent and *Terry*) searches take place in a very small proportion of all traffic stops initiated by LPD officers.

## DATA ANALYSIS: MONTHS 37 TO 48

In contrasting the results of this analysis with prior reports written by the research team, few changes are observed on the whole. First, there was a downward trend in the overall number of stops officers reported during this timeframe. In 2004, LPD initiated a citywide effort to reduce serious and violent crime through greater reliance on crime analysis. More resources were being focused on identifying and dealing with areas with disproportionately high levels of crime (“hot spots”). Consequently, officers were often spending their discretionary time engaging in these crime control activities rather than traffic enforcement. Consequently, the number of traffic stops dropped. The fact that the rate of reported traffic accidents remained stable would suggest this decrease is not a function of officers failing to report traffic stops using the MATS form. Despite this decrease in traffic enforcement, the overall picture has remained stable in terms of who officers are stopping and how these encounters are being handled.

Second, there was an increase in the rate of issuing traffic citation as a disposition to traffic stop encounters. Compared with earlier MATS reports, in year four there was an increase in the proportion of stops in which officers issued citations. This increase was universally observed across race/ethnicity and gender groups. At the same time, there were fewer stops that generated either arrests or written warnings as outcomes.

Although this analysis does not specifically compare the four years in which MATS has been in operation, few changes appear to have occurred in the traffic enforcement behaviors of LPD officers during this timeframe. The number of traffic stops and searches during the fourth year of data collection is lower to the same time frame the previous year. This is, however, presumed to be a product of a departmental effort to encourage officers to use discretionary time engaging in activities other than routine traffic enforcement, not a result of actual changes in officers’ enforcement behaviors. Despite variation in the raw number of completed MATS forms across the six reports prepared by this research team, the proportion of accident to non-accident stops has remained stable (approximately 1 to 4). The evaluation team finds no evidence that MATS reporting behaviors were impacted by the release of any of the prior status report.

This report reflects the results of months 37 to 48 of data collection (all stops from February 12, 2004, through February 11, 2005). During the course

of this twelve-month period, LPD officers used MATS forms to report data for 20,443 traffic stop encounters. Of these encounters, 16,032 (78.4%) were non-accident related (traffic stops not initiated because of a traffic accident). The remaining 4411 (21.6%) encounters were accident-related (traffic stops pursuant to the investigation of a traffic accident). It should be noted that officers completed multiple MATS forms for the majority of these accident-related encounters. Typically, officers would complete a MATS form detailing their interactions with the occupants of all vehicles involved in a traffic accident. Thus, the actual number of traffic accidents investigated by LPD officers during this twelve-month period is likely to be lower than the number of accident-related MATS forms.

Across the timeframe of the study, there was variation in the rate of traffic stops initiated per day. Table 1 presents the average rate of stops *per day* during this study's time frame, both overall and by the type of stop. These rates have been calculated to control for variations in the number of days in each month. Discretionary stops by officers (non-accident related stops) varied from month-to-month, while at the same time, rates of reporting accident related stops were relatively stable. This would seem to suggest variation in officer behavior, rather than variation in compliance with MATS protocols. The timing of the variation in discretionary stops further supports the former explanation. Rates for these stops were higher during the first part of the timeframe covered in this report, when weather would generally be more favorable. Rates tended to decline in the winter months (when officers may be less inclined to engage in proactive traffic enforcement and when some violations, such as speeding, may be less common due to poor road conditions) and around the holiday season (when fewer officers might be working at any given point in time).

Variation is also noted in the time of day during which traffic stops occurred. Figure 1 displays the total number of traffic stops for each hour of the day by the type of stop (accident or non-accident related). The frequency of all types of stops tended to be lowest during the early morning hours. Frequencies rapidly rose between 6:00 and 10:00 AM, before declining from the late morning through the early evening (with a noticeable afternoon increases). The frequency of stops rose from 9:00 PM until 11:00 PM, before declining into the early morning hours.

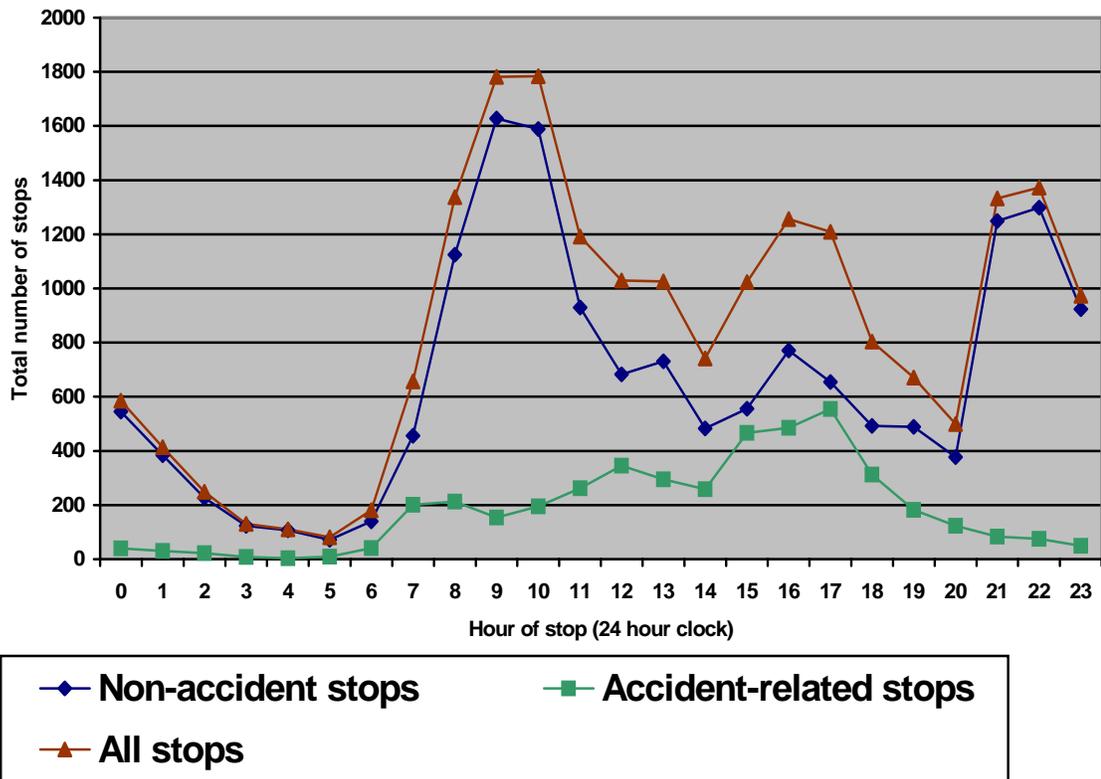
**Table 1: Rate of Traffic Stops Per Day\***

	<b>ALL STOPS (N=20,443)</b>	<b>NON-ACCIDENT RELATED STOPS (N=16,032)</b>	<b>ACCIDENT RELATED STOPS (N=4,411)</b>
February 2004 *	51.2	42.6	8.6
March 2004	70.9	59.3	11.5
April 2004	64.1	53.4	10.7
May 2004	57.5	43.7	13.8
June 2004	53.8	42.6	11.2
July 2004	39.0	28.4	10.6
August 2004	45.8	34.5	11.3
September 2004	45.2	31.7	13.5
October 2004	61.4	47.7	13.7
November 2004	69.7	55.4	14.3
December 2004	52.8	39.1	13.6
January 2005	52.6	42.2	10.4
February 2005 *	69.1	57.3	11.8

\*Rates for February 2004 and 2005 are adjusted to reflect less than a full month of data collection.

The demographic characteristics for drivers are reported in Table 2. A certain amount of variation is observed based upon the reason for a traffic stop (accident or non-accident related). While the drivers in non-accident related traffic stops tended to be male (59.1%), the proportion of male drivers in accident related stops was less skewed (57.8%). Across all types of stops, drivers were most frequently White (63.8%). It must be noted that the only racial groups seen to vary by type of stop are White and Black drivers; the distribution by race/ethnicity is not observed to appreciably vary for other racial groups. Black drivers were more prevalent in non-accident related stops than in accident related stops. The distribution by age also varied based upon the type of traffic stop. The average age of drivers in non-accident related stops was 4 years less than that of drivers in accident related stops (33.71 years and 37.58 years, respectively).

**Figure 1: Total Stops by Time and Type of Stop**



**Table 2:** Demographic Characteristics of Drivers (expressed as column percentages).

	ALL STOPS (N=20,443)	NON-ACCIDENT RELATED STOPS (N=16,032)	ACCIDENT RELATED STOPS (N=4,411)	2000 CENSUS CHARACTERISTICS (PERCENTAGES)
Gender				
Male	57.8	59.1	53.1	46.2
Female	42.2	40.9	46.9	53.8
Race/Ethnicity				
Black	22.4	23.9	16.8	21.9
Asian-Pacific Islander	1.8	1.7	2.1	2.9
Hispanic	6.4	6.7	5.3	10.0
White	65.7	63.8	72.6	65.3
Other	1.7	1.6	1.9	9.9
Not Apparent	2.1	2.4	1.3	--
Age Bracket				
10-19	10.6	10.6	10.7	Data
20-29	35.0	36.9	28.2	Categories
30-39	22.2	21.6	19.9	And
40-49	17.0	16.8	18.0	Statistics
50-59	10.2	9.5	12.6	On Different
60-69	3.8	3.2	5.9	Scales, Thus
70-79	1.6	1.2	3.3	Not
80-89	1.5	0.2	1.3	Comparable
90+	0.0	0.0	0.1	
Average Age (in years)	34.55	33.71	37.58	31.4

Additional analysis was conducted on the traffic stops that were non-accident related. The Lansing Police Department launched this data collection effort to develop a better understanding of how LPD officers were using their discretion. Although there are discretionary elements in accident related traffic stops, the origins of these encounters are non-discretionary. For the purpose of this report, the authors believe it is most appropriate to focus on non-accident related stops because these encounters allow officers to exercise the most discretion (starting with the decision to initiate an encounter).

Officers reported the reasons that lead them to initiated non-accident related traffic stops. Table 3 presents this information. The majority of these stops were initiated because an officer observed some form of moving violation. Most non-accident stops resulted in an officer issuing a citation, although warnings were also very common. Table 4 provides the dispositions of all non-accident related traffic stops.

**Table 3: Reason for Non-Accident Related Traffic Stops**

	FREQUENCY	PERCENT
Moving violation	11853	73.9
Equipment violation	1887	11.8
Registration	1537	9.6
Other	755	4.7

**Table 4: Disposition of Non-Accident Related Traffic Stops\***

	FREQUENCY	PERCENT
Citation issues	14158	88.3
Arrest made	393	2.5
Warning issues	1550	9.7
Report written	124	0.8

\* Disposition categories are not mutually exclusive. Officers could use more than one option in a given traffic enforcement encounter.

## STOPS WITH SEARCHES

Searches were conducted in a relatively small proportion of all non-accident traffic stops. During the time frame covered in this report, officers reported conducting searches during 577 non-accident stops (3.6% of all non-accident stops). Table 5 indicates who the subject of such searches was. Because officers could conduct multiple searches during a single traffic enforcement encounter, these search categories are not mutually exclusive. In addition, no information was collected concerning passenger characteristics, so a further analysis of these variables and their relationship with searches is not possible.

**Table 5: Searches During Non-Accident Related Traffic Stops**

	FREQUENCY	PERCENT OF NON-ACCIDENT STOPS	PERCENT OF NON-ACCIDENT STOPS WITH SEARCHES
Driver searched	326	2.0	56.5
Passenger(s) searched	51	0.3	8.8
Vehicle searched	341	2.1	59.1

\* Categories are not mutually exclusive. An officer could conduct a search of any three of these possible outcomes. Frequencies and percentages reflect the proportion of all non-accident related stops that involved this form of search.

Officers were required to report the legal basis for conducting a search during the course of a traffic stop. This information is reflected in Table 6. The information in this table indicates, among other things, that officers rarely used their own discretion to conduct a search. The majority of all searches (78.3%) were “searches incident to a lawful arrest.” In such situations, officers are conducting the search pursuant to established criminal procedure, rather than exercising discretion. As a result, the probability of a search being based on a racial profile is significantly reduced. Several other categories would also suggest searches made out of procedure, rather than via discretion (e.g., the inventory of a vehicle to be towed or a plain view seizure).

Items were discovered and/or seized during 85 searches in non-accident related traffic stops. This represents 0.5% of all non-accident related stops and 14.7% of those stops involving some type of search. Table 7 presents the types of items that were discovered/seized in the course of these searches. Many of these items were relatively innocuous; alcohol and drugs were the most commonly seized forms of contraband. Weapons were only discovered in 0.5% of the searches. It should be noted that a relatively substantial number of stops producing contraband involved items falling outside of the response categories listed on the MATS form.

Tables 8, 9 and 10 provide alternative perspectives on the data by displaying stops, searches and contraband discoveries/seizures based upon the driver’s race/ethnicity, gender and age bracket. The reader is reminded that this study’s unit of analysis is the individual traffic stop, not the driver. The fact that a search was conducted does not mean that the driver was actually the subject of such a search. Also, these tables do not reflect the characteristics of passengers who may have been the subject of searches.

**Table 6: Authority For Searches In Non-Accident Related Traffic Stops\***

	FREQUENCY	PERCENT OF NON-ACCIDENT STOPS	PERCENT OF NON-ACCIDENT STOPS WITH SEARCHES
Consent	77	0.5	13.3
Incident to arrest	452	2.9	78.3
Terry cursory	28	0.2	4.9
Tow inventory	7	0.0	1.2
Plain view	7	0.0	1.2
Probation/parole	3	0.0	0.5

\* Authority categories are not mutually exclusive. Because an officer could conduct multiple searches during the course of a traffic stop encounter, there could be multiple authorities for such searches.

**Table 7: Items Discovered/Seized Through Searches In Non-Accident Related Traffic Stops\***

	FREQUENCY	PERCENT OF NON-ACCIDENT STOPS	PERCENT OF NON-ACCIDENT STOPS WITH SEARCHES	PERCENT OF ALL SEARCHES PRODUCING CONTRABAND
Weapons	3	0.0	0.5	3.5
Vehicles	1	0.0	0.2	1.2
Drugs	41	0.3	7.1	48.2
Alcohol	22	0.1	3.8	25.9
Cash	5	0.0	0.9	5.9
Other property	19	0.1	3.3	22.4

\* Item categories are not mutually exclusive. Multiple items could be discovered and/or seized during the course of a search.

**Table 8: Driver's Race By Non-Accident Stops, Searches, And Contraband Discoveries/Seizures**

DRIVER'S RACE	NUMBER OF STOPS (% OF ALL STOPS)	NUMBER OF SEARCHES (% OF ALL SEARCHES)	NUMBER OF DISCOVERIES (% OF ALL DISCOVERIES)
Asian-American	268 (1.7%)	4 (0.7%)	--
Black	3835 (23.9%)	272 (47.1%)	33 (38.8%)
Hispanic	1070 (6.7%)	60 (10.4%)	9 (10.6%)
White	10222 (63.8%)	226 (39.2%)	40 (47.1%)
Other	257 (1.6%)	3 (0.5%)	1 (1.2%)
Not Apparent	380 (2.4%)	12 (2.1%)	2 (2.4%)

**Table 9: Driver's Gender By Non-Accident Stops, Searches, And Contraband Discoveries/Seizures**

DRIVER'S GENDER	NUMBER OF STOPS (% OF ALL STOPS)	NUMBER OF SEARCHES (% OF ALL SEARCHES)	NUMBER OF DISCOVERIES (% OF ALL DISCOVERIES)
Female	6557 (40.9%)	142 (24.6%)	17 (20.0%)
Male	9475 (59.1%)	435 (75.4%)	68 (80.0%)

**Table 10:** Driver’s Age Bracket By Non-Accident Stops, Searches, And Contraband Discoveries/Seizures

DRIVER’S GENDER	NUMBER OF STOPS (% OF ALL STOPS)	NUMBER OF SEARCHES (% OF ALL SEARCHES)	NUMBER OF DISCOVERIES (% OF ALL DISCOVERIES)
10-19	1695 (10.6%)	98 (17.0%)	20 (23.5%)
20-29	5908 (36.9%)	262 (45.4%)	39 (45.9%)
30-39	3467 (21.6%)	122 (21.1%)	14 (16.5%)
40-49	2686 (16.8%)	64 (11.1%)	5 (5.9%)
50-59	1531 (9.5%)	26 (4.5%)	6 (7.1%)
60-69	513 (3.2%)	5 (0.9%)	1 (1.2%)
70-79	190 (1.2%)	--	--
80-89	39 (0.2%)	--	--
90+	3 (0.0%)	--	--

\* Mean age of driver = 33.71 years.

## RACE, GENDER AND SEARCHES

A key impetus for this research project was to understand the role of various demographic factors in traffic enforcement encounters. Table 11 presents the race/ethnicity and gender of all drivers involved in non-accident traffic stops. The first column lists the possible race/ethnicity and gender combinations for drivers involved in non-accident traffic stops during the study time frame. The second column reports the number of stops involving each race/ethnicity and gender combination. The third, fourth and fifth columns reflect the percent of drivers within various classifications (e.g., 23.7% of female drivers were Black, 40.4% of Black drivers were female, 9.7% of all drivers were Black females). The final column indicates the odds of a driver being searched in the course of a non-accident related traffic stop. For example, when the driver was a Black female, a search was conducted in 3.9 out of 100 non-accident stops.

Table 12 reflects the odds that various forms of contraband were found when searches were conducted during non-accident traffic stops. The odds are reported based upon the race/ethnicity and gender of the driver. The reader should note that several rows in this table are highlighted to reflect that a very small number of searches were conducted with drivers of the respective race/ethnicity and gender combination. These small numbers may dramatically skew the odds in these cases. It must also be noted that the discovery and/or seizure of any form of contraband does not necessarily mean that the driver was in possession of such items. The unit of analysis for the MATS form is an individual traffic stop. Officers reported driver demographics and search outcomes. The data do not allow for the discovery of contraband to be linked to a particular individual in a vehicle.

**TABLE 11: Drivers By Gender And Race/Ethnicity For Non-Accident Related Traffic Stops**

	<u>COLUMN A</u>	<u>COLUMN B</u>	<u>COLUMN C</u>	<u>COLUMN D</u>	<u>COLUMN E</u>
	FREQUENCY	% OF DRIVERS WITHIN GENDER CLASS	% OF DRIVERS WITHIN RACIAL CLASS	% OF ALL DRIVERS	# OF SEARCHES (ODDS IN 100 OF SEARCH)
Asian American Female *	114	1.7	42.5	0.7	2 (1.8)
Black Female	1551	23.7	40.4	9.7	60 (3.9)
Hispanic Female	370	5.6	34.6	2.3	11 (3.0)
White Female	4294	65.5	42.0	26.8	63 (1.5)
Other Female *	69	1.1	26.8	0.4	0 (--)
Not Apparent Female *	159	2.4	41.8	1.0	6 (3.8)
Asian American Male *	154	1.6	57.5	1.0	2 (1.3)
Black Male	2284	24.1	59.6	14.2	212 (9.3)
Hispanic Male	700	7.4	65.4	4.4	49 (7.0)
White Male	5928	62.6	58.0	37.0	163 (2.7)
Other Male *	188	2.0	73.2	1.2	3 (1.6)
Not Apparent Male *	221	2.3	58.2	1.4	6 (2.7)

\* Dataset contains 10 or fewer non-accident stops where the driver had this race/ethnicity/gender composition and was searched.

**Table 12: Odds (In 100) Of Contraband Being Discovery And/Or Seizures By Driver Race/Ethnicity And Gender**

	WEAPON	VEHICLE	DRUGS	ALCOHOL	CASH	OTHER PROPERTY	ANY CONTRABAND†	NOTHING
Asian American Female *	--	--	--	--	--	--	--	100.0
Black Female	1.7	--	1.7	1.7	--	1.7	6.7	93.3
Hispanic Female	--	--	9.1	--	--	9.1	18.2	81.8
White Female	1.6	--	7.9	4.8	3.1	1.6	15.9	84.1
Other Female *	--	--	--	--	--	--	--	--
Not Apparent Female *	--	--	16.7	--	--	--	16.7	83.3
Asian American Male *	--	--	--	--	--	--	--	100.0
Black Male	--	0.5	7.5	3.3	1.4	2.4	13.7	86.3
Hispanic Male	--	--	4.1	6.1	--	4.1	14.3	85.7
White Male	0.6	--	8.6	4.9	--	4.9	18.4	81.6
Other Male *	--	--	--	--	--	33.3	33.3	66.7
Not Apparent Male *	--	--	16.7	--	--	--	16.7	83.3

\* Dataset contains 10 or fewer non-accident stops where the driver had this race/ethnicity/gender composition and was searched.

† Because officers could seize multiple forms of contraband on a single stop, the various categories are not mutually exclusive and the values in the columns to the left do not necessarily sum to the value appearing in this column.

In examining the odds of being searched by race/ethnicity and gender, it is crucial to examine the legal authority that allowed an officer to conduct a search. The odds of various legal authorities legitimating an officer’s search (when there were searches) are presented in Table 13 by driver race/ethnicity and gender. When searches were conducted during non-accident traffic stops with Black female drivers, the legal authority for 6.7/100 searches was the driver’s consent; 86.7/100 searches were incident to arrest in such stops. Because an officer could have multiple legal authorities justifying multiple searches in a single stop, these columns are not mutually exclusive.

Of key importance in this table are the differential patterns that emerge among the various authorities. For example, minority male drivers tended to be involved in search situations that were not purely discretionary. When an officer conducts a search that is “incidental to a lawful arrest” or for a tow inventory, that officer is following policy and procedure more than discretion. As noted previously, when an officer seeks a driver’s consent or conducts a *Terry* search, that officer is exercising discretion. Among male drivers, it was more common for discretionary searches (consent and *Terry* cursory) to be made when the driver was White. Minority drivers were more likely to be involved in searches that were more a matter of policy/procedure than officer discretion.

**Table 13:** Odds (In 100) Of Various Legal Authorities By Driver Race/Ethnicity And Gender

	CONSENT	INCIDENT TO ARREST	TERRY CURSORY	TOW INVENTORY	PLAIN VIEW
Asian American Female*	--	50.0	50.0	--	--
Black Female	6.7	86.7	3.3	1.7	--
Hispanic Female	9.1	72.7	--	--	--
White Female	9.5	79.4	3.2	1.6	3.2
Other Female*	--	--	--	--	--
Not Apparent Female*	16.7	83.3	--	--	--
Asian American Male*	50.0	50.0	--	--	--
Black Male	13.7	82.1	3.8	0.5	0.5
Hispanic Male	8.2	81.6	2.0	4.1	2.0
White Male	17.8	69.9	8.6	1.2	1.8
Other Male*	33.3	66.7	--	--	--
Not Apparent Male*	16.7	83.3	--	--	--

\* Dataset contains 10 or fewer non-accident stops where the driver had this race/ethnicity/gender composition and was searched.

The outcomes of all non-accident traffic stops are presented in Table 14 by the driver’s race/ethnicity and gender. The table reports the percent of stops for drivers of each race/ethnicity and gender combination that resulted in the various outcomes (e.g., in stops involving Black female drivers, citations were issued in 88.2%, arrests were made in 3.4%, warnings were given in 8.6% and reports were made in 0.8%). The reader is reminded that multiple outcomes are possible for a single stop, therefore these columns are not mutually exclusive. In addition, a specific outcome may not relate to the vehicle’s driver (e.g., a passenger could have been the party cited, arrested or warned). Both arrests and warnings were more commonly noted in stops involving male drivers, while citations were more commonly observed in stops involving female drivers. In contrast to other racial/ethnic groups, Black and Hispanic drivers were cited less, but arrested and warned more.

**Table 14:** Outcome of all non-accident related traffic stops by driver race/ethnicity and gender\*

	CITATION	ARREST	WARNING	REPORT
Asian American Female	91.2	0.9	7.9	--
Black Female	88.2	3.4	8.6	0.8
Hispanic Female	89.2	2.2	10.3	1.4
White Female	90.9	1.0	8.3	0.4
Other Female	87.0	--	11.6	1.4
Not Apparent Female	94.3	1.3	4.4	--
Asian American Male	89.6	0.6	9.1	0.6
Black Male	81.6	6.4	12.4	1.8
Hispanic Male	85.1	5.4	10.7	0.9
White Male	89.1	1.6	9.8	0.6
Other Male	90.0	0.5	9.6	0.5
Not Apparent Male	86.4	2.7	11.8	0.5

\* Because a traffic stop could result in more than one outcome, rows may total to more than 100.0.

## CONCLUSIONS

The data from months 37-48 indicate that fewer citations were issued than in previous years. Further, the data show there was an increase in the *rate* of issuing traffic citation as a disposition to traffic stop encounters. This increase was universally observed across race/ethnicity and gender groups. At the same time, there were fewer stops that generated either arrests or written warnings as outcomes. Thus, while citations were lower and the rate between stops and citations increased, all changes were universal across demographic variables, hence suggesting that these changes were a product of

external policy factors (i.e., the LPD's crime analysis-driven initiatives) and not the product of any biased behavior by the officers.

The number of traffic stops and searches during the fourth year of data collection is lower to the same time frame the previous year. This is, however, presumed to be a product of a departmental effort to encourage officers to use discretionary time engaging in activities other than routine traffic enforcement, not a result of actual changes in officers' enforcement behaviors. Again, the changes were universal across demographic variables.

During the time frame covered in this report, officers reported conducting searches during 577 non-accident stops (3.6% of all non-accident stops), 2.9% of which were "searches incident to an arrest". This suggests few discretionary searches, thereby minimizing the probability of "profiling".

In sum, the critical behaviors and proportionalities measured in this data collection period are consistent with all previous data analyses with no statistically significant variation. Based on the data collected, a consistent pattern is maintained that there is no evidence that suggests that the traffic stop behavior of LPD officers is inappropriate nor does it suggest any bias in traffic stop outcomes is based on inappropriate behavior. In layman's terms, that data do not suggest any pattern of racial profiling by Lansing police officers.