2003

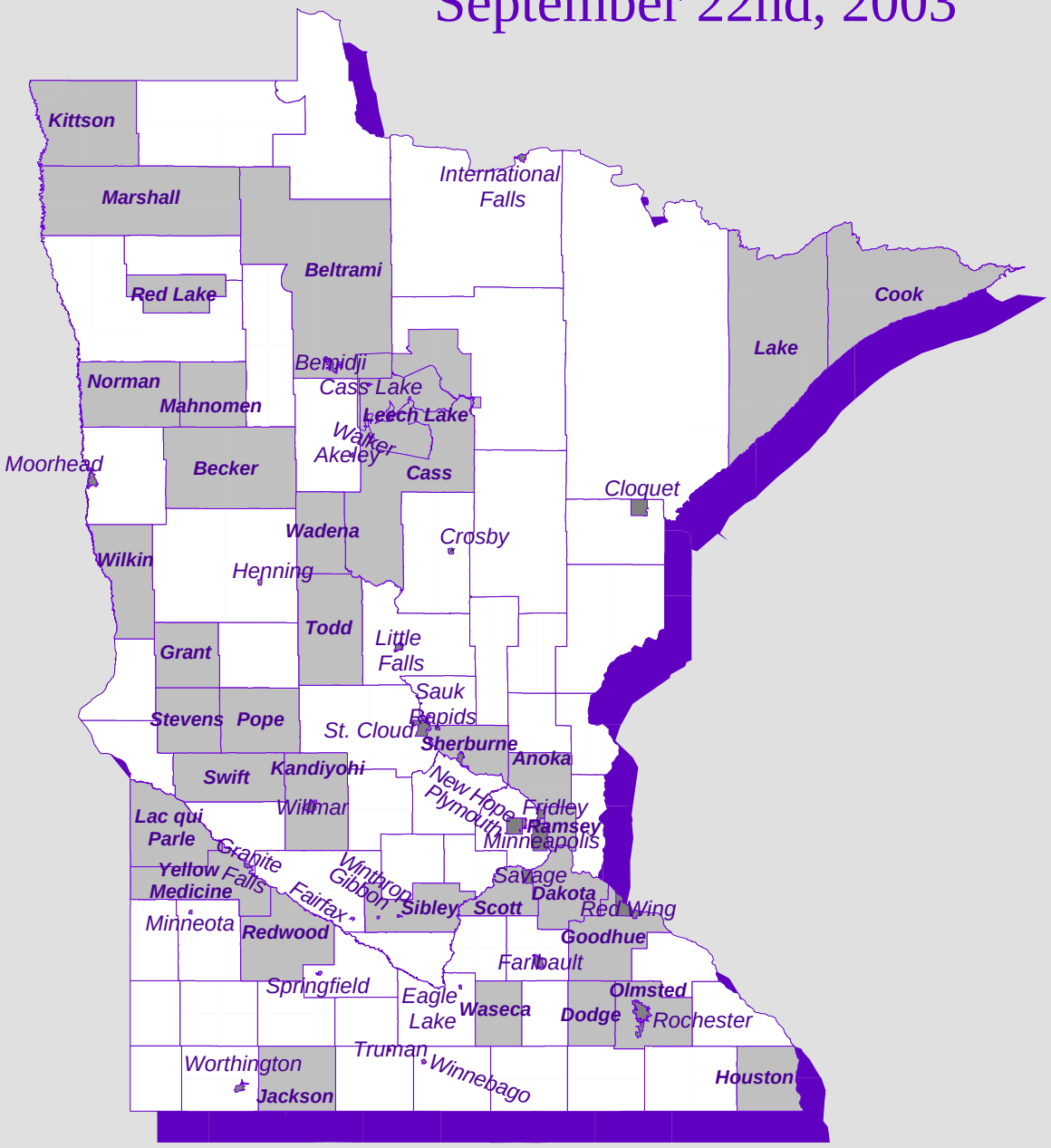
The Minnesota Statewide Racial Profiling Study

Institute on Metropolitan Opportunity
University of Minnesota Law School

Minnesota Statewide Racial Profiling Report: All Participating Jurisdictions.

Report to the Minnesota Legislature

September 22nd, 2003



institute on race and poverty
Research, Education and Advocacy

Council on Crime and Justice

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SUMMARY OF FINDINGS

A basic pattern emerges from our analysis of traffic stop data collected by the sixty-five law enforcement jurisdictions that voluntarily participated in this racial profiling study:

Law enforcement officers stopped Black, Latino, and American Indian drivers at greater rates than White drivers, searched Blacks, Latinos, and American Indians at greater rates than White drivers, and found contraband as a result of searches of Blacks, Latinos, and American Indians at lower rates than in searches of White drivers. Conversely, law enforcement officers stopped and searched White drivers at lower rates than drivers of color and found contraband in searches of White drivers at a greater rate than in searches of drivers of color.

These disparities are particularly large for Blacks and Latinos. If officers in the participating jurisdiction had stopped drivers of all racial/ethnic groups at the same rate, approximately 18,800 fewer Blacks, 5,800 fewer Latinos and approximately 22,500 more Whites would have been stopped in the sixty-five jurisdictions in 2002. If officers in the participating had subjected stopped drivers of all racial/ethnic groups to discretionary searches at the same rate, 2,114 fewer Blacks, 428 fewer Latinos and 2,645 more Whites would have been searched.

The pattern for Blacks and Latinos existed in nearly every participating jurisdiction. Whites were stopped at a greater than expected rate in only 8 of the 60 jurisdictions having enough stops to determine statistical significance. On the other hand, Blacks were over-stopped in every jurisdiction but one and Latinos were over-stopped in all but 5 of the 43 jurisdictions in which statistical significance could be determined. Similarly, in all but 2 of the 37 jurisdictions in which there were discretionary searches of Blacks and Whites, Blacks were subjected to searches at a higher rate than Whites. Latinos were subjected to these searches at a higher rate than Whites in all of the jurisdictions in which there were discretionary searches of Latinos.

These disparities in discretionary search rates are particularly troubling given the rates at which contraband was found as a result of these searches, i.e. the hit rates. Overall, 24% of discretionary searches of Whites produced contraband compared to only 11% of searched of Blacks and 9% of searches of Latinos. In the 37 jurisdictions where discretionary searches of both Blacks and Whites occurred, the hit rate was higher for Whites in 30 of the jurisdictions. In 31 of the 44 jurisdictions where there were discretionary searches of both Whites and Latinos the hit rate was higher for Whites.

The greatest relative differences between actual and expected stops and searches for Blacks are found in suburban cities and central cities other than Minneapolis. In the suburban cities of Fridley, New Hope, Plymouth, Sauk Rapids, and Savage combined, Blacks were stopped about 310% more often than expected. Once stopped, officers subjected Blacks to discretionary searches at a rate 108% greater than expected even though only 11% of Blacks were found in possession of contraband compared to 18% of Whites searched. In absolute terms, approximately 1,800 fewer Blacks would have been stopped in these suburban cities if Blacks had been stopped at the same rate as other drivers. If Blacks stopped in these cities had been subjected to discretionary searches at the same rate as other drivers, 108 fewer Blacks would have been searched.

In the central cities of Moorhead, Saint Cloud, and Rochester combined, Blacks were stopped 239% more often than expected and searched 68% more often than expected. 21% of searches of Blacks in these jurisdictions produced contraband compared to 30% of searches of Whites. In absolute terms this equates to about 1,600 more stops than expected and 29 more searches than expected.

The greatest stop and search disparities for Latinos are also found in the suburban cities. The combined stop rate for Latinos in these jurisdictions was 170% greater than expected and the combined search rate was 190% greater than expected. Only 9% of searches of Latinos produced contraband compared to 18% of searches of Whites. In absolute terms, officers in these jurisdictions stopped 640 more Latinos than they would have if Latinos had been stopped at the same rate as all drivers. If Latinos stopped in these cities had been subjected to discretionary searches at the same rate as other drivers, 80 fewer Latinos would have been searched.

The largest absolute differences between actual and expected stops and searches for Blacks and Latinos were found in Minneapolis, the largest jurisdiction participating in this study with the highest number of traffic stops. In Minneapolis, Blacks were stopped 152% more often than expected and once stopped, subjected to discretionary searches 52% more often than expected. 11% of searches of Blacks produced contraband compared to 13% of searches of Whites. If Minneapolis officers had stopped Blacks at the same rate as other drivers approximately 12,804 fewer Blacks would have been stopped in Minneapolis in 2002. If Blacks stopped in Minneapolis had been subjected to discretionary searches at the same rate as all stopped drivers, 1,053 fewer Blacks would have been searched.

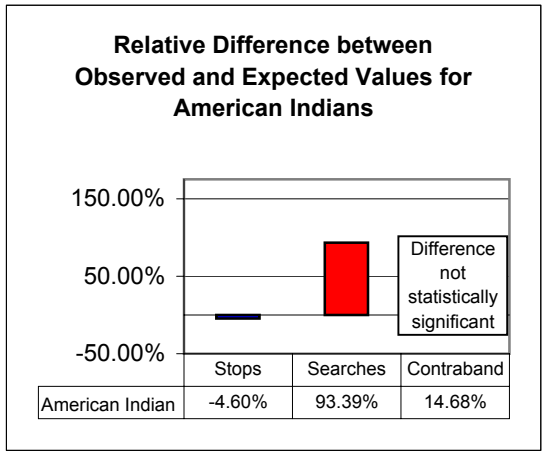
Minneapolis officers stopped Latinos 63% more often than expected and once stopped, subjected Latinos to discretionary searches 15% more often than expected. If Minneapolis officers had stopped Latinos at the same rate as all drivers approximately 2,200 fewer Latinos would have been stopped in Minneapolis in 2002. Only 5% of searches of Latinos produced contraband. If Latinos stopped in Minneapolis had been subjected to discretionary searches at the same rate as other drivers, 82 fewer Latinos would have been searched.

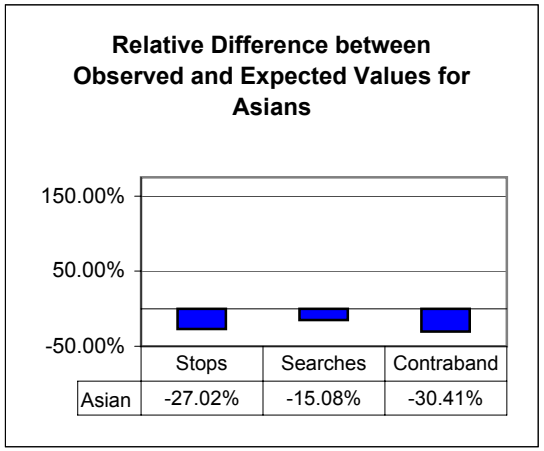
These patterns suggest a strong likelihood that racial/ethnic bias plays a role in traffic stop policies and practices in Minnesota. The same is true for the searches that result from these stops. Taken together, these patterns warrant serious examination. It is fair to conclude that the problems that they suggest are not isolated to a handful of jurisdictions or present only in those jurisdictions that chose to participate in this study.

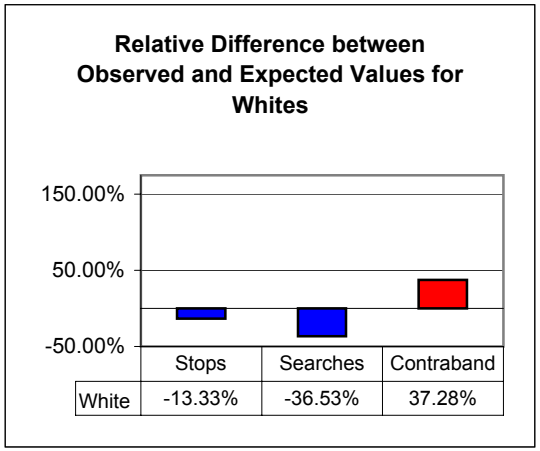
Although there is more variation in results for American Indian drivers across jurisdictions, data for this group also raise concerns of bias. Across all jurisdictions, American Indians were stopped at a slightly greater rate than Whites (9.2% compared to 8.3%). Once stopped, American Indians were subjected to discretionary searches over three times as often as Whites (9.6% compared to 3.1%) even though contraband was found at a lower rate in discretionary searches of American Indians (19.7%) than of Whites (23.5%).

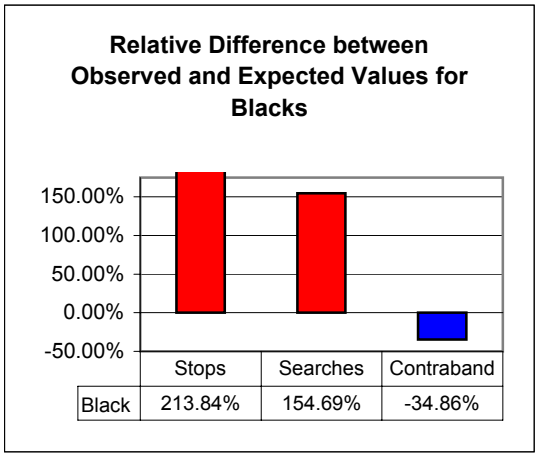
As is more fully discussed in the full report, there are limitations to our estimates of the driving population, used to calculate the number of "expected" stops for each racial/ethnic group, that should be considered when interpreting these results. The estimate of the driving population used here was the driving age population of the jurisdiction. Thus, it includes people who are old enough to drive but do not do so. Nor does it account for differences in driving habits or vehicle condition across households. The estimate includes only residents of the jurisdiction whereas the actual driving population in a jurisdiction includes non-residents, and as a result, so does the stopped population. Because search and hit rates are determined using only the data recorded by law enforcement officers, they are not subject to the same limitations.

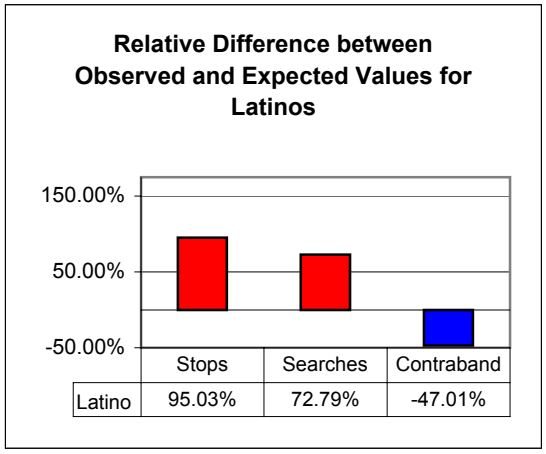
All Jurisdictions' Observed and Expected Values







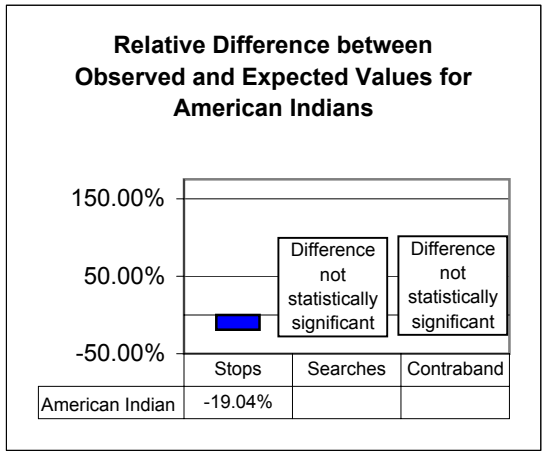


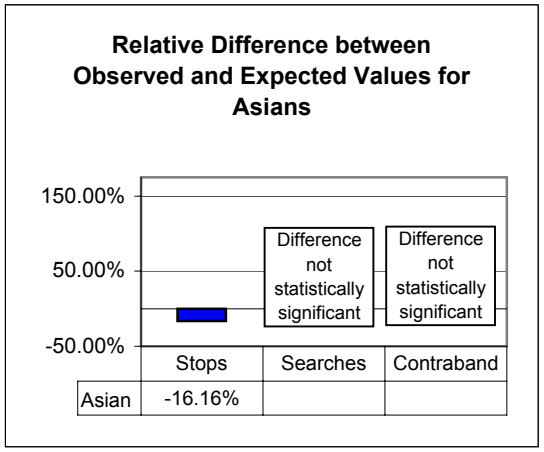


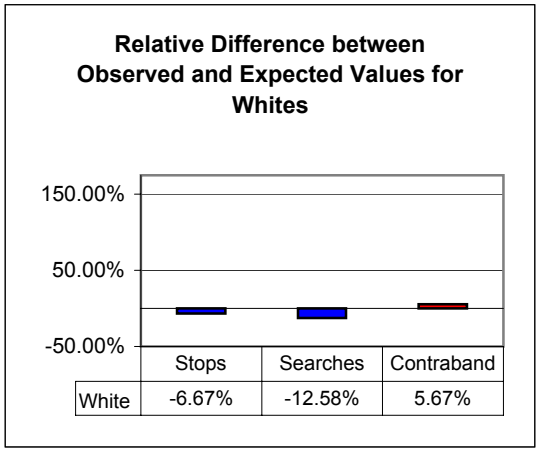
Note: Searches and Contraband Found rates are for discretionary searches.
Stop, search and contraband found rates are based on data accumulated from all jurisdictions.

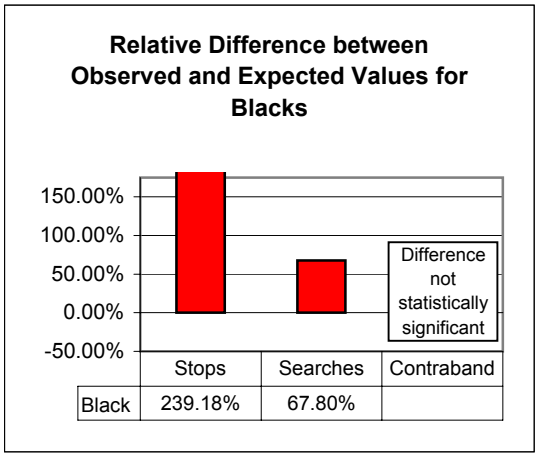
All differences statistically significant (P. < .05) unless otherwise marked.

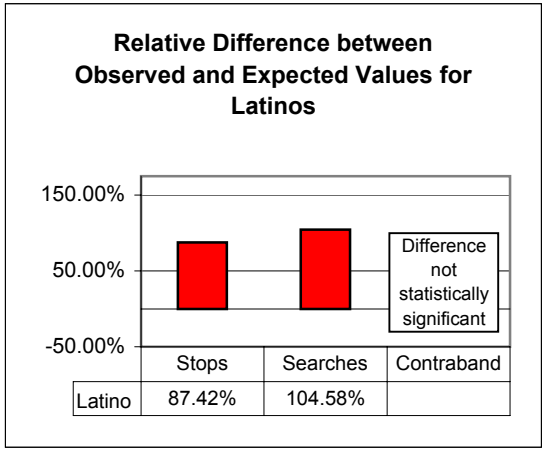
Central Cities' Observed and Expected Values











Note: Searches and Contraband Found rates are for discretionary searches.
Stop, search and contraband found rates are based on data accumulated from central city jurisdictions.
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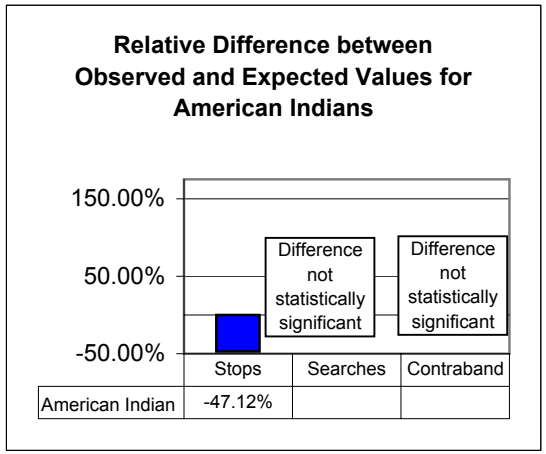
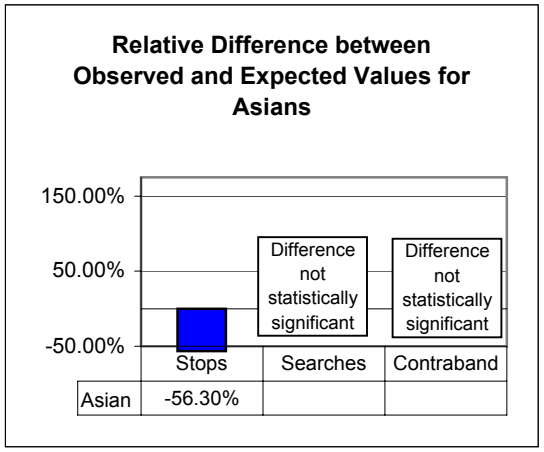
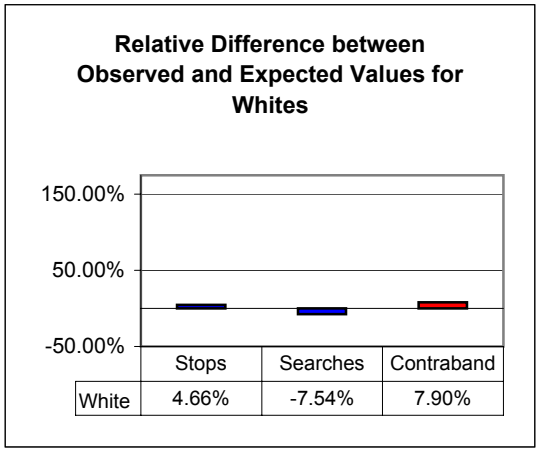
Central cities included are: Moorhead, Saint Cloud and Rochester.

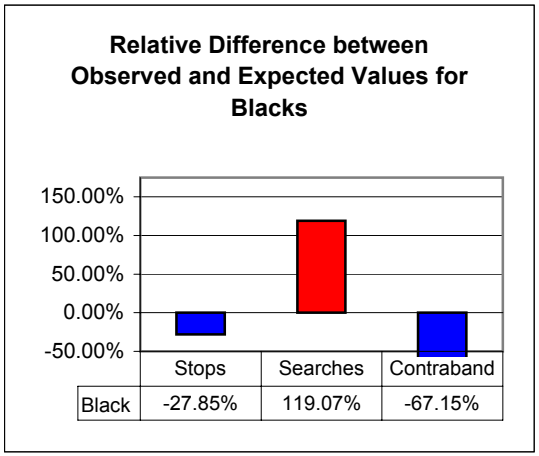
All differences statistically significant (P. < .05) unless otherwise marked.

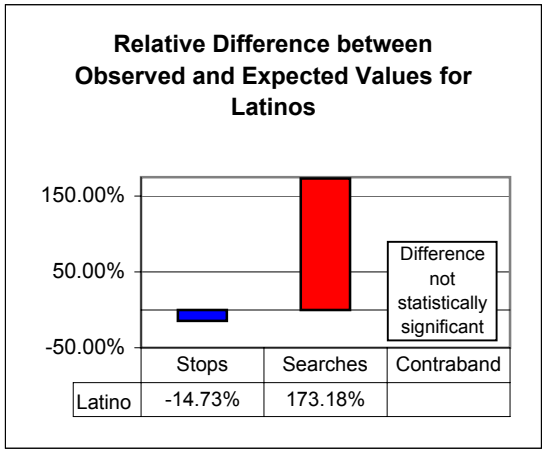
Metro Counties' Observed and Expected Values







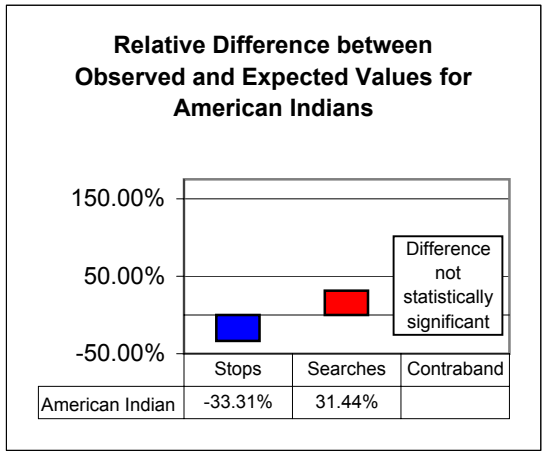


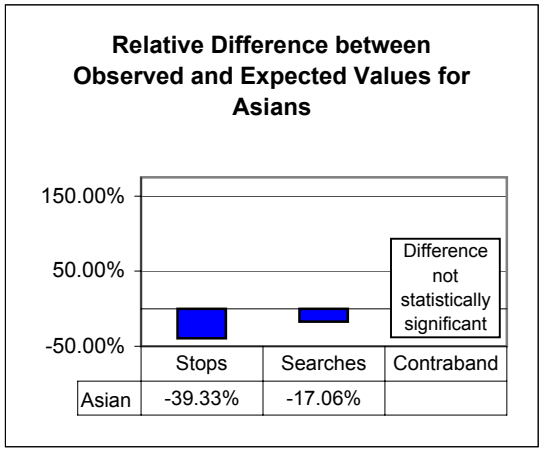


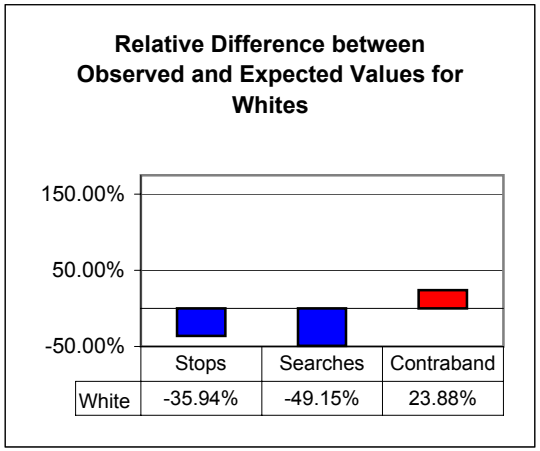
Note: Searches and Contraband Found rates are for discretionary searches.
Stop, search and contraband found rates are based on data accumulated from metro county jurisdictions.
Metro counties are those inside a census defined metropolitan area.
Metro counties included are: Anoka, Dakota, Olmsted, Ramsey, Scott and Sherburne counties.

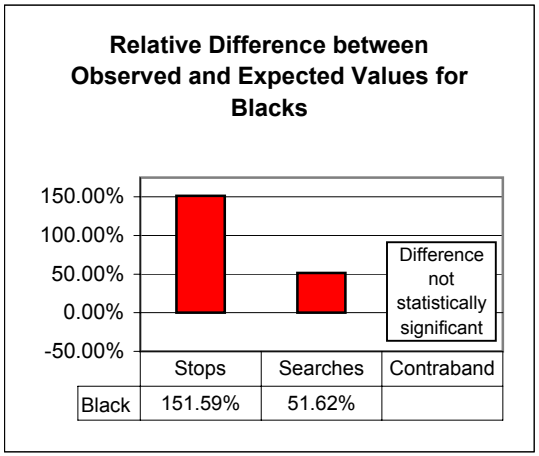
All differences statistically significant (P. < .05) unless otherwise marked.

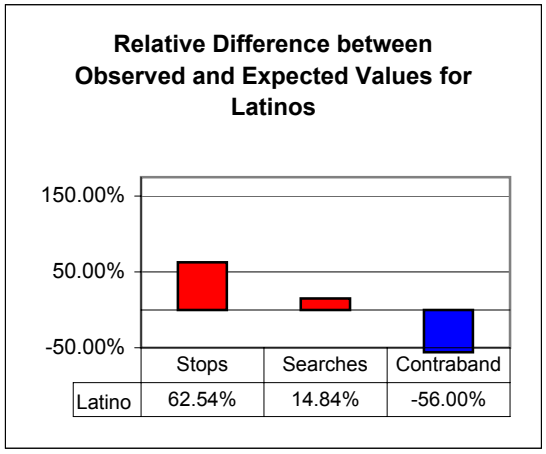
Minneapolis Observed and Expected Values







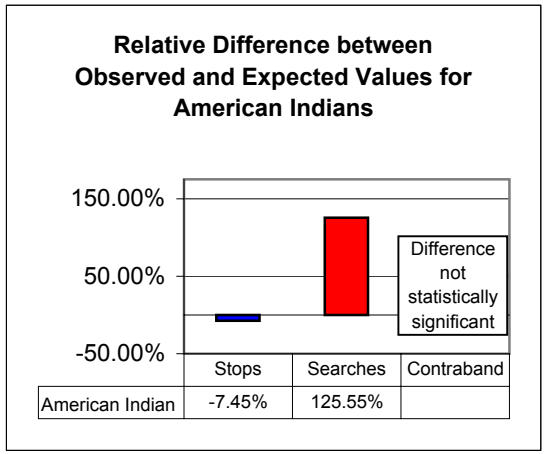


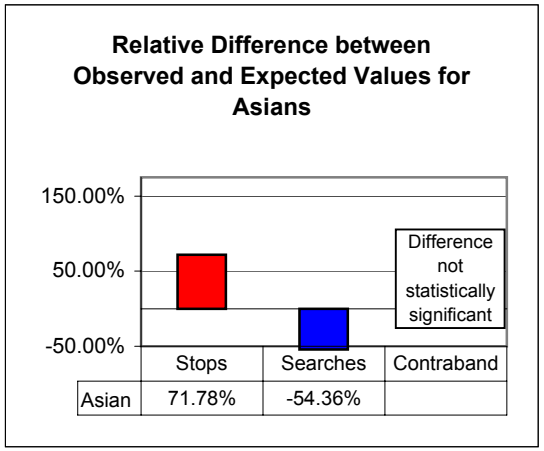


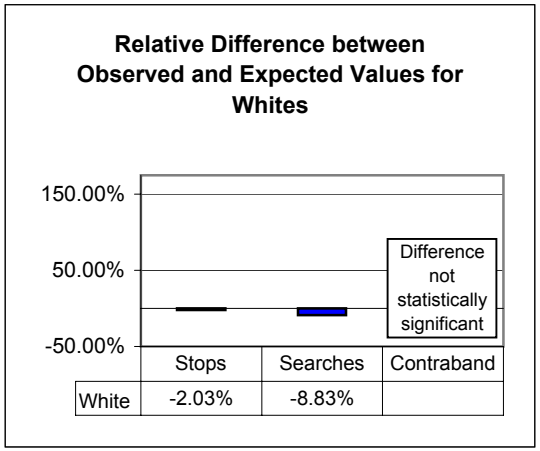
Note: Searches and Contraband Found rates are for discretionary searches.
Stop, search and contraband found rates are based on data accumulated from Minneapolis.

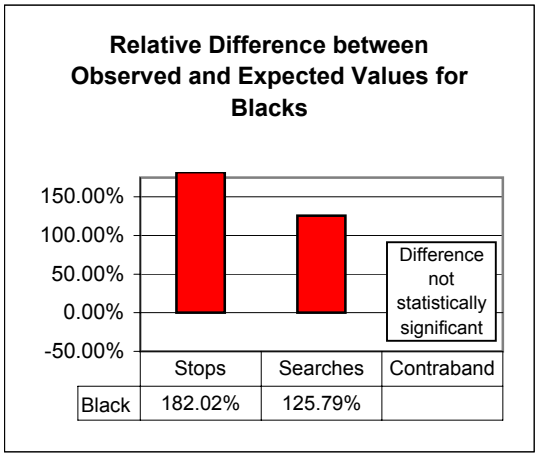
All differences statistically significant (P. < .05) unless otherwise marked.

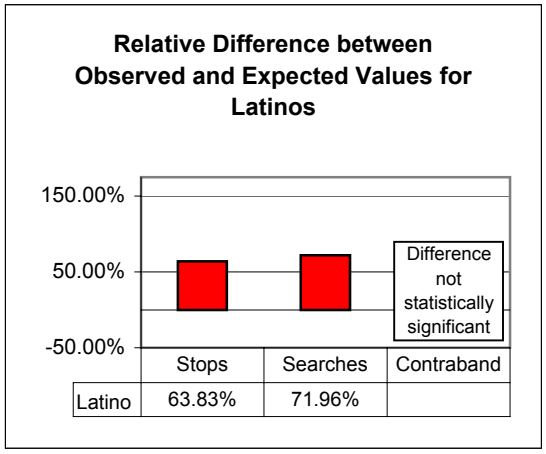
Rural Counties' Observed and Expected Values







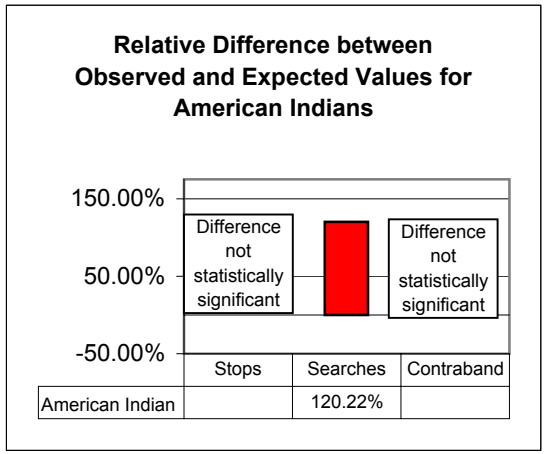


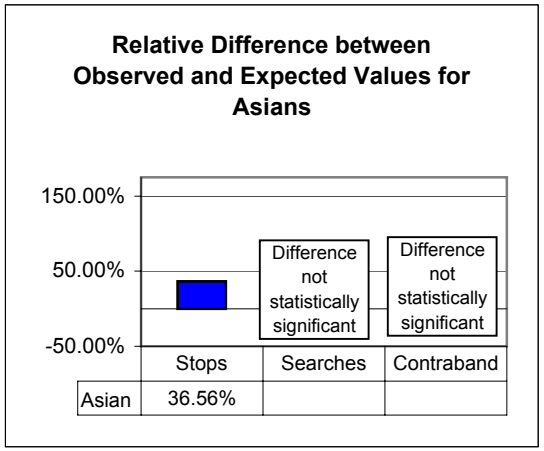


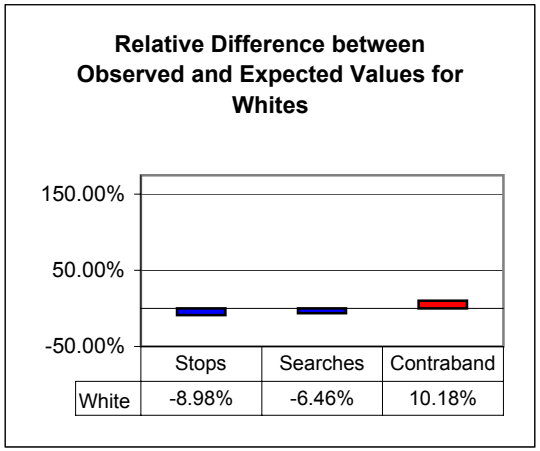
Note: Searches and Contraband Found rates are for discretionary searches.
Stop, search and contraband found rates are based on data accumulated from rural county jurisdictions.
Rural counties include counties not in census defined metropolitan areas.
Rural counties included are: Becker, Beltrami, Cass, Cook, Dodge, Goodhue, Grant, Houston, Jackson, Kandiyohi, Kittson, Lac qui Parle, Lake, Mahnomen, Marshall, Norman, Pope, Red Lake, Redwood, Sibley, Stevens, Swift, Todd, Wadena, Waseca, Wilkin and Yellow Medicine counties.
Also included was the Leech Lake Indian reservation, which encompasses multiple rural counties.

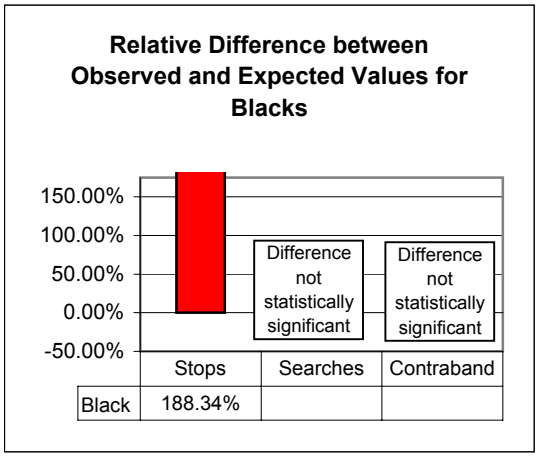
All differences statistically significant (P. < .05) unless otherwise marked.

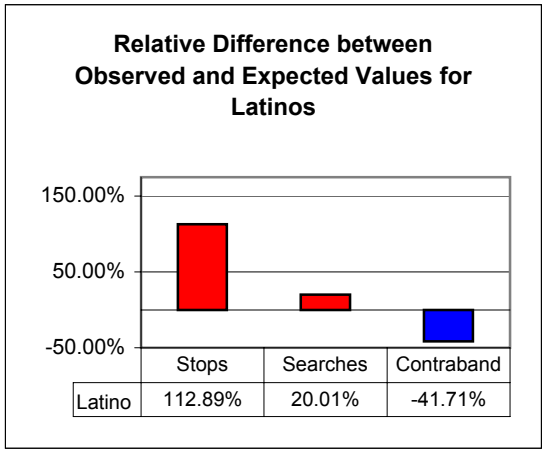
Small Cities' Observed and Expected Values







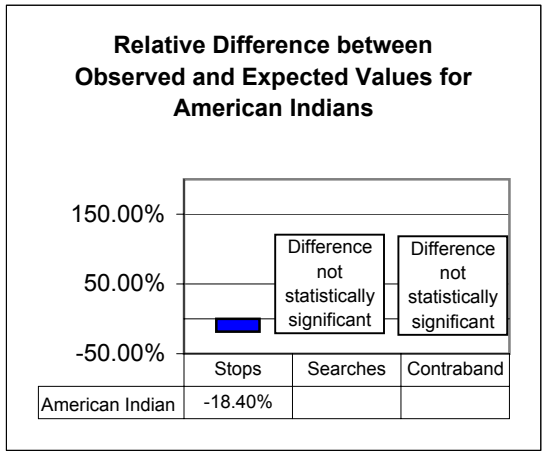


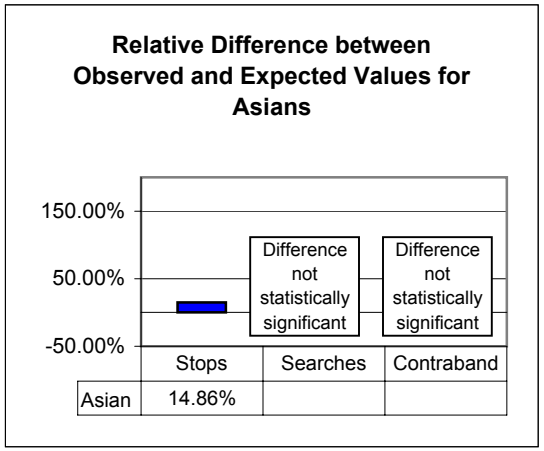


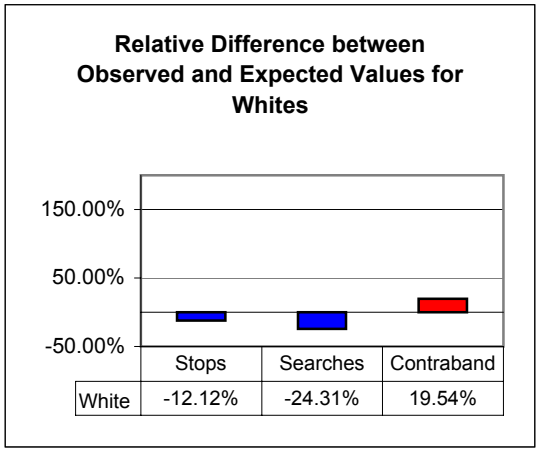
Note: Searches and Contraband Found rates are for discretionary searches.
Stop, search and contraband found rates are based on data accumulated from small city jurisdictions.
Small cities are municipalities inside census defined urban areas, but outside census defined metropolitan areas.
Small cities included are: Bemidji, Cloquet, Crosby, Faribault, Granite Falls, International Falls, Little Falls, Red Wing, Wilmar and Worthington.

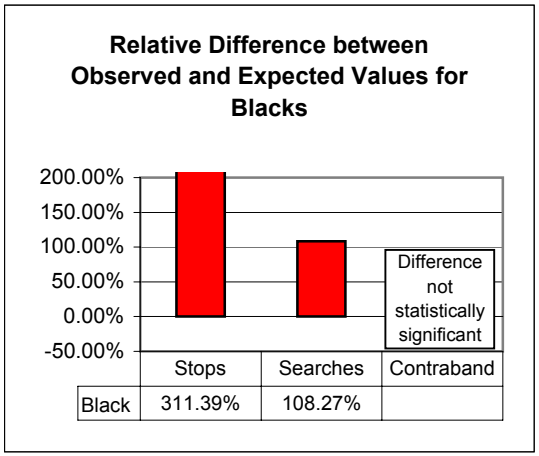
All differences statistically significant (P. < .05) unless otherwise marked.

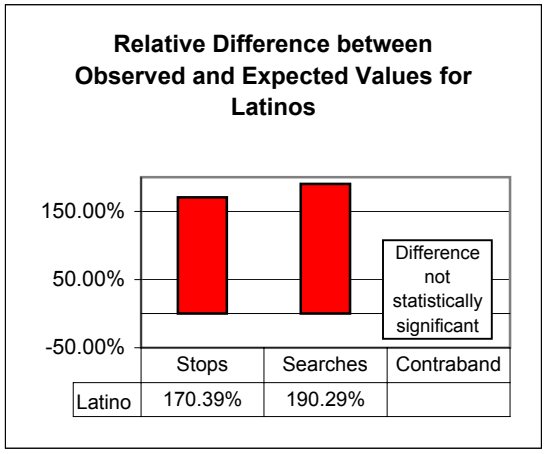
Suburbs' Observed and Expected Values







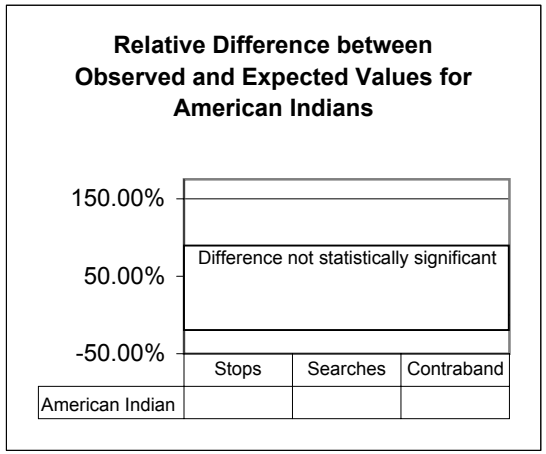


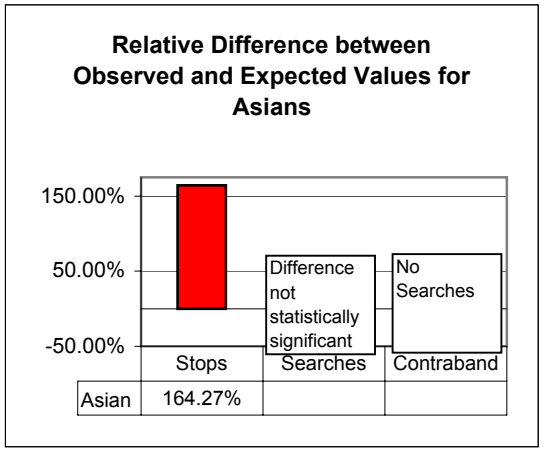


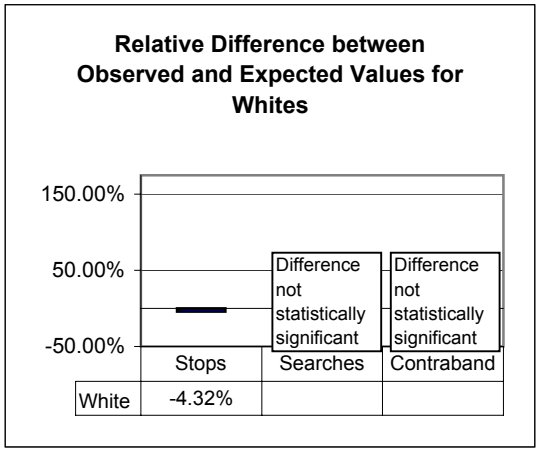
Note: Searches and Contraband Found rates are for discretionary searches.
Stop, search and contraband found rates are based on data accumulated from suburban jurisdictions.
Suburbs are municipalities in metropolitan areas that are not census defined central cities.
Suburbs include are: Fridley, New Hope, Plymouth, Sauk Rapids and Savage.

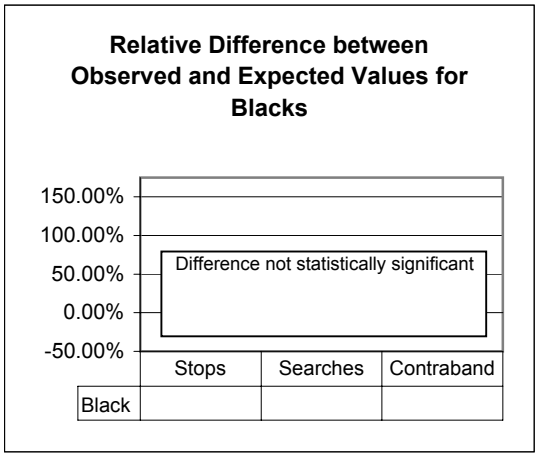
All differences statistically significant (P. < .05) unless otherwise marked.

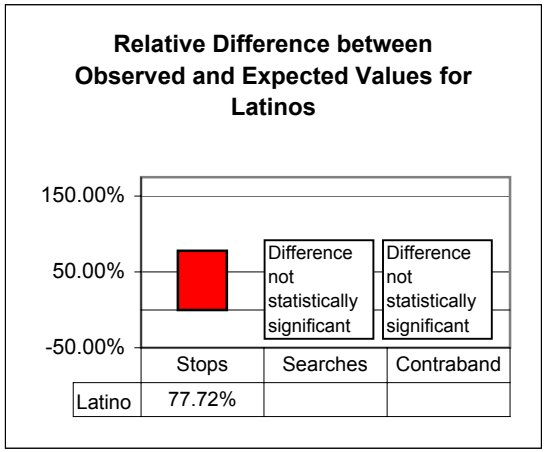
Towns' Observed and Expected Values











Note: Searches and Contraband Found rates are for discretionary searches.
Stop, search and contraband found rates are based on data accumulated from town jurisdictions.
Towns are municipalities outside of census urban areas.
Towns include: Akelely, Cass Lake, Eagle Lake, Fairfax, Gibbon, Henning, Minneota, Springfield, Truman, Walker, Winnebago and Winthrop

All differences statistically significant (P. < .05) unless otherwise marked.

INTRODUCTION

During the 2001 legislative session, the Minnesota legislature enacted Minnesota Statute § 626.951, providing for a racial profiling study. Pursuant to this statute, law enforcement agencies throughout the state were given the option of participating in the study and those that did participate were at least partially compensated for the cost of participation, and received additional state money for the purchase and installation of video cameras in their police vehicles. In return, these jurisdictions agreed to collect traffic stop data from January 1, 2002 through December 31, 2002, and these data were submitted to the Department of Public Safety (DPS).

The statute also directed the commissioners of administration and public safety to retain an independent organization to oversee the collection of data, to audit the data for accuracy, and to analyze the data for evidence of racial profiling. Pursuant to this provision, the commissioners of administration and public safety issued a request for proposals from qualified independent organizations. The Council on Crime and Justice and the Institute on Race and Poverty submitted a joint proposal and were awarded the contract to analyze the data.

The statute specifies data elements to be recorded for each traffic stop.[1] As listed on the forms that officers filled out, they include:

- The location of the stop
- The date and time of the stop
- The age of the driver (recorded as year of birth)
- The gender of the driver
- The race/ethnicity of the driver[2]
- The traffic violation or reason leading to the stop
- The disposition of the stop – arrest, citation, warning, or no action
- Whether a search was conducted of the driver, passengers, or vehicle
- If a search was conducted, the authority for the search
- If a search was conducted, whether any contraband was discovered, and if so, the nature of the contraband
- Whether the officer knew the race/ethnicity of the driver prior to the stop

[1] Departments were instructed to have officers fill out a form for each traffic stop. They were also informed that 911 calls are not considered a traffic stop for the purpose of this study, as they are not officer-initiated.

[2] Officers were instructed to fill this out based on their perception of the driver's race/ethnicity. This is an accepted practice in the context of research as it is an officer's perception of a driver's race/ethnicity, and not the driver's actual race/ethnicity that would influence the officer's decision-making process. More information on methods of data collection can be found in Appendix 1.

- The officer's law enforcement agency

Sixty-five jurisdictions chose to participate, comprising 31 city police departments, 33 county sheriff's departments, and the Leech Lake Indian Reservation.[3] The city police departments included:

Akeley	Henning	Savage
Bemidji	International Falls	Springfield
Cass Lake	Little Falls	St. Cloud
Cloquet	Minneapolis	Truman
Crosby	Minneota	Walker
Eagle Lake	Moorhead	Willmar
Fairfax	New Hope	Winnebago
Faribault	Plymouth	Winthrop
Fridley	Red Wing	Worthington
Gibbon	Rochester	
Granite Falls	Sauk Rapids	

The county sheriff's departments included:

Anoka County	Kandiyohi County	Redwood County
Becker County	Kittson County	Scott County
Beltrami County	Lac qui Parle County	Sherburne County
Cass County	Lake County	Sibley County
Cook County	Mahnomen County	Stevens County
Dakota County	Marshall County	Swift County
Dodge County	Norman County	Todd County
Goodhue County	Olmsted County	Wadena County
Grant County	Pope County	Waseca County
Houston County	Ramsey County	Wilkin County
Jackson County	Red Lake County	Yellow Medicine County

All the jurisdictions are commended for their willingness to participate in this important study. But for their participation, there would have been no study.

[3] The sheriff's departments from Mower and Washington Counties initially chose to participate in the study but dropped out during the data collection period.

DATA AUDITING

An ideal auditing process would ensure that the data collection process provided a complete and accurate record of all traffic stops in each jurisdiction during the data collection period. Given limitations in resources and in the structure of the study, we were able to evaluate the accuracy of certain portions of the data collection process but not all. For those jurisdictions submitting paper forms to DPS, and most jurisdictions submitting data to DPS via web-interface, we were able to evaluate the extent to which data recorded on submitted forms was accurately and thoroughly recorded in the database. For those jurisdictions that did not use paper forms, this type of auditing was neither possible, due to the lack of paper forms, nor necessary, because there was no transfer of information from forms to database. In none of the jurisdictions were we able to evaluate whether the data submitted by jurisdictions was an accurate reflection of law enforcement activity in that jurisdiction. The specific methodology used to audit data can be found in Appendix 2.

The limitations of our auditing process are as follows (see Appendix 2 for a more detailed discussion):

- We were not able to evaluate whether officers filled out forms every time they made a traffic stop.
- We were not able to evaluate whether the information provided on the forms accurately reflected the details of the stop.
- We were not able to evaluate whether forms submitted by jurisdictions, and whether data provided by jurisdictions using electronic forms, accurately reflected the data recorded by their officers.

DEFINITION OF RACIAL PROFILING

Data collected by jurisdictions were analyzed for evidence of racial profiling, defined by the Minnesota legislature as follows:

> [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.[4]

Although there is no universally accepted definition of racial profiling, this definition is consistent with those used by other jurisdictions and researchers.[5] In essence, the term "racial profiling" has come to refer to the influence of racial bias in the law enforcement process.[6]

Our analysis focuses on evidence of racial bias in two primary and related areas of law enforcement: the decision to stop drivers and the decision to search drivers and/or their vehicles once stopped. In order to better understand these dynamics, we have also looked into the reason given for stops, the disposition of stops, the authority reported for searches, and the rate at which contraband is discovered as a result of these searches. The foundation of our analysis is an evaluation of whether drivers of some racial groups are stopped more frequently than others, and once stopped, whether drivers of some groups are subject to search(es) more than others. To the extent that we are able, we use information collected in this study,[7] as well as relevant outside research, to help understand patterns that emerge from the analysis. In addition, the limitations of our research are noted in the analysis. For a more detailed analysis of law enforcement patterns, we were able to map traffic stop data within ten jurisdictions -- five police departments and five sheriff's departments (limited resources prevented us from mapping data for all

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[4] MN ST § 626.8471(2).

[5] See, e.g., Deborah Ramirez, Jack McDevitt, and Amy Ferrell, "A Resource Guide on Racial Profiling Data Collection Systems: Promising Practices and Lessons Learned" (U.S. Dept. of Justice/Northeastern University: Nov. 2000) at p.3 [hereinafter "Ramirez Report"] ("For this guide, racial profiling is defined as any police-initiated action that relies on the race, ethnicity, or national origin rather than the behavior of an individual or information that leads the police to a particular individual who has been identified as being, or having been, engaged in criminal activity.").

[6] For this reason, the National Organization of Black Law Enforcement Executives (NOBLE) suggests that "bias-based policing" is a more accurate term for the scope of activities commonly referred to as racial profiling. NOBLE defines bias-based policing as "The act (intentional or unintentional) of applying or incorporating personal, societal, or organizational biases and/or stereotypes as the basis, or factors considered, in decision-making, police actions, or the administration of justice." Joyce McMahon, Joel Garner, Ronald Davis, and Amanda Kraus, "How to Correctly Collect and Analyze Racial Profiling Data: Your Reputation Depends on It, Final Report for: Racial Profiling-Data Collection and Analysis." (Washington, DC: Government Printing Office, 2002)(Commissioned by U.S. Dept. of Justice, Office of Community Oriented Policing) at p.135 [hereinafter "McMahon Report"]. For similar reasons, the Police Executive Research Forum (PERF), a national membership organization of progressive police executives, recommends using the term "racially biased policing." Lorie Fridell et. al., "Racially Biased Policing: A Principled Response" (Police Executive Research Forum, Washington DC, 2001) at p.5 [hereinafter "PERF Report"]..

[7] In addition to the information provided on forms, each participating jurisdiction was sent a questionnaire designed to elucidate possible explanations for racial patterns that might emerge in the data that they collected. Relevant responses are integrated into the analysis and the full text of the questionnaire can be found in Appendix 3.

participating jurisdictions.[8] Those jurisdictions whose data were mapped are: Dakota County, Goodhue County, Kandiyohi, Moorhead, Minneapolis, Plymouth, Ramsey County, Rochester, Saint Cloud, and Scott County. The maps can be found in their individual reports.

[8] Information on criteria used to select jurisdictions for mapping can be found in Appendix 4.

ANALYSIS OF TRAFFIC STOP DATA

The first step in analyzing traffic stop data involves evaluating whether some racial/ethnic groups are stopped at higher rates than others.[9] In each jurisdiction's report, we did this by calculating the absolute and relative differences between the number of actual stops and number of expected stops for each racial/ethnic group. The number of expected stops for a racial/ethnic group is the number of stops one would expect given the total number of stops in a jurisdiction and the proportion of the jurisdiction's driving population represented by that group. For example, if 10% of a jurisdiction's driving population is Latino and a total of 100 police stops occurred, then the expected number of Latino stops would be 10 (i.e. 10% of all driver's stopped). Absolute differences are the difference between the actual number of stops and the number of expected stops for a group. Absolute differences are likely to be greater in areas that have more overall stops. A relative difference is the extent to which the difference between the observed and expected stops differs from the norm (i.e. the number of expected stops) expressed as a ratio. A positive relative difference (e.g. .25, which we convert to a percentage, 25%) means that the number of observed stops exceeded the number of expected stops and the percentage gets larger as the difference increases. A negative relative difference means that the number of observed stops was less than the number of expected stops and the percentage becomes increasingly negative as the difference grows.[10] Relative differences tend to be greater in areas with fewer stops and/or a smaller population of a given racial/ethnic group.

Estimating the Driving Population

In order to calculate an expected stop rate for each racial group, we first had to estimate the driving population, sometimes referred to as the baseline population, in each jurisdiction. To approximate driving populations we primarily used 2000 U.S. Census population counts by race/ethnicity for persons of ages 16 to 85 in each jurisdiction.[11] We selected this age range because it includes age groups with high per capita daily mileage rates and/or a high proportion of group members that drive automobiles.[12]

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[9] There is no universally accepted language for referring to specific racial/ethnic groups and the two data sets that we rely on, traffic stop data and census data, use different terms. For purposes of this study, we have referred to the five main racial/ethnic groups as American Indian, Asian, Black, Latino, and White and have used the phrase "people of color" to refer to the first four groups collectively. It is our intent to use the most commonly accepted and understood terms and acknowledge that some members of these groups prefer to describe themselves with other language.

[10] Relative difference = ((observed – expected) / expected) x 100

[11] A portion of the driving age population is classified by the Census as "institutionalized." In those jurisdictions where the institutionalized population is large enough to affect our analysis, we have excluded it from our estimate of the driving age population. Examples of those who are institutionalized include people who are incarcerated, people in nursing homes, and people who are hospitalized.

[12] The National Household Travel Study and overall census population data were used to make this determination. For individual jurisdictional reports, we also used household vehicle availability rates as an alternative estimate of the driving population. This estimate generally produced greater racial/ethnic disparities in stop rates because populations of color tend to live in households with no available vehicle more often than do Whites.

There are limitations to this estimate that should be noted. One is that it represents the driving age population rather than the driving population. Thus, for example, it includes people who are old enough to drive but do not have access to an automobile. Another is that it represents the driving age population that resides in a given jurisdiction whereas the actual driving population in a jurisdiction, and consequently the population of people stopped in a jurisdiction, includes people that do not reside in that jurisdiction.[13] The ideal comparison group would be of drivers in a jurisdiction eligible to be stopped (i.e. the population of people violating traffic laws). It is not clear, however, that the driving population and the violator population are substantially different. As one report observed:

> Since many traffic enforcement and vehicle code laws apply to all cars on the road, and since more vehicles are being operated in violation of the local traffic laws than police have the resources to stop them, officers have a wide discretion in selecting which cars to stop. Many traffic officers say that by following any vehicle for 1 or 2 minutes, they can observe a basis on which to stop it.[14]

Similarly, a study that sought to determine the racial demographics of highway drivers eligible to be stopped found that 98% of the driving population exceeded the speed limit by at least 6 miles per hour.[15] While it is true that all drivers are at risk of being pulled over, it should also be noted that some drivers have an elevated risk due to the frequency with which they violate traffic and related laws, and the seriousness of those violations. We do not know whether there is a correlation between the race/ethnicity of drivers and this elevated risk of being stopped.

Differences between Stop Rates

There were 194,189 total stops recorded by the sixty-five participating jurisdictions in 2002. Of these, 3,096 stops were of American Indians, 5,189 stops were of Asians, 27,613 stops were of Blacks, 11,871 stops were of Latinos, and 146,420 stops were of Whites.

When stop rates are computed using our population estimates for each racial/ethnic group, all populations of color, except Asians, were stopped at a higher rate than Whites.[16] Blacks were stopped at the highest rate, over 3.5 times higher than Whites (30.10% to 8.31%). Latinos were stopped at the next highest rate (18.71%), followed by American Indians (9.15%) and Asians

[13] In it's response to the questionnaire that was sent to the Akeley Police Department, the department indicated that "Beginning around Memorial Day and ending around Labor Day the City sees an increase in tourist and seasonal resident traffic with slight increases during the hunting and fishing opener weekends, and other local festivals." This suggests that during these time periods there is an increase in the number of drivers in Akeley that do not reside in Akeley. Whether the racial demographics of the tourist population in Akeley are significantly different from the racial demographics of the resident population is unclear.

[14] Ramirez Report at p.9

[15] Government Accounting Office, Report to the Honorable James E. Clyburn, Chairman Congressional Black Caucus, "Racial Profiling: Limited Data Available on Motorist Stops" (March 2000) at p.11 [hereinafter "GAO Report"].

[16] It should be noted that law enforcement officers have expressed frustration over being accused of biased policing in situations where they make a traffic stop with no prior knowledge of the race/ethnicity of the driver stopped. Further discussion of this dynamic and study findings can be found in Appendix 6.

(7.0%) As can be seen from the relative difference analysis that follows, this disparity in stop rates varies among participating jurisdictions and jurisdictional types but the overall pattern of disparity remains the same and drivers of color, except Asians, are stopped at a higher rate than Whites.

Differences between Actual and Expected Stops[17]

The following table provides information on the relative difference between expected and actual traffic stops by race for each jurisdiction and indicates whether any disparities are statistically significant. In those cases where the relative difference between actual and expected stops could not be calculated and/or the difference between actual and expected stops was not statistically significant, "n/a" is recorded in place of the relative difference.

[17] The racial categories used by the census differ from the racial categories listed on the traffic stop forms. In order to directly compare the two data sets it was necessary to "bridge" them. For a discussion of our methodology for doing so, see Appendix 5.

Relative Difference between Stops and Expected Stops by Race and Jurisdiction

Name of Jurisdiction	Driving Age Population	Total Stops	American Indian	Asian	Black	Latino	White
Akeley	305	460	57.47%	n/a	n/a	n/a	-3.01%
Anoka County	218,941	8,550	-62.80%	-46.30%	-6.68%	-6.42%	1.60%
Becker County	22,369	2,163	12.96%	-12.10%	n/a	54.64%	-1.79%
Beltrami County	28,978	1,646	-25.10%	-1.28%	n/a	-2.79%	3.70%
Bemidji	9,288	2,686	23.84%	-59.87%	79.70%	-36.16%	-1.87%
Cass County	20,753	662	53.26%	n/a	n/a	n/a	-5.80%
Cass Lake	565	145	-13.02%	n/a	n/a	n/a	18.23%
Cloquet	8,419	467	19.26%	n/a	n/a	n/a	-5.03%
Cook County	4,121	1,114	-35.37%	n/a	n/a	n/a	1.13%
Crosby	1,678	295	n/a	n/a	n/a	n/a	-2.02%
Dakota County	259,554	10,951	1.70%	-26.48%	15.51%	34.19%	-0.42%
Dodge County	12,718	2,258	-100.00%	236.83%	n/a	172.72%	-7.59%
Eagle Lake	1,272	623	n/a	n/a	n/a	131.40%	-2.95%
Fairfax	922	242	n/a	n/a	n/a	41.94%	-9.71%
Faribault	15,528	4,168	-50.50%	-8.80%	197.20%	62.20%	-6.60%
Fridley	21,539	3,706	-41.00%	75.15%	290.84%	94.63%	-13.56%
Gibbon	597	238	n/a	n/a	n/a	440.27%	-15.44%
Goodhue County	32,904	3,499	-24.73%	336.50%	353.70%	270.10%	-5.60%
Granite Falls	2,287	430	-21.57%	n/a	n/a	175.07%	-3.64%
Grant County	4,743	880	n/a	n/a	n/a	n/a	-1.30%
Henning	551	162	n/a	n/a	n/a	n/a	
Houston County	14,517	1,743	n/a	27.21%	n/a	14.09%	-1.18%
International Falls	5,109	690	30.94%	n/a	n/a	n/a	-3.53%
Jackson County	8,518	304	n/a	n/a	n/a	n/a	-2.73%
Kandiyohi County	30,737	2,134	22.03%	-17.26%	74.56%	-8.03%	0.14%
Kittson County	3,888	202	n/a	n/a	n/a	n/a	n/a
Lac qui Parle County	5,998	293	n/a	n/a	n/a	n/a	n/a
Lake County	8,615	1,240	27.64%	n/a	n/a	82.82%	-1.63%
Leech Lake Reservation	7,234	872	-18.82%	n/a	n/a	25.23%	9.58%
Little Falls	5,668	725	100.00%	n/a	n/a	n/a	-1.90%
Mahnomen County	3,734	579	-1.54%	n/a	n/a	n/a	-1.58%
Marshall County	7,700	259	n/a	n/a	n/a	112.37%	-4.04%
Minneapolis	298,394	53,555	-33.31%	-39.33%	151.59%	62.54%	-35.94%
Minneota	1,057	159	n/a	n/a	n/a	n/a	n/a
Moorhead	25,017	8,111	-14.13%	3.60%	266.00%	66.34%	-4.41%
New Hope	15,912	4,586	-25.35%	14.52%	216.27%	76.88%	-15.65%
Norman County	5,525	338	66.62%	n/a	n/a	184.26%	-6.58%
Olmsted County	92,355	4,001	-86.69%	-65.13%	2.46%	25.03%	2.74%
Plymouth	49,598	12,216	-5.38%	-3.51%	235.27%	252.18%	-10.26%
Pope County	8,444	827	n/a	n/a	n/a	n/a	-2.10%
Ramsey County	384,626	4,936	-53.52%	-47.22%	-5.58%	-36.77%	7.31%
Red Lake County	3,244	802	68.10%	n/a	n/a	n/a	-3.40%
Red Wing	12,255	3,021	-0.32%	187.27%	257.40%	168.18%	-5.97%
Redwood County	12,357	453	133.83%	n/a	n/a	n/a	-9.30%
Rochester	64,271	14,346	-62.29%	-18.35%	198.26%	76.08%	-8.26%
Sauk Rapids	7,415	672	n/a	59.90%	n/a	83.91%	-4.05%
Savage	14,094	2,003	-7.75%	25.61%	243.47%	232.28%	-8.82%
Scott County	63,409	2,536	-28.58%	-19.85%	146.20%	21.52%	-0.97%
Sherburne County	45,927	3,714	-17.08%	12.09%	156.69%	43.90%	-0.95%
Sibley County	11,228	643	n/a	n/a	n/a	163.78%	-9.12%
Springfield	1,559	607	n/a	n/a	n/a	98.40%	-3.80%
St. Cloud	47,478	8,849	-42.08%	-1.40%	292.56%	43.98%	-5.36%
Stevens County	7,914	1,047	-7.65%	10.86%	7.77%	91.79%	-0.93%
Swift County	9,188	981	n/a	-3.25%	n/a	97.19%	-2.60%
Todd County	18,150	1,036	n/a	n/a	n/a	n/a	-0.53%
Truman	902	446	n/a	n/a	n/a	n/a	n/a
Wadena County	10,139	140	n/a	n/a	n/a	n/a	n/a
Walker	801	338	87.35%	n/a	n/a	n/a	-10.61%
Waseca County	14,676	890	n/a	n/a	n/a	30.89%	-2.90%
Wilkin County	5,223	889	246.95%	n/a	n/a	73.38%	-5.36%
Willmar	13,500	3,372	-22.50%	-20.83%	94.11%	63.38%	-9.86%
Winnebago	1,129	302	n/a	n/a	n/a	42.42%	-3.79%
Winthrop	1,004	411	n/a	n/a	n/a	59.53%	-5.23%
Worthington	8,339	2,712	-53.73%	7.20%	47.98%	92.89%	-21.91%
Yellow Medicine County	8,228	864	33.13%	n/a	n/a	124.60%	-4.26%

(n/a) no expected stops

Where difference is statisitically signficant and : greater, difference is in red; lower, difference is in blue. Where difference is not statistically signficant difference is in black. (P > .05)

As can be seen in the above table, Whites are stopped less than expected in all but eight of the participating jurisdictions (all but eight jurisdictions have negative relative differences). For Blacks and Latinos, a large number of jurisdictions have a stop rate that is higher than the expected rate (most have positive relative differences.)

In order to understand traffic stop patterns that cross jurisdiction, we analyzed the data for all jurisdictions and for specific types of jurisdictions. As can be seen in the following table, officers stopped Blacks and Latinos at much greater than average rates (for all jurisdictions, relative differences between actual and expected stops are 213.84% and 95.03%, respectively). Officers stopped Asians, American Indians,[18] and Whites at lower than average rates (relative differences are –27.02%, -4.60%, and –13.33% respectively). While the magnitude of relative differences varies across jurisdictional types, the pattern is fairly consistent.[19]

Relative Differences between Actual and Expected Stops by Race/Ethnicity and Jurisdictional Type

	American Indian	Asian	Black	Latino	White
All Jurisdictions	-4.60%	-27.02%	213.84%	95.03%	-13.33%
Metro Counties	-47.12%	-56.30%	-27.85%	-14.73%	4.66%
Rural Counties	-7.45%	71.78%	182.02%	63.83%	-2.03%
Minneapolis	-33.31%	-39.33%	151.59%	62.54%	-35.94%
Central Cities[20]	-19.04%	-16.16%	239.18%	87.42%	-6.67%
Suburbs	-18.40%	14.86%	311.39%	170.39%	-12.12%
Small Cities	-5.99%	35.38%	186.53%	77.72%	-4.32%
Towns	8.94%	164.27%	1069.15%	77.72%	-4.32%

Analysis of the Stated Reason for Stops

Allegations of racial profiling often state that institutional and/or officer bias cause drivers of color to be subjected to pretextual stops. In other words, as a result of officers conduct and/or departmental practices that improperly assume that a person's race/ethnicity is relevant to the likelihood that they are engaged in crime, people of color are subjected to a disproportionate number of stops for minor, often unenforced, violations of traffic law as a pretext for

[18] Although American Indians stop rate was higher than Whites, their stop rate was still less than the average stop rate and thus the relative difference is negative.

[19] The sole exception exists in metropolitan county sheriff's departments. However, overall figures for these jurisdictions are somewhat misleading. When we mapped traffic stop patterns in these jurisdictions we found that most traffic stops occurred in less populated areas that were more dependent on sheriff's departments for law enforcement. These less populated areas also tended to have relatively small populations of color. As a result, using the overall driving population of these counties to estimate expected stops tends to overestimate the number of expected stops for drivers of color in areas patrolled by the sheriff's department and underestimate the number of expected stops for Whites. Our maps indicate that in many of the sub-areas of these counties drivers of color were actually over-stopped.

[20] Traffic stop data from Minneapolis was separated from that of the other central cities because of the much larger number of stops recorded in Minneapolis during 2002.

investigating whether the driver is engaged in criminal activity.[21] Evidence of this practice exists where drivers of color are disproportionately stopped for "high discretion" traffic violations, such as minor vehicle code violations (e.g. underinflated tires) and minor driving violations (e.g. failure to properly signal a lane change), which an officer may or may not enforce according to his or her choice. In contrast to these are "low discretion" stops where officers exercise little choice over whether to make a stop. These would include stops based upon significant violations of driving laws (such as excessive speeding or reckless driving) and stops where an officer is responding to an externally generated report of a crime. [22]

For each traffic stop, officers recorded the "Reason for Stop" by choosing one of five available options: Dispatched, Driving Violation, Equipment Violation, Registration Violation, and Other. On any form on which the officer checked "Other" as the reason for the stop, the officer was directed to record the specific reason for that stop. Unfortunately, the provided reasons for stop do not neatly fall into the low and high discretion ranges. Specifically, the "driving violation" category includes both minor and major traffic violations. Nevertheless, one purpose of this calculation was to address concerns that drivers of color might be more likely than White drivers to be stopped for equipment violations, which are typically high discretion stops. Another purpose was to address concerns that drivers of color might be more likely than White drivers to be stopped for subjective reasons that would be categorized as "Other."[23] If drivers of a particular race/ethnicity are subject to stops for subjective and/or minor reasons at a higher than average rate, it suggests that drivers of that race/ethnicity are more likely to be subject to pretextual stops.

For each jurisdiction we compared the racial demographics of the stopped population to the racial demographics of those stopped for a particular reason to determine if there were differences among the recorded reasons for members of different racial/ethnic groups. As seen in the table below, on average, the reason for stop did not differ dramatically by race. However, there are some differences worth noting. For example, the driving violation rate for American Indians is 10 percent lower than for Whites. The "other" rate for American Indians is over 10 percent higher than the rate for Whites. For Asians and Latinos, the "other" rate is nearly twice what it is for Whites. Dispatch rates are highest for Blacks.

[21] "By far the most common complaint by members of communities of color is that they are being stopped for petty traffic violations such as underinflated tires, failure to signal properly before switching lanes, vehicle equipment failures, speeding less than 10 miles above the speed limit, or having an illegible license plate." Ramirez Report at p. 6.

[22] Id. at p. 9. It is important to bear in mind that officer discretion over making different types of stops will vary to some extent by the specific policies and priorities of a given jurisdiction.

[23] The "other" category also includes low discretion reasons for stopping a driver. In particular, this category would include stops where the driver or owner of the vehicle has an arrest warrant. For those jurisdictions that submitted data electronically, we were able to analyze the percentage of stops that were recorded as other and in which the officer entered "warrant" or an approximation of warrant as the specific reason for stop. These warrant stops constituted less than one percent of all stops in each of these jurisdictions.

Jurisdictional Averages of Reason for Stop by Race

Reason for Stop	Total Population	American Indian	Asian	Black	Latino	White
Dispatched	1.73%	2.13%	.66%	4.71%	1.82%	1.61%
Driving Violation	76.40%	67.56%	75.64%	75.86%	73.82%	77.29%
Equipment Violation	13.80%	16.30%	13.41%	11.16%	15.01%	13.43%
Registration Violation	4.29%	5.07%	4.30%	3.63%	3.47%	4.23%
Other	3.79%	8.94%	5.99%	4.64%	5.88%	3.43%

Appendices 7-11 include information on the frequency that each reason for stop is reported by jurisdiction. The extent to which a given reason for stop is used varies substantially from jurisdiction to jurisdiction. For example, "dispatched" was given as the reason for zero percent of stops in Minneota and 11.43 percent of stops in Wadena County. A driving violation was cited as the reason for stop just over half the time in St. Cloud (54.47%) but almost all the time in Lake County (96.37%). Equipment violations are not reported as the reason for any of the stops in Lac Qui Parle County and are reported as the reason for as much as 28.95 percent of stops in Winthrop. Similarly, registration violation was not once reported as the reason for stop in Wadena County but was the reason for 15.31% of stops in Saint Cloud. Finally, "other" was listed as the reason for stop in only .62 percent of stops in Henning but in 10.40 percent of stops in Kittson County. While these numbers do not necessarily speak to bias or the lack thereof, they do speak to the great variability among law enforcement policies and practices across jurisdictions. This variability leaves room for discretionary policies and practices that can either add to or detract from opportunities for bias.

Analysis of the Disposition of Stops

For each stop, officers were given four options for recording the disposition of the stop: Arrest, Citation, Warning, and No Action. For each jurisdiction, we broke down the stops by race/ethnicity and by the disposition of the stop to determine whether the rates of various dispositions of stops varied by the race/ethnicity of the driver.

Without additional information, we are limited in our ability to determine whether bias may have played a role in generating disparities in the disposition of stops. For example, lower citation/arrest rates for people of color could suggest that they are more likely to be subject to pretextual stops that do not warrant such action or it could mean that they are treated less harshly when stopped. On the other hand, higher citation/arrest rates could suggest that people of color are more often stopped for serious violations or they are treated more harshly when they are

stopped.[24] The information provided is useful in ascertaining whether there are differences in how people are treated once they are stopped but is inconclusive on its own.

As can be seen in the following table, officers arrested American Indian (14.14%) drivers at a much higher than the average rate (4.44%) and Latino (7.96%) and Black (7.81%) drivers at slightly higher than average rates. White (3.50%) and Asian (3.26%) drivers were arrested slightly less than average. Latinos (47.75%) also received citations at a slightly higher than the average rate (39.14%). All other groups received citations at a rate similar to average. Latinos (40.11%) and American Indians (41.90%) received warnings at a lower than the average rate (52.50%). Blacks (47.62%) and Asians (50.41%) received warnings at a rate slightly less than average (52.50%) and Whites (53.50%) as a rate slightly higher than average. Blacks (7.85%), Asians (4.54%), Latinos (4.18%), and American Indians (5.50%) had no action taken at a higher rate than the jurisdictional average (3.87%). Whites (3.70%) received no action at a slightly lower than average rate. Information on the disposition of stops for individual jurisdictions can be found in Appendices 12-15.

Jurisdictional Averages of Disposition of Stop by Race/Ethnicity

Reason for Stop	Total population	American Indian	Asian	Black	Latino	White
Arrested	4.44%	14.14%	3.26%	7.81%	7.96%	3.50%
Citation	39.14%	38.46%	41.79%	36.72%	47.75%	39.30%
Warning	52.50%	41.90%	50.41%	47.62%	40.11%	53.50%
No Action	3.87%	5.50%	4.54%	7.85%	4.18%	3.70%

[24] Where there is an arrest warrant for the driver the disposition of the stop will almost always be an arrest. As noted earlier, an existing warrant appears to be the reason for stops in less than one percent of all stops, however. There may also be stops where the warrant is discovered after the stop has already been made.

ANALYSIS OF SEARCH DATA

Data was recorded regarding three types of searches conducted during traffic stops: driver searches, passenger searches, and vehicle searches. Our analysis focuses on driver and vehicle searches. We did not include passenger searches in our analysis because the traffic stop forms did not require officers to provide information about the race/ethnicity or other characteristics of passengers subjected to searches. Without such information, it is very difficult to evaluate whether racial bias plays a role in the decision to search a passenger.[25]

As research on racial profiling has advanced, there has been an increased focus on search data. One reason for this is that a number of studies have revealed more substantial racial disparities in searches following traffic stops than in the stops themselves. Another reason is that research on search data is not subject to some of the same methodological challenges associated with research on traffic stops. In addition, the stopped population provides a clear comparison, or baseline, population for the searched population. Assuming that enforcement activity is accurately reported, the stopped population can be measured directly and there is no need to make estimates or further assumptions, as is the case with the driving population.

However, it is important to consider the driving population as an additional baseline for comparison to the searched population. Although resources have not allowed us to calculate comparisons to both the driving and stopped populations in our jurisdictional reports, the driving population is a useful baseline because it reveals the accumulation of disparities across stops and searches. When members of a particular racial/ethnic group are disproportionately stopped, they are disproportionately represented among the population of people eligible to be searched. If drivers of one group are disproportionately stopped, drivers of that group will also be disproportionately searched, even when search rates are equivalent across racial/ethnic groups. Where disparities exist in both stop and search rates for a particular racial/ethnic group, these disparities are compounded.[26]

Categorizing Searches as Discretionary and Non-discretionary

To understand the role that racial bias might play in the decision to search drivers, it is important to distinguish between searches that are discretionary and searches that are non-discretionary. Non-discretionary searches are those searches that an officer is required to conduct given the circumstances of the traffic stop. Discretionary searches are those searches that an officer decides to conduct, based on his or her own assessment of circumstances. When an officer is required to conduct a search, he or she is not making the decision to conduct a search and thus

[25] We did not include passenger searches when calculating search rates. As is discussed below, however, we did consider passenger searches when interpreting data on the authority for searches conducted.

[26] The Minnesota Supreme Court Racial Bias Task Force described the effect of racial bias at multiple stages of the criminal justice system as a "funnel effect" through which disparities in specific areas of the system compound one another. Minnesota Supreme Court Task Force on Racial Bias in the Judicial System, "Final Report" (May, 1993) at p.9.

the potential for bias is limited.[27] Note that an officer's exercise of discretion may also be influenced by departmental policies and protocol related to searches and thus where questions of bias arise individual officer decision-making and departmental factors that influence it should be examined.

On the traffic stop forms, officers were given five options for the authority to search: the driver gave verbal permission; the driver signed a consent to search form; the search was conducted to ensure the officer's safety; the search was conducted because the officer observed contraband; and the search was conducted incident to arrest. Each form allowed the officer to check only one authority for search even though up to three searches could be reported (driver, passenger, and vehicle).

Searches conducted pursuant to the verbal permission of the driver and searches conducted pursuant to the driver signing a consent to search form are known collectively as "consent searches." Consent searches are considered discretionary and some studies have shown that people of color are more likely to be subjected to consent searches than Whites.[28] The concern that officers may target drivers of color in initiating consent searches has led to restrictions on consent searches in several jurisdictions.[29]

The decision to search on the basis of "officer safety" is also considered discretionary. Such searches occur whenever officers tell drivers and/or passengers to exit their vehicle and/or to sit in the squad car. Officers exercise discretion when they tell drivers and passengers to exit their cars and doing so can serve as a pretext for searching the driver. The potential for such searches to be pretextual is illustrated in two Minnesota court cases. In one case, the court reversed a conviction for possession of a controlled substance discovered during a pat-down search of a driver stopped for a cracked windshield. The court found no reasonable basis for placing the driver in the back of the squad car (and the search that occurred incident to that) given the circumstances for which the driver was stopped.[30] In another case where an officer safety search was found to be pretextual, the court stated: "We are not to be understood as holding that the police have no right, for their own protection, to search a person before placing him in a squad

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[27] Note that it is possible for racial bias to affect the circumstances leading up to a non-discretionary search. For example, driver searches are required when a driver is arrested and vehicle searches are required when a vehicle is impounded. The decision to arrest and/or impound will be based to some extent on an officers assessment of a situation and it is possible for this assessment to be influenced by racial bias.

[28] Ramirez Report at p.8. See also McMahon Report at p. 92. The law on consent searches following traffic stops in Minnesota has changed since the conclusion of the data collection period. On May 20, 2003, the Minnesota Court of Appeals restricted the exercise of officers' discretion in requesting consent to search. The court ruled that an officer conducting a traffic stop may not expand the scope of the traffic stop by questioning the driver about possible contraband or requesting the driver's consent to a search, unless the officer has a reasonable, articulable suspicion that the driver is engaged in criminal activity. *State v. Syhavong*, 661 N.W.2d 278 (Minn. App. 2003).

[29] Both the Saint Paul Police and the New Jersey State Police are prohibited from conducting consent searches during traffic stops unless they obtain written consent after providing the driver with a form advising the driver of his or her right to refuse consent. Curt Brown, *St. Paul City Council Adopts Anti-Racial-Profiling Accord*, Minneapolis Star Tribune, July 12, 2001; Joint Application for Entry of Consent Decree, *United States v. State of New Jersey*, December 30, 1999. The California Highway Patrol, pursuant to a consent decree arising from a racial profiling lawsuit, is banned for the next three years from conducting any consent searches during traffic stops. CNN, *Highway Patrol to Ban Some Searches in Racial-Profiling Settlement* (Feb. 28, 2003), http://www.cnn.com/2003/LAW/02/27/profiling.settlement.ap.

[30] *State v. Varnado*, 582 N.W.2d 886, 890-91 (Minn. 1998)

car *if there is a valid reason for requiring him to enter the vehicle and it is not merely an excuse for an otherwise improper search*."[31]

Searches prompted by the observation of contraband, which provides probable cause for a search, are considered non-discretionary. Searches incident to arrest are also generally considered non-discretionary as they are searches that an officer is required to conduct once the decision had been made to make an arrest. Under Minnesota law, a search "incident to arrest" is valid without an arrest as long as the officer had probable cause to arrest the driver for a custodial offense prior to conducting the search.[32]

All searches incident to arrest that resulted in arrest are considered non-discretionary for our analysis. We discovered, however, that in a number of instances officers reported "incident to arrest" in the authority to search section of the form, but did not report "arrest" as the disposition of the stop. Because it is the arrest that necessitates the search incident to arrest, where no arrest occurs one cannot simply assume that the search is non-discretionary. In order to better understand why a search would be reported as incident to arrest but arrest would not be reported as the disposition of the stop, we spoke with officials from two of the jurisdictions in which there were high percentages of searches incident to arrest with no arrest. From these conversations, we learned of several potential explanations for this pattern and were able to develop a methodology for categorizing searches incident to arrest with no arrest as discretionary and non-discretionary.[33]

Analysis of Search Rates

For purposes of comparing search rates, we have again used a relative difference analysis. Here, the relative difference is the degree to which the difference between observed and expected searches varies from the number of expected searches, expressed as a ratio. A positive relative difference means the observed number of searches exceeded the number of expected searches, with the percentage getting larger as the difference grows. A negative relative difference means that the number of observed searches was less than the number of expected searches, with the percentage becoming more negative as the difference grows.[34]

In the table below, we have calculated discretionary search rates for each racial/ethnic group for all jurisdictions combined and by jurisdiction type. For all jurisdictions combined, officers searched American Indians, Blacks, and Latinos more often than expected (relative differences are 62.95%, 56.44% and 40.35%, respectively). Officers searched Asians and Whites less often than expected (relative differences are -18.94% and -25.95% respectively). While differences also exist across jurisdictional types, the pattern still remains the same.

[31] *State v. Curtis*, 190 N.W.2d 631, 636 (Minn. 1971) (emphasis added).
[32] *State v. Bauman*, 586 N.W.2d 416 (Minn. App. 1998), *review denied* (Minn. Jan. 27, 1999).
[33] For a full discussion of this methodology, see Appendix 16.
[34] Relative difference = ((observed – expected) / expected) x 100

Relative Differences between Actual and Expected Searches for Discretionary Searches by Race/Ethnicity and Jurisdiction Type

	American Indian	Asian	Black	Latino	White
All Jurisdictions	93.39%	-15.08%	154.69%	72.79%	-36.53%
Metro Counties	131.70%	-32.84%	119.07%	173.18%	-7.54%
Rural Counties	125.55%	-54.36%	125.79%	71.96%	-8.83%
Minneapolis	31.44%	-17.06%	51.62%	14.84%	-49.15%
Central Cities	456.05%	-26.22%	67.80%	104.58%	-12.58%
Suburbs	134.48%	-14.82%	108.27%	190.29%	-24.31%
Small Cities	120.22%	-40.51%	21.82%	20.01%	-6.46%
Towns	47.70%	-100.00%	32.19%	51.95%	-3.97%

The following table shows the percent of stopped drivers subjected to discretionary searches only. Officers in participating jurisdictions subjected American Indians (9.57%), Blacks (12.61%), and Latinos (8.55%) to discretionary searches more than the average for the total stopped population (4.95%). Officers subjected Asians and Whites to discretionary searches at lower than average rates (1.76% and 3.72%, respectively). Notably in jurisdictions where relative differences are statistically significant, Blacks and Latinos are always searched more than expected and Whites are always searched less than expected.

Percent of Stopped Drivers Subjected to Discretionary Searches by Race and Jurisdiction

Name of Jurisdiction	Total Stops*	Total Discretionary Searches	Total Discretionary Search Rate	% American Indian	% Asian	% Black	% Latino	% White
Akeley	460	8	1.74%	5.26%	0.00%	0.00%	0.00%	1.62%
Anoka County	8,547	462	5.41%	7.14%	2.47%	9.90%	10.48%	5.31%
Becker County	2,162	48	2.22%	5.62%	0.00%	14.29%	6.25%	1.80%
Beltrami County	1,645	65	3.95%	9.22%	0.00%	4.00%	12.50%	3.16%
Bemidji	2,684	134	4.99%	8.39%	0.00%	0.00%	0.00%	4.66%
Cass County	662	59	8.91%	8.08%	0.00%	0.00%	0.00%	9.16%
Cass Lake	145	5	3.45%	1.35%	0.00%	n/a	0.00%	5.80%
Cloquet	467	61	13.06%	4.08%	12.50%	28.57%	0.00%	14.00%
Cook County	1,114	26	2.33%	3.57%	0.00%	0.00%	0.00%	2.33%
Crosby	294	18	6.12%	22.22%	0.00%	0.00%	n/a	5.67%
Dakota County	10,946	200	1.83%	8.93%	2.05%	4.83%	7.44%	1.50%
Dodge County	2,257	105	4.65%	n/a	0.00%	7.02%	9.80%	4.26%
Eagle Lake	622	23	3.70%	n/a	0.00%	0.00%	5.88%	3.75%
Fairfax	242	5	2.07%	0.00%	0.00%	16.67%	5.26%	1.46%
Faribault	4,168	91	2.18%	0.00%	2.99%	3.48%	7.82%	1.35%
Fridley	3,706	111	3.00%	0.00%	0.00%	7.18%	3.47%	2.57%
Gibbon	238	9	3.78%	50.00%	0.00%	0.00%	3.57%	3.09%
Goodhue County	3,494	160	4.58%	15.38%	2.50%	9.72%	9.73%	4.25%
Granite Falls	420	30	7.14%	18.75%	0.00%	0.00%	20.00%	6.35%
Grant County	880	19	2.16%	16.67%	0.00%	0.00%	12.50%	1.98%
Henning	161	3	1.86%	0.00%	n/a	0.00%	0.00%	1.90%
Houston County	1,743	90	5.16%	0.00%	0.00%	10.00%	10.00%	5.12%
International Falls	690	21	3.04%	3.85%	0.00%	5.88%	0.00%	2.97%
Jackson County	304	5	1.64%	n/a	0.00%	0.00%	12.50%	1.39%
Kandiyohi County	2,134	24	1.12%	0.00%	0.00%	0.00%	0.00%	1.21%
Kittson County	202	14	6.93%	n/a	0.00%	0.00%	0.00%	7.14%
Lac qui Parle County	293	7	2.39%	n/a	0.00%	n/a	0.00%	2.42%
Lake County	1,240	13	1.05%	0.00%	0.00%	0.00%	0.00%	1.08%
Leech Lake Reservation	871	44	5.05%	12.14%	0.00%	10.00%	25.00%	1.24%
Little Falls	725	44	6.07%	30.00%	0.00%	0.00%	12.50%	5.76%
Mahnomen County	577	41	7.11%	14.81%	0.00%	0.00%	16.67%	3.98%
Marshall County	257	23	8.95%	33.33%	0.00%	n/a	16.67%	8.33%
Minneapolis	53,555	5,143	9.60%	12.62%	7.96%	14.56%	11.03%	4.88%
Minneota	147	8	5.44%	0.00%	0.00%	0.00%	0.00%	5.88%
Moorhead	8,102	233	2.88%	13.82%	4.72%	7.05%	6.48%	2.30%
New Hope	4,571	148	3.24%	9.52%	3.91%	6.59%	9.87%	1.97%
Norman County	338	13	3.85%	9.09%	0.00%	100.00%	5.00%	3.31%
Olmsted County	4,001	83	2.07%	0.00%	0.00%	0.98%	4.72%	2.06%
Plymouth	12,209	581	4.76%	14.00%	4.55%	10.79%	14.36%	3.54%
Pope County	821	10	1.22%	0.00%	0.00%	0.00%	9.09%	1.13%
Ramsey County	4,934	95	1.93%	0.00%	2.66%	6.98%	7.46%	1.36%
Red Lake County	802	52	6.48%	5.26%	12.50%	40.00%	0.00%	6.31%
Red Wing	3,020	97	3.21%	3.33%	2.90%	7.77%	3.57%	3.03%
Redwood County	453	9	1.99%	3.45%	0.00%	25.00%	0.00%	1.78%
Rochester	14,346	131	0.91%	0.00%	0.31%	2.06%	1.92%	0.75%
Sauk Rapids	672	29	4.32%	0.00%	0.00%	8.70%	0.00%	4.30%
Savage	2,003	90	4.49%	12.50%	4.79%	5.88%	18.82%	3.61%
Scott County	2,534	83	3.28%	12.50%	0.00%	12.50%	8.57%	2.93%
Sherburne County	3,711	39	1.05%	0.00%	0.00%	2.70%	7.50%	0.97%
Sibley County	642	36	5.61%	0.00%	0.00%	18.18%	2.82%	5.77%
Springfield	607	18	2.97%	0.00%	0.00%	50.00%	11.76%	2.63%
St. Cloud	8,843	230	2.60%	5.88%	2.39%	4.30%	5.56%	2.42%
Stevens County	1,047	16	1.53%	0.00%	0.00%	16.67%	5.88%	1.30%
Swift County	979	10	1.02%	0.00%	0.00%	10.00%	0.00%	0.97%
Todd County	1,036	25	2.41%	0.00%	0.00%	0.00%	5.26%	2.39%
Truman	445	18	4.04%	0.00%	0.00%	0.00%	8.33%	3.95%
Wadena County	140	7	5.00%	50.00%	n/a	0.00%	n/a	4.44%
Walker	338	13	3.85%	6.67%	0.00%	0.00%	0.00%	3.32%
Waseca County	890	34	3.82%	n/a	0.00%	8.33%	11.11%	3.48%
Wilkin County	889	195	21.93%	5.56%	40.00%	25.00%	22.22%	22.09%
Willmar	3,372	96	2.85%	0.00%	0.00%	1.59%	4.00%	2.61%
Winnebago	282	4	1.42%	0.00%	0.00%	0.00%	0.00%	1.59%
Winthrop	411	10	2.43%	0.00%	0.00%	0.00%	3.13%	2.45%
Worthington	2,711	56	2.07%	0.00%	1.55%	2.86%	2.09%	2.09%
Yellow Medicine County	863	29	3.36%	0.00%	0.00%	0.00%	12.00%	3.26%

* Where searches could be determined

(n/a) no stops

Search rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Analysis of Hit Rates

When considering whether the decision to conduct discretionary searches is being influenced by racial bias, it is important to look at the rate at which contraband is discovered in these searches. This is known as the "hit rate." When the hit rate in discretionary searches is lower for one racial/ethnic group than another in a jurisdiction, it suggests that officers are subjecting members of that group to searches more often than is warranted by the likelihood that they are in possession of contraband.

Interpreting a situation where one group is searched more often than another and the hit rates in these searches are equivalent is less clear-cut. When hit rates in discretionary searches are equivalent across different groups, it can be argued that officers are assessing situations and exercising their predictive capabilities with equal effectiveness and fairness across these groups. When hit rates are high, officers are exercising their discretion effectively and the decision to conduct these searches is justified. When hit rates are low, however, hit rates may be less a reflection of an officer's properly exercised discretion and more a reflection of the fact that there is some likelihood that any search will produce contraband, even if the officer has no legitimate reason to believe that contraband may be present.[35] When there are racial/ethnic disparities in search rates and hit rates are similarly low for these racial/ethnic groups, one could argue that bias plays a role in the search rate disparities.

When members of certain racial/ethnic groups are disproportionately subjected to discretionary searches that do not produce contraband, questions are also raised about whether members of these groups are being subjected to pretextual stops. National concerns about racial profiling in traffic stops arose from evidence that in some cases officers were disproportionately stopping drivers of color for minor traffic violations so that they could investigate whether more serious illegal activity was taking place. Because of the investigative nature of these pretextual stops, they often led to drivers, passengers, and vehicles being searched improperly.[36] Concerns are raised when members of a particular group are stopped in disproportionately high numbers and subjected to a disproportionately high number of discretionary searches that do not produce contraband. These concerns are not only about the legitimacy of the officers' search decisions and the departmental policies and practices that might affect the search decision, but also about the legitimacy of the officers' stop decisions and the policies and practices that might affect that.

[35] Put another way, if people were randomly selected to be searched without any evaluation of the likelihood that they are carrying contraband, we would still expect some of those searches to produce contraband.

[36] *See, e.g.* David A. Harris, *Driving While Black: Racial Profiling on Our Nation's Highways*, p. 7 (1999)("The constitutionality of pretextual traffic stops – using a minor traffic infraction, real or alleged, as excuse to stop and search a vehicle and its passengers – reached the U.S. Supreme Court in 1996 in a case called Whren v. U.S."); The Sentencing Project, *Reducing Racial Disparity in the Criminal Justice System: A Manual for Practitioners and Policymakers*, p. 12 (2000)("On the highways, road patrol officers often stop people for apparent traffic violations, and use the occasion to search the vehicle for drugs. These "pretext" stops have become a matter of considerable concern in several states based on the belief that people of color are grossly over-represented among those stopped.)."

Hit Rates for Discretionary Searches by Race/Ethnicity

The following table shows the hit rates for discretionary searches in each jurisdiction. Where no searches occurred in a jurisdiction for a particular racial/ethnic population "n/a" is shown. In general, hit rates were higher for Whites than for any population of color and this is true for most of the participating jurisdictions. In the 37 jurisdictions where discretionary searches of both Blacks and Whites occurred, the hit rate was higher for Whites in 30 of the jurisdictions. In 44 jurisdictions, there were searches of both Whites and Latinos. The hit rate was higher for Whites in 31 of those 44 jurisdictions.

Discretionary Search Hit Rates by Race and Jurisdiction

Name of Jurisdiction	Total Discretionary Searches*	Contraband Found	Contraband Found (Hit) Rate	% American Indian	% Asian	% Black	% Latino	% White
Akeley	8	6	75.00%	0.00%	n/a	n/a	n/a	85.71%
Anoka County	460	132	28.70%	0.00%	50.00%	0.00%	30.00%	29.36%
Becker County	48	8	16.67%	10.00%	n/a	0.00%	100.00%	17.14%
Beltrami County	65	24	36.92%	52.63%	n/a	100.00%	0.00%	29.55%
Bemidji	133	16	12.03%	15.38%	n/a	n/a	n/a	11.21%
Cass County	59	2	3.39%	25.00%	n/a	n/a	n/a	0.00%
Cass Lake	5	0	0.00%	0.00%	n/a	n/a	n/a	0.00%
Cloquet	61	27	44.26%	100.00%	100.00%	50.00%	n/a	41.07%
Cook County	26	7	26.92%	0.00%	n/a	n/a	n/a	29.17%
Crosby	18	6	33.33%	0.00%	n/a	n/a	n/a	37.50%
Dakota County	200	37	18.50%	0.00%	20.00%	7.69%	7.41%	22.00%
Dodge County	105	42	40.00%	n/a	n/a	0.00%	6.67%	47.67%
Eagle Lake	23	15	65.22%	n/a	n/a	n/a	0.00%	68.18%
Fairfax	5	3	60.00%	n/a	n/a	0.00%	100.00%	66.67%
Faribault	91	26	28.57%	n/a	0.00%	0.00%	13.16%	44.68%
Fridley	109	10	9.17%	n/a	n/a	3.33%	0.00%	12.16%
Gibbon	9	2	22.22%	0.00%	n/a	n/a	0.00%	33.33%
Goodhue County	159	60	37.74%	0.00%	50.00%	42.86%	18.18%	39.71%
Granite Falls	30	11	36.67%	33.33%	n/a	n/a	33.33%	37.50%
Grant County	19	9	47.37%	100.00%	n/a	n/a	100.00%	41.18%
Henning	3	3	100.00%	n/a	n/a	n/a	n/a	100.00%
Houston County	90	33	36.67%	n/a	n/a	0.00%	100.00%	36.78%
International Falls	21	6	28.57%	0.00%	n/a	0.00%	n/a	31.58%
Jackson County	5	2	40.00%	n/a	n/a	n/a	0.00%	50.00%
Kandiyohi County	24	17	70.83%	n/a	n/a	n/a	n/a	70.83%
Kittson County	14	9	64.29%	n/a	n/a	n/a	n/a	64.29%
Lac qui Parle County	7	0	0.00%	n/a	n/a	n/a	n/a	0.00%
Lake County	13	3	23.08%	n/a	n/a	n/a	n/a	23.08%
Leech Lake Reservation	43	11	25.58%	27.27%	n/a	0.00%	0.00%	28.57%
Little Falls	44	19	43.18%	66.67%	n/a	n/a	100.00%	40.00%
Mahnomen County	40	5	12.50%	8.70%	n/a	n/a	0.00%	18.75%
Marshall County	23	9	39.13%	0.00%	n/a	n/a	50.00%	40.00%
Minneapolis	5,143	554	10.77%	12.62%	10.42%	10.99%	4.74%	13.34%
Minneota	8	4	50.00%	n/a	n/a	n/a	n/a	50.00%
Moorhead	232	47	20.26%	23.53%	16.67%	11.76%	28.57%	19.51%
New Hope	146	39	26.71%	100.00%	14.29%	20.83%	21.74%	32.84%
Norman County	13	3	23.08%	100.00%	n/a	0.00%	0.00%	20.00%
Olmsted County	83	23	27.71%	n/a	n/a	0.00%	20.00%	28.57%
Plymouth	580	66	11.38%	0.00%	5.00%	8.33%	5.13%	14.37%
Pope County	10	3	30.00%	n/a	n/a	n/a	0.00%	33.33%
Ramsey County	91	14	15.38%	n/a	0.00%	5.00%	20.00%	19.64%
Red Lake County	52	14	26.92%	0.00%	0.00%	0.00%	n/a	29.17%
Red Wing	97	40	41.24%	50.00%	100.00%	12.50%	0.00%	43.90%
Redwood County	9	1	11.11%	100.00%	n/a	0.00%	n/a	0.00%
Rochester	131	40	30.53%	n/a	0.00%	13.79%	38.46%	35.63%
Sauk Rapids	29	10	34.48%	n/a	n/a	0.00%	n/a	37.04%
Savage	90	16	17.78%	0.00%	28.57%	16.67%	12.50%	18.33%
Scott County	83	11	13.25%	0.00%	n/a	16.67%	16.67%	13.04%
Sherburne County	38	11	28.95%	n/a	n/a	100.00%	50.00%	25.71%
Sibley County	36	3	8.33%	n/a	n/a	0.00%	0.00%	9.38%
Springfield	18	9	50.00%	n/a	n/a	0.00%	100.00%	46.67%
St. Cloud	227	80	35.24%	50.00%	0.00%	37.50%	28.57%	36.36%
Stevens County	16	6	37.50%	n/a	n/a	50.00%	0.00%	38.46%
Swift County	10	7	70.00%	n/a	n/a	0.00%	n/a	77.78%
Todd County	25	8	32.00%	n/a	n/a	n/a	0.00%	33.33%
Truman	18	9	50.00%	n/a	n/a	n/a	0.00%	56.25%
Wadena County	7	1	14.29%	0.00%	n/a	n/a	n/a	16.67%
Walker	11	3	27.27%	0.00%	n/a	n/a	n/a	33.33%
Waseca County	34	3	8.82%	n/a	n/a	0.00%	0.00%	10.34%
Wilkin County	194	8	4.12%	100.00%	0.00%	0.00%	0.00%	3.87%
Willmar	96	19	19.79%	n/a	n/a	0.00%	11.11%	23.53%
Winnebago	4	2	50.00%	n/a	n/a	n/a	n/a	50.00%
Winthrop	10	3	30.00%	n/a	n/a	n/a	0.00%	33.33%
Worthington	56	15	26.79%	n/a	0.00%	0.00%	27.78%	30.30%
Yellow Medicine County	29	11	37.93%	n/a	n/a	n/a	33.33%	38.46%

* Where contrband found could be determined

(n/a) no searches

Hit rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Comparing hit rates to discretionary search rates for all stops in all jurisdictions (see Table below) shows that high discretionary search rates are not justified by high hit rates. American Indians, Blacks, and Latinos were all searched more often than Whites even though contraband was found in searches of Whites more often than in searches of members of these groups.

Search Rates and Hit Rates by Race/Ethnicity for Discretionary Searches

	Total Stopped Population	American Indian	Asian	Black	Latinos	Whites
Search Rates	4.95%	9.57%	4.20%	12.61%	8.55%	3.14%
Hit Rates	17.14%	19.66%	11.93%	11.17%	9.08%	23.53%

Analysis of Authority for Searches

As discussed earlier, when officers conducted searches they were to report the authority for the search(es). Officers were given five options from which to choose: driver gave verbal permission; consent to search form; contraband observed; incident to arrest, and officer safety. For each jurisdiction, we broke down searches by race/ethnicity and by the authority for the search to determine whether the authority for the searches varies by race/ethnicity.[37] Driver gave verbal permission and consent to search form are combined in the following table under "consent to search." Incident to arrest is broken down into discretionary and non-discretionary searches.

Jurisdictional Averages of Authority for All Searches by Race/Ethnicity

	All Jurisdictions	American Indian	Asian	Black	Latino	White
Consent to Search	30.07%	19.15%	15.40%	19.91%	25.38%	32.36%
Contraband Observed	8.48%	5.32%	6.81%	4.34%	3.83%	8.66%
Discretionary Incident to Arrest	5.11%	6.77%	10.78%	6.29%	16.74%	4.74%
Non-Discretionary Incident to Arrest	38.50%	56.71%	53.54%	40.86%	38.92%	36.85%
Officer Safety	17.84%	12.06%	13.47%	28.60%	15.13%	17.40%

As can be seen in the preceding table, searches of American Indians (19.15%), Asians (15.40%), Blacks (19.91%), and Latinos (25.38%) were reported as consent searches less often than searches in general (30.07%), and searches of Whites (32.36%). Searches of American Indians (5.32%), Asians (6.81%), Blacks (4.34%) and Latinos (3.83%) were less often reported as due to contraband being observed than the jurisdictional average for all populations in general (8.48%) and searches of Whites, in particular (8.66%). Asians were over twice as likely (10.78%) and Latinos over three times as likely (16.74%) to be searched incident to arrest in discretionary

[37] Information for individual jurisdictions on the authority for search by race/ethnicity can be found in Appendices 17-21.

searches than were Whites (4.74%). American Indians and Asians were considerably more likely to be searched incident to arrest in non-discretionary searches (56.71% and 53.54%, respectively) than were Whites (36.85%). Officer safety was reported as the authority for search for Blacks considerably more (28.60%) than for Whites (17.40%)

RECOMMENDATIONS

The following Recommendations flow from the basic finding of the study, which is: drivers of color are over-represented among those stopped; over-represented among those searched; and under-represented among those found to have contraband on their person or in their vehicle as a result of being searched. The finding applies to all regions of the state. While many factors may have contributed to this finding, the finding is indisputable. It is a situation that should command continued attention and action.

To better understand the issues raised in our report it is critical that public officials engage the community, particularly the communities of color, in constructive conversation so that the information presented in this report can be better understood and so that it can be augmented. This will lead to a fuller understanding of the extent to which racial profiling/bias is a factor in traffic stops made by law enforcement officers and in the searches that ensure from them. The Recommendations identify some important ways through which this can occur.

While the Recommendations focus on the jurisdictions that participated in the study, it should be acknowledged that there would have been no study without their participation. Their leadership, and honesty in reporting their data, is greatly appreciated. Finally, while we cannot conclude that the findings of this study are representative of those jurisdictions that did not participate, the consistency of the observed disparities across participating jurisdictions creates a strong likelihood that similar issues are also present in some, if not all, of the jurisdictions that did not participate. Thus, the non-participating departments and agencies should also review these Recommendations and respond accordingly.

1. Involve the community.

The data collected by law enforcement officers reveals a number of trends that warrant further investigation. In order to ensure that this investigation is effective, the general public needs to have sustained participation in the review of this study, in the fair and effective identification of problem areas, and in assuring that the appropriate public officials act in an expeditious manner consistent with the seriousness of the issues raised. This participation should occur at each level of government and involve the communities of color in particular.[38]

2. Involve local elected officials.

The local elected officials for each of the participating jurisdictions need to become knowledgeable about the study and its findings, engage the community and the chief law enforcement officer in assessing its relevance to departmental policy and practices, and assure that the appropriate action is taken to ensure fair treatment of motorists and to mitigate any unnecessary or inappropriate racial/ethnic disparity in traffic stops and searches.

[38] The importance of community involvement in addressing the possibility of biased law enforcement is stressed by a number of people and organizations experienced in this areas. *See, e.g.*, McMahon Report, pp. 2, 46, 65; National Organization of Black Law Enforcement (NOBLE), *Racial Profiling: "What Does the Data Mean?*; Ramirez Report, p. 43.

3. Hold community forums.

Each of the participating jurisdictions should hold at least one community forum at which the data and findings from the study are presented and discussed. Feedback should be sought in particular from the populations of color as to the significance of the findings relative to departmental policy and practice.

Other governmental bodies, educational institutions and community-based organizations should also sponsor community forums to increase public understanding of the issues surrounding traffic stops and searches. The Council on Crime and Justice and the Institute on Race and Poverty will jointly sponsor a public forum to present the study findings on Friday, September 26, 2003 from 4:00 – 6:00 p.m. at the University of Minnesota Law School.

4. Examine departmental policies and practices.

Our analysis has identified racial/ethnic disparities in stops and searches, but as discussed in the main body of the report, we are unable to determine the extent to which these disparities are caused by departmental policy and practice. In order to better achieve this understanding, the chief law enforcement officer from each of the participating departments should assure that the data and findings for their jurisdiction are examined and that any departmental policies and practices, whether formal or informal, that may have contributed to any existing disparity are identified and evaluated. This review should include an analysis of the unique jurisdictional circumstances relevant to a fair and thorough understanding of the data. Input should be sought from the officers who recorded data for the study and from the general public, particularly the communities of color, through public forum(s) and other appropriate means.

Two complementary measures would assist in developing an improved and continued understanding of traffic stop polices and practices. These are:

- *The continued collection and analysis of data regarding traffic stops and searches, including comparison of such data against the baseline established by this study; and*

- *The use of video camera equipment (obtained through participation in the study or otherwise) to record the behavior of the driver and officer in connection with each traffic stop and search. The use of video recording is not a substitute for data collection. If systematically used in conjunction with data, however, it is useful in verifying the accuracy of the data and in observing the roles that officer and driver conduct may play in generating outcomes.*

5. Examine the wide variances in practices relating to stops and searches.

The sixty-five participating departments should collectively examine the appropriateness of the wide variances among the jurisdictions with respect to the reasons recorded (i) for stopping motorists, (ii) for searching drivers once stopped and (iii) for disposing of the stops. In doing so, the departments should determine whether there is a need for more consistency among

departmental policies and/or more consistent implementation of existing policies. The departments should also identify any improvements that should be made in data collection, including the consistency with which data is recorded, for purposes of on-going data collection by the departments.

6. Provide state-level leadership and assistance.

Given that racial/ethnic disparities in traffic stops and searches occur in all geographic regions, state government should remain actively involved in seeking to identify and assess the factors that generate the disparities and to develop a richer understanding of issues of racial profiling in law enforcement jurisdictions. To be effective, such involvement could include:

- *Clarifying the law pertaining to stops and searches;*

- *Providing continuing incentives for law enforcement jurisdictions to video record all traffic stops and searches and to use them as a tool for understanding traffic stop and search dynamics.*

- *Assuring that the public has available, both at the state and local level, an adequate opportunity to raise concerns about law enforcement policy and practices relating to traffic stops and searches.*

7. Provide ongoing and improved statewide data collection.

In order to make a more definitive and nuanced assessment of the extent to which racial profiling/bias is present in traffic stops and searches in Minnesota, ongoing data collection is necessary. An improved and ongoing data collection system will address some of the limitations of our current analysis and will make it possible to evaluate the effectiveness of current and future efforts to address issues of profiling. To be effective, periodic individual reports will need to be generated for each law enforcement jurisdiction.

In designing on-going data collection, ample time should be allowed to incorporate the expertise of the participants in this study as well as input from a broad range of community members, advocates and elected officials. Additionally, the following improvements would create a data collection system that effectively analyzes issues of bias in stops and searches:

- *Make the data collection forms scannable in order to eliminate the potential for data entry error and save resources spent on data entry and on auditing of the data;*

- *Include residence of the stopped driver so that the data collected and the driving population baseline are more compatible;*

- *Create categories for "reason for stop" and "authority for search" that more clearly delineate high and low discretion decisions;*

- *Include information on whether an arrest warrant was involved;*

- *With respect to passengers, the data entry form should separately list the race/ethnicity of passenger(s) searched, the legal authority for searching a passenger and the disposition of the stop and search relative to passengers*

- *Allow the data entered for each stop to be correlated with the particular officer making the stop. The resulting analysis with this additional data will shed much greater light on the extent to which the conduct of individual officers, as contrasted with departmental policy or practice, may have contributed to any observed disparity.*[39]

- *Include an effective, independent auditing mechanism to insure the accuracy of data collected. Such a mechanism could include providing for the numerical coordination of the data entry forms with dispatch records or providing a copy of the completed traffic stop form to all stopped drivers so that they can verify the accuracy of its contents and creating an avenue for them to report inaccuracies.*

[39] The McMahon Report states the following about collecting officer identifying information:

> [it is] a valuable tool for both early warning systems and officer management and efficiency considerations. Administrators must also ensure that the individual officer information is treated as strictly 'confidential' and to the extent possible, afford the information the same protections as personnel files. … Identifying officer characteristics such as age, length of service, race, and gender may also provide valuable information. (McMahon p.94)

The Ramirez Report similarly states that this information:

> [E]nables organizations to identify potential problem officers …functions as an early warning system, alerting management to problems and allowing them to investigate possible extenuating circumstances and, if necessary, to intervene early with counseling, training, or some other intervention. … an alternative to officer identification may be the use of unit or district information." (Ramirez p.46)

Appendix 1: Methods of Data Collection

Participating jurisdictions were required to collect the data elements listed previously for all traffic stops occurring during 2002. The Department of Public Safety produced paper forms that included all of the required data elements for officers to fill out each time they made a traffic stop. They were given the choice of three methods for submitting the data. Under the first option, jurisdictions had their officers fill these forms out and the jurisdictions then sent the forms to DPS. DPS contracted with Intertech, a division of the Department of Administration that provides technology support services to state agencies, to record the contents of each form in an electronic database. Under the second option, jurisdictions used the paper forms and then entered the forms' contents directly into a database maintained by DPS via a web interface program. The final option allowed jurisdictions with the necessary technological capability to have officers enter the required traffic stop data directly into a database via computers located in their squad cars. Jurisdictions using this method then transmitted their database information to DPS on a periodic basis. Regardless of the method of data collection chosen, all jurisdictions were instructed to provide data to DPS regularly throughout the duration of the data collection period.

Participating jurisdictions were given written instructions that provided a general overview of the study and discussed how officers should complete forms, and how and when forms should be submitted to the Department of Public Safety. In addition, a voluntary training session was held for law enforcement personnel on December 27, 2001. This session reviewed the written instructions for completing forms and reporting data. The training was conducted by the Department of Public Safety and was attended by about 25 law enforcement representatives.

Forty-one of the participating jurisdictions chose the first method of data collection. Approximately twenty jurisdictions chose to submit their data via web-interface, and five jurisdictions used squad car computers. Some jurisdictions changed their method of data collection during the course of the study. DPS shared collected data with the Institute on Race & Poverty and the Council on Crime and Justice. We then audited the data for accuracy and analyzed the data for evidence of racial profiling.

Appendix 2: Audit Methodology

Audit of Jurisdictions Submitting Paper Forms to DPS

The audit for jurisdictions submitting paper forms was designed to answer two questions:

1) Did Intertech/DPS enter all of the forms into the database?

2) To what extent did Intertech/DPS accurately enter the data elements recorded on the forms into the database?[40]

Once received, we sorted forms by jurisdiction and by the date of the traffic stop, and then grouped them for each week of the data-collection period. To answer the first auditing question, we hand counted each weekly batch of forms for each jurisdiction and compared the results of those counts to the weekly count of database entries for that jurisdiction.

A total of 2132 weeks worth of data were entered for the 41 agencies. In 85 of the 2132 weeks of entries, there was a discrepancy of five or greater between the number of forms we received and the number of entries in the database. In 45 of these weeks, the number of database entries exceeded the number of forms by five or more. In 40 weeks, the number of forms exceeded the number of database entries by five or more. In very few cases (12 weeks total) were there discrepancies greater than 15 forms. This degree of discrepancy between the number of forms and the number of database entries is unlikely to skew the data in any substantial way.

To answer the second auditing question, a random 1% sample of all database entries was compared to their corresponding paper forms. This sample size was sufficient to arrive at a statistically valid assessment of the accuracy of the database entries. Through the process of comparison, we arrived at an overall data-entry error rate for all fields. We also calculated a data-entry error rate for each element (field) of data to evaluate whether errors randomly occurred throughout the dataset.[41]

The 1% sample resulted in a comparison of a total of 907 database entries to their corresponding forms. Ten cells of information were compared for each entry, for a total of 9070 cells. We found a total of 31 cells for which the information entered into the database differed from the information on the form. With 31 errors in 9070 cells, the data entry error rate was 0.34%. This overall level of error is very low, having a negligible effect on the overall accuracy of the dataset.

The following table shows the error rates for each field of data:

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[40] As will be discussed in more detail below, the audit did not enable us to answer any questions related to the thoroughness or accuracy with which law enforcement officers and agencies recorded and submitted data on the paper forms. We were also unable to evaluate whether the forms provided to researchers included all forms sent to DPS.

[41] We did not include location of the stop in this analysis. Error rates for the location of the stop were substantially higher because of problems of legibility. While this affected our ability to map the location of all traffic stops, it did not prevent us from analyzing data at the jurisdictional level.

Field	Number of errors	Error rate
Officer knew race/ethnicity	1	0.11%
Time of stop	8	0.88%
Reason for stop	4	0.44%
Disposition of stop	2	0.22%
Race/ethnicity of driver	0	0.00%
Age of driver	3	0.33%
Gender of driver	2	0.22%
Search yes/no	1	0.11%
Authority for search	1	0.11%
Contraband discovered	9	0.99%

As can be seen, the error rate within each field is also very low and any effect on the accuracy of data in each field is also negligible.

Audit of Jurisdictions Submitting via Web Interface

The audit for jurisdictions submitting data via web interface was similarly designed to answer two questions:

1) Did the jurisdiction enter all of the forms into the database?

2) To what extent did the jurisdiction accurately enter the data elements recorded on the forms into the database?

As we did with jurisdictions submitting forms to DPS, we addressed the first question by comparing the total number of forms submitted by each jurisdiction to the total number of database entries for that jurisdiction. We again addressed the second question by comparing a sample of forms to a sample of database entries.[42] Overall, error rates were low, although there was some variation across jurisdictions. The specific auditing results for each jurisdiction that collected and submitted data via this method are included in the jurisdiction's report.

Limitations of the Auditing Process

Through our auditing process we were not able to evaluate whether officers filled out forms every time they made a traffic stop, nor were we able to evaluate whether the information provided on the forms accurately reflected the details of the stop. The potential harm of this

[42] The sample size for each jurisdiction varied based on preliminary error rates found.

limitation has been noted in several reports on racial profiling data collection. As one study commissioned by the U.S. Department of Justice stated, "If some officers are knowingly engaged in racial profiling, which the department forbids, then there is an incentive for officers to forego filling out forms or to fill them out incorrectly. This could lead to biased data."[43]

In order to ensure that forms were filled out for every traffic stop, some of the participating jurisdictions told us that they required officers to submit a form for each instance in which the officer reported a stop to their dispatcher. Although there is no guarantee that officers reported all stops to their dispatcher, participating jurisdictions suggested that concerns of personal safety create a strong incentive for the officers to keep their dispatchers apprised of their location and enforcement activity should danger arise.

Some racial profiling studies to date have taken measures to ensure that officers fill out forms accurately. In New Jersey, for example, the Attorney General's office contacts a sample of people stopped by police to verify that the forms filled out pursuant to their stop are accurate. In addition, police supervisors review videotapes of traffic stops to ensure the accuracy of forms.[44] In Great Britain, persons stopped by police are entitled to a copy of the form that officers fill out at the time of the stop or upon request within 12 months. Individuals are then able to report any inaccuracies contained in the form.[45] It has also been suggested that dispatch records and information provided on driver's licenses (when driver's license numbers are recorded on forms) could be used to evaluate accuracy.

We were also unable to evaluate whether forms submitted by jurisdictions, and whether data provided by jurisdictions using electronic forms, accurately reflected the data submitted to the jurisdictions by their officers.

[43] McMahon Report at p.62 [hereinafter "McMahon Report"]. See also Ramirez Report at p.14.
[44] Ramirez Report at p.35.
[45] Id. at 38.

Appendix 3: Questionnaire sent to Jurisdictions

As you know, the data collection period for the Statewide Racial Profiling Study is nearing conclusion and we will soon begin analysis of the traffic stop data that your jurisdiction has collected over the course of this year. In analyzing this data we will document patterns and variations within the data set (including variations in the number of stops over the course of the year, the location of stops, the number of searches, the reason for stops and searches, and the characteristics of those stopped and searched). We will also compare the traffic enforcement data to the driving population of your jurisdiction. To ensure that our analysis is as thorough and accurate as possible, we would appreciate it if you would take time to thoroughly answer the questions listed below. Where appropriate, you are encouraged to include any supporting documentation that will aid our analysis. If there are questions for which the answer is simply "no," please indicate this so that we know that you have considered the question.

1) Are there any elements of your police operations in general or traffic enforcement in particular that could lead to variations in the reported enforcement activity or to differences between the reported enforcement activity and the driving population of your jurisdiction? Specifically:

   A) Has the method/process by which your jurisdiction has collected and processed this data changed over the course of the year?

      If so, can you please describe as specifically as possible the nature of these changes, when these changes have occurred, and the effect, if any, that you believe these changes may have on the nature or amount of data collected?

   B) Are there any enforcement policies/practices in your jurisdiction that may create variations in the reported enforcement activity (for example, policies that focus enforcement resources in specific geographic areas of your jurisdiction; policies, practices and/or events that may cause fluctuations in the number and/or nature of stops during the course of the year)?

      If so, can you please provide detailed descriptions of these policies, practices, and/or events (including the period(s) during which they have been in effect), and the affect that you believe they may have on the data collected?

   C) Are there any other enforcement policies or practices that will affect the data collected?

2) Are there any factors unrelated to law enforcement policies that could lead to variations in reported law enforcement activity within your jurisdiction or variations in the driving population of your jurisdiction? Specifically:

   A) Are you aware of changes in the driving population (for example, due to tourism) over the course of the data collection period? If so, what are the nature and timing of these changes?

B) Are there other phenomena that you are aware of that may affect the driving population and/or the population stopped/searched in your jurisdiction? If so, what are the nature and timing of these phenomena?

3) Has your jurisdiction already received some or all of the video cameras given as a result of your participation in this study? If so, please provide information on each time that cameras were installed and the percentage of your traffic enforcement vehicles possessing these cameras at each relevant point in time.

3) Please describe the method by which your jurisdiction has been collecting and submitting traffic information (for example, via paper forms, web-interface, FTP).

A) Has your jurisdiction used this method of submission for the entire study period? If not please list each method used with dates for when that method was employed.

B) Have there been issues related to data collection/submission that may affect the consistency and content of data that your jurisdiction has submitted? If so, please provide details.

Please submit your responses no later than **December 23rd, 2002**. Responses should be sent to:

Gavin Kearney
Institute on Race & Poverty
N150 Mondale Law Center
229 19th Avenue South
Minneapolis, MN 55455

You may also submit your answers electronically to kearn008@umn.edu. Should you have any questions please contact Mr. Kearney at (612) 625-5344.

Thank you for your attention to this.

Sincerely,

Gavin Kearney
Institute on Race & Poverty

Laura Schauben
Council on Crime and Justice

Appendix 4: Criteria for Selecting Jurisdictions to be Mapped

Jurisdictions were selected based on four equally weighted criteria:

1) Proportion of the jurisdiction's population that is of color.

2) Total number of stops.

   Criteria 1 and 2 were selected because they increase the likelihood that there is sufficient data to make statistically significant findings regarding disparities found in sub-units of the jurisdictions mapped.[46] In jurisdictions where populations of color are small and/or where there are fewer traffic stops there is a diminished likelihood that sufficient data exist to determine whether variations among sub-units of a jurisdiction are statistically significant.

3) Magnitude of the disparity between the proportion of people of color in the driving population and the proportion of people of color in the stopped population.

   Mapping is a tool for better understanding disparities that might exist between the driving population and stopped population within a jurisdiction. In particular it can provide insight into the role that enforcement patterns within a jurisdiction plays in determining what drivers are stopped. Because limited resources were available for mapping these differences within jurisdictions, this criterion was selected to help focus resources in jurisdictions where overall disparities suggest a need for further analysis.

4) Number of census tracts within the jurisdiction.

   This criterion was selected because spatial analysis is most useful where numerous geographic sub-units exist so that detailed spatial patterns can emerge. As the number of geographic sub-units declines, so does the utility of mapping.

[46] The sub-units used were minor civil divisions for county sheriff's departments and census tracts for city police departments.

Appendix 5: Methodology for Bridging Census and Traffic Stop Data

For the purpose of direct comparison, it was necessary to group the driving population and the stopped population into identical racial/ethnic categories. There are fundamental differences between how the census and the racial profiling study classify race and ethnicity. Unlike the Census data, the police stop data do not include "other" race or multiple race combination categories. In addition, the Census considers Hispanic as an ethnicity distinct from race and individuals are both racially categorized by the Census and recorded as Hispanic or non-Hispanic. The traffic stop data considers Hispanic a distinct race.

Several steps were necessary to make these two data sets compatible. We used the Census' Hispanic or Latino and Not Hispanic or Latino by race for the population age 18 and over to get detailed multiple race combinations for our baseline driving population. To "bridge" the Census data to the police stop data we allocated Hispanic Whites, Hispanic other race and Hispanic multiple race persons to the Hispanic category and Hispanics of all other races to their race (e.g. Hispanic Blacks to Black). This is similar to the method proposed by the Office of Management and Budget for working with the Census' racial categorization.[47] We allocated Hispanic other race persons to Hispanic because there is no "other race" comparison group in the police stop data.

The second step in bridging the data included using a fractional assignment to allocate non-Hispanic multiple race respondents. This method assigns equal fractions to each race checked by a multi-race respondent. For example, for a respondent that indicated that they were Asian and American Indian would we would add 0.5 to the Asian and 0.5 to the American Indian populations. We used the fractional assignment of non-Hispanic multiple race respondents because it enables us to directly compare the two data sets and it has been found to be a statistically defensible way of bridging multiple race respondents into single race categories.[48]

Last we adjusted our baseline data with data for the age 16 and 17 population and the 85 and over population. The Census does not provide detailed race data by age, instead it provides age data for Hispanic/Non Hispanic respondents where only one race is identified and a two or more race category for all multiple race respondents. In order to make the age specific data consistent with the data from the adult population, we assumed that the racial proportions of multiple race respondents age 16 to 17 and ages 85 and over were identical to the racial proportions of the adult multiple race respondents.

[47] This method is similar to that of the historical series approach illustrated in the Office of Management and Budget's (OMB) *Results of the 1996 Race and Ethnic Targeted Test* (RETT), which designated Hispanic as a race. The historical series approach is a useful bridging method for agencies that use data on race and ethnicity to monitor and enforce civil rights legislation.

[48] See Office of Management and Budget's Provisional Guidance on the Implementation of the 1997 Standards for Federal Data on Race and Ethnicity.

Appendix 6: Analysis of Data on Whether the Officer Knew the Race/Ethnicity of the Driver Prior to Making the Stop

Law enforcement officers have expressed frustration over being accused of biased policing in situations where they make a traffic stop with no prior knowledge of the race/ethnicity of the driver stopped. For example, the Police Executive Research Forum (PERF) reported, "In our focus groups, many officers expressed great frustration at accusations of racial bias, and lamented that they were so accused even when it was clearly impossible for them to discern driver characteristics before a stop."[49] Indeed, where an officer has no direct or indirect information about the race/ethnicity of a driver prior to deciding to stop that driver, it is difficult to argue that the stop was affected by the racial biases of that officer. To address that concern, the Minnesota legislature required that the forms filled out by officers in this study include the question, "Officer knew race/ethnicity prior to stop?" and officers checked a box for either "Yes" or "No" in response to this question. We analyzed whether the racial demographics of stopped drivers varied by whether the officer reported knowing the race/ethnicity of a driver prior to making a stop.

The results of this analysis must be interpreted with caution for a number of reasons, however. First, the results may suggest to some that the influence of racial bias is not present where an officer does not know the race/ethnicity of the driver prior to making a stop. This inference ignores the role that other factors related to race/ethnicity can play in an officer's decision-making process. Factors such as the location of the stop and the age or type of vehicle being driven enable officers to draw inferences about a driver's race/ethnicity where the officer does not have direct knowledge of the driver's identity. Also, racial profiling may result from institutional bias reflected in policies or practices that are not dependent upon an individual officer's knowledge of a particular driver's identity. Biases and stereotypes that may shape the decision-making process of individual officers may also shape the decisions made by higher officials regarding the policies and practices of a department or vice versa.

A second set of issues that arises in interpreting responses to this question goes to the phrasing of the question. It is not clear from the question what level of certainty should exist for an officer to answer that they "knew" the race/ethnicity of the driver. Because of this ambiguity, an officer could truthfully assert that he or she did not "know" the race/ethnicity of a driver even where the officer was able to directly observe the driver and to draw preliminary conclusions about the driver's identity. Similarly, observation may allow an officer to conclude that a driver is non-White prior to making a stop without allowing the officer to identify the specific racial group to which the driver belongs.[50]

A third set of issues in interpreting responses to this question arises from the fact that this is the only data category that is entirely subjective. Because it is an assertion of the officer's state of

[49] PERF Report at p. 133.

[50] In such a case, the officer would know that they were pulling over a person of color without knowing the race/ethnicity of the driver and racial profiling would be possible. PERF has recommended a less ambiguous phrasing of this question: "Were citizen's characteristics observable before stop? Yes/No." PERF Report at p.127. A further ambiguity identified by law enforcement officers participating in the study concerns the phrase "prior to stop." In some circumstances an officer may not know the race/ethnicity of a driver prior to making the decision to stop the driver but will gain knowledge of the driver's race/ethnicity prior to actually executing the stop.

mind prior to making a traffic stop it is extremely difficult to evaluate the accuracy of responses to this question. If an officer does not know the race/ethnicity of a driver that he or she decides to stop, it can be argued that the stop was not motivated by racial bias on the part of the officer. Thus, there is a strong incentive for officers engaged in racially biased policing to absolve themselves of responsibility by asserting that they do not know the race/ethnicity of drivers they decide to stop, and there is limited ability to evaluate whether these assertions are truthful.

Although we are not able to definitively assess whether this question was answered consistently, we performed several calculations that are relevant to making such a determination. First, we evaluated whether responses to this question varied by jurisdiction. If officers accurately recorded whether they observed the race/ethnicity of drivers prior to stopping them, one would expect the reported success rates in identifying the race/ethnicity of drivers to be similar for similarly situated agencies.

Through this comparison we found wide variation in the rates at which officers of the various agencies reported knowing the drivers' race/ethnicity. The average rate at which officers responded "yes" to this question was 11.9%, and the median was 10.6%. The "yes" rates varied from 0.6% for the Henning Police Department to 30.4% for the Sherburne County Sheriff's Office. We did not find a pattern in "yes" rates among law enforcement agencies that would suggest an enforcement-related reason for this variation. For example, the distinction between city police departments (where a high proportion of stops occur on streets) and county sheriff's offices (where a high proportion of stops occur on highways) appears to have no correlation with the "yes" rates.[51]

We also evaluated whether answers to this question varied by whether the stops occurred during the day or at night, when visibility is diminished. Specifically, we evaluated whether responses varied between 10am and 4 pm (daylight hours year-round) and 10pm and 4am (night year-round). If officers accurately recorded whether they had observed the driver before the stop, one would expect the "yes" rates to be higher during hours of daylight than during hours of darkness. On average, the "yes" rates were higher (19.4% on average) during the daylight period than during the darkness period (9.7% on average). Nine of the sixty-five agencies recorded higher yes rates during the nighttime period than during the daylight period, however. Moreover, there is considerable variation between agencies in these rates (see Table below).

[51] The "yes" rates for city police departments ranged from 0.6% for Henning to 29.6% for Springfield, while the rates for county sheriff's offices ranged from 2.2% for Dodge and Grant Counties, to 30.4% for Sherburne County. Ideally, one would evaluate response rates against a baseline generated through independent research that replicated the conditions of law enforcement. The degree of variation across jurisdictions raises questions about the accuracy of responses but does not indicate what an accurate response rate would be because it is quite possible that some level of underreporting is present in all jurisdictions. A review of surveys of the racial demographics of the driving population done pursuant to racial profiling studies found that the success with which researchers were able to identify the race of drivers ranged from the high-80 to high-90 percentiles. Comparing these rates to reported "yes" rates by participating jurisdictions is problematic, however, given that these surveys were designed to allow researchers to successfully identify the race of drivers and were not designed to replicate the conditions of law enforcement.

Rates at which officers answered yes to "knew race prior to stop" Daylight vs Nighttime

	Overall race known rate	Daylight 10am to 4pm	Nighttime 10pm to 4am
Akeley	2.4%	5.4%	2.0%
Anoka County	16.3%	31.4%	12.0%
Becker County	7.4%	20.9%	4.6%
Beltrami County	5.6%	8.9%	5.2%
Bemidji	11.8%	21.4%	9.2%
Cass County	18.0%	31.5%	10.7%
Cass Lake	1.4%	5.0%	0.8%
Cloquet	5.1%	8.3%	4.2%
Cook County	8.4%	11.8%	6.2%
Crosby	4.5%	0.0%	4.9%
Dakota County	16.2%	34.1%	11.2%
Dodge County	2.4%	4.7%	2.1%
Eagle Lake	12.8%	27.3%	7.2%
Fairfax	2.5%	0.0%	2.9%
Faribault	13.9%	31.3%	9.8%
Fridley	18.1%	28.8%	13.8%
Gibbon	10.5%	16.7%	9.8%
Goodhue County	16.9%	27.5%	12.6%
Granite Falls	8.4%	8.9%	8.3%
Grant County	2.2%	4.6%	0.9%
Henning	0.6%	0.0%	0.7%
Houston County	2.4%	5.6%	2.1%
International Falls	19.9%	24.8%	18.8%
Jackson County	6.9%	9.5%	6.2%
Kandiyohi County	12.5%	24.1%	7.6%
Kittson County	7.9%	4.5%	10.5%
Lac qui Parle County	15.7%	22.6%	11.8%
Lake County	16.6%	19.0%	14.4%
Leech Lake	1.7%	1.4%	1.8%
Little Falls	7.0%	18.9%	5.4%
Mahnomen County	3.1%	5.2%	2.7%
Marshall County	10.1%	5.9%	11.1%
Minneapolis	13.0%	23.9%	11.1%
Minneota	19.5%	34.5%	16.2%
Moorhead	18.7%	24.0%	17.1%
New Hope	8.0%	13.1%	6.4%
Norman County	13.0%	17.9%	12.1%
Olmsted County	19.0%	27.8%	15.9%
Plymouth	28.4%	42.2%	23.6%
Pope County	2.3%	6.3%	1.2%
Ramsey County	20.1%	29.1%	15.6%
Red Lake County	3.4%	0.8%	3.8%
Red Wing	10.7%	24.3%	7.0%
Redwood County	19.2%	30.6%	13.2%
Rochester	6.3%	10.6%	4.9%

Rates at which officers answered yes to "knew race prior to stop" Daylight vs Nighttime

Sauk Rapids	6.3%	5.5%	6.6%
Savage	22.4%	44.2%	17.3%
Scott County	11.5%	15.8%	10.6%
Sherburne County	30.4%	55.1%	19.2%
Sibley County	15.4%	51.3%	10.4%
Springfield	29.6%	37.7%	28.6%
St. Cloud	24.1%	36.1%	20.2%
Stevens County	5.6%	11.8%	3.9%
Swift County	18.7%	24.1%	16.1%
Todd County	7.4%	17.6%	5.1%
Truman County	1.8%	2.7%	1.7%
Wadena County	25.0%	20.0%	25.8%
Walker	8.7%	12.0%	7.0%
Waseca County	10.1%	27.1%	6.2%
Wilkin County	18.0%	36.6%	14.4%
Willmar	11.8%	18.8%	10.2%
Winnebago	9.1%	11.1%	8.7%
Winthrop	17.0%	24.7%	15.4%
Worthington	24.5%	43.8%	19.5%
Yellow Medicine County	4.4%	11.6%	2.8%

Rates by Race of Driver at which officers answered yes to "knew race prior to stop"							
		Stops of American Indian Drivers	Stops of Asian Drivers	Stops of Black Drivers	Stops of Latino Drivers	Stops of White Drivers	Stops of All Drivers of color
Akeley	Number of Stops	19	2	2	4	432	27
	% Knew Race	10.5%	0.0%	0.0%	0.0%	2.1%	7.4%
Anoka County	Number of Stops	28	81	101	105	8,220	315
	% Knew Race	21.4%	3.7%	16.8%	9.5%	16.4%	11.4%
Becker County	Number of Stops	178	8	14	16	1,946	216
	% Knew Race	6.2%	0.0%	21.4%	0.0%	7.5%	6.5%
Beltrami County	Number of Stops	204	13	24	8	1,386	249
	% Knew Race	6.4%	0.0%	0.0%	0.0%	5.6%	5.2%
Bemidji	Number of Stops	310	15	31	12	2,317	368
	% Knew Race	11.9%	6.7%	12.9%	0.0%	11.9%	11.4%
Cass County	Number of Stops	99	2	1	3	557	105
	% Knew Race	17.2%	0.0%	100.0%	0.0%	18.1%	17.1%
Cass Lake	Number of Stops	74	1	0	1	69	76
	% Knew Race	0.0%	0.0%	No Stops	0.0%	2.9%	0.0%
Cloquet	Number of Stops	49	8	7	3	400	67
	% Knew Race	10.2%	0.0%	0.0%	0.0%	4.8%	7.5%
Cook County	Number of Stops	56	15	11	4	1,027	86
	% Knew Race	7.1%	0.0%	9.1%	25.0%	8.5%	7.0%
Crosby	Number of Stops	9	1	2	0	279	12
	% Knew Race	11.1%	0.0%	0.0%	No Stops	4.3%	8.3%
Dakota County	Number of Stops	56	244	268	364	9,997	932
	% Knew Race	5.4%	11.1%	17.9%	14.0%	16.5%	13.8%
Dodge County	Number of Stops	0	30	57	153	2,018	240
	% Knew Race	No Stops	3.3%	1.8%	3.9%	2.3%	3.3%
Eagle Lake	Number of Stops	0	8	10	17	588	35
	% Knew Race	No Stops	25.0%	10.0%	0.0%	13.1%	8.6%
Fairfax	Number of Stops	9	3	6	19	205	37
	% Knew Race	0.0%	0.0%	0.0%	5.3%	2.4%	2.7%
Faribault	Number of Stops	10	67	115	486	3,490	678
	% Knew Race	20.0%	14.9%	16.5%	12.8%	14.0%	13.7%
Fridley	Number of Stops	22	189	431	143	2,917	785
	% Knew Race	18.2%	11.6%	27.4%	9.1%	17.6%	20.0%
Gibbon	Number of Stops	4	4	8	28	194	44
	% Knew Race	0.0%	0.0%	37.5%	21.4%	8.2%	20.5%
Goodhue County	Number of Stops	26	80	72	113	3,206	291
	% Knew Race	7.7%	1.3%	15.3%	13.3%	17.5%	10.0%
Granite Falls	Number of Stops	18	5	6	15	386	44
	% Knew Race	33.3%	20.0%	0.0%	6.7%	7.3%	18.2%
Grant County	Number of Stops	6	6	2	8	858	22
	% Knew Race	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%
Henning	Number of Stops	1	0	1	1	159	3
	% Knew Race	0.0%	No Stops	0.0%	0.0%	0.6%	0.0%
Houston County	Number of Stops	5	8	20	10	1,700	43
	% Knew Race	0.0%	0.0%	5.0%	10.0%	2.3%	4.7%

Rates by Race of Driver at which officers answered yes to "knew race prior to stop"							
		Stops of American Indian Drivers	Stops of Asian Drivers	Stops of Black Drivers	Stops of Latino Drivers	Stops of White Drivers	Stops of All Drivers of color
	% Knew Race	7.7%	0.0%	23.5%	0.0%	20.5%	12.0%
Jackson County	Number of Stops	0	5	4	8	287	17
	% Knew Race	No Stops	0.0%	0.0%	25.0%	6.6%	11.8%
Kandiyohi County	Number of Stops	8	8	18	118	1,982	152
	% Knew Race	0.0%	0.0%	16.7%	11.9%	12.6%	11.2%
Kittson County	Number of Stops	0	2	2	2	196	6
	% Knew Race	No Stops	0.0%	0.0%	0.0%	8.2%	0.0%
Lac qui Parle County	Number of Stops	0	3	0	1	289	4
	% Knew Race	No Stops	0.0%	No Stops	0.0%	15.9%	0.0%
Lake County	Number of Stops	13	8	9	10	1,198	40
	% Knew Race	7.7%	0.0%	11.1%	10.0%	16.9%	7.5%
Leech Lake	Number of Stops	279	7	10	8	566	304
	% Knew Race	2.5%	0.0%	0.0%	0.0%	1.4%	2.3%
Little Falls	Number of Stops	10	4	9	8	693	31
	% Knew Race	0.0%	0.0%	0.0%	12.5%	7.2%	3.2%
Mahnomen County	Number of Stops	163	4	3	6	401	176
	% Knew Race	4.9%	0.0%	0.0%	16.7%	2.2%	5.1%
Marshall County	Number of Stops	3	2	0	12	238	17
	% Knew Race	0.0%	50.0%	No Stops	25.0%	8.8%	23.5%
Minneapolis	Number of Stops	816	1,808	21,250	5,740	23,941	29,614
	% Knew Race	6.7%	10.7%	16.1%	6.2%	12.3%	13.6%
Minneota	Number of Stops	2	1	1	7	136	11
	% Knew Race	0.0%	0.0%	0.0%	57.1%	19.9%	36.4%
Moorhead	Number of Stops	123	127	240	432	7,178	922
	% Knew Race	17.1%	7.9%	15.0%	23.4%	18.7%	18.2%
New Hope	Number of Stops	21	176	749	234	3,391	1,180
	% Knew Race	0.0%	1.7%	10.5%	8.5%	7.8%	8.6%
Norman County	Number of Stops	11	4	1	20	302	36
	% Knew Race	0.0%	0.0%	0.0%	30.0%	12.6%	16.7%
Olmsted County	Number of Stops	2	59	102	106	3,732	269
	% Knew Race	0.0%	10.2%	16.7%	2.8%	19.7%	9.7%
Plymouth	Number of Stops	50	437	1,106	540	10,037	2,133
	% Knew Race	32.0%	14.2%	30.7%	22.8%	29.1%	25.3%
Pope County	Number of Stops	2	4	6	11	786	23
	% Knew Race	0.0%	0.0%	0.0%	9.1%	2.2%	4.3%
Ramsey County	Number of Stops	23	187	313	134	4,255	657
	% Knew Race	4.3%	14.4%	19.2%	23.9%	20.4%	18.3%
Red Lake County	Number of Stops	19	8	5	9	761	41
	% Knew Race	0.0%	0.0%	0.0%	0.0%	3.5%	0.0%
Red Wing	Number of Stops	60	69	103	84	2,692	316
	% Knew Race	18.3%	2.9%	18.4%	4.8%	10.6%	11.4%
Redwood County	Number of Stops	29	13	4	13	394	59
	% Knew Race	17.2%	7.7%	25.0%	0.0%	20.3%	11.9%
Rochester	Number of Stops	23	651	1,407	678	11,587	2,759
	% Knew Race	4.3%	2.9%	9.1%	4.1%	6.2%	6.4%

Rates by Race of Driver at which officers answered yes to "knew race prior to stop"							
		Stops of American Indian Drivers	Stops of Asian Drivers	Stops of Black Drivers	Stops of Latino Drivers	Stops of White Drivers	Stops of All Drivers of color
	% Knew Race	0.0%	0.0%	4.3%	0.0%	6.5%	2.3%
Savage	Number of Stops	8	146	102	85	1,660	341
	% Knew Race	37.5%	18.5%	14.7%	17.6%	23.4%	17.6%
Scott County	Number of Stops	16	46	47	70	2,353	179
	% Knew Race	6.3%	6.5%	10.6%	7.1%	11.7%	7.8%
Sherburne County	Number of Stops	15	26	37	40	3,588	118
	% Knew Race	13.3%	19.2%	27.0%	7.5%	30.8%	16.9%
Sibley County	Number of Stops	3	2	11	71	556	87
	% Knew Race	0.0%	50.0%	36.4%	19.7%	14.4%	21.8%
Springfield	Number of Stops	1	15	2	17	557	35
	% Knew Race	0.0%	0.0%	0.0%	23.5%	30.7%	11.4%
St. Cloud	Number of Stops	34	291	580	126	7,799	1,031
	% Knew Race	14.7%	13.1%	33.4%	17.5%	24.0%	25.1%
Stevens County	Number of Stops	9	11	12	17	994	49
	% Knew Race	0.0%	0.0%	25.0%	0.0%	5.5%	6.1%
Swift County	Number of Stops	5	5	10	27	926	47
	% Knew Race	0.0%	0.0%	20.0%	22.2%	18.8%	17.0%
Todd County	Number of Stops	4	3	5	19	1,004	31
	% Knew Race	0.0%	0.0%	0.0%	0.0%	7.7%	0.0%
Truman	Number of Stops	2	6	8	24	401	40
	% Knew Race	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%
Wadena County	Number of Stops	2	0	3	0	135	5
	% Knew Race	0.0%	No Stops	0.0%	No Stops	25.9%	0.0%
Walker	Number of Stops	59	3	3	1	269	66
	% Knew Race	10.2%	0.0%	0.0%	0.0%	8.6%	9.1%
Waseca County	Number of Stops	0	6	24	27	833	57
	% Knew Race	No Stops	0.0%	25.0%	3.7%	10.0%	12.3%
Wilkin County	Number of Stops	16	4	23	17	816	60
	% Knew Race	6.3%	0.0%	8.7%	23.5%	18.5%	11.7%
Willmar	Number of Stops	10	17	63	675	2,607	765
	% Knew Race	0.0%	0.0%	11.1%	13.9%	11.4%	13.2%
Winnebago	Number of Stops	3	1	3	23	247	30
	% Knew Race	33.3%	100.0%	0.0%	4.3%	9.3%	10.0%
Winthrop	Number of Stops	4	2	6	32	367	44
	% Knew Race	0.0%	0.0%	0.0%	21.9%	17.2%	15.9%
Worthington	Number of Stops	7	193	69	856	1,567	1,125
	% Knew Race	14.3%	27.5%	18.8%	26.2%	23.5%	25.9%
Yellow Medicine County	Number of Stops	21	5	14	25	796	65
	% Knew Race	4.8%	0.0%	0.0%	12.0%	4.3%	6.2%

Rates at which officers answered yes to "knew race prior to stop" Daylight vs Nighttime

	Overall race known rate	Daylight 10am to 4pm	Nighttime 10pm to 4am
Akeley	2.4%	5.4%	2.0%
Anoka County	16.3%	31.4%	12.0%
Becker County	7.4%	20.9%	4.6%
Beltrami County	5.6%	8.9%	5.2%
Bemidji	11.8%	21.4%	9.2%
Cass County	18.0%	31.5%	10.7%
Cass Lake	1.4%	5.0%	0.8%
Cloquet	5.1%	8.3%	4.2%
Cook County	8.4%	11.8%	6.2%
Crosby	4.5%	0.0%	4.9%
Dakota County	16.2%	34.1%	11.2%
Dodge County	2.4%	4.7%	2.1%
Eagle Lake	12.8%	27.3%	7.2%
Fairfax	2.5%	0.0%	2.9%
Faribault	13.9%	31.3%	9.8%
Fridley	18.1%	28.8%	13.8%
Gibbon	10.5%	16.7%	9.8%
Goodhue County	16.9%	27.5%	12.6%
Granite Falls	8.4%	8.9%	8.3%
Grant County	2.2%	4.6%	0.9%
Henning	0.6%	0.0%	0.7%
Houston County	2.4%	5.6%	2.1%
International Falls	19.9%	24.8%	18.8%
Jackson County	6.9%	9.5%	6.2%
Kandiyohi County	12.5%	24.1%	7.6%
Kittson County	7.9%	4.5%	10.5%
Lac qui Parle County	15.7%	22.6%	11.8%
Lake County	16.6%	19.0%	14.4%
Leech Lake	1.7%	1.4%	1.8%
Little Falls	7.0%	18.9%	5.4%
Mahnomen County	3.1%	5.2%	2.7%
Marshall County	10.1%	5.9%	11.1%
Minneapolis	13.0%	23.9%	11.1%
Minneota	19.5%	34.5%	16.2%
Moorhead	18.7%	24.0%	17.1%
New Hope	8.0%	13.1%	6.4%
Norman County	13.0%	17.9%	12.1%
Olmsted County	19.0%	27.8%	15.9%
Plymouth	28.4%	42.2%	23.6%
Pope County	2.3%	6.3%	1.2%
Ramsey County	20.1%	29.1%	15.6%
Red Lake County	3.4%	0.8%	3.8%
Red Wing	10.7%	24.3%	7.0%
Redwood County	19.2%	30.6%	13.2%
Rochester	6.3%	10.6%	4.9%

Finally, we evaluated whether the rate at which officers responded to this question varied by the race/ethnicity of the driver. If officers intended to conceal racial profiling, one approach might be to record lower rates of observing the race/ethnicity of the driver for drivers of color than for

White drivers. There is no indication that this approach was used here. The average yes rates were 11.9% for White drivers, 11.9% for Black drivers, 10.2% for Latino drivers, 7.6% for American Indian drivers, and 7.2% for Asian drivers.

Appendix 7: Dispatched as Reason for Stop by Race and Jurisdiction

Name of Jurisdiction	Total Stops*	Dispatches	Total Dispatch Rate	American Indian %	Asian %	Black %	Latino %	White %
Akeley	460	2	0.43%	0.00%	0.00%	0.00%	0.00%	0.46%
Anoka County	8,548	147	1.72%	0.00%	2.47%	1.98%	3.81%	1.69%
Becker County	2,163	31	1.43%	1.12%	0.00%	14.29%	6.25%	1.34%
Beltrami County	1,645	52	3.16%	6.31%	0.00%	0.00%	0.00%	2.80%
Bemidji	2,686	37	1.38%	2.58%	0.00%	6.45%	8.33%	1.12%
Cass County	662	18	2.72%	8.08%	0.00%	0.00%	0.00%	1.80%
Cass Lake	145	2	1.38%	2.70%	0.00%	n/a	0.00%	0.00%
Cloquet	467	3	0.64%	0.00%	0.00%	0.00%	0.00%	0.75%
Cook County	1,113	20	1.80%	5.36%	0.00%	0.00%	0.00%	1.66%
Crosby	295	8	2.71%	0.00%	0.00%	50.00%	n/a	2.47%
Dakota County	10,948	84	0.77%	3.51%	0.82%	0.00%	1.92%	0.73%
Dodge County	2,256	20	0.89%	n/a	0.00%	1.75%	1.96%	0.79%
Eagle Lake	623	7	1.12%	n/a	0.00%	10.00%	0.00%	1.02%
Fairfax	242	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Faribault	4,168	40	0.96%	0.00%	1.49%	2.61%	2.26%	0.72%
Fridley	3,705	12	0.32%	0.00%	0.00%	0.23%	0.00%	0.38%
Gibbon	238	6	2.52%	0.00%	0.00%	0.00%	0.00%	3.09%
Goodhue County	3,494	31	0.89%	0.00%	2.50%	1.39%	0.88%	0.84%
Granite Falls	430	4	0.93%	0.00%	0.00%	0.00%	0.00%	1.04%
Grant County	880	4	0.45%	0.00%	0.00%	0.00%	0.00%	0.47%
Henning	162	7	4.32%	0.00%	n/a	0.00%	0.00%	4.40%
Houston County	1,743	7	0.40%	0.00%	0.00%	0.00%	0.00%	0.41%
International Falls	690	9	1.30%	0.00%	0.00%	0.00%	0.00%	1.41%
Jackson County	303	6	1.98%	n/a	0.00%	0.00%	0.00%	2.09%
Kandiyohi County	2,134	25	1.17%	0.00%	0.00%	0.00%	3.39%	1.06%
Kittson County	202	3	1.49%	n/a	0.00%	0.00%	0.00%	1.53%
Lac qui Parle County	293	6	2.05%	n/a	0.00%	n/a	0.00%	2.08%
Lake County	1,240	5	0.40%	0.00%	0.00%	0.00%	0.00%	0.42%
Leech Lake Reservation	872	13	1.49%	2.86%	0.00%	10.00%	0.00%	0.71%
Little Falls	724	6	0.83%	0.00%	0.00%	0.00%	12.50%	0.72%
Mahnomen County	579	39	6.74%	11.66%	25.00%	33.33%	0.00%	4.47%
Marshall County	259	7	2.70%	0.00%	0.00%	n/a	7.69%	2.49%
Minneapolis	53,555	409	0.76%	1.23%	0.55%	1.10%	0.49%	0.53%
Minneota	159	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Moorhead	8,111	83	1.02%	2.44%	0.00%	2.07%	4.63%	0.77%
New Hope	4,581	27	0.59%	4.76%	0.56%	0.67%	0.86%	0.53%
Norman County	338	9	2.66%	0.00%	0.00%	0.00%	0.00%	2.98%
Olmsted County	4,001	40	1.00%	0.00%	0.00%	3.92%	0.94%	0.94%
Plymouth	12,213	333	2.73%	6.00%	2.95%	5.12%	4.05%	2.36%
Pope County	827	3	0.36%	0.00%	0.00%	0.00%	0.00%	0.37%
Ramsey County	4,927	35	0.71%	0.00%	0.53%	0.95%	0.75%	0.70%
Red Lake County	802	12	1.50%	0.00%	0.00%	0.00%	0.00%	1.58%
Red Wing	3,019	61	2.02%	6.67%	0.00%	1.94%	4.76%	1.89%
Redwood County	453	7	1.55%	0.00%	0.00%	0.00%	0.00%	1.78%
Rochester	14,346	75	0.52%	0.00%	0.77%	0.71%	0.59%	0.48%
Sauk Rapids	672	16	2.38%	0.00%	0.00%	4.35%	0.00%	2.39%
Savage	2,003	21	1.05%	12.50%	0.00%	1.96%	1.18%	1.02%
Scott County	2,536	34	1.34%	12.50%	2.17%	2.08%	2.86%	1.19%
Sherburne County	3,712	49	1.32%	0.00%	0.00%	2.70%	7.50%	1.25%
Sibley County	643	14	2.18%	0.00%	0.00%	0.00%	4.23%	1.98%
Springfield	607	5	0.82%	0.00%	0.00%	50.00%	0.00%	0.70%
St. Cloud	8,844	101	1.14%	2.94%	1.02%	1.03%	0.00%	1.17%
Stevens County	1,047	8	0.76%	0.00%	0.00%	0.00%	0.00%	0.80%
Swift County	981	24	2.45%	20.00%	0.00%	20.00%	7.41%	2.03%
Todd County	1,036	6	0.58%	0.00%	0.00%	0.00%	5.26%	0.50%
Truman	446	4	0.90%	0.00%	0.00%	12.50%	0.00%	0.74%
Wadena County	140	16	11.43%	0.00%	n/a	0.00%	n/a	11.85%
Walker	337	27	8.01%	6.67%	0.00%	33.33%	0.00%	8.15%
Waseca County	890	18	2.02%	n/a	0.00%	0.00%	3.70%	2.04%
Wilkin County	888	38	4.28%	5.56%	0.00%	12.50%	5.56%	4.01%
Willmar	3,372	69	2.05%	0.00%	0.00%	3.17%	2.52%	1.92%
Winnebago	301	6	1.99%	0.00%	0.00%	0.00%	4.17%	1.85%
Winthrop	411	1	0.24%	0.00%	0.00%	0.00%	0.00%	0.27%
Worthington	2,712	7	0.26%	0.00%	0.51%	0.00%	0.23%	0.25%
Yellow Medicine County	864	6	0.69%	0.00%	0.00%	0.00%	4.00%	0.63%
Jurisdiction Average	**2,987**	**34**	**1.73%**	**2.13%**	**0.66%**	**4.71%**	**1.82%**	**1.61%**

* Where reason for stop could be determined

(n/a) no stops

Dispatch rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Appendix 8: Driving Violation as Reason for Stop by Race and Jurisdiction

Name of Jurisdiction	Total Stops*	Driving Violations	Total Driving Violation Rate	American Indian %	Asian %	Black %	Latino %	White %
Akeley	460	371	80.65%	73.68%	50.00%	100.00%	75.00%	81.06%
Anoka County	8,548	6,220	72.77%	57.14%	76.54%	68.32%	62.86%	72.96%
Becker County	2,163	1,691	78.18%	72.47%	100.00%	64.29%	87.50%	78.63%
Beltrami County	1,645	1,186	72.10%	67.48%	69.23%	92.00%	87.50%	72.36%
Bemidji	2,686	1,647	61.32%	52.58%	66.67%	54.84%	50.00%	62.60%
Cass County	662	546	82.48%	63.64%	50.00%	100.00%	100.00%	85.82%
Cass Lake	145	90	62.07%	51.35%	100.00%	n/a	100.00%	72.46%
Cloquet	467	299	64.03%	63.27%	75.00%	28.57%	66.67%	64.50%
Cook County	1,113	953	85.62%	76.79%	93.33%	63.64%	75.00%	86.27%
Crosby	295	221	74.92%	66.67%	0.00%	50.00%	n/a	75.62%
Dakota County	10,948	8,729	79.73%	70.18%	84.02%	73.98%	71.15%	80.15%
Dodge County	2,256	1,662	73.67%	n/a	90.00%	71.93%	69.93%	73.76%
Eagle Lake	623	484	77.69%	n/a	62.50%	80.00%	88.24%	77.55%
Fairfax	242	200	82.64%	44.44%	66.67%	100.00%	94.74%	82.93%
Faribault	4,168	2,682	64.35%	40.00%	61.19%	62.61%	57.20%	65.53%
Fridley	3,705	2,660	71.79%	54.55%	77.37%	58.10%	69.44%	73.71%
Gibbon	238	194	81.51%	50.00%	50.00%	100.00%	71.43%	83.51%
Goodhue County	3,494	2,646	75.73%	76.92%	92.50%	81.94%	65.49%	75.52%
Granite Falls	430	291	67.67%	61.11%	60.00%	100.00%	86.67%	66.84%
Grant County	880	814	92.50%	83.33%	83.33%	100.00%	100.00%	92.54%
Henning	162	116	71.60%	100.00%	n/a	100.00%	0.00%	71.70%
Houston County	1,743	1,436	82.39%	100.00%	100.00%	85.00%	60.00%	82.35%
International Falls	690	432	62.61%	57.69%	40.00%	82.35%	100.00%	62.34%
Jackson County	303	267	88.12%	n/a	80.00%	100.00%	71.43%	88.50%
Kandiyohi County	2,134	1,767	82.80%	100.00%	100.00%	50.00%	74.58%	83.45%
Kittson County	202	162	80.20%	n/a	100.00%	50.00%	100.00%	80.10%
Lac qui Parle County	293	282	96.25%	n/a	100.00%	n/a	100.00%	96.19%
Lake County	1,240	1,195	96.37%	100.00%	100.00%	88.89%	90.00%	96.42%
Leech Lake Reservation	872	760	87.16%	80.00%	100.00%	70.00%	100.00%	90.65%
Little Falls	724	456	62.98%	50.00%	0.00%	77.78%	62.50%	63.35%
Mahnomen County	579	419	72.37%	58.90%	50.00%	66.67%	83.33%	77.92%
Marshall County	259	217	83.78%	33.33%	100.00%	n/a	76.92%	84.65%
Minneapolis	53,555	30,560	57.06%	51.47%	58.90%	52.56%	52.06%	62.32%
Minneota	159	113	71.07%	50.00%	100.00%	100.00%	57.14%	71.62%
Moorhead	8,111	5,720	70.52%	60.98%	66.14%	67.63%	56.94%	71.68%
New Hope	4,581	3,447	75.25%	52.38%	78.77%	68.89%	64.81%	77.32%
Norman County	338	266	78.70%	90.91%	75.00%	100.00%	70.00%	78.81%
Olmsted County	4,001	3,386	84.63%	100.00%	89.83%	81.37%	79.25%	84.78%
Plymouth	12,213	7,140	58.46%	42.00%	65.00%	48.03%	42.54%	60.27%
Pope County	827	680	82.22%	100.00%	100.00%	100.00%	100.00%	81.69%
Ramsey County	4,927	3,463	70.29%	43.48%	77.54%	58.41%	57.46%	71.39%
Red Lake County	802	660	82.29%	84.21%	100.00%	100.00%	77.78%	82.00%
Red Wing	3,019	2,219	73.50%	68.33%	78.26%	67.96%	63.10%	74.03%
Redwood County	453	416	91.83%	89.66%	92.31%	100.00%	100.00%	91.62%
Rochester	14,346	10,854	75.66%	60.87%	75.73%	72.14%	74.93%	76.15%
Sauk Rapids	672	513	76.34%	50.00%	100.00%	78.26%	60.00%	76.27%
Savage	2,003	1,333	66.55%	50.00%	63.70%	59.80%	58.82%	67.69%
Scott County	2,536	2,139	84.35%	68.75%	78.26%	81.25%	81.43%	84.72%
Sherburne County	3,712	3,152	84.91%	73.33%	88.46%	72.97%	75.00%	85.17%
Sibley County	643	520	80.87%	66.67%	100.00%	90.91%	84.51%	80.22%
Springfield	607	460	75.78%	100.00%	81.25%	50.00%	64.71%	76.01%
St. Cloud	8,844	4,817	54.47%	35.29%	51.88%	51.98%	49.21%	54.92%
Stevens County	1,047	867	82.81%	77.78%	72.73%	75.00%	82.35%	83.07%
Swift County	981	868	88.48%	80.00%	100.00%	80.00%	81.48%	88.76%
Todd County	1,036	849	81.95%	100.00%	66.67%	80.00%	73.68%	82.09%
Truman	446	380	85.20%	50.00%	100.00%	75.00%	75.00%	85.96%
Wadena County	140	115	82.14%	50.00%	n/a	100.00%	n/a	82.22%
Walker	337	244	72.40%	60.00%	66.67%	66.67%	100.00%	75.19%
Waseca County	890	634	71.24%	n/a	66.67%	70.83%	81.48%	70.95%
Wilkin County	888	674	75.90%	83.33%	60.00%	79.17%	83.33%	75.58%
Willmar	3,372	2,246	66.61%	30.00%	64.71%	52.38%	55.70%	69.93%
Winnebago	301	227	75.42%	66.67%	100.00%	66.67%	54.17%	77.41%
Winthrop	411	249	60.58%	100.00%	0.00%	83.33%	56.25%	60.49%
Worthington	2,712	1,951	71.94%	71.43%	68.72%	65.71%	72.16%	72.50%
Yellow Medicine County	864	763	88.31%	72.73%	100.00%	85.71%	68.00%	89.35%
Jurisdiction Average	**2,987**	**2,046**	**76.40%**	**67.56%**	**75.64%**	**75.86%**	**73.82%**	**77.29%**

* Where reason for stop could be determined

(n/a) no stops

Driving violation rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Appendix 9: Equipment Violation as Reason for Stop by Race and Jurisdiction

Name of Jurisdiction	Total Stops*	Equipment Violations	Total Equipment Violation Rate	American Indian %	Asian %	Black %	Latino %	White %
Akeley	460	72	15.65%	21.05%	50.00%	0.00%	25.00%	15.24%
Anoka County	8,548	1,212	14.18%	21.43%	14.81%	15.84%	18.10%	14.08%
Becker County	2,163	270	12.48%	16.85%	0.00%	0.00%	6.25%	12.28%
Beltrami County	1,645	275	16.72%	20.39%	23.08%	8.00%	0.00%	16.37%
Bemidji	2,686	699	26.02%	34.84%	20.00%	19.35%	25.00%	24.98%
Cass County	662	47	7.10%	13.13%	0.00%	0.00%	0.00%	6.10%
Cass Lake	145	31	21.38%	25.68%	0.00%	n/a	0.00%	17.39%
Cloquet	467	128	27.41%	30.61%	25.00%	57.14%	33.33%	26.50%
Cook County	1,113	76	6.83%	10.71%	0.00%	27.27%	0.00%	6.52%
Crosby	295	45	15.25%	22.22%	100.00%	0.00%	n/a	14.84%
Dakota County	10,948	1,389	12.69%	10.53%	9.84%	14.50%	17.58%	12.54%
Dodge County	2,256	328	14.54%	n/a	3.33%	7.02%	16.99%	14.73%
Eagle Lake	623	80	12.84%	n/a	0.00%	10.00%	11.76%	13.10%
Fairfax	242	35	14.46%	44.44%	33.33%	0.00%	0.00%	14.63%
Faribault	4,168	995	23.87%	10.00%	22.39%	24.35%	26.34%	23.58%
Fridley	3,705	499	13.47%	22.73%	13.16%	13.19%	16.67%	13.30%
Gibbon	238	23	9.66%	50.00%	25.00%	0.00%	17.86%	7.73%
Goodhue County	3,494	548	15.68%	19.23%	5.00%	11.11%	21.24%	15.83%
Granite Falls	430	94	21.86%	11.11%	20.00%	0.00%	6.67%	23.32%
Grant County	880	40	4.55%	0.00%	16.67%	0.00%	0.00%	4.55%
Henning	162	32	19.75%	0.00%	n/a	0.00%	100.00%	19.50%
Houston County	1,743	252	14.46%	0.00%	0.00%	10.00%	10.00%	14.65%
International Falls	690	151	21.88%	34.62%	0.00%	5.88%	0.00%	22.03%
Jackson County	303	20	6.60%	n/a	20.00%	0.00%	14.29%	6.27%
Kandiyohi County	2,134	260	12.18%	0.00%	0.00%	44.44%	16.95%	11.71%
Kittson County	202	15	7.43%	n/a	0.00%	50.00%	0.00%	7.14%
Lac qui Parle County	293	0	0.00%	n/a	0.00%	n/a	0.00%	0.00%
Lake County	1,240	27	2.18%	0.00%	0.00%	11.11%	10.00%	2.08%
Leech Lake Reservation	872	69	7.91%	11.43%	0.00%	10.00%	0.00%	6.35%
Little Falls	724	208	28.73%	40.00%	50.00%	11.11%	0.00%	29.00%
Mahnomen County	579	69	11.92%	15.34%	0.00%	0.00%	0.00%	10.92%
Marshall County	259	20	7.72%	0.00%	0.00%	n/a	15.38%	7.47%
Minneapolis	53,555	13,815	25.80%	28.55%	25.06%	27.43%	35.38%	22.01%
Minneota	159	31	19.50%	0.00%	0.00%	0.00%	42.86%	18.92%
Moorhead	8,111	1,247	15.37%	17.07%	21.26%	18.26%	19.21%	14.91%
New Hope	4,581	694	15.15%	28.57%	12.85%	18.16%	20.17%	14.18%
Norman County	338	41	12.13%	9.09%	25.00%	0.00%	5.00%	12.58%
Olmsted County	4,001	360	9.00%	0.00%	6.78%	10.78%	9.43%	8.98%
Plymouth	12,213	2,266	18.55%	22.00%	16.59%	20.02%	25.60%	18.08%
Pope County	827	127	15.36%	0.00%	0.00%	0.00%	0.00%	15.82%
Ramsey County	4,927	765	15.53%	39.13%	9.09%	24.44%	20.15%	14.88%
Red Lake County	802	86	10.72%	15.79%	0.00%	0.00%	22.22%	10.64%
Red Wing	3,019	454	15.04%	16.67%	15.94%	18.45%	23.81%	14.58%
Redwood County	453	16	3.53%	0.00%	7.69%	0.00%	0.00%	3.81%
Rochester	14,346	1,901	13.25%	26.09%	14.13%	15.07%	15.93%	12.80%
Sauk Rapids	672	62	9.23%	50.00%	0.00%	8.70%	20.00%	9.08%
Savage	2,003	283	14.13%	12.50%	19.18%	17.65%	21.18%	13.12%
Scott County	2,536	197	7.77%	12.50%	13.04%	10.42%	10.00%	7.51%
Sherburne County	3,712	317	8.54%	20.00%	7.69%	10.81%	17.50%	8.38%
Sibley County	643	55	8.55%	0.00%	0.00%	0.00%	7.04%	8.99%
Springfield	607	120	19.77%	0.00%	12.50%	0.00%	23.53%	19.96%
St. Cloud	8,844	2,169	24.53%	23.53%	29.35%	25.65%	31.75%	24.15%
Stevens County	1,047	144	13.75%	22.22%	27.27%	8.33%	11.76%	13.63%
Swift County	981	54	5.50%	0.00%	0.00%	0.00%	7.41%	5.57%
Todd County	1,036	131	12.64%	0.00%	33.33%	0.00%	5.26%	12.84%
Truman	446	33	7.40%	0.00%	0.00%	12.50%	16.67%	6.90%
Wadena County	140	3	2.14%	0.00%	n/a	0.00%	n/a	2.22%
Walker	337	33	9.79%	11.67%	0.00%	0.00%	0.00%	9.63%
Waseca County	890	158	17.75%	n/a	0.00%	20.83%	11.11%	18.01%
Wilkin County	888	64	7.21%	0.00%	0.00%	0.00%	0.00%	7.78%
Willmar	3,372	713	21.14%	40.00%	29.41%	28.57%	28.44%	18.95%
Winnebago	301	55	18.27%	33.33%	0.00%	0.00%	37.50%	16.67%
Winthrop	411	119	28.95%	0.00%	50.00%	16.67%	15.63%	30.52%
Worthington	2,712	411	15.15%	28.57%	16.92%	14.29%	15.55%	14.70%
Yellow Medicine County	864	71	8.22%	18.18%	0.00%	14.29%	16.00%	7.64%
Jurisdiction Average	**2,987**	**539**	**13.80%**	**16.30%**	**13.41%**	**11.16%**	**15.01%**	**13.43%**

* Where reason for stop could be determined

(n/a) no stops

Equipment violation rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Appendix 10: Registration Violation as Reason for Stop by Race and Jurisdiction

Name of Jurisdiction	Total Stops*	Registration Violations	Total Registration Violation Rate	American Indian %	Asian %	Black %	Latino %	White %
Akeley	460	3	0.65%	5.26%	0.00%	0.00%	0.00%	0.46%
Anoka County	8,548	608	7.11%	14.29%	1.23%	9.90%	10.48%	7.07%
Becker County	2,163	74	3.42%	3.37%	0.00%	7.14%	0.00%	3.44%
Beltrami County	1,645	104	6.32%	4.85%	7.69%	0.00%	12.50%	6.60%
Bemidji	2,686	267	9.94%	8.06%	13.33%	9.68%	16.67%	10.14%
Cass County	662	35	5.29%	8.08%	0.00%	0.00%	0.00%	4.85%
Cass Lake	145	18	12.41%	17.57%	0.00%	n/a	0.00%	7.25%
Cloquet	467	25	5.35%	2.04%	0.00%	14.29%	0.00%	5.75%
Cook County	1,113	10	0.90%	0.00%	0.00%	0.00%	0.00%	0.97%
Crosby	295	7	2.37%	0.00%	0.00%	0.00%	n/a	2.47%
Dakota County	10,948	341	3.11%	5.26%	2.46%	4.09%	2.47%	3.12%
Dodge County	2,256	130	5.76%	n/a	6.67%	19.30%	3.92%	5.51%
Eagle Lake	623	26	4.17%	n/a	0.00%	0.00%	0.00%	4.42%
Fairfax	242	2	0.83%	0.00%	0.00%	0.00%	0.00%	0.98%
Faribault	4,168	223	5.35%	20.00%	4.48%	2.61%	6.17%	5.30%
Fridley	3,705	213	5.75%	9.09%	3.68%	7.64%	4.86%	5.62%
Gibbon	238	8	3.36%	0.00%	0.00%	0.00%	7.14%	3.09%
Goodhue County	3,494	128	3.66%	3.85%	0.00%	1.39%	5.31%	3.75%
Granite Falls	430	11	2.56%	0.00%	0.00%	0.00%	0.00%	2.85%
Grant County	880	2	0.23%	0.00%	0.00%	0.00%	0.00%	0.23%
Henning	162	6	3.70%	0.00%	n/a	0.00%	0.00%	3.77%
Houston County	1,743	20	1.15%	0.00%	0.00%	0.00%	10.00%	1.12%
International Falls	690	75	10.87%	7.69%	40.00%	11.76%	0.00%	10.78%
Jackson County	303	5	1.65%	n/a	0.00%	0.00%	0.00%	1.74%
Kandiyohi County	2,134	56	2.62%	0.00%	0.00%	0.00%	4.24%	2.57%
Kittson County	202	1	0.50%	n/a	0.00%	0.00%	0.00%	0.51%
Lac qui Parle County	293	3	1.02%	n/a	0.00%	n/a	0.00%	1.04%
Lake County	1,240	5	0.40%	0.00%	0.00%	0.00%	0.00%	0.42%
Leech Lake Reservation	872	18	2.06%	3.21%	0.00%	0.00%	0.00%	1.59%
Little Falls	724	40	5.52%	10.00%	50.00%	0.00%	12.50%	5.19%
Mahnomen County	579	10	1.73%	2.45%	0.00%	0.00%	0.00%	1.49%
Marshall County	259	1	0.39%	0.00%	0.00%	n/a	0.00%	0.41%
Minneapolis	53,555	3,673	6.86%	6.00%	7.25%	7.52%	4.48%	6.84%
Minneota	159	8	5.03%	0.00%	0.00%	0.00%	0.00%	5.41%
Moorhead	8,111	775	9.55%	9.76%	11.81%	7.05%	8.56%	9.65%
New Hope	4,581	254	5.54%	4.76%	4.47%	5.87%	6.87%	5.44%
Norman County	338	15	4.44%	0.00%	0.00%	0.00%	5.00%	4.64%
Olmsted County	4,001	100	2.50%	0.00%	1.69%	0.98%	3.77%	2.52%
Plymouth	12,213	1,359	11.13%	14.00%	8.64%	11.49%	11.97%	11.14%
Pope County	827	11	1.33%	0.00%	0.00%	0.00%	0.00%	1.37%
Ramsey County	4,927	420	8.52%	13.04%	8.56%	9.21%	13.43%	8.29%
Red Lake County	802	17	2.12%	0.00%	0.00%	0.00%	0.00%	2.23%
Red Wing	3,019	169	5.60%	3.33%	4.35%	6.80%	2.38%	5.73%
Redwood County	453	4	0.88%	0.00%	0.00%	0.00%	0.00%	1.02%
Rochester	14,346	1,118	7.79%	13.04%	7.22%	7.18%	4.57%	8.08%
Sauk Rapids	672	59	8.78%	0.00%	0.00%	4.35%	10.00%	9.08%
Savage	2,003	246	12.28%	0.00%	10.96%	9.80%	7.06%	12.88%
Scott County	2,536	111	4.38%	6.25%	2.17%	2.08%	2.86%	4.50%
Sherburne County	3,712	116	3.13%	0.00%	0.00%	5.41%	0.00%	3.17%
Sibley County	643	11	1.71%	0.00%	0.00%	0.00%	0.00%	1.98%
Springfield	607	5	0.82%	0.00%	0.00%	0.00%	0.00%	0.88%
St. Cloud	8,844	1,354	15.31%	29.41%	13.99%	12.39%	11.90%	15.57%
Stevens County	1,047	13	1.24%	0.00%	0.00%	8.33%	0.00%	1.20%
Swift County	981	11	1.12%	0.00%	0.00%	0.00%	0.00%	1.18%
Todd County	1,036	22	2.12%	0.00%	0.00%	0.00%	5.26%	2.09%
Truman	446	13	2.91%	50.00%	0.00%	0.00%	0.00%	2.96%
Wadena County	140	0	0.00%	0.00%	n/a	0.00%	n/a	0.00%
Walker	337	22	6.53%	10.00%	33.33%	0.00%	0.00%	5.56%
Waseca County	890	22	2.47%	n/a	0.00%	4.17%	0.00%	2.52%
Wilkin County	888	26	2.93%	0.00%	20.00%	8.33%	0.00%	2.79%
Willmar	3,372	194	5.75%	10.00%	0.00%	7.94%	6.37%	5.56%
Winnebago	301	8	2.66%	0.00%	0.00%	0.00%	0.00%	2.96%
Winthrop	411	9	2.19%	0.00%	0.00%	0.00%	9.38%	1.63%
Worthington	2,712	263	9.70%	0.00%	7.18%	18.57%	8.24%	10.46%
Yellow Medicine County	864	10	1.16%	4.55%	0.00%	0.00%	0.00%	1.13%
Jurisdiction Average	**2,987**	**199**	**4.29%**	**5.07%**	**4.30%**	**3.63%**	**3.47%**	**4.23%**

* Where reason for stop could be determined

(n/a) no stops

Registration violation rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Appendix 11: Other as Reason for Stop by Race and Jurisdiction

Name of Jurisdiction	Total Stops*	"Other" reason for stop	Total Other Reason Rate	American Indian %	Asian %	Black %	Latino %	White %
Akeley	460	12	2.61%	0.00%	0.00%	0.00%	0.00%	2.77%
Anoka County	8,548	361	4.22%	7.14%	4.94%	3.96%	4.76%	4.20%
Becker County	2,163	97	4.48%	6.18%	0.00%	14.29%	0.00%	4.31%
Beltrami County	1,645	28	1.70%	0.97%	0.00%	0.00%	0.00%	1.87%
Bemidji	2,686	36	1.34%	1.94%	0.00%	9.68%	0.00%	1.16%
Cass County	662	16	2.42%	7.07%	50.00%	0.00%	0.00%	1.44%
Cass Lake	145	4	2.76%	2.70%	0.00%	n/a	0.00%	2.90%
Cloquet	467	12	2.57%	4.08%	0.00%	0.00%	0.00%	2.50%
Cook County	1,113	54	4.85%	7.14%	6.67%	9.09%	25.00%	4.58%
Crosby	295	14	4.75%	11.11%	0.00%	0.00%	n/a	4.59%
Dakota County	10,948	405	3.70%	10.53%	2.87%	7.43%	6.87%	3.47%
Dodge County	2,256	116	5.14%	n/a	0.00%	0.00%	7.19%	5.21%
Eagle Lake	623	26	4.17%	n/a	37.50%	0.00%	0.00%	3.91%
Fairfax	242	5	2.07%	11.11%	0.00%	0.00%	5.26%	1.46%
Faribault	4,168	228	5.47%	30.00%	10.45%	7.83%	8.02%	4.87%
Fridley	3,705	321	8.66%	13.64%	5.79%	20.83%	9.03%	6.99%
Gibbon	238	7	2.94%	0.00%	25.00%	0.00%	3.57%	2.58%
Goodhue County	3,494	141	4.04%	0.00%	0.00%	4.17%	7.08%	4.06%
Granite Falls	430	30	6.98%	27.78%	20.00%	0.00%	6.67%	5.96%
Grant County	880	20	2.27%	16.67%	0.00%	0.00%	0.00%	2.21%
Henning	162	1	0.62%	0.00%	n/a	0.00%	0.00%	0.63%
Houston County	1,743	28	1.61%	0.00%	0.00%	5.00%	20.00%	1.47%
International Falls	690	23	3.33%	0.00%	20.00%	0.00%	0.00%	3.44%
Jackson County	303	5	1.65%	n/a	0.00%	0.00%	14.29%	1.39%
Kandiyohi County	2,134	26	1.22%	0.00%	0.00%	5.56%	0.85%	1.21%
Kittson County	202	21	10.40%	n/a	0.00%	0.00%	0.00%	10.71%
Lac qui Parle County	293	2	0.68%	n/a	0.00%	n/a	0.00%	0.69%
Lake County	1,240	8	0.65%	0.00%	0.00%	0.00%	0.00%	0.67%
Leech Lake Reservation	872	12	1.38%	2.50%	0.00%	10.00%	0.00%	0.71%
Little Falls	724	14	1.93%	0.00%	0.00%	11.11%	12.50%	1.73%
Mahnomen County	579	42	7.25%	11.66%	25.00%	0.00%	16.67%	5.21%
Marshall County	259	14	5.41%	66.67%	0.00%	n/a	0.00%	4.98%
Minneapolis	53,555	5,098	9.52%	12.75%	8.24%	11.39%	7.60%	8.30%
Minneota	159	7	4.40%	50.00%	0.00%	0.00%	0.00%	4.05%
Moorhead	8,111	286	3.53%	9.76%	0.79%	4.98%	10.65%	2.99%
New Hope	4,581	159	3.47%	9.52%	3.35%	6.41%	7.30%	2.53%
Norman County	338	7	2.07%	0.00%	0.00%	0.00%	20.00%	0.99%
Olmsted County	4,001	115	2.87%	0.00%	1.69%	2.94%	6.60%	2.79%
Plymouth	12,213	1,115	9.13%	16.00%	6.82%	15.35%	15.84%	8.15%
Pope County	827	6	0.73%	0.00%	0.00%	0.00%	0.00%	0.75%
Ramsey County	4,927	244	4.95%	4.35%	4.28%	6.98%	8.21%	4.73%
Red Lake County	802	27	3.37%	0.00%	0.00%	0.00%	0.00%	3.55%
Red Wing	3,019	116	3.84%	5.00%	1.45%	4.85%	5.95%	3.77%
Redwood County	453	10	2.21%	10.34%	0.00%	0.00%	0.00%	1.78%
Rochester	14,346	398	2.77%	0.00%	2.15%	4.90%	3.98%	2.49%
Sauk Rapids	672	22	3.27%	0.00%	0.00%	4.35%	10.00%	3.18%
Savage	2,003	120	5.99%	25.00%	6.16%	10.78%	11.76%	5.29%
Scott County	2,536	55	2.17%	0.00%	4.35%	4.17%	2.86%	2.08%
Sherburne County	3,712	78	2.10%	6.67%	3.85%	8.11%	0.00%	2.03%
Sibley County	643	43	6.69%	33.33%	0.00%	9.09%	4.23%	6.83%
Springfield	607	17	2.80%	0.00%	6.25%	0.00%	11.76%	2.45%
St. Cloud	8,844	403	4.56%	8.82%	3.75%	8.95%	7.14%	4.20%
Stevens County	1,047	15	1.43%	0.00%	0.00%	8.33%	5.88%	1.30%
Swift County	981	24	2.45%	0.00%	0.00%	0.00%	3.70%	2.46%
Todd County	1,036	28	2.70%	0.00%	0.00%	20.00%	10.53%	2.49%
Truman	446	16	3.59%	0.00%	0.00%	0.00%	8.33%	3.45%
Wadena County	140	6	4.29%	50.00%	n/a	0.00%	n/a	3.70%
Walker	337	11	3.26%	11.67%	0.00%	0.00%	0.00%	1.48%
Waseca County	890	58	6.52%	n/a	33.33%	4.17%	3.70%	6.48%
Wilkin County	888	86	9.68%	11.11%	20.00%	0.00%	11.11%	9.84%
Willmar	3,372	150	4.45%	20.00%	5.88%	7.94%	6.96%	3.64%
Winnebago	301	5	1.66%	0.00%	0.00%	33.33%	4.17%	1.11%
Winthrop	411	33	8.03%	0.00%	50.00%	0.00%	18.75%	7.08%
Worthington	2,712	80	2.95%	0.00%	6.67%	1.43%	3.83%	2.09%
Yellow Medicine County	864	14	1.62%	4.55%	0.00%	0.00%	12.00%	1.25%
Jurisdiction Average	**2,987**	**169**	**3.79%**	**8.94%**	**5.99%**	**4.64%**	**5.88%**	**3.43%**

* Where reason for stop could be determined

(n/a) no stops

Other reason rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Appendix 12: Arrest as Disposition of Stop by Race and Jurisdiction

Name of Jurisdiction	Total Stops*	Arrests	Total Arrest Rate	American Indian %	Asian %	Black %	Latino %	White %
Akeley	460	13	2.83%	15.79%	0.00%	0.00%	0.00%	2.31%
Anoka County	8,548	371	4.34%	10.71%	2.47%	10.89%	8.57%	4.20%
Becker County	2,163	158	7.30%	19.10%	12.50%	14.29%	6.25%	6.16%
Beltrami County	1,645	122	7.42%	17.07%	7.69%	8.00%	0.00%	6.05%
Bemidji	2,686	138	5.14%	16.77%	0.00%	16.13%	0.00%	3.49%
Cass County	662	36	5.44%	19.19%	0.00%	0.00%	0.00%	3.05%
Cass Lake	145	16	11.03%	18.92%	0.00%	n/a	0.00%	2.90%
Cloquet	467	27	5.78%	16.33%	25.00%	14.29%	0.00%	4.00%
Cook County	1,113	16	1.44%	5.36%	0.00%	0.00%	0.00%	1.27%
Crosby	295	28	9.49%	44.44%	0.00%	0.00%	n/a	8.48%
Dakota County	10,948	290	2.65%	5.26%	2.05%	6.77%	6.04%	2.42%
Dodge County	2,256	84	3.72%	n/a	3.33%	1.75%	8.50%	3.42%
Eagle Lake	623	10	1.61%	n/a	0.00%	0.00%	5.88%	1.53%
Fairfax	242	5	2.07%	0.00%	0.00%	0.00%	10.53%	1.46%
Faribault	4,168	156	3.74%	10.00%	0.00%	0.87%	6.58%	3.50%
Fridley	3,705	187	5.05%	18.18%	1.05%	10.44%	5.56%	4.39%
Gibbon	238	19	7.98%	25.00%	0.00%	25.00%	14.29%	6.19%
Goodhue County	3,494	88	2.52%	3.85%	0.00%	6.94%	7.08%	2.31%
Granite Falls	430	24	5.58%	38.89%	0.00%	0.00%	6.67%	4.15%
Grant County	880	7	0.80%	0.00%	0.00%	0.00%	0.00%	0.82%
Henning	162	9	5.56%	0.00%	n/a	0.00%	0.00%	5.70%
Houston County	1,743	28	1.61%	0.00%	0.00%	5.00%	10.00%	1.53%
International Falls	690	37	5.36%	7.69%	0.00%	0.00%	0.00%	5.47%
Jackson County	303	8	2.64%	n/a	0.00%	50.00%	0.00%	2.09%
Kandiyohi County	2,134	85	3.98%	0.00%	0.00%	5.56%	13.56%	3.43%
Kittson County	202	1	0.50%	n/a	0.00%	0.00%	0.00%	0.52%
Lac qui Parle County	293	11	3.75%	n/a	0.00%	n/a	100.00%	3.46%
Lake County	1,240	9	0.73%	0.00%	0.00%	0.00%	0.00%	0.75%
Leech Lake Reservation	872	56	6.42%	16.43%	14.29%	0.00%	0.00%	1.59%
Little Falls	724	23	3.18%	20.00%	0.00%	11.11%	12.50%	2.74%
Mahnomen County	579	73	12.61%	30.06%	25.00%	0.00%	16.67%	5.46%
Marshall County	259	15	5.79%	33.33%	0.00%	n/a	7.69%	5.39%
Minneapolis	53,555	5,132	9.58%	19.36%	5.09%	12.66%	15.82%	5.36%
Minneota	159	1	0.63%	0.00%	0.00%	0.00%	0.00%	0.68%
Moorhead	8,111	397	4.89%	13.82%	2.36%	10.37%	10.88%	4.24%
New Hope	4,581	221	4.82%	9.52%	3.93%	8.01%	9.40%	3.82%
Norman County	338	20	5.92%	9.09%	0.00%	100.00%	10.00%	5.30%
Olmsted County	4,001	152	3.80%	50.00%	6.78%	8.82%	19.81%	3.14%
Plymouth	12,213	847	6.94%	26.00%	4.78%	16.25%	15.10%	5.47%
Pope County	827	41	4.96%	33.33%	0.00%	0.00%	9.09%	4.86%
Ramsey County	4,927	164	3.33%	13.04%	2.67%	6.67%	7.46%	2.93%
Red Lake County	802	32	3.99%	15.79%	0.00%	0.00%	0.00%	3.82%
Red Wing	3,019	247	8.18%	16.67%	14.49%	11.65%	16.67%	7.44%
Redwood County	453	12	2.65%	10.34%	0.00%	0.00%	0.00%	2.28%
Rochester	14,346	502	3.50%	13.04%	3.69%	5.40%	7.52%	3.00%
Sauk Rapids	672	52	7.74%	0.00%	0.00%	8.70%	10.00%	7.80%
Savage	2,003	81	4.04%	37.50%	4.79%	6.86%	4.71%	3.61%
Scott County	2,536	76	3.00%	18.75%	0.00%	10.42%	8.57%	2.63%
Sherburne County	3,712	112	3.02%	0.00%	7.69%	8.11%	15.00%	2.81%
Sibley County	643	36	5.60%	0.00%	0.00%	9.09%	15.49%	4.32%
Springfield	607	29	4.78%	0.00%	12.50%	50.00%	11.76%	4.20%
St. Cloud	8,844	332	3.75%	8.82%	1.71%	5.69%	7.94%	3.60%
Stevens County	1,047	24	2.29%	0.00%	0.00%	0.00%	5.88%	2.30%
Swift County	981	19	1.94%	20.00%	0.00%	0.00%	0.00%	1.93%
Todd County	1,036	35	3.38%	0.00%	0.00%	0.00%	5.26%	3.38%
Truman	446	12	2.69%	0.00%	0.00%	0.00%	4.17%	2.71%
Wadena County	140	4	2.86%	50.00%	n/a	0.00%	n/a	2.22%
Walker	337	23	6.82%	18.33%	0.00%	0.00%	0.00%	4.44%
Waseca County	890	30	3.37%	n/a	16.67%	8.33%	0.00%	3.24%
Wilkin County	888	17	1.91%	0.00%	0.00%	4.17%	0.00%	1.94%
Willmar	3,372	269	7.98%	30.00%	0.00%	3.17%	18.52%	5.33%
Winnebago	301	6	1.99%	0.00%	0.00%	0.00%	0.00%	2.22%
Winthrop	411	3	0.73%	0.00%	0.00%	0.00%	0.00%	0.82%
Worthington	2,712	185	6.82%	14.29%	4.62%	2.86%	14.27%	3.17%
Yellow Medicine County	864	25	2.89%	14.29%	20.00%	0.00%	12.00%	2.26%
Jurisdiction Average	**2,987**	**174**	**4.44%**	**14.14%**	**3.26%**	**7.81%**	**7.96%**	**3.50%**

* Where dispostition of stop could be determined

(n/a) no stops

Arrest rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Appendix 13: Citation as Disposition of Stop by Race and Jurisdiction

Name of Jurisdiction	Total Stops*	Citations	Citation Rate	American Indian %	Asian %	Black %	Latino %	White %
Akeley	460	159	34.57%	26.32%	50.00%	0.00%	25.00%	35.19%
Anoka County	8,548	3,700	43.28%	46.43%	37.04%	35.64%	47.62%	43.38%
Becker County	2,163	725	33.52%	16.85%	0.00%	28.57%	43.75%	35.13%
Beltrami County	1,645	571	34.71%	32.68%	30.77%	36.00%	75.00%	34.94%
Bemidji	2,686	1,050	39.09%	32.26%	40.00%	38.71%	50.00%	39.95%
Cass County	662	298	45.02%	31.31%	50.00%	0.00%	33.33%	47.58%
Cass Lake	145	31	21.38%	17.57%	0.00%	n/a	0.00%	26.09%
Cloquet	467	113	24.20%	16.33%	12.50%	0.00%	33.33%	25.75%
Cook County	1,113	411	36.93%	17.86%	46.67%	9.09%	50.00%	38.07%
Crosby	295	66	22.37%	22.22%	100.00%	0.00%	n/a	22.26%
Dakota County	10,948	7,048	64.38%	68.42%	65.57%	62.41%	62.64%	64.46%
Dodge County	2,256	727	32.23%	n/a	43.33%	43.86%	47.06%	30.59%
Eagle Lake	623	187	30.02%	n/a	37.50%	30.00%	52.94%	29.30%
Fairfax	242	109	45.04%	55.56%	33.33%	66.67%	52.63%	43.41%
Faribault	4,168	1,338	32.10%	30.00%	28.36%	42.61%	50.82%	29.23%
Fridley	3,705	2,172	58.62%	54.55%	55.26%	53.60%	61.81%	59.52%
Gibbon	238	93	39.08%	50.00%	50.00%	62.50%	35.71%	38.14%
Goodhue County	3,494	1,827	52.29%	61.54%	72.50%	56.94%	53.98%	51.59%
Granite Falls	430	103	23.95%	11.11%	20.00%	16.67%	33.33%	24.35%
Grant County	880	463	52.61%	83.33%	66.67%	50.00%	75.00%	52.10%
Henning	162	30	18.52%	100.00%	n/a	0.00%	0.00%	18.35%
Houston County	1,743	331	18.99%	0.00%	12.50%	40.00%	20.00%	18.82%
International Falls	690	215	31.16%	38.46%	20.00%	41.18%	0.00%	30.78%
Jackson County	303	128	42.24%	n/a	40.00%	25.00%	57.14%	42.16%
Kandiyohi County	2,134	619	29.01%	50.00%	37.50%	22.22%	34.75%	28.61%
Kittson County	202	123	60.89%	n/a	100.00%	0.00%	100.00%	61.34%
Lac qui Parle County	293	162	55.29%	n/a	0.00%	n/a	0.00%	56.06%
Lake County	1,240	700	56.45%	61.54%	100.00%	88.89%	60.00%	55.83%
Leech Lake Reservation	872	447	51.26%	35.36%	71.43%	70.00%	75.00%	58.20%
Little Falls	724	309	42.68%	20.00%	25.00%	77.78%	62.50%	42.42%
Mahnomen County	579	119	20.55%	10.43%	0.00%	0.00%	83.33%	24.07%
Marshall County	259	107	41.31%	0.00%	0.00%	n/a	61.54%	41.08%
Minneapolis	53,555	22,953	42.86%	36.27%	39.71%	41.20%	43.75%	44.58%
Minneota	159	43	27.04%	50.00%	0.00%	0.00%	57.14%	25.68%
Moorhead	8,111	3,493	43.06%	46.34%	39.37%	34.02%	47.69%	43.10%
New Hope	4,581	2,487	54.29%	38.10%	61.80%	51.00%	46.15%	55.28%
Norman County	338	122	36.09%	27.27%	25.00%	0.00%	25.00%	37.42%
Olmsted County	4,001	1,080	26.99%	50.00%	25.42%	27.45%	26.42%	27.01%
Plymouth	12,213	4,713	38.59%	26.00%	42.60%	25.31%	28.91%	40.51%
Pope County	827	298	36.03%	33.33%	50.00%	33.33%	54.55%	35.74%
Ramsey County	4,927	3,231	65.58%	43.48%	65.24%	53.02%	62.69%	66.65%
Red Lake County	802	252	31.42%	42.11%	37.50%	40.00%	33.33%	31.05%
Red Wing	3,019	1,240	41.07%	43.33%	39.13%	43.69%	39.29%	41.06%
Redwood County	453	224	49.45%	31.03%	61.54%	50.00%	84.62%	49.24%
Rochester	14,346	5,034	35.09%	34.78%	32.26%	38.45%	47.49%	34.12%
Sauk Rapids	672	396	58.93%	50.00%	100.00%	47.83%	80.00%	58.44%
Savage	2,003	1,059	52.87%	62.50%	53.42%	48.04%	57.65%	52.86%
Scott County	2,536	1,209	47.67%	62.50%	43.48%	45.83%	50.00%	47.64%
Sherburne County	3,712	1,440	38.79%	53.33%	30.77%	40.54%	30.00%	38.89%
Sibley County	643	264	41.06%	33.33%	100.00%	63.64%	38.03%	40.83%
Springfield	607	138	22.73%	0.00%	18.75%	0.00%	47.06%	22.24%
St. Cloud	8,844	3,327	37.62%	44.12%	37.67%	45.34%	37.30%	37.08%
Stevens County	1,047	508	48.52%	44.44%	36.36%	41.67%	58.82%	48.60%
Swift County	981	458	46.69%	60.00%	80.00%	70.00%	33.33%	46.57%
Todd County	1,036	389	37.55%	50.00%	66.67%	60.00%	42.11%	37.21%
Truman	446	171	38.34%	0.00%	33.33%	12.50%	66.67%	37.44%
Wadena County	140	32	22.86%	0.00%	n/a	33.33%	n/a	22.96%
Walker	337	45	13.35%	11.67%	0.00%	33.33%	100.00%	13.33%
Waseca County	890	380	42.70%	n/a	50.00%	37.50%	66.67%	42.02%
Wilkin County	888	540	60.81%	61.11%	60.00%	70.83%	77.78%	60.07%
Willmar	3,372	1,141	33.84%	20.00%	23.53%	34.92%	33.33%	34.06%
Winnebago	301	110	36.54%	33.33%	0.00%	33.33%	25.00%	37.78%
Winthrop	411	161	39.17%	100.00%	50.00%	83.33%	65.63%	35.42%
Worthington	2,712	617	22.75%	57.14%	23.59%	17.14%	27.73%	20.05%
Yellow Medicine County	864	348	40.28%	33.33%	60.00%	21.43%	36.00%	40.95%
Jurisdiction Average	**2,987**	**1,267**	**39.14%**	**38.46%**	**41.79%**	**36.72%**	**47.75%**	**39.30%**

* Where dispostition of stop could be determined

(n/a) no stops

Citation rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Appendix 14: No Action as Disposition of Stop by Race and Jurisdiction

Name of Jurisdiction	Total Stops*	No Action	Total No Action Rate	American Indian %	Asian %	Black %	Latino %	White %
Akeley	460	7	1.52%	0.00%	0.00%	0.00%	0.00%	1.62%
Anoka County	8,548	855	10.00%	14.29%	13.58%	10.89%	6.67%	9.99%
Becker County	2,163	130	6.01%	5.62%	0.00%	14.29%	6.25%	6.01%
Beltrami County	1,645	35	2.13%	2.93%	0.00%	0.00%	0.00%	2.09%
Bemidji	2,686	36	1.34%	0.97%	13.33%	0.00%	0.00%	1.34%
Cass County	662	18	2.72%	8.08%	0.00%	0.00%	0.00%	1.80%
Cass Lake	145	2	1.38%	1.35%	0.00%	n/a	0.00%	1.45%
Cloquet	467	9	1.93%	4.08%	0.00%	14.29%	0.00%	1.50%
Cook County	1,113	83	7.46%	10.71%	6.67%	18.18%	50.00%	7.01%
Crosby	295	16	5.42%	11.11%	0.00%	100.00%	n/a	4.59%
Dakota County	10,948	205	1.87%	1.75%	0.82%	2.26%	1.92%	1.89%
Dodge County	2,256	122	5.41%	n/a	0.00%	3.51%	4.58%	5.60%
Eagle Lake	623	4	0.64%	n/a	0.00%	0.00%	0.00%	0.68%
Fairfax	242	3	1.24%	0.00%	0.00%	0.00%	0.00%	1.46%
Faribault	4,168	69	1.66%	10.00%	4.48%	2.61%	1.44%	1.58%
Fridley	3,705	508	13.71%	4.55%	16.84%	15.78%	13.89%	13.28%
Gibbon	238	4	1.68%	0.00%	0.00%	0.00%	0.00%	2.06%
Goodhue County	3,494	85	2.43%	0.00%	0.00%	1.39%	1.77%	2.56%
Granite Falls	430	9	2.09%	11.11%	20.00%	0.00%	6.67%	1.30%
Grant County	880	13	1.48%	0.00%	0.00%	0.00%	0.00%	1.52%
Henning	162	3	1.85%	0.00%	n/a	0.00%	0.00%	1.90%
Houston County	1,743	38	2.18%	0.00%	0.00%	5.00%	10.00%	2.12%
International Falls	690	18	2.61%	0.00%	20.00%	0.00%	0.00%	2.66%
Jackson County	303	7	2.31%	n/a	0.00%	0.00%	14.29%	2.09%
Kandiyohi County	2,134	198	9.28%	12.50%	25.00%	16.67%	6.78%	9.28%
Kittson County	202	12	5.94%	n/a	0.00%	0.00%	0.00%	6.19%
Lac qui Parle County	293	0	0.00%	n/a	0.00%	n/a	0.00%	0.00%
Lake County	1,240	2	0.16%	0.00%	0.00%	0.00%	0.00%	0.17%
Leech Lake Reservation	872	6	0.69%	1.07%	0.00%	10.00%	0.00%	0.35%
Little Falls	724	11	1.52%	0.00%	0.00%	0.00%	0.00%	1.59%
Mahnomen County	579	88	15.20%	26.38%	25.00%	33.33%	0.00%	10.67%
Marshall County	259	10	3.86%	0.00%	0.00%	n/a	0.00%	4.15%
Minneapolis	53,555	1,389	2.59%	2.82%	3.04%	3.09%	1.90%	2.28%
Minneota	159	5	3.14%	0.00%	0.00%	0.00%	0.00%	3.38%
Moorhead	8,111	281	3.46%	4.07%	3.15%	5.39%	9.26%	3.05%
New Hope	4,581	253	5.52%	14.29%	6.18%	6.14%	7.26%	5.18%
Norman County	338	30	8.88%	18.18%	0.00%	0.00%	0.00%	9.27%
Olmsted County	4,001	130	3.25%	0.00%	3.39%	2.94%	3.77%	3.24%
Plymouth	12,213	744	6.09%	6.00%	7.06%	8.53%	10.50%	5.55%
Pope County	827	41	4.96%	0.00%	0.00%	0.00%	9.09%	4.98%
Ramsey County	4,927	170	3.45%	4.35%	4.81%	6.35%	4.48%	3.14%
Red Lake County	802	25	3.12%	5.26%	0.00%	0.00%	11.11%	3.03%
Red Wing	3,019	488	16.16%	3.33%	10.14%	17.48%	8.33%	16.81%
Redwood County	453	7	1.55%	3.45%	0.00%	0.00%	7.69%	1.27%
Rochester	14,346	280	1.95%	0.00%	2.92%	3.55%	1.47%	1.73%
Sauk Rapids	672	21	3.13%	50.00%	0.00%	8.70%	0.00%	2.87%
Savage	2,003	169	8.44%	0.00%	8.90%	9.80%	14.12%	8.07%
Scott County	2,536	44	1.74%	0.00%	0.00%	2.08%	2.86%	1.74%
Sherburne County	3,712	43	1.16%	6.67%	0.00%	0.00%	0.00%	1.17%
Sibley County	643	33	5.13%	33.33%	0.00%	9.09%	1.41%	5.40%
Springfield	607	3	0.49%	0.00%	6.25%	0.00%	0.00%	0.35%
St. Cloud	8,844	155	1.75%	2.94%	1.37%	3.45%	3.97%	1.60%
Stevens County	1,047	18	1.72%	0.00%	0.00%	16.67%	0.00%	1.60%
Swift County	981	9	0.92%	0.00%	0.00%	0.00%	3.70%	0.86%
Todd County	1,036	13	1.25%	0.00%	0.00%	20.00%	0.00%	1.19%
Truman	446	9	2.02%	0.00%	0.00%	12.50%	0.00%	1.97%
Wadena County	140	14	10.00%	0.00%	n/a	0.00%	n/a	10.37%
Walker	337	10	2.97%	1.67%	0.00%	33.33%	0.00%	2.96%
Waseca County	890	30	3.37%	n/a	0.00%	4.17%	3.70%	3.36%
Wilkin County	888	99	11.15%	22.22%	20.00%	4.17%	11.11%	11.04%
Willmar	3,372	200	5.93%	10.00%	11.76%	6.35%	7.11%	5.56%
Winnebago	301	5	1.66%	0.00%	0.00%	33.33%	0.00%	1.48%
Winthrop	411	7	1.70%	0.00%	50.00%	0.00%	3.13%	1.36%
Worthington	2,712	21	0.77%	0.00%	1.03%	0.00%	0.81%	0.76%
Yellow Medicine County	864	36	4.17%	9.52%	0.00%	21.43%	12.00%	3.52%
Jurisdiction Average	**2,987**	**114**	**3.87%**	**5.50%**	**4.54%**	**7.85%**	**4.18%**	**3.70%**

* Where dispostition of stop could be determined

(n/a) no stops

No Action rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Appendix 15: Warning as Disposition of Stop by Race and Jurisdiction

Name of Jurisdiction	Total Stops*	Warnings	Total Warning Rate	American Indian %	Asian %	Black %	Latino %	White %
Akeley	460	280	60.87%	57.89%	50.00%	100.00%	75.00%	60.88%
Anoka County	8,548	3,621	42.36%	28.57%	46.91%	42.57%	37.14%	42.43%
Becker County	2,163	1,150	53.17%	58.43%	87.50%	42.86%	43.75%	52.70%
Beltrami County	1,645	911	55.38%	47.32%	61.54%	56.00%	25.00%	56.92%
Bemidji	2,686	1,462	54.43%	50.00%	46.67%	45.16%	50.00%	55.22%
Cass County	662	310	46.83%	41.41%	50.00%	100.00%	66.67%	47.58%
Cass Lake	145	96	66.21%	62.16%	100.00%	n/a	100.00%	69.57%
Cloquet	467	318	68.09%	63.27%	62.50%	71.43%	66.67%	68.75%
Cook County	1,113	603	54.18%	66.07%	46.67%	72.73%	0.00%	53.65%
Crosby	295	185	62.71%	22.22%	0.00%	0.00%	n/a	64.66%
Dakota County	10,948	3,402	31.07%	24.56%	31.56%	28.57%	29.40%	31.24%
Dodge County	2,256	1,324	58.69%	n/a	53.33%	50.88%	39.87%	60.39%
Eagle Lake	623	421	67.58%	n/a	62.50%	70.00%	41.18%	68.48%
Fairfax	242	125	51.65%	44.44%	66.67%	33.33%	36.84%	53.66%
Faribault	4,168	2,605	62.50%	50.00%	67.16%	53.91%	41.15%	65.70%
Fridley	3,705	835	22.54%	22.73%	26.84%	20.19%	18.75%	22.81%
Gibbon	238	122	51.26%	25.00%	50.00%	12.50%	50.00%	53.61%
Goodhue County	3,494	1,491	42.67%	34.62%	27.50%	34.72%	37.17%	43.53%
Granite Falls	430	294	68.37%	38.89%	60.00%	83.33%	53.33%	70.21%
Grant County	880	397	45.11%	16.67%	33.33%	50.00%	25.00%	45.57%
Henning	162	119	73.46%	0.00%	n/a	100.00%	100.00%	74.05%
Houston County	1,743	1,346	77.22%	100.00%	87.50%	50.00%	60.00%	77.53%
International Falls	690	420	60.87%	53.85%	60.00%	58.82%	100.00%	61.09%
Jackson County	303	160	52.81%	n/a	60.00%	25.00%	28.57%	53.66%
Kandiyohi County	2,134	1,232	57.73%	37.50%	37.50%	55.56%	44.92%	58.68%
Kittson County	202	64	31.68%	n/a	0.00%	100.00%	0.00%	31.96%
Lac qui Parle County	293	120	40.96%	n/a	100.00%	n/a	0.00%	40.48%
Lake County	1,240	529	42.66%	38.46%	0.00%	11.11%	40.00%	43.25%
Leech Lake Reservation	872	363	41.63%	47.14%	14.29%	20.00%	25.00%	39.86%
Little Falls	724	381	52.62%	60.00%	75.00%	11.11%	25.00%	53.25%
Mahnomen County	579	299	51.64%	33.13%	50.00%	66.67%	0.00%	59.80%
Marshall County	259	127	49.03%	66.67%	100.00%	n/a	30.77%	49.38%
Minneapolis	53,555	24,081	44.96%	41.54%	52.16%	43.04%	38.54%	47.79%
Minneota	159	110	69.18%	50.00%	100.00%	100.00%	42.86%	70.27%
Moorhead	8,111	3,940	48.58%	35.77%	55.12%	50.21%	32.18%	49.61%
New Hope	4,581	1,620	35.36%	38.10%	28.09%	34.85%	37.18%	35.72%
Norman County	338	166	49.11%	45.45%	75.00%	0.00%	65.00%	48.01%
Olmsted County	4,001	2,639	65.96%	0.00%	64.41%	60.78%	50.00%	66.61%
Plymouth	12,213	5,900	48.31%	42.00%	45.56%	49.91%	45.49%	48.48%
Pope County	827	447	54.05%	33.33%	50.00%	66.67%	27.27%	54.42%
Ramsey County	4,927	1,367	27.75%	39.13%	27.27%	33.97%	25.37%	27.29%
Red Lake County	802	492	61.35%	36.84%	62.50%	60.00%	55.56%	62.11%
Red Wing	3,019	1,042	34.51%	36.67%	36.23%	27.18%	35.71%	34.69%
Redwood County	453	210	46.36%	55.17%	38.46%	50.00%	7.69%	47.21%
Rochester	14,346	8,530	59.46%	52.17%	61.14%	52.59%	43.51%	61.15%
Sauk Rapids	672	203	30.21%	0.00%	0.00%	34.78%	10.00%	30.89%
Savage	2,003	693	34.60%	0.00%	32.88%	35.29%	23.53%	35.46%
Scott County	2,536	1,206	47.56%	18.75%	56.52%	41.67%	38.57%	47.98%
Sherburne County	3,712	2,115	56.98%	40.00%	61.54%	51.35%	55.00%	57.13%
Sibley County	643	310	48.21%	33.33%	0.00%	18.18%	45.07%	49.46%
Springfield	607	437	71.99%	100.00%	62.50%	50.00%	41.18%	73.20%
St. Cloud	8,844	5,018	56.74%	44.12%	59.25%	45.52%	50.79%	57.72%
Stevens County	1,047	497	47.47%	55.56%	63.64%	41.67%	35.29%	47.49%
Swift County	981	495	50.46%	20.00%	20.00%	30.00%	62.96%	50.64%
Todd County	1,036	599	57.82%	50.00%	33.33%	20.00%	52.63%	58.21%
Truman	446	254	56.95%	100.00%	66.67%	75.00%	29.17%	57.88%
Wadena County	140	90	64.29%	50.00%	n/a	66.67%	n/a	64.44%
Walker	337	259	76.85%	68.33%	100.00%	33.33%	0.00%	79.26%
Waseca County	890	450	50.56%	n/a	33.33%	50.00%	29.63%	51.38%
Wilkin County	888	233	26.24%	16.67%	20.00%	20.83%	11.11%	26.94%
Willmar	3,372	1,762	52.25%	40.00%	64.71%	55.56%	41.04%	55.04%
Winnebago	301	180	59.80%	66.67%	100.00%	33.33%	75.00%	58.52%
Winthrop	411	240	58.39%	0.00%	0.00%	16.67%	31.25%	62.40%
Worthington	2,712	1,887	69.58%	28.57%	70.77%	80.00%	57.19%	76.02%
Yellow Medicine County	864	452	52.31%	42.86%	20.00%	57.14%	40.00%	53.27%
Jurisdiction Average	**2,987**	**1,431**	**52.50%**	**41.90%**	**50.41%**	**47.62%**	**40.11%**	**53.50%**

* Where dispostition of stop could be determined

(n/a) no stops

Warning rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Appendix 16: Categorizing Searches Incident to Arrest with no Arrest

From our conversations with law enforcement officials, we learned of several potential scenarios in which an officer would conduct a search, cite incident to arrest as the authority for the search, and not cite arrest as the disposition of the stop. Two of these explanations relate to limitations in the traffic stop forms that drivers were required to fill out. The third relates to departmental policy on arrests.

First, we learned that in some cases officers searched vehicles prior to impounding them, as required by state law, without searching the driver of the vehicle. Because the traffic stop forms did not include "incident to impound" as a possible search authority, some officers reported the search as incident to arrest as this authority offered the most similar explanation.

Second, we learned that that a search might be listed as incident to arrest when arrest was not reported as the disposition of the stop because of the inability of officers to list multiple search authorities where multiple searches were conducted and multiple stop dispositions where more than one person was in the stopped vehicle. Thus, is it is possible that in some circumstances "incident to arrest" was the authority for a passenger or vehicle search and arrest would not be listed as the disposition of the stop because the driver was not arrested (although presumably the passenger was arrested or the car was impounded).

Finally, from a conversation with the head of one jurisdiction we learned that officers in this jurisdiction were required to contact their supervisor prior to making an arrest and explain the circumstances leading to their decision to make an arrest. The supervisor would then approve or overturn their decision to make the arrest. In those cases where the decision is overturned, searches incident to arrest may occur prior to the officer contacting his or her supervisor.

In order to ensure that searches reported as incident to arrest were properly allocated between discretionary and non-discretionary we developed a methodology for categorizing them based on the possible scenarios discussed above:

- All searches incident to arrest where arrest was reported as the disposition are categorized as non-discretionary.

- We have also assumed that all searches incident to arrest where there is a vehicle search, but no driver search, involve impounding and thus are also non-discretionary.

- When both the vehicle and the driver were searched, the authority was reported as incident to arrest, and arrest was not reported as the disposition, we have assumed that the incident to arrest authority applies to the vehicle search (as no arrest occurred). We then assume that the driver search is discretionary because of the small very small number of searches that were non-discretionary and did not include an arrest.

- Where there is a driver and passenger search, but no vehicle search, we assume that incident to arrest applies to the passenger search and again assume that the driver search

is discretionary because of the small very small number of searches that were non-discretionary and did not include an arrest.[52]

- Where there is only a driver search incident to arrest and no arrest, we assume that the search is discretionary. Although such searches may have been legitimately conducted based on a subsequently reversed decision to arrest, the fact that the decision to arrest was reversed indicates that the officer exercised discretion in this decision and thus the search that resulted from it is also a product of the officer's discretion.

[52] Fourteen percent of all traffic stop forms that report searches fit this and the proceeding pattern. There is small likelihood that these searches are non-discretionary. Searches incident to arrest that result in arrest do not fit this pattern. Only 6 percent of all searches were made because contraband was observed, the other non-discretionary category and in nearly one-fourth of such searches arrest was listed as the disposition of the stop. Thus approximately 4.5 percent of all searches would fit this pattern and be non-discretionary and 95.5 percent would be discretionary.

Appendix 17: Consent to Search as Authority for Search by Race and Jurisdiction

Name of Jurisdiction	Total Searches*	Consent Searches	Consent to Search Rate	American Indian %	Asian %	Black %	Latino %	White %
Akeley	19	6	31.58%	25.00%	n/a	n/a	n/a	33.33%
Anoka County	765	233	30.46%	16.67%	25.00%	11.76%	16.67%	31.39%
Becker County	207	19	9.18%	7.14%	0.00%	25.00%	0.00%	9.43%
Beltrami County	128	26	20.31%	11.11%	n/a	33.33%	0.00%	23.86%
Bemidji	259	88	33.98%	27.14%	n/a	0.00%	n/a	37.50%
Cass County	82	39	47.56%	5.26%	n/a	n/a	n/a	60.32%
Cass Lake	20	2	10.00%	0.00%	n/a	n/a	n/a	33.33%
Cloquet	81	56	69.14%	18.18%	100.00%	66.67%	n/a	77.27%
Cook County	38	16	42.11%	40.00%	n/a	n/a	n/a	42.42%
Crosby	45	13	28.89%	33.33%	n/a	n/a	n/a	28.21%
Dakota County	473	60	12.68%	12.50%	25.00%	10.53%	0.00%	14.52%
Dodge County	168	74	44.05%	n/a	0.00%	60.00%	25.93%	47.41%
Eagle Lake	31	19	61.29%	n/a	n/a	n/a	100.00%	60.00%
Fairfax	7	2	28.57%	n/a	n/a	0.00%	0.00%	50.00%
Faribault	275	34	12.36%	0.00%	50.00%	0.00%	7.00%	16.15%
Fridley	249	17	6.83%	0.00%	0.00%	5.08%	8.33%	7.65%
Gibbon	27	9	33.33%	66.67%	n/a	0.00%	20.00%	35.29%
Goodhue County	230	69	30.00%	42.86%	0.00%	18.18%	11.76%	32.12%
Granite Falls	45	20	44.44%	25.00%	n/a	n/a	100.00%	44.12%
Grant County	23	16	69.57%	100.00%	n/a	n/a	100.00%	66.67%
Henning	7	1	14.29%	n/a	n/a	n/a	n/a	14.29%
Houston County	125	74	59.20%	n/a	n/a	0.00%	50.00%	61.34%
International Falls	63	16	25.40%	33.33%	n/a	100.00%	n/a	23.73%
Jackson County	12	4	33.33%	n/a	n/a	0.00%	100.00%	33.33%
Kandiyohi County	86	17	19.77%	n/a	n/a	0.00%	0.00%	22.97%
Kittson County	16	13	81.25%	n/a	n/a	n/a	n/a	81.25%
Lac qui Parle County	8	2	25.00%	n/a	n/a	n/a	n/a	25.00%
Lake County	19	11	57.89%	n/a	n/a	n/a	n/a	57.89%
Leech Lake Reservation	82	6	7.32%	6.35%	0.00%	0.00%	0.00%	13.33%
Little Falls	59	35	59.32%	50.00%	n/a	n/a	100.00%	59.26%
Mahnomen County	79	6	7.59%	4.35%	0.00%	n/a	50.00%	10.00%
Marshall County	29	20	68.97%	50.00%	n/a	n/a	100.00%	68.00%
Minneapolis	10,277	576	5.87%	4.07%	9.36%	5.98%	2.79%	7.59%
Minneota	11	2	18.18%	n/a	n/a	n/a	n/a	18.18%
Moorhead	713	45	6.31%	7.50%	0.00%	2.17%	2.08%	7.53%
New Hope	399	21	5.26%	25.00%	13.33%	5.79%	1.96%	4.81%
Norman County	35	13	37.14%	50.00%	n/a	100.00%	33.33%	34.48%
Olmsted County	172	66	38.37%	0.00%	0.00%	0.00%	33.33%	41.50%
Plymouth	1,035	94	9.08%	0.00%	10.00%	3.88%	6.25%	11.28%
Pope County	50	8	16.00%	0.00%	n/a	n/a	50.00%	14.89%
Ramsey County	265	8	3.02%	0.00%	10.00%	2.27%	9.52%	2.14%
Red Lake County	87	37	42.53%	0.00%	100.00%	50.00%	n/a	43.21%
Red Wing	191	57	29.84%	16.67%	20.00%	38.46%	25.00%	30.19%
Redwood County	18	3	16.67%	50.00%	n/a	0.00%	n/a	13.33%
Rochester	486	104	21.40%	0.00%	10.53%	26.09%	14.58%	21.91%
Sauk Rapids	72	22	30.56%	n/a	n/a	0.00%	n/a	31.88%
Savage	178	16	8.99%	0.00%	6.25%	7.14%	12.50%	9.02%
Scott County	146	33	22.60%	0.00%	n/a	10.00%	9.09%	25.83%
Sherburne County	122	19	15.57%	0.00%	0.00%	0.00%	16.67%	16.51%
Sibley County	72	32	44.44%	n/a	n/a	66.67%	9.09%	50.00%
Springfield	41	14	34.15%	n/a	0.00%	0.00%	0.00%	38.89%
St. Cloud	436	102	23.39%	0.00%	9.09%	20.41%	15.38%	24.79%
Stevens County	33	11	33.33%	n/a	n/a	100.00%	0.00%	31.03%
Swift County	25	6	24.00%	n/a	n/a	0.00%	n/a	25.00%
Todd County	42	20	47.62%	n/a	n/a	n/a	0.00%	50.00%
Truman	29	5	17.24%	n/a	n/a	n/a	0.00%	19.23%
Wadena County	7	5	71.43%	100.00%	n/a	n/a	n/a	66.67%
Walker	21	3	14.29%	14.29%	n/a	n/a	n/a	14.29%
Waseca County	71	20	28.17%	n/a	0.00%	16.67%	66.67%	27.87%
Wilkin County	246	11	4.47%	0.00%	0.00%	0.00%	20.00%	4.31%
Willmar	341	56	16.42%	0.00%	n/a	0.00%	7.91%	23.08%
Winnebago	12	1	8.33%	n/a	n/a	0.00%	0.00%	10.00%
Winthrop	13	8	61.54%	n/a	n/a	n/a	0.00%	66.67%
Worthington	217	44	20.28%	0.00%	27.27%	50.00%	8.33%	35.80%
Yellow Medicine County	44	23	52.27%	0.00%	0.00%	n/a	33.33%	60.00%
Jurisdiction Average	**303**	**39**	**30.07%**	**19.15%**	**15.40%**	**19.91%**	**25.38%**	**32.36%**

* Where authority for search could be determined

(n/a) no searches

Consent to search rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Appendix 18: Contraband Observed as Authority for Search by Race and Jurisdiction

Name of Jurisdiction	Total Searches*	Contraband Observed Searches	Total Contraband Observed	American Indian %	Asian %	Black %	Latino %	White %
Akeley	19	1	5.26%	0.00%	n/a	n/a	n/a	6.67%
Anoka County	765	22	2.88%	0.00%	0.00%	0.00%	0.00%	3.06%
Becker County	207	7	3.38%	2.38%	0.00%	0.00%	0.00%	3.77%
Beltrami County	128	7	5.47%	8.33%	n/a	0.00%	0.00%	4.55%
Bemidji	259	10	3.86%	2.86%	n/a	0.00%	n/a	4.35%
Cass County	82	2	2.44%	0.00%	n/a	n/a	n/a	3.17%
Cass Lake	20	5	25.00%	35.71%	n/a	n/a	n/a	0.00%
Cloquet	81	5	6.17%	9.09%	0.00%	0.00%	n/a	6.06%
Cook County	38	0	0.00%	0.00%	n/a	n/a	n/a	0.00%
Crosby	45	1	4.44%	0.00%	n/a	n/a	n/a	5.13%
Dakota County	473	39	8.25%	0.00%	0.00%	7.89%	1.85%	9.59%
Dodge County	168	9	5.36%	n/a	0.00%	20.00%	3.70%	5.19%
Eagle Lake	31	3	9.68%	n/a	n/a	n/a	0.00%	10.00%
Fairfax	7	1	14.29%	n/a	n/a	0.00%	0.00%	25.00%
Faribault	275	21	7.64%	0.00%	0.00%	9.09%	5.00%	9.32%
Fridley	249	10	4.02%	0.00%	50.00%	1.69%	16.67%	3.53%
Gibbon	27	1	3.70%	0.00%	n/a	0.00%	0.00%	5.88%
Goodhue County	230	10	4.35%	14.29%	0.00%	0.00%	5.88%	4.15%
Granite Falls	45	1	2.22%	0.00%	n/a	n/a	0.00%	2.94%
Grant County	23	3	13.04%	0.00%	n/a	n/a	0.00%	14.29%
Henning	7	1	14.29%	n/a	n/a	n/a	n/a	14.29%
Houston County	125	9	7.20%	n/a	n/a	25.00%	0.00%	6.72%
International Falls	63	10	15.87%	0.00%	n/a	0.00%	n/a	16.95%
Jackson County	12	2	16.67%	n/a	n/a	50.00%	0.00%	11.11%
Kandiyohi County	86	20	23.26%	n/a	n/a	0.00%	9.09%	25.68%
Kittson County	16	1	6.25%	n/a	n/a	n/a	n/a	6.25%
Lac qui Parle County	8	0	0.00%	n/a	n/a	n/a	n/a	0.00%
Lake County	19	2	10.53%	n/a	n/a	n/a	n/a	10.53%
Leech Lake Reservation	82	2	2.44%	3.17%	0.00%	0.00%	0.00%	0.00%
Little Falls	59	0	0.00%	0.00%	n/a	n/a	0.00%	0.00%
Mahnomen County	79	4	5.06%	4.35%	0.00%	n/a	0.00%	6.67%
Marshall County	29	2	6.90%	0.00%	n/a	n/a	0.00%	8.00%
Minneapolis	10,277	23	0.23%	0.41%	0.85%	0.28%	0.06%	0.17%
Minneota	11	1	9.09%	n/a	n/a	n/a	n/a	9.09%
Moorhead	713	35	4.91%	5.00%	0.00%	0.00%	7.29%	5.02%
New Hope	399	21	5.26%	0.00%	0.00%	2.48%	0.00%	8.65%
Norman County	35	4	11.43%	0.00%	n/a	0.00%	33.33%	10.34%
Olmsted County	172	21	12.21%	0.00%	0.00%	14.29%	13.33%	12.24%
Plymouth	1,035	22	2.13%	0.00%	3.33%	1.46%	0.89%	2.52%
Pope County	50	10	20.00%	100.00%	n/a	n/a	0.00%	19.15%
Ramsey County	265	7	2.64%	0.00%	0.00%	0.00%	0.00%	3.74%
Red Lake County	87	15	17.24%	0.00%	0.00%	0.00%	n/a	18.52%
Red Wing	191	29	15.18%	0.00%	0.00%	0.00%	12.50%	17.61%
Redwood County	18	4	22.22%	0.00%	n/a	0.00%	n/a	26.67%
Rochester	486	65	13.37%	0.00%	5.26%	13.04%	8.33%	14.81%
Sauk Rapids	72	2	2.78%	n/a	n/a	0.00%	n/a	2.90%
Savage	178	13	7.30%	0.00%	6.25%	14.29%	0.00%	8.20%
Scott County	146	4	2.74%	20.00%	n/a	0.00%	0.00%	2.50%
Sherburne County	122	5	4.10%	0.00%	0.00%	0.00%	0.00%	4.59%
Sibley County	72	4	5.56%	n/a	n/a	0.00%	0.00%	6.90%
Springfield	41	3	7.32%	n/a	0.00%	0.00%	0.00%	8.33%
St. Cloud	436	20	4.59%	0.00%	0.00%	6.12%	15.38%	4.18%
Stevens County	33	6	18.18%	n/a	n/a	0.00%	0.00%	20.69%
Swift County	25	3	12.00%	n/a	n/a	0.00%	n/a	12.50%
Todd County	42	4	9.52%	n/a	n/a	n/a	0.00%	10.00%
Truman	29	7	24.14%	n/a	n/a	n/a	0.00%	26.92%
Wadena County	7	0	0.00%	0.00%	n/a	n/a	n/a	0.00%
Walker	21	3	14.29%	28.57%	n/a	n/a	n/a	7.14%
Waseca County	71	6	8.45%	n/a	0.00%	16.67%	0.00%	8.20%
Wilkin County	246	41	16.67%	0.00%	0.00%	0.00%	20.00%	17.24%
Willmar	341	19	5.57%	0.00%	n/a	0.00%	3.60%	7.18%
Winnebago	12	0	0.00%	n/a	n/a	0.00%	0.00%	0.00%
Winthrop	13	2	15.38%	n/a	n/a	n/a	0.00%	16.67%
Worthington	217	12	5.53%	0.00%	18.18%	0.00%	2.50%	8.64%
Yellow Medicine County	44	5	11.36%	0.00%	100.00%	n/a	16.67%	8.57%
Jurisdiction Average	**303**	**10**	**8.48%**	**5.32%**	**6.81%**	**4.34%**	**3.83%**	**8.66%**

* Where authority for search could be determined

(n/a) no searches

Contraband observed rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Appendix 19: Discretionary Incident to Arrest as Authority for Search by Race and Jurisdiction

Name of Jurisdiction	Total Searches*	Discretionary Incident to Arrest Searches	Total Discretionary Incident to Arrest Rate	American Indian %	Asian %	Black %	Latino %	White %
Akeley	19	0	0.00%	0.00%	n/a	n/a	n/a	0.00%
Anoka County	765	85	11.11%	16.67%	25.00%	0.00%	16.67%	11.11%
Becker County	207	9	4.35%	4.76%	0.00%	0.00%	100.00%	3.77%
Beltrami County	128	1	0.78%	0.00%	n/a	0.00%	100.00%	0.00%
Bemidji	259	6	2.32%	1.43%	n/a	0.00%	n/a	2.72%
Cass County	82	1	1.22%	0.00%	n/a	n/a	n/a	1.59%
Cass Lake	20	0	0.00%	0.00%	n/a	n/a	n/a	0.00%
Cloquet	81	0	0.00%	0.00%	0.00%	0.00%	n/a	0.00%
Cook County	38	1	2.63%	0.00%	n/a	n/a	n/a	3.03%
Crosby	45	2	4.44%	0.00%	n/a	n/a	n/a	5.13%
Dakota County	473	93	19.66%	25.00%	12.50%	18.42%	24.07%	19.18%
Dodge County	168	9	5.36%	n/a	0.00%	20.00%	3.70%	5.19%
Eagle Lake	31	1	3.23%	n/a	n/a	n/a	0.00%	3.33%
Fairfax	7	0	0.00%	n/a	n/a	0.00%	0.00%	0.00%
Faribault	275	16	5.82%	0.00%	50.00%	0.00%	9.00%	3.73%
Fridley	249	9	3.61%	0.00%	0.00%	3.39%	0.00%	4.12%
Gibbon	27	0	0.00%	0.00%	n/a	0.00%	0.00%	0.00%
Goodhue County	230	13	5.65%	0.00%	50.00%	0.00%	11.76%	5.18%
Granite Falls	45	5	11.11%	0.00%	n/a	n/a	0.00%	14.71%
Grant County	23	0	0.00%	0.00%	n/a	n/a	0.00%	0.00%
Henning	7	0	0.00%	n/a	n/a	n/a	n/a	0.00%
Houston County	125	13	10.40%	n/a	n/a	50.00%	0.00%	9.24%
International Falls	63	2	3.17%	0.00%	n/a	0.00%	n/a	3.39%
Jackson County	12	0	0.00%	n/a	n/a	0.00%	0.00%	0.00%
Kandiyohi County	86	6	6.98%	n/a	n/a	0.00%	0.00%	8.11%
Kittson County	16	0	0.00%	n/a	n/a	n/a	n/a	0.00%
Lac qui Parle County	8	0	0.00%	n/a	n/a	n/a	n/a	0.00%
Lake County	19	0	0.00%	n/a	n/a	n/a	n/a	0.00%
Leech Lake Reservation	82	5	6.10%	3.17%	0.00%	0.00%	100.00%	6.67%
Little Falls	59	4	6.78%	25.00%	n/a	n/a	0.00%	5.56%
Mahnomen County	79	1	1.27%	0.00%	0.00%	n/a	0.00%	3.33%
Marshall County	29	0	0.00%	0.00%	n/a	n/a	0.00%	0.00%
Minneapolis	10,277	3,390	32.99%	31.71%	30.21%	35.15%	31.29%	29.20%
Minneota	11	2	18.18%	n/a	n/a	n/a	n/a	18.18%
Moorhead	713	71	9.96%	15.00%	30.77%	15.22%	12.50%	8.11%
New Hope	399	32	8.02%	25.00%	13.33%	11.57%	11.76%	4.33%
Norman County	35	0	0.00%	0.00%	n/a	0.00%	0.00%	0.00%
Olmsted County	172	2	1.16%	0.00%	0.00%	0.00%	0.00%	1.36%
Plymouth	1,035	32	3.09%	0.00%	13.33%	3.40%	4.46%	2.37%
Pope County	50	1	2.00%	0.00%	n/a	n/a	0.00%	2.13%
Ramsey County	265	51	19.25%	0.00%	20.00%	18.18%	23.81%	19.25%
Red Lake County	87	0	0.00%	0.00%	0.00%	0.00%	n/a	0.00%
Red Wing	191	6	3.14%	0.00%	0.00%	7.69%	12.50%	2.52%
Redwood County	18	3	16.67%	0.00%	n/a	0.00%	n/a	20.00%
Rochester	486	10	2.06%	0.00%	0.00%	1.09%	4.17%	2.16%
Sauk Rapids	72	2	2.78%	n/a	n/a	0.00%	n/a	2.90%
Savage	178	27	15.17%	50.00%	18.75%	0.00%	16.67%	15.57%
Scott County	146	18	12.33%	0.00%	n/a	20.00%	27.27%	10.83%
Sherburne County	122	9	7.38%	0.00%	0.00%	0.00%	16.67%	7.34%
Sibley County	72	3	4.17%	n/a	n/a	0.00%	9.09%	3.45%
Springfield	41	1	2.44%	n/a	0.00%	0.00%	0.00%	2.78%
St. Cloud	436	41	9.40%	0.00%	27.27%	10.20%	7.69%	8.91%
Stevens County	33	1	3.03%	n/a	n/a	0.00%	50.00%	0.00%
Swift County	25	0	0.00%	n/a	n/a	0.00%	n/a	0.00%
Todd County	42	1	2.38%	n/a	n/a	n/a	0.00%	2.50%
Truman	29	3	10.34%	n/a	n/a	n/a	66.67%	3.85%
Wadena County	7	0	0.00%	0.00%	n/a	n/a	n/a	0.00%
Walker	21	0	0.00%	0.00%	n/a	n/a	n/a	0.00%
Waseca County	71	3	4.23%	n/a	0.00%	16.67%	0.00%	3.28%
Wilkin County	246	2	0.81%	100.00%	0.00%	0.00%	0.00%	0.43%
Willmar	341	32	9.38%	0.00%	n/a	33.33%	9.35%	9.23%
Winnebago	12	0	0.00%	n/a	n/a	0.00%	0.00%	0.00%
Winthrop	13	2	15.38%	n/a	n/a	n/a	100.00%	8.33%
Worthington	217	1	0.46%	0.00%	0.00%	0.00%	0.83%	0.00%
Yellow Medicine County	44	0	0.00%	0.00%	0.00%	n/a	0.00%	0.00%
Jurisdiction Average	**303**	**62**	**5.11%**	**6.77%**	**10.78%**	**6.29%**	**16.74%**	**4.74%**

* Where authority for search could be determined

(n/a) no searches

Incident to arrest rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Appendix 20: Non-Discretionary Incident to Arrest as Authority for Search by Race and Jurisdiction

Name of Jurisdiction	Total Searches*	Non-Discretionary Incident to Arrest	Total Non-Discretionary Incident to Arrest Rate	American Indian %	Asian %	Black %	Latino %	White %
Akeley	19	10	52.63%	75.00%	n/a	n/a	n/a	46.67%
Anoka County	765	281	36.73%	66.67%	50.00%	41.18%	38.89%	36.25%
Becker County	207	149	71.98%	73.81%	100.00%	50.00%	0.00%	72.33%
Beltrami County	128	56	43.75%	38.89%	n/a	66.67%	0.00%	45.45%
Bemidji	259	115	44.40%	60.00%	n/a	100.00%	n/a	36.96%
Cass County	82	22	26.83%	57.89%	n/a	n/a	n/a	17.46%
Cass Lake	20	10	50.00%	57.14%	n/a	n/a	n/a	33.33%
Cloquet	81	15	18.52%	72.73%	0.00%	33.33%	n/a	9.09%
Cook County	38	12	31.58%	60.00%	n/a	n/a	n/a	27.27%
Crosby	45	23	53.33%	66.67%	n/a	n/a	n/a	51.28%
Dakota County	473	234	49.47%	37.50%	37.50%	57.89%	48.15%	49.32%
Dodge County	168	54	32.14%	n/a	100.00%	0.00%	40.74%	31.11%
Eagle Lake	31	5	16.13%	n/a	n/a	n/a	0.00%	16.67%
Fairfax	7	1	14.29%	n/a	n/a	0.00%	50.00%	0.00%
Faribault	275	163	59.27%	100.00%	0.00%	54.55%	57.00%	61.49%
Fridley	249	127	51.00%	83.33%	50.00%	45.76%	41.67%	52.35%
Gibbon	27	17	62.96%	33.33%	n/a	100.00%	80.00%	58.82%
Goodhue County	230	60	26.09%	28.57%	0.00%	36.36%	29.41%	25.39%
Granite Falls	45	14	31.11%	62.50%	n/a	n/a	0.00%	26.47%
Grant County	23	1	4.35%	0.00%	n/a	n/a	0.00%	4.76%
Henning	7	3	42.86%	n/a	n/a	n/a	n/a	42.86%
Houston County	125	26	20.80%	n/a	n/a	25.00%	50.00%	20.17%
International Falls	63	32	50.79%	66.67%	n/a	0.00%	n/a	50.85%
Jackson County	12	5	41.67%	n/a	n/a	50.00%	0.00%	44.44%
Kandiyohi County	86	42	48.84%	n/a	n/a	100.00%	90.91%	41.89%
Kittson County	16	1	6.25%	n/a	n/a	n/a	n/a	6.25%
Lac qui Parle County	8	1	12.50%	n/a	n/a	n/a	n/a	12.50%
Lake County	19	4	21.05%	n/a	n/a	n/a	n/a	21.05%
Leech Lake Reservation	82	36	43.90%	42.86%	100.00%	0.00%	0.00%	53.33%
Little Falls	59	15	25.42%	25.00%	n/a	n/a	0.00%	25.93%
Mahnomen County	79	34	43.04%	43.48%	100.00%	n/a	50.00%	40.00%
Marshall County	29	4	13.79%	50.00%	n/a	n/a	0.00%	12.00%
Minneapolis	10,277	4,845	48.89%	56.91%	35.74%	45.76%	61.25%	48.41%
Minneota	11	2	18.18%	n/a	n/a	n/a	n/a	18.18%
Moorhead	713	445	62.41%	52.50%	53.85%	63.04%	63.54%	63.13%
New Hope	399	230	57.64%	50.00%	53.33%	57.02%	54.90%	59.13%
Norman County	35	18	51.43%	50.00%	n/a	0.00%	33.33%	55.17%
Olmsted County	172	68	39.53%	100.00%	100.00%	71.43%	53.33%	35.37%
Plymouth	1,035	432	41.74%	46.15%	30.00%	40.29%	29.46%	44.66%
Pope County	50	30	60.00%	0.00%	n/a	n/a	50.00%	61.70%
Ramsey County	265	163	61.51%	100.00%	50.00%	50.00%	52.38%	65.24%
Red Lake County	87	20	22.99%	66.67%	0.00%	0.00%	n/a	22.22%
Red Wing	191	65	34.03%	66.67%	60.00%	38.46%	50.00%	30.82%
Redwood County	18	5	27.78%	50.00%	n/a	0.00%	n/a	26.67%
Rochester	486	290	59.67%	100.00%	84.21%	55.43%	64.58%	58.33%
Sauk Rapids	72	41	56.94%	n/a	n/a	33.33%	n/a	57.97%
Savage	178	75	42.13%	50.00%	50.00%	42.86%	33.33%	42.62%
Scott County	146	59	40.41%	40.00%	n/a	40.00%	45.45%	40.00%
Sherburne County	122	78	63.93%	100.00%	100.00%	75.00%	50.00%	63.30%
Sibley County	72	32	44.44%	n/a	n/a	33.33%	81.82%	37.93%
Springfield	41	20	48.78%	n/a	100.00%	0.00%	33.33%	50.00%
St. Cloud	436	186	42.66%	50.00%	36.36%	42.86%	30.77%	43.18%
Stevens County	33	11	33.33%	n/a	n/a	0.00%	50.00%	34.48%
Swift County	25	12	48.00%	n/a	n/a	0.00%	n/a	50.00%
Todd County	42	13	30.95%	n/a	n/a	n/a	50.00%	30.00%
Truman	29	4	13.79%	n/a	n/a	n/a	33.33%	11.54%
Wadena County	7	0	0.00%	0.00%	n/a	n/a	n/a	0.00%
Walker	21	5	23.81%	14.29%	n/a	n/a	n/a	28.57%
Waseca County	71	31	43.66%	n/a	100.00%	50.00%	0.00%	44.26%
Wilkin County	246	10	4.07%	0.00%	0.00%	0.00%	0.00%	4.31%
Willmar	341	226	66.28%	100.00%	n/a	66.67%	76.98%	57.95%
Winnebago	12	8	66.67%	n/a	n/a	100.00%	100.00%	60.00%
Winthrop	13	1	7.69%	n/a	n/a	n/a	0.00%	8.33%
Worthington	217	149	68.66%	100.00%	54.55%	50.00%	82.50%	50.62%
Yellow Medicine County	44	10	22.73%	100.00%	0.00%	n/a	33.33%	17.14%
Jurisdiction Average	**303**	**141**	**38.50%**	**56.71%**	**53.54%**	**40.86%**	**38.92%**	**36.85%**

* Where authority for search could be determined

(n/a) no searches

Incident to arrest rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)

Appendix 21: Officer Safety as Authority for Search by Race and Jurisdiction

Name of Jurisdiction	Total Searches*	Officer Safety Searches	Total Officer Saftey Rate	American Indian %	Asian %	Black %	Latino %	White %
Akeley	19	2	10.53%	0.00%	n/a	n/a	n/a	13.33%
Anoka County	765	144	18.82%	0.00%	0.00%	47.06%	27.78%	18.19%
Becker County	207	23	11.11%	11.90%	0.00%	25.00%	0.00%	10.69%
Beltrami County	128	38	29.69%	41.67%	n/a	0.00%	0.00%	26.14%
Bemidji	259	40	15.44%	8.57%	n/a	0.00%	n/a	18.48%
Cass County	82	18	21.95%	36.84%	n/a	n/a	n/a	17.46%
Cass Lake	20	3	15.00%	7.14%	n/a	n/a	n/a	33.33%
Cloquet	81	5	6.17%	0.00%	0.00%	0.00%	n/a	7.58%
Cook County	38	9	23.68%	0.00%	n/a	n/a	n/a	27.27%
Crosby	45	3	8.89%	0.00%	n/a	n/a	n/a	10.26%
Dakota County	473	47	9.94%	25.00%	25.00%	5.26%	25.93%	7.40%
Dodge County	168	22	13.10%	n/a	0.00%	0.00%	25.93%	11.11%
Eagle Lake	31	3	9.68%	n/a	n/a	n/a	0.00%	10.00%
Fairfax	7	3	42.86%	n/a	n/a	100.00%	50.00%	25.00%
Faribault	275	41	14.91%	0.00%	0.00%	36.36%	22.00%	9.32%
Fridley	249	86	34.54%	16.67%	0.00%	44.07%	33.33%	32.35%
Gibbon	27	0	0.00%	0.00%	n/a	0.00%	0.00%	0.00%
Goodhue County	230	78	33.91%	14.29%	50.00%	45.45%	41.18%	33.16%
Granite Falls	45	5	11.11%	12.50%	n/a	n/a	0.00%	11.76%
Grant County	23	3	13.04%	0.00%	n/a	n/a	0.00%	14.29%
Henning	7	2	28.57%	n/a	n/a	n/a	n/a	28.57%
Houston County	125	3	2.40%	n/a	n/a	0.00%	0.00%	2.52%
International Falls	63	3	4.76%	0.00%	n/a	0.00%	n/a	5.08%
Jackson County	12	1	8.33%	n/a	n/a	0.00%	0.00%	11.11%
Kandiyohi County	86	1	1.16%	n/a	n/a	0.00%	0.00%	1.35%
Kittson County	16	1	6.25%	n/a	n/a	n/a	n/a	6.25%
Lac qui Parle County	8	5	62.50%	n/a	n/a	n/a	n/a	62.50%
Lake County	19	2	10.53%	n/a	n/a	n/a	n/a	10.53%
Leech Lake Reservation	82	33	40.24%	44.44%	0.00%	100.00%	0.00%	26.67%
Little Falls	59	5	8.47%	0.00%	n/a	n/a	0.00%	9.26%
Mahnomen County	79	34	43.04%	47.83%	0.00%	n/a	0.00%	40.00%
Marshall County	29	3	10.34%	0.00%	n/a	n/a	0.00%	12.00%
Minneapolis	10,277	1,177	12.03%	6.91%	23.83%	12.83%	4.61%	14.62%
Minneota	11	4	36.36%	n/a	n/a	n/a	n/a	36.36%
Moorhead	713	117	16.41%	20.00%	15.38%	19.57%	14.58%	16.22%
New Hope	399	95	23.81%	0.00%	20.00%	23.14%	31.37%	23.08%
Norman County	35	0	0.00%	0.00%	n/a	0.00%	0.00%	0.00%
Olmsted County	172	15	8.72%	0.00%	0.00%	14.29%	0.00%	9.52%
Plymouth	1,035	455	43.96%	53.85%	43.33%	50.97%	58.93%	39.17%
Pope County	50	1	2.00%	0.00%	n/a	n/a	0.00%	2.13%
Ramsey County	265	36	13.58%	0.00%	20.00%	29.55%	14.29%	9.63%
Red Lake County	87	15	17.24%	33.33%	0.00%	50.00%	n/a	16.05%
Red Wing	191	34	17.80%	16.67%	20.00%	15.38%	0.00%	18.87%
Redwood County	18	3	16.67%	0.00%	n/a	100.00%	n/a	13.33%
Rochester	486	17	3.50%	0.00%	0.00%	4.35%	8.33%	2.78%
Sauk Rapids	72	5	6.94%	n/a	n/a	66.67%	n/a	4.35%
Savage	178	47	26.40%	0.00%	18.75%	35.71%	37.50%	24.59%
Scott County	146	32	21.92%	40.00%	n/a	30.00%	18.18%	20.83%
Sherburne County	122	11	9.02%	0.00%	0.00%	25.00%	16.67%	8.26%
Sibley County	72	1	1.39%	n/a	n/a	0.00%	0.00%	1.72%
Springfield	41	3	7.32%	n/a	0.00%	100.00%	66.67%	0.00%
St. Cloud	436	87	19.95%	50.00%	27.27%	20.41%	30.77%	18.94%
Stevens County	33	4	12.12%	n/a	n/a	0.00%	0.00%	13.79%
Swift County	25	4	16.00%	n/a	n/a	100.00%	n/a	12.50%
Todd County	42	4	9.52%	n/a	n/a	n/a	50.00%	7.50%
Truman	29	10	34.48%	n/a	n/a	n/a	0.00%	38.46%
Wadena County	7	2	28.57%	0.00%	n/a	n/a	n/a	33.33%
Walker	21	10	47.62%	42.86%	n/a	n/a	n/a	50.00%
Waseca County	71	11	15.49%	n/a	0.00%	0.00%	33.33%	16.39%
Wilkin County	246	182	73.98%	0.00%	100.00%	100.00%	60.00%	73.71%
Willmar	341	8	2.35%	0.00%	n/a	0.00%	2.16%	2.56%
Winnebago	12	3	25.00%	n/a	n/a	0.00%	0.00%	30.00%
Winthrop	13	0	0.00%	n/a	n/a	n/a	0.00%	0.00%
Worthington	217	11	5.07%	0.00%	0.00%	0.00%	5.83%	4.94%
Yellow Medicine County	44	6	13.64%	0.00%	0.00%	n/a	16.67%	14.29%
Jurisdiction Average	**303**	**47**	**17.84%**	**12.06%**	**13.47%**	**28.60%**	**15.13%**	**17.40%**

* Where authority for search could be determined

(n/a) no searches

Officer safety rates that are above a jurisdiction's average by a statistically significant margin are in red, those below are in blue. (P. < .05)