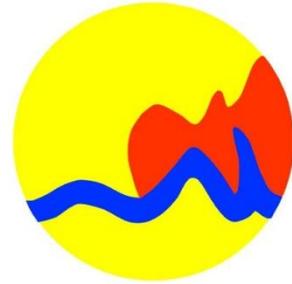


# GRAND RAPIDS POLICE DEPARTMENT TRAFFIC STOP DATA ANALYSIS

Report for the City  
of Grand Rapids



John Lamberth & Jerry Clayton  
Lamberth Consulting

**LAMBERTH CONSULTING**  
PROVIDING PROFILING SOLUTIONS

April, 2017

Lamberth Consulting was formed in 2000 in an effort to provide racial profiling assessment, training, and communication services to universities, states, counties, cities, civil rights groups, litigators, and communities.

Dr. John Lamberth, CEO and founder of Lamberth Consulting, developed the nation's first racial profiling methodology in 1993. Since that time we have revised and adapted our methodology for highways, urban areas, suburban areas, and pedestrian populations. We have expanded our service offerings to include training solutions targeted towards law enforcement and community members, as well as communication planning services to help educate and inform all parties concerned about racial profiling issues.

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## Lamberth Consulting Personnel

Dr. John Lamberth is the CEO of LC and has been involved in assessing racial profiling in many contexts both domestically and internationally. He developed the first racial profiling assessment methodology that has been relied on by courts in making a determination of whether targeting of minority motorists was occurring. He has directed projects on behalf of more than 25 police departments around the country, has assessed a number of other departments in a litigation context and has directed data collection projects in Moscow, Russia and Paris, France. He regularly is invited to address both community and law enforcement meetings concerning racial profiling. His most recent addresses occurred at the United Nations Minority Forum held in Geneva, Switzerland on November 24-25, 2015 and at a meeting entitled Building Leadership for Fair and Effective Policing in Barcelona, Spain in December of 2015. The first of these meetings was composed primarily of community leaders from around the world and the second was of Police leaders from Europe.

Dr. Lamberth served as the Project Director for this study.

Sheriff Jerry Clayton of Washtenaw County, MI is Vice President of Training for LC and served as co-project director and participated in all aspects of the engagement with particular emphasis on the training and community engagement portions of this study. Sheriff Clayton served in the Sheriff's Office of Washtenaw County for 20 years and was elected Sheriff in 2009. He has worked extensively with community groups and developed a first of its kind police community workshop to assist police and communities to build trust and work together. He recently reported on the workshop at a meeting entitled Building Leadership for Fair and Effective Policing in Barcelona, Spain in December of 2015. Sheriff Clayton has been active in

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Dr. Cheryl Rickabaugh who serves on the faculty at the University of Redlands in California has worked with LC for over 10 years in a data collection, management, analysis and reporting capacity. She assisted Dr. Lamberth in the management and analysis of the data for this project. Dr. Rickabaugh has many years of experience in working with complex datasets and analyses.

Ms. Patricia Allen served as coordinator of collected data and worked with Dr. Lamberth in assessing the quality and accuracy of the data collected. She was involved in the administrative aspects of the project.

Ms. Megan Steinruck assisted Dr. Lamberth and Sheriff Clayton in the development and writing of this Report.

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We wish to thank City Manager Greg Sundstrom who has been extremely supportive of our endeavor. He has stood for transparency in our efforts to both provide training and determine whether GRPD targets minorities during traffic stops. He was present at all of the community meetings held during August and took part in the discussions.

Managing Director of Administrative Services Mari Beth Jelks was our primary contact from the City. We appreciate her cooperation and assistance in working through the myriad of administrative issues that arose in the course of our work. Manager of the Diversity and Inclusion Office Patti Caudill was also part of the process and assisted us in keeping the project on track.

Chief David M. Rahinsky was very helpful in assuring that we were able to conclude all the elements of a complicated study. Deputy Chief David Kiddle was our chief contact at the department and was responsible for the superb cooperation we received particularly as we conducted the benchmarking. A GRPD officer was present at every one of the benchmarking sessions and the department provided lights for those times the ambient light was not sufficient. Additionally we received input and cooperation from Deputy Chief Daniel Savage. We asked for and received a great amount of help from Kevin Carpenter, Information Systems Coordinator

for GRPD. Most of the maps in this report were provided by Andrea McClain, a crime analyst for the department. Finally, Lt. David Schnurstein was helpful in answering our questions and providing assistance in determining the “hit rate” for searches.

## EXECUTIVE SUMMARY

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Over the last two decades, the topic of how Black and Hispanic motorists are treated by police among the general population of the United States has waxed and waned. During the late 1990s, and for a few years following, interest in this topic increased then decreased for several years. In 2014, the tragic event of the killing of a young Black man in Ferguson, Mo. sparked increased attention to this matter, and the effects were felt in Grand Rapids. This and other conflicts between communities and the police department in other cities throughout the country led to community meetings in Grand Rapids and a report by the City Manager in early 2015. The City Manager said in part:

*Recent tragic events in Ferguson, Missouri and New York City have prompted conversations about community and police relations across the country. In Grand Rapids, community leaders, City elected officials, Police Department union leaders, Police Officers, and citizens from across the City are concerned about how these national events impact our community. Many have expressed an interest in improving community and police relations by fostering an environment that ensures civility and respect between the community and the Police Department. At the City Commission's December 16 public hearing, dozens of citizens shared their sincere thoughts and experiences; they were moving and compelling. Many spoke of the high quality performance of the Grand Rapids Police Department. Former City Commissioner and State Representative Reverend Robert Dean said it best, "it's really a matter of trust. We're fighting perceptions."*

The City Manager proposed a 12 point program to shed light upon the situation.

Lamberth Consulting was retained in conjunction with two of those 12 objectives:

1) Training of GRPD officers with an emphasis on Implicit Bias and 2) a Traffic Stop study to update the original study of the GRPD that was presented to the City in 2004. The 2004 study found that GRPD was not targeting either Black or Hispanic motorists, although there were a few locations in Grand Rapids where Blacks and, to a lesser extent, Hispanics were being stopped at higher rates than would be expected by their presence in the motoring population. One of the crucial elements of that study was that a comparison standard against which to evaluate GRPD stops was developed. A very similar standard was proposed and utilized for this present study.

For a long time, one of the more difficult areas of the scientific research on traffic stop data has been which standard to use when making a determination of whether a police department was targeting one or more minorities for stopping or, to use the vernacular, whether police were engaging in racial profiling. Such a “benchmark” was developed in the mid 1990s in conjunction with litigation against the New Jersey State Police. That benchmark, which we refer to as the observational benchmark, was accepted by the courts in New Jersey and other courts around the country as a reliable and valid benchmark. The major challenge presented with the use of this benchmark is that it takes time and resources to gather the data for it. In fact, in this present study, LC took from August 28, 2016 until the second week in November to complete the benchmarking process. During that time, surveyors went to all 20 of the locations chosen for the study on at least 8 different days/times of day to collect the data. These data were then compared to the GRPD stop data for each location separately. Stop and benchmark data for the 20 locations chosen for the study were analyzed to determine if approximately the correct number, too few or too many Black, Hispanic, White or female motorists were stopped by

GRPD. To provide some historical context to the study, these analyses were made for the years 2013-2014 and for 2015. Additionally, data from the 2004 study were used to make general comparisons.

The first analytic step was to compare the percentage of Black drivers stopped by GRPD in 2004, 2013, 2014 and 2015. This step was suggestive but not definitive, because there was no way to make specific comparisons of the percentage stopped at specific locations to the percentage of Black motorists in the traffic. These data indicated that in 2004 33.3% of motorists stopped were Black. In 2013 this percentage had risen to 37.5% and it increased to 40.0% in 2014 and 40.3 % in 2015. That is, the percentage of all Black motorists stopped in Grand Rapids rose 4.2% from 2004 to 2013 and rose another 2.8% from 2013 to 2015.

With regard to Hispanic motorists, the situation is slightly more complex. In 2004, GRPD was collecting race/ethnicity data more accurately by allowing officers to choose the race/ethnicity of the motorist stopped. At some point between 2004 and 2013, the department changed to a system that forced officers to use the Michigan Secretary of State's and Michigan Incident Crime Reporting system choices which did not include Hispanic as a choice. To record a motorist as Hispanic, an officer would have to override the choices that were available and manually enter Hispanic. It appears that some, but not all officers did this. Thus, we had to turn to the Hispanic Surname Analysis to estimate the percentage of Hispanic motorists stopped by GRPD. Using this method for GRPD in 2013-2015, the estimated percentage of Hispanics stopped in 2013, 2014 and 2015 was 13.8%, 13.9% and 13.9%, respectively. In 2004, directly using the reports of GRPD officers the percentage of Hispanic motorists was 11.6%.

The major thrust of the Traffic Study results come with the analysis of the 20 locations chosen for benchmarking/stop analysis. The statistic that is used is the odds ratio, which

determines whether, given the race/ethnicity/gender of motorists in the traffic stream at each of these locations GRPD stops approximately the correct percentage, too few to too many minority drivers. The odds ratio is best understood by the statement “If you are a Black (Hispanic, female) motorist, you are \_\_\_ times more likely to be stopped than if you are a non-Black (Hispanic, female) motorist. The theoretical neutral point for the odds ratio is 1. Because of sample size, sampling errors and errors that are contained in both GRPD’s stop data and benchmark data, LC has adopted a convention that refers to odds ratios of 1 to 1.5 as benign, odds ratios of 1.5 to 1.99 as a high probability of a problem and 2 and above as indicating a definite problem.

In the 2004 study that was done, the “overall” odds ratio for Black motorists was 1.4. In the combined 2013-2014 data the “overall” odds ratio had risen to 1.85 and by 2015, it increased to 2.00. In 2013-2014, out of the 20 locations 1 odds ratio was below 1.0, 4 were between 1.0 and 1.5, 8 were between 1.5 and 2.0 and 7 were 2.0 and above. Thus, 75% of the odds ratios indicated that more Black motorists than expected were stopped based on the number of Black motorist in the traffic stream. In 2015 there was 1 location where the odds ratio was below 1.0; 3 that were between 1.0 and 1.5; 6 were between 1.5 and 2 and 10 were above 2.0. The combined odds ratio for the 20 sites rose from 1.85 to 2.0. In this year, 80% of the locations indicated that too many Black motorists were being stopped.

The situation for White motorists is a stark contrast to that of Black motorists. White motorists in 2013-2014 were under stopped when compared to their presence in traffic at 18 of the locations and the odds ratios at the other two locations were 1.53 and 1.47. In 2015, White motorists were under stopped at 18 locations with the other two having odds ratios of 1.8 and 1.21.

The situation is different when Hispanic motorists are considered. The odds ratio for Hispanic motorists in 2004 was 1.0, and it rose to 1.3 in both the 2013-2014 and 2015 data. There were 3 locations that indicated an issue with over stopping of Hispanics in 2013-14. These were Michigan & Fuller, Lake Eastbrook & Sparks and College & Michigan. In 2015, these three location's odds ratios were again above 1.5 and in addition, the odds ratios at 28th & Breton (2.02) and Leonard & Turner (1.71) were high. We recommend that GRPD investigates these areas and determine why more Hispanics than would be expected were stopped.

Female motorists were under stopped in 2004, 2013-14 and 2015. In 2013-14 the combined odds ratios for the 20 locations is 0.86 and it is 0.87 for 2015. There is no indication that female motorists were stopped at too high a rate in any of the GRPD data that we have seen.

Essentially, the only post stop activity that is relevant to this report is searches, which are rare. Of interest for this present study are the high discretion searches, consent and probable cause. For searches, the benchmark moves from the percentage of minority drivers in the traffic to the percentage of minority drivers stopped. Black drivers are over searched with odds ratios for consent searches ranging from 1.91 in 2015 to 2.69 in 2013. When probable cause searches are the variable of interest, the odds ratios range from 2.54 for 2015 to 3.97 in 2013. In contrast, the odds ratios for consent and probable cause searches of White motorists are well below the rates that would be expected based upon their presence among the drivers who have been stopped. Hispanic motorists are searched at very nearly the rates at which they are stopped and female motorists are searched at well below the rates at which they are stopped.

It is possible that the over searching of Black motorists is based upon the results of the searches. If more Black motorists who are searched are found with contraband, then one might argue that those circumstances account for their over searching. However, for consent searches

the percentage of Black motorists found with contraband does not differ statistically from White motorists found with contraband, while more White than Black motorists are found with contraband when probable cause searches are considered.

## INTRODUCTION

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For decades, representatives from minority groups, particularly Black<sup>1</sup> and Hispanic motorists, have provided anecdotal evidence of racial/ethnic targeting by law enforcement agencies on the roadways of our country. The specific measurement of the practice, however, was not formalized until 1994. During a criminal litigation case in New Jersey (*State v. Soto et al.*), a group of defendants alleged that New Jersey State troopers were targeting and stopping Black motorists on the highway, not because of their driving behavior, but because of the color of their skin. During the course of the case, the race and ethnicity of the driving population was observed and recorded on portions of the New Jersey Turnpike<sup>2</sup>. The driving population was then compared to the racial and ethnic makeup of the individuals stopped by the New Jersey State Police on the New Jersey Turnpike to determine whether a disproportionate percentage of minority drivers were being stopped relative to their presence on the roadway. This method was also used in Maryland (Lamberth, 1996) during the civil litigation case (*Wilkins v. Maryland State Police*) in which Robert Wilkins alleged that the rental car driven by his cousin on a Maryland State highway was stopped and searched by a drug-sniffing dog due to a “profile” prepared by the Maryland State Police which included Black males driving rental cars.

In the former case, the courts held for the defendants. The latter case was settled, and the issue of racial profiling began to develop greater national attention and exposure. It is important to note that the early work performed in this field, while groundbreaking, was limited due to the

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<sup>1</sup> Throughout this report we refer to Black or African American motorists, using the term interchangeably. By this we mean people of Black appearance.

<sup>2</sup> Lamberth, J. Revised Statistical Analysis... (1994) Available at [http://www.lamberthconsulting.com/downloads/new\\_jersey\\_study\\_report.pdf](http://www.lamberthconsulting.com/downloads/new_jersey_study_report.pdf)

fact that it was conducted within the context of litigation. That is, the issue was reviewed in a combative forum between community and law enforcement participants. The work was completed slowly and dialogue surrounding the science was limited. In the late 1990s, a dramatic shift began to take place resulting from state legislation, police agency participation, and leadership relative to this science. Since then, state legislatures have mandated data collection and/or developed laws prohibiting racial profiling by law enforcement agencies. By 2008, 26 states had enacted legislation relative to this issue and police agencies in all but 3 states have undertaken efforts due to mandate, decree or of their own volition. Several significant events have occurred nationally which have influenced this proactive shift in focus and have helped to direct activities in this field.

In June 1999, the Department of Justice (DOJ) hosted a conference on “Strengthening Police-Community Relationships.” This conference recognized that police are more effective when they have the trust and cooperation of the residents in their community. However, in many communities, especially minority communities, a lack of trust still exists between law enforcement and local residents. This tension is exacerbated by allegations of police misconduct such as racial profiling.

The conference highlighted the need to identify and implement proactive police practices that build trust, enhance police integrity, and reduce police misconduct. Members at the conference determined that collecting data on traffic and pedestrian stops, analyzing this data and providing the results for public review can help shift debates on racial profiling from anecdotal reports to informed discussions. By being proactive in recognizing and addressing racial profiling, police and communities can go a long way towards managing perceptions around racial profiling and strengthening police-community relationships.

In February 2000, the DOJ held a conference entitled “Traffic Stops and Data Collection: Analyzing and Using the Data.” In this conference, more than 75 federal, state and local police administrators, prosecutors, civil rights advocates, government officials, police labor leaders, researchers and community leaders gathered to examine the collection, analysis and use of data on traffic, pedestrian and other law enforcement stops. Collectively the participants reached several conclusions:

- Traffic stop data collection systems are needed to respond to the perceptions of racial profiling, to measure their reality, and to bridge the gap between minorities and police.
- Core data elements of traffic stop systems should include: date and time, location, race and ethnicity, gender, reasons for initiating the stop, actions taken by the officer, and duration of the encounter.
- Benchmarks for comparing data collected on stops are essential for conducting valid analyses. Without valid control groups, supportable statistical analyses are not possible.
- Data that is complete, accurate and truthful is critical.
- Analysis of data must be conducted by a capable and credible party.
- Publicizing traffic stop data can help to build trust between public law enforcement agencies and the public.

In August 2001, under a DOJ grant, the Police Executive Research Forum held a conference for leading researchers in the field to discuss issues relating to benchmarking for stop data collection and analysis. The conference was attended by social scientists, legal scholars and practitioners from several police departments across the nation. This conference was the first of its kind to bring leading scientists and researchers together to discuss the best methods for analyzing stop data.

In March 2003, the Soros Foundation provided support for a conference on racial profiling that was co-hosted by the Institute on Race and Justice at Northeastern University, the American Civil Liberties Union, the National Organization of Black Law Enforcement Executives, and Lamberth Consulting. The Conference, “Confronting Racial Profiling in the 21<sup>st</sup> Century: Implications for Racial Justice”, featured 30 of the leading researchers in the country. The intent of this conference was to bring together researchers, law enforcement agencies, and community representatives to collectively review the latest and most progressive methods for stop data collection and analysis. The conference also focused on post-stop activity, community engagement, and data auditing as primary subject topics.

In November 2003, the Northwestern University Center for Public Safety and the Police Executive Research Forum held the Third National Symposium on Racial Profiling. The third day of that conference was given over to discussing issues of data collection and analysis. Specifically issues of risk management, benchmarking, post-stop activity and related topics were reviewed. Observational benchmarks, which were pioneered by Lamberth Consulting, were cited as the most used and reliable of the strong benchmarks discussed.

In January 2005, the Open Justice Initiative hosted a workshop in Budapest, Hungary in which ethnic profiling was considered an issue in several European countries. Dr. John Lamberth presented a paper on the methodology utilized in the United States that allowed for the scientific study of racial profiling. Among other things this initiative led to a monograph “Ethnic Profiling by Police in Europe” and a study of ethnic profiling in the Moscow metro system.<sup>3</sup>

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<sup>3</sup> Ethnic Profiling in the Moscow Metro. (2006). Open Society Institute, New York, N.Y.

In 2007, The Open Society Justice Initiative, in connection with the CESDIP, a French Research Institution devoted to the study of criminal justice and deviance, and Lamberth Consulting conducted a study of the Paris Police activities with regard to the stopping of civilians in Paris. This resulted in a monograph *Profiling Minorities: A Study of Stop and Search Practices in Paris*, published in 2009, which detailed the targeting of Black and Arabs by the Paris Police.

In 2009, the Massachusetts Executive Office of Public Safety and Security engaged Lamberth Consulting and The Rendon Group in Boston to prepare the first training modules designed for both police and community members on the subject of biased policing.

In 2011, John Jay College of Criminal Justice hosted a "Roundtable on Current Debates, Research Agendas and Strategies to Address Ethnic/Racial Profiling in the UK and USA". This meeting of police and research experts discussed and contributed to a deeper understanding of the issue in both the United States and the UK.

In 2015, two events of particular note were held. For the first time, the United Nations Forum on Minority Issues held its yearly Forum on the subject of "Minorities in the Criminal Justice System". One of the important issues at this conference was Data collection and analysis and Dr. Lamberth was invited to speak on that issue. Both Sheriff Clayton and Dr. Lamberth were also invited to speak at a meeting sponsored by the Open Society Justice Initiative on "Building Leadership for Fair and Effective Policing" which had police leaders from Europe, Australia, South America and the United States.

From these and other conferences, a central and critical focus has become clear: to manage public perception about racial profiling and to strengthen community-policing

relationships, the methods used for collecting and analyzing stop data is critical. Two primary components must be in place to determine whether racial profiling is occurring: benchmarks and complete stop data.

Throughout all of this process, the debate over the proper benchmark has been central. While most researchers have favored, used or agreed that the strongest benchmark is the observational one, in one way or another they have sought to find another benchmark that is not so costly in terms of time and effort. However, whether it be adjusting Census data, traffic accidents, the “Veil of Darkness” or some other candidate for ease of use, none have proved to be reliable and valid, two characteristics that a scientific measure demands. Therefore, LC continues to use observational benchmarks in our work.

In 2002, the Grand Rapids Police Department decided to be proactive in studying whether minority motorists were being targeted in their city. After a competitive bidding process, Lamberth Consulting (LC) was selected to conduct the study. That study, which was completed in 2004 and is available on the Grand Rapids website, found that while there were areas of concern about the over stopping of Black motorists, and to a lesser extent of Hispanic motorists in specific areas, neither of these groups were over stopped to the extent that the problem was systemic. That study provided a basis for comparison to the stops made by GRPD over a decade later.

## Community Engagement

One of the most important components of this, or indeed any study of “racial profiling”, is the involvement of community members from the very beginning of the process. In Grand Rapids, some (a large part of?) of the impetus for the initiatives that are taking place in GRPD came from members of the community expressing their views. While it might be easy to ignore those views, the City of Grand Rapids in the form of the City Commission, the City Manager, and GRPD have chosen to listen. This study will determine whether there is evidence to suggest that the views of the community are founded on fact, or that they are perceptions of the community that, while possibly real, are not empirically supported. LC believes that GRPD should take these views seriously whether they turn out to be empirically supported or not.

In August of 2014, the shooting of Michael Brown in Ferguson, Missouri ignited a controversy in the United States about the treatment of people of color by police. Through the intervening months and years, this issue has intensified with police being the targets of angry citizens in places such as Baltimore, Cleveland and Dallas. While there were no specific incidents of conflict between GRPD and members of the community in Grand Rapids, the overall feeling amongst many of those members, the City Council, the City Manager and GRPD was that a proactive approach to a problem that was sweeping the country should be adopted. The specific recommendations adopted are contained in a report made by the City Manager in early 2015. One of these recommendations was that the city should conduct a follow-up racial profiling traffic stop study to the 2004 study that LC conducted. In 2004, LC presented a report to the City, the Grand Rapids Police Department and the Community of Grand Rapids which indicated that there was no systemic targeting of minority motorists by the GRPD. LC was asked to update that study and this report contains our response.

An important distinction should be drawn here to assure that everyone understands the task that LC has taken on. The study that was conducted in 2004 and the present study are concerned with determining whether GRPD is targeting a minority group to stop and search in a systemic manner. By that we mean in a way that pervades the entire department and is prevalent in many or most areas of the city. When we found that GRPD was not targeting any minority in 2004, we tried to make it clear to community members that we were not stating that the practice never happened, but that we did not find evidence that any minority group was targeted systemically. It is important for us to say that we did not say nor intend to infer that the targeting of minority motorists never occurred. We would not be surprised to find that a few officers in GRPD (or any other police department in the U.S.) did not hold the view that minority motorists were more likely to be carrying contraband than other motorists and stop more of them on that basis. However, we did not find that it was occurring on a pervasive scale in 2004 and we continue to hold that view today after reviewing that report and reconsidering much of the data that supported it. Nor did we enter our study of the stop data from 2013-2015 with a preconceived notion of what those data would tell us.

For a number of years, LC has espoused the idea that the ultimate end to our work, whether it be racial profiling analysis, training, community engagement or other activities, should be the improvement of communication and as a result, the relationship between police and the community they serve. What is too often forgotten when tensions rise in a city is that community and police need each other to function effectively.

As with any new area of study, in the early days of working on racial profiling, community engagement was viewed through a different lens. In the 2004 study that LC completed in Grand Rapids, community engagement was not as robust of a part of the process as

it is today. During that study, LC met with the Chief's Advisory committee early in the process and presented the results of the study at a press conference when the study was complete. Since that time, LC has progressed in our thinking about how to involve the community and, for example, met on a regular basis with a committee of community members in our Washington, DC study, met regularly with a citizen's commission and held extensive community meetings during our Sacramento study and met with a community group during and engaged in open community meetings both to introduce the study and again to report the results in our Kalamazoo study. Thus, we were in full agreement with the City's decision to keep the community apprised of the details of the study and progress as we moved along. The Project Manager for the City, Mari Beth Jelks selected the members of the Citizens Advisory Committee and the City, GRPD and LC scheduled community meetings wherein community members heard LC present the methodology and explained the project. Community members were given the locations where a major portion of the study would be carried out and were asked to make suggestions concerning other areas of the City that should be studied. There were 6 lively meetings in August of 2016 at which the methodology of the study was presented and community members were able to ask questions and express their feelings. Three hundred and eighty community members attended these meetings and they expressed their opinions. We observed a significant amount of anger, frustration and mistrust of GRPD expressed by the participants attending those meetings. While this is a subjective opinion, it was informed by our attendance at community meetings in other cities when we were presenting a similar study. We consider these community meetings to be an important expression of the views of many community members and ones that GRPD should take seriously. This is especially true when viewed in the context of approximately 500 community members participating in meetings concerning police-community relations in late

2014. We strongly feel that GRPD should be especially concerned with and attentive to this form of strong community feedback.

When this study is complete and “rolled out”, we will again partner with GRPD and the city to present our findings directly to community members in 4 community meetings that will be held in April of 2017. This is the report that will inform all stakeholders of the results of our efforts.

## IMPLICIT BIAS TRAINING OVERVIEW

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### Agency Training

As part of the contractual agreement with the City of Grand Rapids, Lamberth Consulting provided training to all members of the Grand Rapids Police Department and other members of the Grand Rapids city government and members of the community. The training curriculum focus on three areas; Procedural Justice, Cultural Competence and Implicit Bias.

### Course Overview

The course taught to Grand Rapids Police Department staff can be broken up into three modules.

1. Procedural Justice
2. Cultural Competence
3. Implicit Bias

### Procedural Justice (Overview from the President's Task Force on 21st Century Policing)

Procedural justice focuses on the ways officers and other legal authorities interact with the public and how the characteristics of those interactions shape the public's trust of the police.

Procedurally just behavior is based on four central principles:

1. Treating people with dignity and respect
2. Giving individuals "voice" during encounters
3. Being neutral and transparent in decision making
4. Conveying trustworthy motives

Research demonstrates that these principles lead to relationships in which the community trusts that officers are honest, unbiased, benevolent and lawful. The community therefore feels obligated to follow the law and the dictates of legal authorities, and is more willing to cooperate with and engage those authorities because it believes that it shares a common set of interests and values with the police.

Participants in this course are introduced to the LEED (Listen, Explain, Equity & Dignity) approach to interpersonal communications. Following completion of this module, participant should not only be familiar with the LEED approach, but also identify several opportunities to utilize the approach during the course of their daily encounters with the communities they serve.

Instructional strategies for this module include lecture, classroom discussion and video examples.

## Cultural Competence

Cultural competence is developed through intentional choices to take action and adjust behaviors to build understanding between people, build awareness of different cultural perspectives and strengthen relationships through improved understanding.

Participants in this course are introduced to the cultural formula and identify opportunities to improve their cultural competence during the course of their daily duties. An exploration of culture includes an in-depth look at value/belief systems, myths/stereotypes and cultural behaviors which are often misinterpreted by people outside of the cultural group.

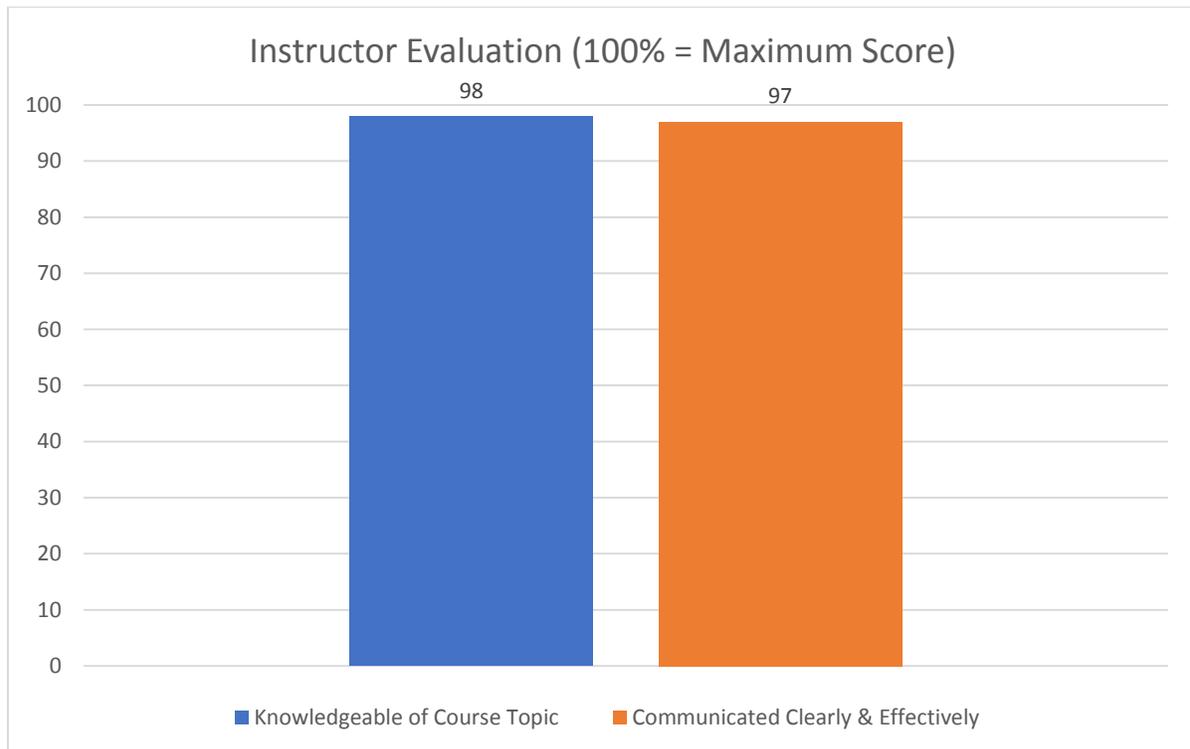
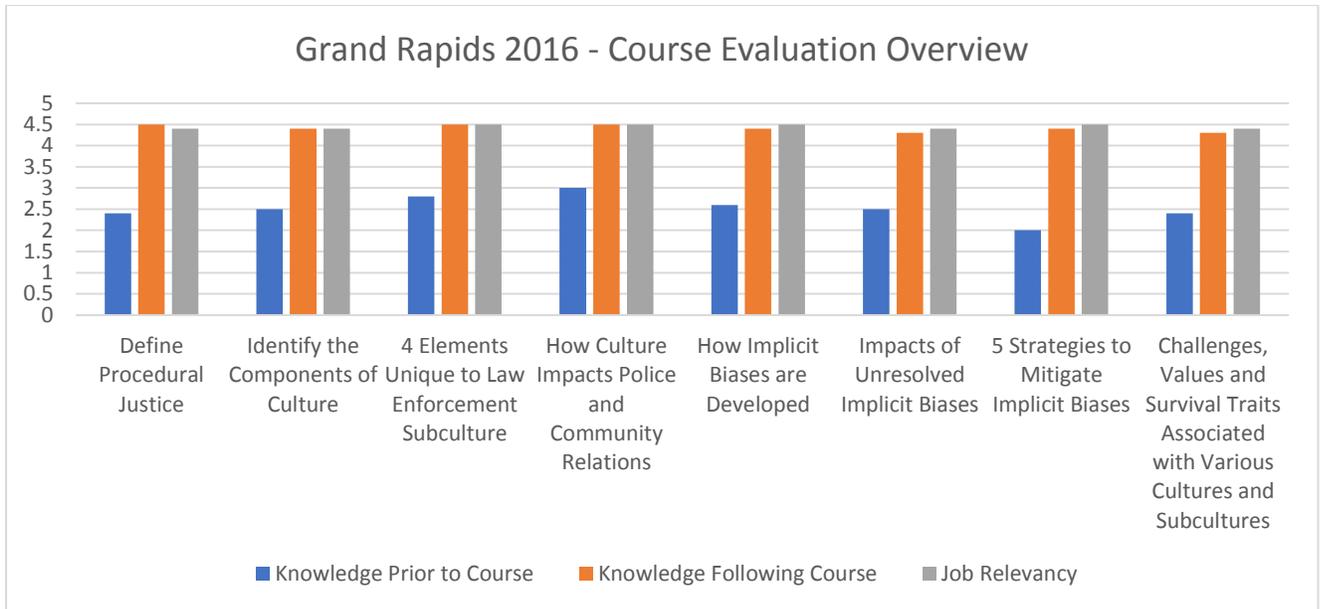
Instructional strategies for this module include lecture, large and small group activities and large group discussion.

## Implicit Bias (Definition from the Kirwan Institute)

Implicit bias refers to the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner. These biases, which encompass both favorable and unfavorable assessments, are activated involuntarily and without an individual's awareness or intentional control.

In this module, participants are introduced to the research around implicit bias and the plausible impacts these biases may have if not mitigated through an intervention strategy. Examples of implicit bias in multiple professions are offered to participants as well as five mitigation strategies that can be done in the course of daily duties. The goal of this module is not only to introduce participants to the science behind implicit bias but also to lessen its impact through deliberate mental exercises and cultivating cultural competence.

Instructional strategies for this module include video scenarios, individual exercises, small group activities and large group discussions.



## A Sample of Course Comments:

“Eric did a great job explaining implicit bias and was able to provide many examples that helped me understand his lessons.”

“Instructor did a great job engaging a tough group of veteran officers. Not sure why we don’t have bi-annual training in regards to communication. It’s 90% of our job.”

“Thanks for keeping the class moving. Very informative and worthwhile.”

“Eric presented well. The course could have been 2-3 hours long. Struggle to see the value of this training.”

“It didn’t “teach” me anything. But it was good subject matter presented with respect.”

“Waste of a day.”

“Delivered a difficult subject matter very well.”

“Great training, very informational, eye opening and beneficial. Could potentially be shortened by a little bit. Thank You!”

“This class was really long.”

“The stereotype sheet helped bring it full circle.”

“Would like to see a similar program for the general public or at least community leaders.”

“Good course, better than expected. Good course subjects.”

“Well done considering the audience!”

“The course was well organized and presented. Eric did a nice job of presenting the material & answering questions.”

“The best thing I got out of this class should be made part of the Field Training Program – that is increase opportunities for contacts in various neighborhoods in a positive manner. Ex. Given in class – Have recruit go into store and speak to the clerk for 10 minutes and ask 10 questions.”

“Good idea to relate this to own culture/subculture and turning it around. Instructor was good. I believe info was good overall.”

“This class was very general and basic for our department. If they develop a class that expands on this it would be a better fit for us.”

“Nice work taking a topic most were resistant to and covering it in a way that took the resistance away.”

“Excellent presentation – very well spoken and easy to relate to. Appreciated that this was not a beat down. A lot to think about. Was not what I had expected this to be.”

“Eric is a very talented instructor and the content of the course is good. I would welcome more examples from law enforcement rather than the medical field, private sector or the orchestra but those examples were thought provoking too. I’ve always prided myself on my empathy and open mindedness but I benefited from an upbringing that was very culturally diverse. With that said, I benefited from being here.”

“I feel 8 hours is too long. This could have been accomplished in less than 4.”

“Instructor was good. Course not needed.”

“I would like to see more cultural competency examples. Teach more and educate us on different culture groups.”

“This class/training was far better than I anticipated. It was well done and well presented. A lot of stuff I already learned through my experience, but a good reinforcement. Good class for new officers!”

## Instructor Comments

Over the course of teaching this material within the Grand Rapids Police Department the instructor made the following observations:

1. The GRPD Training Unit assigned to assist in the facilitation of this training were welcoming and eager to accommodate any request made to ensure that classes had the very best chance for success. Without their support this training would not have been possible.
2. A large number of GRPD staff were apprehensive coming into this course. Many articulated a feeling of a lack of support by their local government officials. Several mentioned that they had been referred to as “Jack Boot Thugs” by city leadership and question the motivation behind bringing this training to Grand Rapids. Some staff articulated that past trainings of similar context have been facilitated by instructors who use the opportunity to impugn the integrity of the profession rather than introduce knowledge and skills to improve their ability to do their job. This has, in-part, created a culture where trainings such as this are met with immediate apprehension and skepticism.
3. A large majority of GRPD law enforcement officers and sergeants were attentive and actively engaged in the course material. These participants demonstrated a willingness to take part in discussions and course activities designed to meet the training objectives of the course. It is the instructor’s opinion that this majority of staff were open to this course

once it was clear that the intention of the course was to introduce or enhance knowledge and skills relevant to their daily tasks.

4. A much smaller minority of GRPD staff are actively resistant to training concepts such as cultural competence and implicit bias. Their comments generally support a belief that:
  - a. These courses have little benefit to law enforcement and the public.
  - b. These courses are a politically motivated fad which will, in time, be discarded as the political landscape changes.
  - c. Community complaints against law enforcement are largely the result of a lack of unbiased information within the community, not unsatisfactory law enforcement practices.

It must be said that the small number of staff which were actively resistant to this course maintained their professionalism despite their disagreement with the course material.

5. Executive level participants that attended the executive overview of the course were attentive but largely did not actively engage in classroom discussions designed to achieve training objectives. It is difficult to gauge whether this behavior is the result of organizational culture, resistance to course topics or simply discontent with political/community discourse leading up to this course.

## METHODOLOGY: OVERVIEW

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The methodology used in this study has been developed and refined based upon experience with similar efforts in determining if racial profiling was occurring in the states of New Jersey, Maryland, Massachusetts, Arizona, Kansas, California, North Carolina, Texas, Michigan and Nevada (eg. *State of New Jersey v. Soto*,<sup>4</sup> *Wilkins v. Maryland State Police*,<sup>5</sup> *Arizona v. Folkes*<sup>6</sup>, Lamberth, 2001, 2003), and through our experience in working with national leaders on this issue in US DOJ conferences and work sessions. Our belief is that the most effective approach is a holistic one that includes the assessment of racial profiling, intervention to train officers and to improve processes and behaviors if the problem exists. One of the most crucial elements is communications with the stakeholder communities and groups that are affected by the practice.

It is not possible to conduct benchmarking in every location of a city or highway to assess racial profiling. The logic of our work, elemental to statistical analysis in other contexts, is to select locations where police are active and sample those locations on randomly selected days and times of day to establish benchmarks against which we compare police stops. This deployed methodology enables the generalization of the study results to the police department's activity across the locations that we study. In this study, we designated 20 specific locations within Grand Rapids to be assessed.

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<sup>4</sup> *State v. Pedro Soto*, A. 734A. 2d 350(N.J. Super: Ct. Law Div. 1996)

<sup>5</sup> *Wilkins v. Maryland State Police, et al.*, Civ. No MJG-93-468

<sup>6</sup> *State v. Barrington Folkes, et al.*

The benchmarks at these locations were then compared to the stops at these locations. To be specific, all stops that occurred at the location or within one quarter of a mile were used in the comparison to the benchmark. Thus, in this analysis, there are 20 different analyses for each of two groups of minority motorists, Blacks and Hispanics. The City asked us to do the same analyses that were utilized in the 2004 study conducted for the GRPD. To accomplish this, we also analyzed gender data to determine whether one gender was being targeted by GRPD officers. Two sets of analyses were conducted at the request of the City. First, the City wanted us to make explicit what any racial/ethnic effect had on White motorists and second that we analyze data from 2013-2014 together to determine if there were trends in the data.

## Site Selection

In observational benchmark work within urban/suburban areas, specific intersections are selected for surveying generally based upon high police activity (known as a deployed analysis), with approximately a quarter of a square mile perimeter (polygon) drawn around them. We worked with the GRPD to determine which specific locations to survey. The factors that went into these decisions are provided below:

- Location of agency stop activity gathered from a review of stops during 2015;
- Computer-Aided Dispatch (CAD) data on police stops;
- Consultation with both Police Department representatives and Community members;
- Local demographics at reviewed locations (businesses, schools, etc.);
- Traffic (motorist and/or pedestrian) patterns and volume;
- Suitability of sight for surveying (safe surveying areas, ambient lighting).

After comparing the list of the top locations for stops made by GRPD in 2015, 27 locations were carefully reviewed for suitability. During these site reviews, a composite of the locations was developed recording landmarks and apparent lighting (direct lighting from streetlamps, and ambient lighting from nearby businesses), street direction and number of lanes, and by conducting traffic counts to estimate traffic volume.

During the site selection process, Police Representatives made suggestions about the sites. In a series of six Community meetings held in August 2016, community members were informed of the 20 sites that were under consideration and given the opportunity to make suggestions as to their appropriateness.

Following these efforts, the 20 locations chosen for the analysis were:

28th & Breton	28th & Eastern
Alpine & Leonard	Alpine & Sylvia
Bridge & Stocking	Burton & Division
College & Leonard	College & Michigan
Division & Alger	Eastern & Hall
Franklin & Eastern	Hall & Madison
Grandville & Hall	Lake Eastbrook & Sparks
Lake Michigan & Covell	Leonard & Fuller
Leonard & Turner	Madison & Burton
Michigan & Fuller	Wealthy & Division

**Table 1 Table of 20 Locations for GRPD 2016 Analysis**

## Surveyor Selection and Training

During August of 2016, several local colleges and universities were contacted through their criminal justice departments and informed of an opportunity for their students to obtain part time employment for several months during the fall. The Job Description, as it was presented to those who might be interested, was as follows:

## *Surveyor Job Description*

Lamberth Consulting is looking for part-time workers who will survey traffic in the Grand Rapids city limits. Each surveyor will be expected to attend a day of training prior to the project starting at the end of August, for which they will be compensated. Surveying will occur at randomly selected days and times at specific locations in 4-5 hour blocks of time. The selected individuals will be expected to carefully view traffic and note the race/ethnicity and gender of each motorist. During the training successful applicants will be provided with all of the information necessary to accurately view and code the data. Data collected must be reduced to an excel data sheet and forwarded to the Lamberth Consulting data coordinator within 24 hours. To assure data accuracy Inter Rater Reliability tests will be conducted during the training session.

Approximate dates of project—Last week of August to Mid November.

Rate of pay--\$12.00 per hour.

In addition, those who attended the community meetings during the month of August were also invited to apply for positions. Nine individuals were selected for the positions of surveyors. Four were Black, 1 was Hispanic, 1 was Middle Eastern and 3 were White.

On August 28, 2016 all nine surveyors met for training with the Benchmarking Project Manager, Mr. Eric Waddell, for a full day training session. The training session consisted of approximately 3 hours during which they were trained in how to survey traffic to assure that the data collected was as complete and accurate as possible. After an introduction to the specific requirements of their duties, they were taught how to assure that they were able to see and categorize drivers, how to assure that they surveyed all the traffic once and only once during the

session, how to capture data, how to enter data into Excel worksheets and where to send their completed data.

Following the morning session, the surveyors were taken to 3 of the locations that were to be surveyed and given onsite training. That is, they were instructed where to position themselves to see and record data most accurately, how to record data on the data sheets that were provided, how to handle cars that were turning into or out of the intersection, and how to conduct themselves during the surveying periods. At each location, surveyors concentrated on only one lane at a time. They were instructed to position themselves to get as close to the traffic as they could do safely, look directly at one vehicle at a time, record the data and move on to the next vehicle. They learned that the best view of the driver was “head on” through the windshield of the vehicle, but if they were not able to see the race/ethnicity of the driver then, they still had an opportunity to make this observation through the passenger side window as the vehicle passed. They practiced doing this during the afternoon of training.

In both the morning and the hands on session, surveyors were instructed that they should be sure of their racial/ethnicity and gender categorizations. They were given the following categories for racial/ethnic categories:

1. White
2. Black
3. Hispanic
4. Asian
5. Middle East or South Asian
6. Other
7. Unknown

A word about other and unknown. Other was described as another race/ethnicity that they recognized (e.g., Samoan) and unknown was described as a driver they could not see well enough or long enough to make a racial/ethnic identification. We were clear in advising them that we did not wish for them to guess about the racial/ethnicity of the driver. As expected, there were times when surveyors were unable to categorize the race/ethnicity of drivers. This occurred about 2.2% of the time. The worst locations for identification were those that were relatively large, such as 28th & Breton and 28th & Eastern. At these two intersections, surveyors were quite some distance from the traffic and when they categorized drivers in the inner lane, they were sometimes unable to see the driver because they were completely blocked by a vehicle in the lane closer to them. However, the rate of unknowns were far below the point at which it should be concluded that the analysis was in any way compromised.

From our preliminary examination of stop data and from Census population figures for Grand Rapids, we fully expected that there would be only 3 racial/ethnic categories that would be large enough for meaningful statistical analysis. However, we wished to provide the other categories for accuracy with the very remote chance that there would be a location that had a cluster of such a minority. As expected, we did not see any group other than Whites, Blacks and Hispanics represented in large enough numbers to allow analysis.

In addition, two of the surveyors who showed leadership and time availability were selected as Team Leads who were tasked with assuring that each survey was completed accurately and the data was sent to Lamberth Consulting in a timely fashion. Team Leads were required to go to each location before the surveying was to begin to assure that they knew the best placement for surveyors.

They also were required to:

- Maintain contact with GRPD to assure an escort was present at all sessions;
- Assure the schedule was maintained;
- Direct surveyors;
- Manage data collection and transmission to LC;
- Act as one of the surveyors.

These Team Leads were paid \$14.00 an hour for their added responsibilities.

The surveyors were tested to assure that they were all identifying driver's race/ethnicity reliability. Clearly, we do not know the race/ethnicity that drivers may attribute to themselves, but the heart of the observational method is a comparison of the race/ethnicity that police officers attribute to drivers and the race/ethnicity that our surveyors attribute to drivers. We have worked closely with police officers and former police officers and found that their identification of the race/ethnicity of drivers does not differ to any great degree from the identification of surveyors we have used in past studies. We do find that there are a few individuals who are not very accurate in their identification of race/ethnicity. Therefore, we tested the nine surveyors to assure a commonality of race/ethnicity identification. These first Interrater Reliability Tests (IRR) were conducted during the "hands on" training on August 28th. The average accuracy level for the 9 surveyors was 88%. We again tested the surveyors for reliability in identifying race/ethnicity among drivers passing them on the streets. These tests occurred during the first or second week of October. This second testing revealed that our surveyors achieved an IRR score of 92%. We note that while the first IRRs were conducted during daytime conditions that were sunny and clear, 6 of the October tests were carried out during conditions that were dark. The IRR score for these surveyors was 90%.

GRPD provided an escort for all surveying schedules and lighting where needed. This assistance was crucial to the timely conduct of the surveying schedule. We have found that

several individuals standing on a street corner obviously recording something about the passing traffic is noticed by the public. Rarely did we have surveyors feel threatened for some reason or another. The police officer escort handled any inquiry or questions that passing citizens may have had allowing the surveyors to concentrate on their jobs. We also requested and obtained lighting additional to the ambient lighting at each intersection to assure that the race/ethnicity and gender of each driver was more clearly visible at night. The GRPD escort assisted the surveyors by setting up and assisting in moving the lighting when necessary.

## Procedure

The twenty locations were divided into 5 groups of 4 locations each. Each of these groups were assigned to a two-week time frame for surveying. For each of the 5 groups a different random selection of days and times of day was used. Days were broken into 6 four hour periods, 0700-1100, 1100-1500, 1500-1900, 1900-2300, 2300-0300 and 0300-0700. Examination of GRPD stop data indicated that there were very few stops between the hours of 0300 AM to 0700AM. To be exact, of the 29,420 race identified stops made by GRPD during 2015, only 3.9% of them were made during these hours. We therefore decided to omit those hours from our benchmark survey for two reasons; 1) the paucity of stops during this time period, and 2) we knew that very few vehicles were in the traffic stream during these hours. This meant that an extraordinary amount of time would have to be spent benchmarking the locations during those four hours. To assure the comparability of the stops to the benchmarking data, the stops made during this four hour time period were not included in the analysis. The remaining five time frames were then used along with days of the week as the basis for benchmarking. To assure adequate coverage of weekends and weekdays, each surveying schedule included 5 week days and 3 weekend days.

Surveyors went to the locations selected for surveying on eight different days/times as indicated in the schedule below. To assure that each location was surveyed at different times within the survey schedule, the order of surveying was rotated. That is, the first location surveyed during the first survey period of the two week session was rotated to number 4 on the second time period during the session. Location 2 was moved to 1, 3 to 2 and 4 to 3. Thus, during the course of the eight survey sessions each location was surveyed at different times within the time frame.

Date	Day	Time	
29-Aug	MON	7a-11a	<p style="text-align: center;"><b>LOCATION SET 1</b></p> <p>Location 1 Alpine &amp; Sylvia Location 2 Alpine &amp; Leonard Location 3 Bridge &amp; Stocking Location 4 Lake Michigan &amp; Covell</p>
30-Aug	TUES	11a-3p	
31-Aug	WED	11p-3a	
7-Sep	WED	3p-7p	
9-Sep	FRI	7p-11p	
10-Sep	SAT	11a-3p	
10-Sep	SAT	11p-3a	
11-Sep	SUN	3p-7p	
12-Sep	MON	7p-11p	<p style="text-align: center;"><b>LOCATION SET 2</b></p> <p>Location 1 Division &amp; Alger Location 2 28th &amp; Eastern Location 3 28th &amp; Breton Location 4 Lake Eastbrook &amp; Sparks</p>
14-Sep	WED	3p-7p	
15-Sep	THUR	11p-3a	
17-Sep	SAT	11p-3a	
20-Sep	TUES	11a-3p	
21-Sep	WED	7a-11a	
24-Sep	SAT	11a-3p	
25-Sep	SUN	3p-7p	
26-Sep	MON	11a-3p	<p style="text-align: center;"><b>LOCATION SET 3</b></p> <p>Location 1 Eastern &amp; Hall Location 2 Franklin &amp; Eastern Location 3 Hall &amp; Madison Location 4 Madison &amp; Burton</p>
27-Sep	TUES	3p-7p	
1-Oct	SAT	11p-3a	
2-Oct	SUN	7a-11a	
4-Oct	TUES	11p-3a	
5-Oct	WED	7p-11p	
7-Oct	FRI	7a-11a	
8-Oct	SAT	7p-11p	

Date	Day	Time		
10-Oct	MON	3p-7p	<p style="text-align: center;"><b>LOCATION SET 4</b></p> <p>Location 1 College &amp; Leonard Location 2 College &amp; Michigan Location 3 Leonard &amp; Turner Location 4 Leonard &amp; Fuller</p>	
12-Oct	WED	7a-11a		
12-Oct	WED	7p-11p		
15-Oct	SAT	11p-3a		
19-Oct	WED	11p-3a		
20-Oct	THUR	11a-3p		
22-Oct	SAT	7a-11a		
23-Oct	SUN	3p-7p		
24-Oct	MON	3p-7p		<p style="text-align: center;"><b>LOCATION SET 5</b></p> <p>Location 1 Wealthy &amp; Division Location 2 Grandville &amp; Hall Location 3 Michigan &amp; Fuller Location 4 Burton &amp; Division</p>
25-Oct	TUES	7a-11a		
26-Oct	WED	7p-11p		
29-Oct	SAT	11a-3p		
2-Nov	WED	11p-3a		
3-Nov	THUR	11a-3p		
5-Nov	SAT	7p-11p		
6-Nov	SUN	7p-11p		

**Table 2 Survey Schedule of 20 Locations**

Inspection of the stops made by officers during 2015 revealed a higher proportion of stops during the hours from 7:00 PM to 11:00 PM and a higher proportion of stops of Black motorists from 11:00 PM to 3:00 AM. During the random assignment of days and times, we made sure that both of these time periods were included in the schedule by selecting times without replacement until all had been selected once.

To reiterate, there were two built-in data check points in the survey schedule. The first of these was what we termed the between time frames check in which we assured that all locations were surveyed in all five of the time frames, 7:00 am to 11:00 am, 11:00 am to 3:00 pm, 3:00 pm to 7:00 pm, 7:00pm to 11:00 pm, and 11:00pm to 3:00 am. The second check was within time frames in which we rotated the order of the locations for each survey session. Due to a misunderstanding, there were 3 occasions during Session 1 where that rotation did not occur. We carefully inspected the data for these four locations and found no effect on the data,

particularly since 3 of the locations had make-up data conducted after the initial error was discovered.

When the data were inspected to see whether the race/ethnicity of drivers was consistent between time frames, there was one strongly significant effect apparent. For the time frames from 7:00 AM to 11:00 PM, the proportion of Black motorists in the traffic stream was quite consistent. However, in every one of the 20 locations that were benchmarked, the proportion of Black motorists, rose and in most instances, rose dramatically in the 11:00 PM to 3:00 AM time frame. When these data were subjected to statistical analyses, this effect was always in the same direction (more Black motorists) and at 15 of the 20 locations this difference reached statistical significance. This sort of unanimity of an effect is, in our experience, seldom seen. While these data do not explain why GRPD made more stops during the 7:00 PM to 11:00 PM time frame, they do tend to explain why there were a higher proportion of stops of Black motorists during the 11:00 PM to 3:00 AM time frame. Proportionately, there were more Black motorists in the traffic stream during this time frame than there were during the other four time streams sampled.

There were 40 surveying sessions in the original schedule divided into 5 two week time frames with 4 locations surveyed during each time frame. This meant that each location would be surveyed 8 times during the course of the surveying. The first session began on Monday, August 29 and the last was scheduled to be on Sunday, November 6. However, on 12 occasions it was not possible to complete all of or part of a session. On 7 occasions the weather caused us to cancel surveying for either an entire session or part thereof. On 4 occasions we could not survey the location because construction impeded our efforts and on 1 occasion we were unable to survey the location because the police escort was called out for SWAT duty. All of these

sessions were made up either during the course of the later sessions or during the week of November 7<sup>th</sup> with the last makeup session occurring on November 9<sup>th</sup>.

During preliminary visits to each of these locations, the volume of traffic was assessed and the amount of time it would take to survey each was determined. The general objective was to obtain a large enough sample size to assure that, when taken together, the eight sessions would be an accurate representation of the race/ethnicity of motorists at each location.

During the surveying, each lane of traffic was surveyed for a specific amount of time by one surveyor. Then the surveyor moved to another lane and continued until every lane at the location had been surveyed. During hours when the darkness impeded visibility, lights provided by GRPD were utilized to assure that surveyors could determine the race/ethnicity and gender of each motorist. In general, lights were available from sunset to sunrise each day. Data were recorded on data sheets provided to the surveyors and at the end of each session these datasheets were collected by the Team Leads who transcribed the data to Excel and forwarded both the electronic data and the data sheets to the Data Coordinator. She was responsible for compiling the data as it was received and after a two week session was completed she utilized random sampling to check a 10% sample of the data for accuracy. This allowed LC to assure that the data were all included and that they were accurate.

As stated earlier, there were 20 locations surveyed. The proportion of vehicles in which the surveyor could not determine the race/ethnicity of the driver is important to know, as a large number of unknowns can make statistical analyses suspect. For example, in a study

commissioned by the New Jersey State Police<sup>7</sup>, 38% of the data could not be used because the race/ethnicity of the driver could not be determined. This made the whole study suspect.

During our study, the surveyors saw 57,660 vehicles and were able to categorize all but 1,259 of them with regard to race/ethnicity. This means that they successfully categorized 97.8% of the motorists. The location at which there were the most unknowns was at 28th & Breton where 4.3% of the vehicles were categorized as unknown. The location at which there were the fewest unknowns was Lake Eastbrook & Sparks where there were 0.07% unknowns. This makes sense as 28th & Breton is a large intersection with two thru lanes both ways and one or more turning lanes that do not have medians that can be used for surveying. This means that there are many more chances that vehicles can be obscured from a surveyor by larger vehicles being between the surveyor and vehicle. Lake Eastbrook & Sparks, on the other hand, is a small intersection where Sparks dead ends at Lake Eastbrook and surveyors are very close to the vehicles. These data indicate that a very high degree of identification was achieved by the surveyors.

Following receipt of the electronic data from the surveyors and the original data sheets, a 10% sample was randomly drawn from the data at each location and checked for accuracy. This was done to further assure the accuracy of the data. This means that a sample of over 5,700 was inspected for errors that occurred during transcription of the data on the data sheets to electronic version of the data. With regard to race/ethnicity there were 2 mistakes found and corrected. This means that the error rate in transcribing the data from written to electronic form was

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<sup>7</sup> Lange, J. E. (2005) Testing the Racial Profiling Hypothesis for Seemingly Disparate Traffic Stops on the New Jersey Turnpike. *Justice Quarterly*, 22, 193–213.

approximately 0.00035 percent. This check tells us that the data transcription included a miniscule amount of error.

## Stop Data

With regard to GRPD stop data, there are four general categories of interest for the present study. The demographic categories that will be explored for this study are 1) race, 2) ethnicity and 3) gender; the 4<sup>th</sup> category that will be addressed is post stop activity, to the extent it is measured by GRPD. While each of these will be addressed individually during the next two major sections of this report, some introductory comments may be valuable to the reader.

With regard to race, for years there have been complaints from members of Black communities in the United States that they are targeted by police. As the subject matter of this report is whether Black motorists are stopped by GRPD at about the correct rate, more or less than they should, we call attention to the early work in Courts establishing to the satisfaction of New Jersey Courts that the practice of targeting Black motorists was occurring. The benchmarking for this case occurred in 1993, with the case being heard in late 1994 and early 1995. In 1996, the case was decided in favor of the defendants who argued that they had been stopped on the New Jersey Turnpike because of their race. New Jersey disputed the finding of the Court until they conducted their own investigation and decided that the practice was occurring and withdrew their appeal. The data collected for this study was directly informed by the early litigation that established the methodology for deciding whether racial profiling was occurring.

At the request of the City of Grand Rapids, data on White motorists that were collected in all studies that LC has done, will be explicitly reported. Generally speaking, if either Black or Hispanic motorists are significantly over represented in the stop data at a specific location, the

odds ratio will reflect that in lower than expected proportions of White motorists being stopped. If the over stopping of either or both Black or Hispanic motorists occurs in this study, reporting on White motorists will make that reduction in stops of White motorists explicit.

Historically, ethnicity was a slightly later development of concern in whether police were targeting minority motorists. The addition of concern about “Driving while Brown” came in the early 2000s. While accurately estimating the number of Hispanic drivers and Hispanics who were stopped was always a concern, the 2000 Census was the basis for the Hispanic Surname Analysis that will be used in this study.

Early in the new century there was also concern about police officers stopping too many female drivers. However, in LC’s experience there has not been much, if any, evidence to support that contention. At the request of the City, data were collected for female and male drivers and those data were analyzed and the results will be provided below.

In 2003, when LC was working with GRPD to provide the assessment that was described in the 2004 report, a format for data associated with police traffic stops was developed. At that time, the data were collected via paper and pencil forms and then transcribed to an electronic format. Over the course of the next 12 or so years, these data have been collected. As computers were added to police vehicles, the data collection was transferred over to an electronic format. The data that were collected during that first study are, generally speaking, still being collected today.

In general, when officers make a traffic stop, their recording of the event occurs when they enter into their computers that this event is a traffic stop or is traffic stop related. As soon as officers enter this information, a drop down menu appears which prompts them to enter the data for the traffic stop. These data include the closest intersection to the stop, the name of the

driver and license plate of the vehicle, the exact date and time the stop was made, the reason for the stop, whether a search was conducted and other variables. Some of these data are populated in the traffic stop software directly from the data that is in the Computer Assisted Dispatch (CAD) information. This means that in virtually every traffic stop made by the GRPD a traffic stop record is entered. For the purposes of this study it is important to assure that every traffic stop made is recorded. The fact that an officer has to detail a traffic stop is an important component in assuring full data availability both for the records GRPD maintains and for the completeness of the database used.

Another check on officers that is possible is the fact that as soon as an officer engages the light bar on the vehicle, the in-car camera is activated and a record is made of the stop. Additionally, officers know that for their safety, the location of their vehicle while making a stop is essential if something goes wrong and they need assistance. Finally, recording every stop is required and part of their daily routine. While it is impossible to prove a negative, we are satisfied that GRPD has taken virtually all possible steps to assure that the traffic stop data are complete and after discussions with personnel in the department, we are satisfied that we do have complete stop data.

We will describe a few of the steps that we have taken to assure that the stop data are complete. First, we considered the stop data that were collected in 2004 wherein there were 32,602 stops made. In 2013, the first subsequent year that is being considered for this study there were 30,200 stops made; in 2014 there were 29,838 stops made; in 2015 there were 29,745 stops made. There are fewer stops being made during each of the years being considered in this study compared to the 2004 data. GRPD points to the decrease in officers in 2013-2015 compared to 2004 which is substantial. In 2004 there were approximately 25% more officers

than are now on the GRPD. These decreases in staffing undoubtedly contribute to the decrease in traffic stops, which are not anywhere near 25%. When we inquired about the amount of time that the department spends in making traffic stops, the answer was probably less than 10% of officer time, although the department feels that there should be more time spent engaging in traffic stops. They simply do not have a sufficient number of officers to do so.

To further inspect the stops that were made and their completeness, we determined how many traffic stops had recorded 'unknown' for race and/or the race variable was missing. In 2004, 3.8% of the stops were without meaningful race data; in 2013 - 2.1%; in 2014 - 2.0%; and in 2015 - 1.1%. The unknowns for gender in 2004 was 3.0%, and in 2013, 2014 and 2015 these percentages were .07%. This is quite an acceptable level of unknowns.

The next comparison of the annual stop data is the proportion of minorities who were stopped. For these preliminary data, the Hispanic percentages are those reported in the GRPD database (they will be updated in a later section). In 2004, 33.3% of motorists stopped were Black, 11.6% were Hispanic, and 34.7% were female. In 2013, 37.5% of motorists stopped were Black, 8.0% were Hispanic, and 39.3% were female. In 2014, 40.0% of motorists stopped were Black, 8.2% were Hispanic, and 39.3% were female. In 2015, 40.3% of motorists stopped were Black, 9.2% were Hispanic, and 38.2% were female. Between 2004 and 2013, there was a 4.2% increase in the proportion of Black motorists stopped, a 3.6% decrease in the proportion of Hispanic motorists stopped, and a 4.3% increase in the proportion of female motorists stopped. Between 2013 and 2015 there is a 2.8% increase in the proportion of Black motorists stopped, a 1.2% increase in the proportion of Hispanic motorists stopped, and a 0.8% decrease in the proportion of female motorists stopped. Of course, while these are potentially significant

increases, particularly of Black motorists, it is important not to jump to unfounded conclusions, as we do not yet have a benchmark against which to compare the stop data.

Apparently, the reason for the decline in Motorists listed as Hispanics in the database has to do with changes in the way officers are prompted to respond. In 2004 and until several years ago, officers were allowed freedom in filling in the Race category. As more and more inconsistencies developed in the reporting of Race, the department changed to a system that forced officers to use the Michigan Secretary of State's and Michigan Incident Crime Reporting system choices which are:

1. I-- American Indian or Alaska Native
2. A-- Asian
3. B-- Black
4. W-- White
5. U—Unknown

To record a motorist as Hispanic, an officer would have to override the choices that are available and enter Hispanic. It appears that some, but not all officers are doing this. Thus, we must turn to another method of identifying Hispanic motorists in the GRPD database.

## Hispanic Surname Analysis

The GRPD stop database does not provide the ethnicity of the individual stopped. While many officers do include Hispanic as a choice under race of the motorist, some do not. This occurs partly because there has not been a clear understanding of the importance of separating these two designations and partly because of the early emphasis in racial profiling cases on Black motorists. When LC was working with GRPD beginning in 2002, the tool that allowed researchers to measure Hispanic motorists from their surnames more accurately was in its earliest stages. That is, the methodology was developed after the completion of the 2000 Census and it utilizes 2000 Census data. For this report, a "surname analysis" to estimate the number of

Hispanics who were among the motorists stopped will be used. The use of surnames to categorize persons of Hispanic ethnicity is widely accepted, dating back at least to the 1950s. As Perkins (1993) wrote:

*The United States Bureau of the Census has used Spanish surname lists as a method of identifying the Hispanic population for more than 40 years. In 1950, the first Spanish surname list helped indicate the Hispanic population found in Arizona, California, Colorado, New Mexico, and Texas. New Spanish surname lists developed whenever additional significant Spanish surname data became available.*<sup>8</sup>

Subsequent research on Hispanic surnames, primarily coming from the United States Census Bureau, has found that Hispanic surnames are an accurate way of determining Hispanic ethnic origin when surnames are available. Probably the most recent in a series of articles relating to this methodology is an undated one by Word, et. al. available at <http://www.Census.gov/genealogy/www/surnames.pdf>. The methodology of determining ethnicity from the surname of an individual has been widely utilized by social science researchers. To cite but a few examples, Beckett<sup>9</sup> used the methodology in classifying drug arrestees in Seattle, Barreto<sup>10</sup> in determining the effect of naturalized citizens on the California electorate, and Karr<sup>11</sup> in determining the ethnicity of injured children in Washington State. Surname analysis has been credited by courts, most recently in a 2013 decision by the United States District Court for the District of Arizona<sup>12</sup> in litigation over alleged profiling of Hispanics.

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<sup>8</sup> Perkins, R. Colby (1993), Evaluating the Passel-Word Spanish Surname List. Available online at <http://www.Census.gov/population/www/documentation/twps0004.html>.

<sup>9</sup> Beckett, et al. (2005). "Drug use, drug possession arrests and the question of race: Lessons from Seattle." *Social Problems*, **52**, (3): 419-441.

<sup>10</sup> Barreto, et al. (2005). "Are naturalized voters driving the California Latino electorate? Measuring the effect of IRCA citizens on Latino voting." *Social Science Quarterly*, **86** (4): 792-811.

<sup>11</sup> Karr, et al. (2005). "Severe injury among Hispanic and Non-Hispanic white children in Washington State." *Public Health Reports*, **120** (1): 19-24.

<sup>12</sup> See *Melendres v. Arpaio*, Case No. 07-02513.

Individuals of Hispanic ancestry can be identified using this methodology with a high degree of certainty. According to the U.S. Census Bureau's surname list for the year 2000, there are more than 3,000 surnames for which 90% or more of the population identify as Hispanic, and more than 6,000 surnames for which 75% or more of the population identify as Hispanic.<sup>13</sup> The final surname list derived from all data forms in the 2000 Census is made up of more than 151,000 different surnames.<sup>14</sup> For each of these distinct surnames, the list provides the percentage of people who claim one of the following race/ethnicities: White, Black, Asian Pacific Islander, American Indian, of two races, or Hispanic.

These percentages will be used to calculate the exact probability that the names in GRPD's stop data are Hispanic. Applying the Census data to names in the stop database, the percentage of persons with each surname who claimed Hispanic ancestry will be summed and these probabilities will be used to determine the total percentage of Hispanics on the list of individuals stopped. This number was then divided by the total number of individuals who could be ethnically identified on the list.<sup>15</sup> This percentage will then be used as the best estimate for the percentage of Hispanics in the stop database.

As an alternative method of surname analysis, some researchers have selected a cutoff point for concluding that a person with a specific surname is Hispanic. For example, Word and

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<sup>13</sup> <http://www.Census.gov/genealogy/www/data/2000surnames/index.html>. The general methodology used to build the Census 2000 surname list was to determine specific surnames from that Census. Then the race/ethnicity of people with that surname was obtained from Census forms. Almost 270 million people responded to the Census and their data made up the information from which the list of Hispanic surnames was developed.

<sup>14</sup> A small number of names in GRPD's data do not appear on the Census surname list. There are two reasons that a surname would not appear in this list or would not have a percentage race/ethnicity reported based on the list construction. The first is that surnames that rarely occur (defined as occurring less than 100 times in the 2000 Census) are omitted from the list. Only about 10% of the population has a surname that is not frequent enough to appear on the Census list. Second, a surname that has less than five instances in which respondents claim a specific race/ethnicity is suppressed for that group for confidentiality purposes. The only other reason that a name may not appear on the list is if misspellings or other data entry errors make the name unrecognizable when compared to the list.

<sup>15</sup> As explained above, a small number of surnames were excluded from this analysis because they did not match names in the Census data.

Perkins (1996)<sup>16</sup> provided definitions of heavily, generally and moderately Hispanic surnames. In this context *heavily* is defined as a surname for which more than 75% of individuals with that name describe themselves as Hispanic, *generally* is defined as 50 to 74.9% Hispanic, and *moderately* as 25 to 49.9% Hispanic. However, a more accurate way to measure the likelihood that a person is Hispanic is to use the actual percentage of persons having a specific surname who indicated that they were Hispanic. This approach avoids classifying Gomezgarcia (for which 99.66% of people with the name indicated that they were Hispanic) and Alviso (for which 75.04% with the name indicated that they were Hispanic) as equivalent, even though both would be classified as Hispanic if the cutoff being used was a list of “heavily” Hispanic surnames.

Further, Word, in a personal communication to Karr (2005) pointed out that the use of the heavily Hispanic list underestimates the Hispanic population by about 10%<sup>17</sup>. The reasons for this undercount of Hispanics is that there are essentially two types of errors when this methodology is used, as this statement from Perkins explains:

*Two important statistics judge the effectiveness of the PW Spanish surname list. The surname commission (SCOM) rate defines the percentage of people whose surnames appeared on the PW list that reported a Non-Hispanic origin. The lower the SCOM rate, the more reliable the surnames on the PW list are at detecting the Hispanic population. The surname omission (SOM) rate defines the percentage of people who reported a Hispanic origin that had a surname not appearing on the PW (Passel-Word) list. The lower the SOM rate, the greater proportion of the Hispanic population the PW list finds.<sup>18</sup>*

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<sup>16</sup> <http://www.Census.gov/population/documentation/twpno13.pdf>

<sup>17</sup> See Karr, et al. (2005) p.23.

<sup>18</sup> Perkins (1993) *ibid.*

The SCOM error would occur, for example, when a Non-Hispanic woman marries a Hispanic man and takes his surname but does not identify herself as Hispanic. The typically larger SOM error would occur because there are a relatively large number of names that indicate a majority Hispanic name but fall below the 75% cutoff point when the Heavily Hispanic surname list is being used.

The SCOM rate can be roughly viewed as an over count of Hispanics and the SOM rate as an under count. The 10% undercount comes as a result of these two errors being used simultaneously. Using the Census surname list to calculate the exact probability that names in the database are Hispanic appears to overcome this undercount and provides percentages for Hispanics that are in the neighborhood of 10-12% higher than use of the Heavily Hispanic List methodology.

As indicated above, the proportion of Hispanic motorists stopped is under counted because of the changes made in GRPD's reporting system. After subjecting GRPD's data to the Hispanic surname analysis it is possible to make more accurate estimations of the proportion of Hispanic motorists who were stopped. Table 3 provides the percentages for each of the three years under consideration.

Category	2013	2014	2015
Reported in GRPD data	8.0	8.2	9.2
Hispanic Surname Estimate	13.8	13.9	13.9

**Table 3 Percentages of Hispanic Motorists for 3 years under consideration.**

## Searches

Searches fall under the general category of Post Stop Activity. As most of the analyses in this report concentrate on the actual stop itself, post stop activity differs from stop activity because of the complexity of the interaction between the officer and motorist and the benchmark that is used, although the underlying question being asked is quite similar. That is, was there any

racial/ethnic/gender component discernable in the post stop activity? However, there are a number of activities that can occur after the stop has been made that have been relevant to answering this question. The most important ones in LC's previous work have been whether the officer asked the motorist to exit the vehicle, handcuffed the motorist and/or searched an individual or vehicle. Unfortunately, GRPD does not keep a record of the first two of these activities but it does record whether a search has been made.

There are three major types of searches that GRPD conducts; 1) consent, 2) probable cause, and 3) incident to arrest. Of these, the most frequent were searches that were conducted because the individual was being arrested. These searches are mandatory for officers to conduct which means that the decision to search occurs because of the arrest and officers have no discretion in whether they make the search. Whether arrests are overly targeted at minorities is an important part of whether police are targeting minorities as a whole, but it is not the focus of this study. As such, there will be no analysis of searches that are incident to arrest. Searches that are incident to arrest occur for about 10% of motorists stopped. The next most common type of search is known as the consent search. In this type of search, the officer is suspicious that there is contraband being carried either on the driver's or passenger's person or in the vehicle and asks the motorist for permission to search. In 2015 about 3% of motorists stopped had their person or vehicles searched after giving permission for the search. The final major search category is probable cause. In this type of search the officer sees, smells or otherwise detects what he/she perceives to be contraband in the vehicle or on the person of the driver or one of the passengers. The officer is then free to search that individual or vehicle without permission. In 2015, probable cause searches occurred in about 1.7% of the stops. We return to the search data in the results section of this report.

## Recapitulation

There does appear to be an increase in the proportion of stops of Black motorists between 2004 and 2015. What we don't know is whether there was a corresponding increase in the proportion of Black motorists on the streets of Grand Rapids and if there was what its effect on the appropriateness of those stops was. It is precisely this question that is the major thrust of this study and so we now turn to those comparisons.

We now turn to what we know about the 20 locations chosen for the study with respect to Police Activity.

## Police Activity at the 20 Locations

It is instructive to understand why there was a larger amount of police activity at the 20 locations used in this study than there was at other locations. The reader should recall that these 20 locations were picked for this study on the basis of having a large amount of police activity. To this end, LC asked GRPD to tell us, to the extent that they could pinpoint it, why this was the case. There were two reasons given: 1) there were certain locations that were High Crash areas and more stops are made there to attempt to reduce crashes and 2) these were listed as Service Referral, which indicates that the Service Area Captain deemed the location was important to concentrate on because of concern from citizens or for some other reason.

All 20 locations are depicted in Table 4 with the number of stops in 2013-14 and 2015 and the appropriate designation for 8 of the 20 locations.

Location	Stop N 2013-14	Stop N 2015	Reason for Stops
28th & Breton	342	176	High Crash
28th & Eastern	392	162	High Crash
Alpine & Leonard	534	487	
Alpine & Sylvia	496	150	
Bridge & Stocking	1073	673	
Burton & Division	1949	968	High Crash
College & Leonard	663	291	
College & Michigan	774	269	High Crash
Division & Alger	584	301	
Eastern & Hall	1083	723	
Franklin & Eastern	2138	1102	
Grandville & Hall	400	246	
Hall & Madison	1200	708	
Lake Eastbrook & Sparks	605	206	
Lake Michigan & Covell	583	196	
Leonard & Fuller	703	392	Service Referral
Leonard & Turner	821	360	Service Referral
Madison & Burton	738	423	
Michigan & Fuller	1038	575	Service Referral
Wealthy & Division	821	372	Service Referral

**Table 4 Number of Motorists Stopped at Benchmark Locations with Reasons for Patrolling the Location.**

It is evident from Table 1 that the majority of the locations that were benchmarked for this study are patrolled in the general course of business for GRPD. Furthermore, it does not seem that there is any apparent correlation of high stop areas with the reason for stop.

## Results

The design of the study requires that we provide results for four racial/ethnic/gender groups—Blacks and Whites for race, Hispanics for Ethnicity and females for gender. In addition we were also asked to track the results beginning in 2013. Therefore, results for stop data from

2013/2014 will be presented followed by results for 2015. This will allow readers to see if there were changes during the 3 year period ending in 2015.

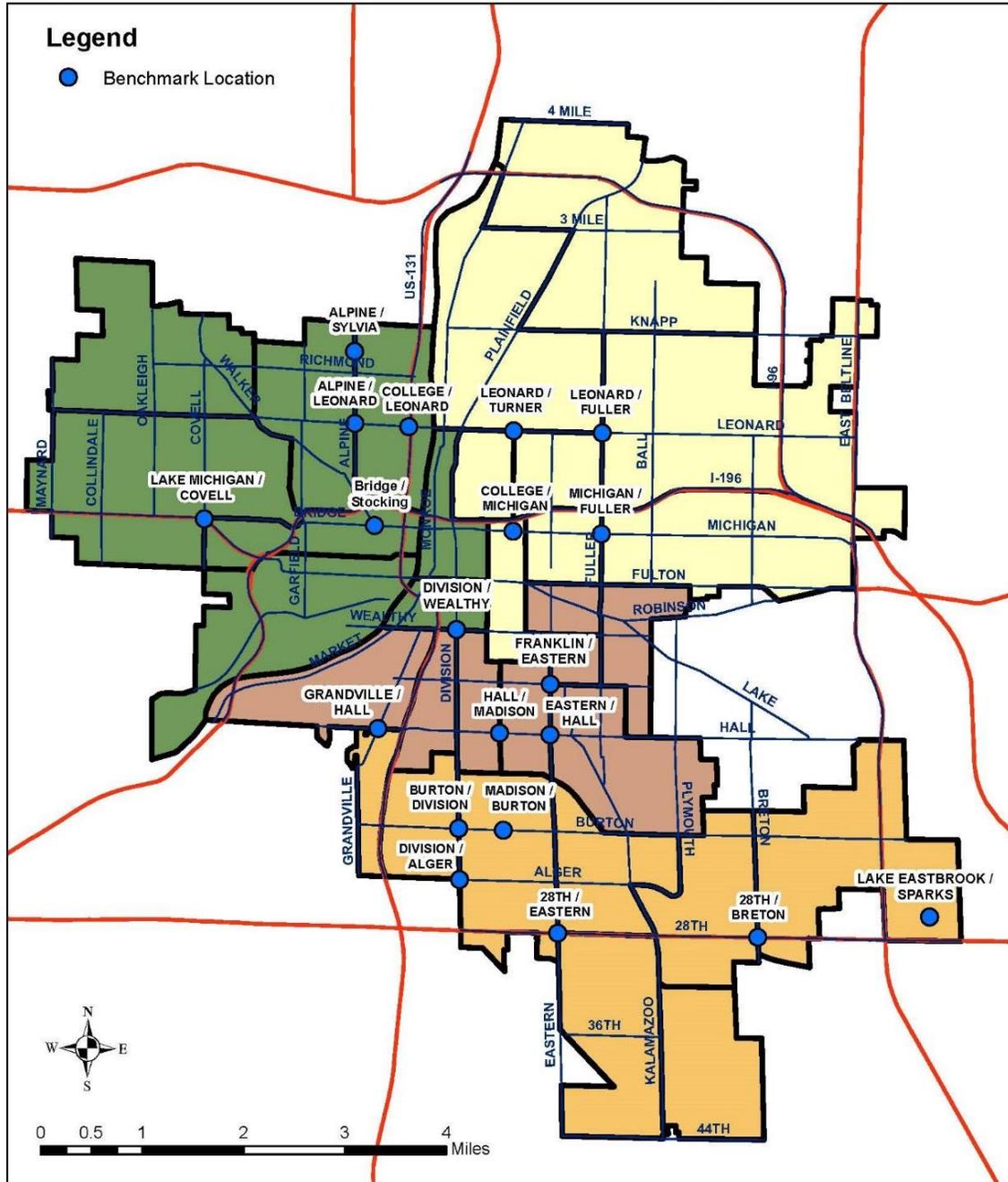
Given the concern of a number of community members about GRPD knowing where benchmarking was being done, one item is worth reiterating. Prior to the initial work done on determining benchmark locations, which occurred in June, 2016 no one in either LC or GRPD knew where the locations to be studied were. By that time, all of the GRPD stop data had been collected. While it is theoretically possible that GRPD could affect the results of the study if they knew the benchmark locations during the stop data collection phase, that is highly unlikely. With regard to this study it was impossible, as the stop data had been collected six months before work was begun on selecting the locations. While LC takes quite seriously the concerns a number of citizens raised in the Community Meetings held in August of 2016, there is no way that GRPD could have influenced this study by changing officer's behavior with regard to who was stopped at the locations we studied.

## Stops of Black Motorists

To reiterate briefly the methodology of this study, in consultation with GRPD, the City and Grand Rapids Community members, LC chose 20 locations spread all around the City.



# Traffic Stop Study Benchmark Locations



**Map 1 Stop Data Benchmark Locations, Grand Rapids. Note: The labels for College & Leonard and Leonard & Turner have been interchanged.**

All 20 locations were carefully and scientifically benchmarked to determine the race/ethnicity/gender of motorists driving at each of those intersections. Then all stops from the years 2013 and 2014 were combined to compare to those benchmarks. The results of that analysis are presented in Table 5 for Black motorists. The results for 2015 are presented in Table 6 also for Black motorist.

Location	Benchmark N	Benchmark % Black	Stop N	Stop % Black	Disparity*	Odds Ratio
28th & Breton	3673	21.8	342	30.4	8.6	1.57
28th & Eastern	3700	30.6	392	41.6	11	1.62
Alpine & Leonard	3042	13.8	534	22.1	8.3	1.77
Alpine & Sylvia	2388	10	496	11.3	1.3	1.15
Bridge & Stocking	2383	15	1073	31.2	16.2	2.57
Burton & Division	2738	30.3	1949	41.6	11.3	1.64
College & Leonard	2575	19.2	663	36.7	17.5	2.44
College & Michigan	2512	10.7	774	19.8	9.1	2.06
Division & Alger	2190	28.6	584	39.4	10.8	1.62
Eastern & Hall	2426	52.5	1083	75	22.5	2.71
Franklin & Eastern	2912	53.3	2138	76.7	23.4	2.66
Grandville & Hall	2253	19.6	400	34.5	14.9	2.16
Hall & Madison	3093	53.4	1200	73.3	19.9	2.4
Lake Eastbrook & Sparks	2214	16.6	605	11.4	-5.2	0.65
Lake Michigan & Covell	4731	4.8	583	6.7	1.9	1.42
Leonard & Fuller	2015	19.1	703	25.7	6.6	1.47
Leonard & Turner	2440	13.2	821	18.4	5.2	1.48
Madison & Burton	2641	46.5	738	61.8	15.3	1.86
Michigan & Fuller	2120	13.7	1038	21.2	7.5	1.69
Wealthy & Division	3475	23.2	821	37.4	14.2	1.98

**Table 5 2013-2014 Black Motorists Stopped Compared to Black Motorists in Traffic. The disparity is the benchmark of Black motorists subtracted from the stops of Black motorists.**

There are 6 data points for each location presented in Table 5. The first data column is the number of vehicles counted by the surveyors during the benchmarking of each location. This is the sample size from which the proportion of Black motorists was determined. The second

data column provides the proportion of Black motorists at that location. The third data column provides the number of stops made by GRPD at each of those locations during 2013-2014. The fourth column is the percentage of Black motorists stopped at that location by GRPD and the fifth column provides the disparity between the proportion of Black motorists stopped and the proportion of Black motorists enumerated in the benchmark. For the disparity, a positive number means that GRPD stopped more Black motorists than the benchmark would predict and a negative number means that fewer than predicted Black motorists were stopped. The sixth and final data column provides the odds ratio for that location.

The odds ratio is best understood by filling in the ratio (contained in the last column of Table \_\_\_ above) in the following sentence. If you are a Black motorist, you are \_\_\_ times more likely to be stopped than if you are a non-Black motorist. Because of sample size and the number of errors that is known to occur in both the collection of stop data and benchmark data, LC has generally adopted the position that odds ratios of 1 to 1.5 are benign. Odds ratios from 1.5 to 2.00 indicate the probable targeting of a group of motorists and odds ratios of 2 and above rather definitively establish the targeting of a group of motorists. As can be seen in Table 5, all of the odds ratios except 1 are above 1.00, 15 of them are above 1.5, and 7 are above 2.00. The unweighted mean for all locations is 1.85.

We now turn to the data from 2015. These are the data that are the major emphasis of this study—the data from 2013-2014 were included to provide historical perspective to the study.

The data from stops conducted of Black motorists by GRPD in 2015 are contained in Table 6.

Location	Benchmark N	Benchmark % Black	Stop N	Stop % Black	Disparity	Odds Ratio
28th & Breton	3673	21.8	176	29	7.2	1.47
28th & Eastern	3700	30.6	162	48.8	18.2	2.16
Alpine & Leonard	3042	13.8	487	27.5	13.7	2.37
Alpine & Sylvia	2388	10	150	13.3	3.3	1.38
Bridge & Stocking	2383	15	673	32.8	17.8	2.77
Burton & Division	2738	30.3	968	42.9	12.6	1.73
College & Leonard	2575	19.2	291	37.8	18.6	2.56
College & Michigan	2512	10.7	269	18.2	7.5	1.86
Division & Alger	2190	28.6	301	36.9	8.3	1.46
Eastern & Hall	2426	52.5	723	73.9	21.4	2.56
Franklin & Eastern	2912	53.3	1102	75.1	21.8	2.64
Grandville & Hall	2253	19.6	246	36.2	16.6	2.33
Hall & Madison	3093	53.4	708	73.4	20	2.32
Lake Eastbrook & Sparks	2214	16.6	206	8.7	-7.9	0.48
Lake Michigan & Covell	4731	4.8	196	8.7	3.9	1.89
Leonard & Fuller	2015	16.6	392	28.1	9	1.96
Leonard & Turner	2440	13.2	360	28.9	15.7	2.67
Madison & Burton	2641	46.5	423	63.6	17.1	2.01
Michigan & Fuller	2120	13.7	575	20.5	6.8	1.62
Wealthy & Division	3475	23.2	372	34.7	11.5	1.76

**Table 6 2015 Black Motorists Stopped Compared to Black Motorists in Traffic. The disparity is the benchmark for Black motorists subtracted from the stops of Black motorists.**

The data in Table 6 present a very similar but somewhat more extreme picture than was seen for the data from 2013-2014. In 2015, all of the odds ratios except 1 are above 1.00, 16 of them are above 1.5, and 10 are above 2.00. The unweighted mean for all locations is 2.00. This means that Black motorists are twice as likely as non-Black motorists to be stopped by GRPD.

We have seen in three related but distinct data sets 2004, 2013-14 and 2015 that Black motorists are stopped at an increasing level from year to year when the entire stop data base is considered. That is, in 2013-2014, the proportion of Black motorists that were stopped was much higher than was observed in 2004. The following year, 2015 Black motorists continued to be stopped at an elevated rate. When we consider just the 20 locations benchmarked for this study, we note that the odds ratio for Black motorists is approximately 8% higher in 2015 than it was in the combined years 2013-2014.

## Stops of White Motorists

The concern for this section of the study is the extent to which White motorists were over or under stopped by GRPD. White motorists were categorized during the benchmarking surveys and the data in the following two tables presents those data for 2013-2014 and separately for 2015.

Location	Benchmark N	Benchmark % White	Stop N	Stop % White	Disparity*	Odds Ratio
28th & Breton	3673	65.2	176	60	-5.2	0.8
28th & Eastern	3700	53.3	162	46.9	-6.4	0.77
Alpine & Leonard	3042	67	487	61	-6	0.77
Alpine & Sylvia	2388	75.2	150	82.3	7.1	1.53
Bridge & Stocking	2383	66	673	54.3	-11.7	0.61
Burton & Division	2738	42.3	968	32.5	-9.8	0.66
College & Leonard	2575	70	291	58.8	-11.2	0.61
College & Michigan	2512	80.3	269	73.1	-7.2	0.67
Division & Alger	2190	36.8	301	35.6	-1.2	0.95
Eastern & Hall	2426	39.7	723	20.8	-18.9	0.4
Franklin & Eastern	2912	39.7	1102	19.7	-20	0.37
Grandville & Hall	2253	40.3	246	32.3	-8	0.71
Hall & Madison	3093	36.3	708	23	13.3	0.52
Lake Eastbrook & Sparks	2214	75.2	206	81.7	6.5	1.47
Lake Michigan & Covell	4731	85.7	196	85.6	-0.1	0.99
Leonard & Fuller	2015	74.9	392	69.3	-5.6	0.76
Leonard & Turner	2440	75.9	360	73	-2.9	0.86
Madison & Burton	2641	40	423	27.2	-12.8	0.56
Michigan & Fuller	2120	78.9	575	74.6	-4.3	0.78
Wealthy & Division	3475	65.2	372	53.3	-11.9	0.61

**Table 7 2013-14 White Motorists Stopped Compared to White Motorists in Traffic. The disparity is the benchmark of White motorists subtracted from the stops of White motorists.**

In stark contrast to the data provided for Black motorists, Table 7 illustrates that White motorists were stopped well below the rate that would be expected based on their presence in traffic at the 20 benchmarked locations. Given the statistics that are being used, when one group of motorists are over stopped, then it follows that another group will be under stopped.

This is precisely what is seen in these data. The unweighted mean for the odds ratios at all 20 locations for White motorists is 0.77.

Table 8 provides data for stops of White motorists in Grand Rapids at the 20 locations for 2015.

Location	Benchmark N	Benchmark % White	Stop N	Stop % White	Disparity*	Odds Ratio
28th & Breton	3673	65.2	176	56.3	-8.9	0.69
28th & Eastern	3700	53.3	162	42.6	-10.6	0.65
Alpine & Leonard	3042	67	487	56.5	-10.5	0.64
Alpine & Sylvia	2388	75.2	150	78.6	3.4	1.21
Bridge & Stocking	2383	66	673	50.1	-15.9	0.52
Burton & Division	2738	42.3	968	32.2	-10.1	0.64
College & Leonard	2575	70	291	57.7	-12.3	0.58
College & Michigan	2512	80.3	269	76.6	-3.7	0.8
Division & Alger	2190	36.8	301	35.5	-1.3	0.95
Eastern & Hall	2426	39.7	723	19.2	-20.5	0.37
Franklin & Eastern	2912	39.7	1102	20.7	-19	0.4
Grandville & Hall	2253	40.3	246	29.7	-10.6	0.63
Hall & Madison	3093	36.3	708	19.5	-16.8	0.43
Lake Eastbrook & Sparks	2214	75.2	206	84.5	9.3	1.8
Lake Michigan & Covell	4731	85.7	196	83.7	-2	0.86
Leonard & Fuller	2015	74.9	392	68.1	-6.8	0.72
Leonard & Turner	2440	75.9	360	60.6	-15.3	0.49
Madison & Burton	2641	40	423	25.5	-14.5	0.51
Michigan & Fuller	2120	78.9	575	73.9	-5	0.76
Wealthy & Division	3475	65.2	372	55.1	-10.1	0.65

**Table 8 2015 White Motorists Stopped Compared to White Motorists in Traffic. The disparity is the benchmark of White motorists subtracted from the stops of White motorists.**

As was the case in 2013-14, White motorists are stopped at a lower rate than would be expected based on their presence in traffic. Compared to the 2013-14 data, there is a drop in the odds ratio to 0.71. Between 2013-14 and 2015, there is about an 8% drop in the odds ratio of White motorists who were stopped. Keep in mind that when we compared the odds ratios for Black motorists there was about an 8% increase in the odds ratio between the years 2013-14 and 2015.

## Stops of Hispanic Motorists

At this point in the analyses, it is necessary to change the focus from the actual measured data to an estimated proportion of stops for Hispanic motorists. To summarize an earlier portion of this report, the measurement of Hispanic motorists changed between 2004 and 2013. At some point in the intervening years, GRPD changed the designation of race/ethnicity of drivers to simply race. It appears that the intent of this change was not a decision on the part of GRPD to omit ethnicity because Hispanics were designated in a relatively large number of cases. Officers were able to designate Hispanics, but they had to override the existing choices that were offered and designate Hispanic. As might be expected, this led to an underreporting of Hispanic motorists. Recall that the 2004 stop data enumerated quite a few more Hispanics (11.6%) than did the 2013-14 (8.2%) or 2015 (9.2%) data. LC has analyzed the 2013-2014 data using the Hispanic Surname analysis and determined that the best estimation of Hispanics stopped by GRPD during that time period is 13.1%. For the 2015 data when the percent of those enumerated as Hispanics is considered, there were 9.2% Hispanics. However, when the Hispanic Surname analysis is used, the best estimate of the percent of Hispanics stopped is 13.9%. This substantial under counting of Hispanic stops is due to a policy decision and, as far as we can determine, officers bear none of the responsibility for it.

We now turn to the stops of Hispanics compared to the benchmark. Please remember that we are using the Hispanic Surname analysis to estimate the number of Hispanics stopped. Table 9 provides the results for 2013-2014 and the following Table provides the results for 2015.

Location	Benchmark N	Benchmark % Hispanic	Stop N	Stop % Hispanic	Disparity*	Odds Ratio
28th & Breton	3673	8.9	342	10	1.1	1.14
28th & Eastern	3700	12.4	392	11.7	-0.7	0.94
Alpine & Leonard	3042	17.2	534	19.7	2.5	1.18
Alpine & Sylvia	2388	13	496	13.2	0.2	1.02
Bridge & Stocking	2383	16.3	1073	19	2.7	1.2
Burton & Division	2738	25.3	1949	32.8	7.5	1.44
College & Leonard	2575	8.8	663	9.7	0.9	1.11
College & Michigan	2512	5.7	774	10.8	5.1	2.00
Division & Alger	2190	31.1	584	30.2	-0.9	0.96
Eastern & Hall	2426	6.7	1083	8	1.3	1.21
Franklin & Eastern	2912	5.6	2138	6.3	0.7	1.13
Grandville & Hall	2253	38.7	400	40.8	2.1	1.09
Hall & Madison	3093	8.2	1200	9.8	1.4	1.22
Lake Eastbrook & Sparks	2214	4.2	605	8.5	4.3	2.11
Lake Michigan & Covell	4731	6.8	583	8.7	1.9	1.31
Leonard & Fuller	2015	5.8	703	6.7	0.9	1.17
Leonard & Turner	2440	9.1	821	12.8	3.7	1.47
Madison & Burton	2641	11.1	738	14.7	3.6	1.38
Michigan & Fuller	2120	5.1	1038	7.7	2.6	1.55
Wealthy & Division	3475	9	821	12.1	3.1	1.39

**Table 9 2013-14 Hispanic Motorists Stopped Compared to Hispanic Motorists in Traffic. The disparity is the Benchmark of Hispanic Motorists subtracted from the stops of Hispanic Motorists.**

The data in Table 9 indicates that Hispanic motorists are stopped more than would be expected by their presence in traffic, although this over stopping does not reach a level that would indicate a problem. The unweighted odds ratios for these data is 1.3. There are 3 locations that do indicate a problem and should be monitored by GRPD. At Michigan & Fuller the odds ratio is 1.55, at Lake Eastbrook & Sparks it is 2.11, and at College & Michigan, it is

2.00. In 2004, the odds ratio for Hispanic motorists was 1. These data indicate that there is an increase in the stopping of Hispanics relative to their presence in the traffic, but it is within the area that indicates that a pattern and practice of targeting Hispanic motorists is not occurring.

The data for stopping of Hispanic motorists in 2015 is contained in Table 10.

Location	Benchmark N	Benchmark % Hispanic	Stop N	Stop % Hispanic	Disparity	Odds Ratio
28th & Breton	3673	8.9	176	16.5	7.6	2.02
28th & Eastern	3700	12.4	162	10.5	-1.9	0.83
Alpine & Leonard	3042	17.2	487	19	-1.8	1.13
Alpine & Sylvia	2388	13	150	13.6	-0.6	1.05
Bridge & Stocking	2383	16.3	673	20.2	3.9	1.3
Burton & Division	2738	25.3	968	30.1	4.8	1.27
College & Leonard	2575	8.8	291	7.5	-1.3	0.84
College & Michigan	2512	5.7	269	9.5	0.7	1.74
Division & Alger	2190	31.1	301	28.3	-2.8	0.87
Eastern & Hall	2426	6.7	723	9.3	2.6	1.43
Franklin & Eastern	2912	5.6	1102	7.5	1.9	1.37
Grandville & Hall	2253	38.7	246	40.6	1.9	1.08
Hall & Madison	3093	8.2	708	9.3	1.1	1.15
Lake Eastbrook & Sparks	2214	4.2	206	7.2	3	1.77
Lake Michigan & Covell	4731	6.8	196	9	2.2	1.36
Leonard & Fuller	2015	5.8	392	7.7	1.9	1.35
Leonard & Turner	2440	9.1	360	14.6	5.5	1.71
Madison & Burton	2641	11.1	423	15.2	4.1	1.44
Michigan & Fuller	2120	5.1	575	8.5	3.4	1.73
Wealthy & Division	3475	9	372	11.8	2.8	1.35

**Table 10 2015 Hispanic Motorists Stopped Compared to Hispanic Motorists in Traffic. The disparity is the Benchmark of Hispanic Motorists subtracted from the stops of Hispanic Motorists.**

The unweighted odds ratio for these data is 1.3. The pattern is slightly different that the 2013-2014 data show, with 3 of the odds ratios being below 1 and 5 being large enough to be of concern, which are 28th & Breton, College & Michigan, Leonard & Turner, Lake Eastbrook &

Sparks, and Michigan & Fuller. Michigan & Fuller, Lake Eastbrook & Sparks, and College & Michigan were also the 3 locations that were of concern in the 2013-2014 data.

## Stops of Female Motorists

In the 2004 study the gender of motorists stopped was one of the issues that was of concern both to GRPD and the country as a whole. There was a concern that women were being stopped at a higher rate than their presence in the motoring public. However, in 2004 males were stopped at a slightly higher, but not statistically significant rate. In this report we will provide the data for female motorists. Data for female motorists in 2013-14 are contained in Table 11.

Location	Benchmark N	Benchmark % Female	Stop N	Stop % Female	Disparity*	Odds Ratio
28th & Breton	3673	41.8	347	38.7	-3.1	0.88
28th & Eastern	3700	42.6	397	42.8	0.2	1
Alpine & Leonard	3042	41.4	544	36.2	-5.2	0.8
Alpine & Sylvia	2388	39.5	499	43.7	4.2	1.19
Bridge & Stocking	2383	42.4	1090	31.7	-10.7	0.63
Burton & Division	2738	36.7	2040	36.7	0	1
College & Leonard	2575	45	666	36.2	-8.8	0.69
College & Michigan	2512	47.1	779	47.5	0.4	1.02
Division & Alger	2190	40.6	599	32.9	-7.7	0.72
Eastern & Hall	2426	42.1	1095	37.3	-4.8	0.82
Franklin & Eastern	2912	46.3	2159	37	-9.3	0.68
Grandville & Hall	2253	36.6	410	30.7	-5.9	0.77
Hall & Madison	3093	44.3	1209	38.2	-6.1	0.78
Lake Eastbrook & Sparks	2214	53.6	619	45.4	-8.2	0.72
Lake Michigan & Covell	4731	43.4	584	48.1	4.7	1.21
Leonard & Fuller	2015	46.6	707	44.8	-1.8	0.93
Leonard & Turner	2440	42	830	38.3	-3.7	0.86
Madison & Burton	2641	45.2	741	40.4	-4.8	0.82
Michigan & Fuller	2120	44.2	1044	44.1	-0.1	0.99
Wealthy & Division	3475	44.7	834	38.1	-6.6	0.76

**Table 11 2013-14 Female Motorists Stopped Compared to Female Motorists in Traffic. Note that the Gender N for stops differs slightly than the Race/Ethnicity N for stops at most locations. This is due to differences in the “unknown” classification.**

These data indicate that little has changed since 2004 with regard to stopping of female motorists. In 2004, women were stopped at a slightly lower rate than their presence in traffic would suggest and that is still the case with the 2013-14 data. The odds ratio for female drivers stopped is 0.86.

Data for 2015 are contained in Table 12.

Location	Benchmark N	Benchmark % Female	Stop N	Stop % Female	Disparity*	Odds Ratio
28th & Breton	3673	41.8	179	45.8	4	1.18
28th & Eastern	3700	42.6	164	39	-3.6	0.86
Alpine & Leonard	3042	41.4	491	30.3	-11.1	0.61
Alpine & Sylvia	2388	39.5	150	48.7	9.2	1.45
Bridge & Stocking	2383	42.4	677	35.3	-7.1	0.74
Burton & Division	2738	36.7	1010	35.2	-1.5	0.94
College & Leonard	2575	45	294	36.7	-8.3	0.71
College & Michigan	2512	47.1	269	34	-13.1	0.58
Division & Alger	2190	40.6	312	32.1	-8.5	0.69
Eastern & Hall	2426	42.1	726	36.9	-5.2	0.8
Franklin & Eastern	2912	46.3	1108	37.8	-8.5	0.7
Grandville & Hall	2253	36.6	246	30.5	-6.1	0.76
Hall & Madison	3093	44.3	712	35	-9.3	0.68
Lake Eastbrook & Sparks	2214	53.6	207	57.2	3.6	1.16
Lake Michigan & Covell	4731	43.4	197	47.2	3.8	1.17
Leonard & Fuller	2015	46.6	395	45.8	-0.8	0.97
Leonard & Turner	2440	42	364	36.3	-5.7	0.79
Madison & Burton	2641	45.2	426	38.3	-6.9	0.75
Michigan & Fuller	2120	44.2	579	43.9	-0.3	0.98
Wealthy & Division	3475	44.7	374	39.6	-5.1	0.81

**Table 12 2015 Female Motorists Stopped Compared to Female Motorists in Traffic Note that the Gender N for stops differs slightly than the Race/Ethnicity N for stops at most locations. This is due to differences in the “unknown” classification.**

The data for stops of women in 2015 are quite consistent with the 2013-14 data. The odds ratio for these data is 0.87. There is no evidence that GRPD stops too many female motorists. Quite to the contrary, too few female motorists are stopped.

## Searches

We now turn to the results of the study with regard to searches. While searches of individuals or their passengers/vehicles are fairly rare events, they are much more intrusive, time consuming, and vexing for a motorist than many other types of post stop activity. With regard to searches, the major focus of this study is on whether, given the proportion of motorists stopped, Black, Hispanic, White or female motorists are subjected to more searches than would be expected. The benchmark for the expected searches of minorities now becomes their presence in those motorists stopped by GRPD. Therefore, the focus for the analysis of searches shifts away from the 20 locations used to determine whether there was over stopping and to the proportion stopped of each group in the entire databases for the years 2013, 2014 and 2015. The data of most interest are the stop rates and search rates for Black, Hispanic, White and female motorists. Table 13 presents the data for Black and White motorist and Table 14 contains the data for Hispanic and female motorists.

Year	% Black Stops	% Black Consent Searches	% Black PC Searches	% White Stops	% White Consent Searches	% White PC Searches
2013	37.1	61.3	70.1	53.5	29.3	22.1
2014	40.0	62.5	67.2	50.4	28	27.3
2015	40.3	56.3	63.2	48.9	33.8	26.9

**Table 13 Stop and Search percentages for Black and White motorists.**

It is quite clear that the search rates for Black motorists are very much higher than their stop rates and are very much lower for White motorists than their stop rates. It is instructive to consider the odds ratios for searches to know what the magnitude of these stop rates mean.

Recall that the odds ratios that have been considered in the sections of this report on police stops compared the proportion of a group stopped to the proportion of motorists in the motoring population. The odds ratio here is the proportion of motorists in a group that are

stopped compared to the proportion of that group that are searched. When consent searches are considered for Black motorists the odds ratios are 2.69 for 2013, 2.5 for 2014 and 1.91 for 2015. The odds ratios for Probable Cause searches for Black motorists is 3.97 for 2013, 3.07 for 2014 and 2.54 for 2015.

When the corresponding odds ratios for searches of White motorists are considered, we see that they are very much lower than would be expected based on the stop rate for White motorists. For consent searches the odds ratios are 0.36 for 2013, 0.38 for 2014 and 0.53 for 2015. For Probable Cause searches the odds ratios are 0.25 for 2013, 0.37 for 2014 and 0.38 for 2015.

Next we turn to searches of Hispanic and female motorists.

Year	% Hispanic Stops	% Hispanic Consent Searches	% Hispanic PC Searches	% Female Stops	% Female Consent Searches	% Female PC Searches
2013	13.8	13.4	12.6	39.3	18.0	17.9
2014	13.8	13.0	12.6	39.3	20.7	17.0
2015	13.9	14.5	14.6	38.2	18.6	19.7

**Table 14 Stop and Search percentages for Hispanic and Female motorists.**

Here we see that Hispanic motorists are searched at very nearly the rate at which they were stopped. The mean odds ratios for these data for the 3 years are 0.97, with the range being from 0.90 to 1.06. Clearly Hispanic motorists are searched at rates that are comparable to their stop rates.

Female motorists are searched at rates very much lower than their stop rates. In 2013, consent search odds ratios for females was 0.34 in 2014 they were 0.40 and in 2015 they were .37. For probable cause searches for the three years were 0.34, 0.32, and 0.38.

## Hit Rates

To help in deciding whether any over searching of minorities is accounted for by the results of the search, a “hit rate” for searches was determined. The reason for this step is quite simple. Some police departments around the country have long argued that the reason they stop or search more minorities is that they are more often breaking the law. This particular argument, at least for stops, was most pointedly made in Lange, et. al. (see footnote 4). That contention was questioned in Kadane & Lamberth, 2009)<sup>19</sup>.

The hit rates were determined for each demographic group, Blacks, White and female motorists in the following manner. GRPD does not maintain data in their Computer Assisted Dispatch (CAD) or other electronic data sources on the results of searches. When a search is conducted, a report of the search is created and whether contraband is found is reported in the narrative of that report. Thus, it is quite cumbersome for GRPD to review all of these reports. LC suggested that a review of a random sample of those reports would be sufficient for the purposes of determining the hit rates for the searches. Thus, a 30% random sample of the consent and probable cause searches was created and reviewed for purposes of determining the proportion of these searches by demographic group. For 2013, there were 363 consent and 136 PC search records, in 2014 there were 374 consent and 145 PC search records, and in 2015 there were 270 consent and 153 PC search records that were examined to determine if contraband was discovered. In total, there were 1,007 consent search records and 434 PC search records in the sample. Hit rates for each type of search were determined by computing the proportion of each demographic group who were found with contraband.

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<sup>19</sup> Kadane, J.B. & Lamberth, J. (2009). “ Are Blacks egregious speeding violators at extraordinary rates in New Jersey?” **Law, Probability & Risk. (8) 139-152.**

The situation regarding Hispanic motorists is analytically somewhat more complex than it is for Black, White and female motorists. Recall that some years ago GRPD dropped the Hispanic designation from the drop down menu for officers to fill in when designating the race of motorists during a traffic stop. To designate a motorist Hispanic, the officer would have to ignore the available races and insert Hispanic. This decreased the reported proportion of Hispanic motorists in GRPD's stop data substantially. For this study, LC used the Hispanic Surname analysis to determine the proportion of Hispanic motorists stopped. That method is also being used to determine the proportion of Hispanics searched and the hit rate from those searches. This methodological difference is noted here to alert the reader to the fact that an estimate, although it has been quite reliable in the 15 or so years since its inception, is being used.

The results of that analysis for consent searches is that 26.5% of Black motorists searched were found with contraband and 24.2% of White motorists searched were found with contraband. Statistically, these percentages do not differ from each other. With reference to PC searches, 60.4% of Black motorists searched had contraband while 74.2% of White motorists searched had contraband. This difference is statistically significant at the 0.01 level of confidence. If the two types of searches are combined, the hit rate for all motorists searched on the basis of consent or PC is 37.2% for Black motorists and 38.5% for White motorists. This difference is not statistically significant. What these data say in a very clear way is that a Black motorist that GRPD searched on the basis of consent is no more likely than a White motorist to be carrying contraband. Further, a Black motorist is less likely to be carrying contraband when they were searched on the basis of PC than a White motorist.

The hit rate for Hispanic motorists for consent searches was 23.1% and that rate for probable cause was 50.0%. It should be noted that this rate for consent searches is slightly lower than the corresponding hit rate for Black and White motorists. The hit rate for PC searches is considerably lower for Hispanic motorists than for either Black or White motorists.

With regard to gender, 23% of females searched when the reason for the search was consent had contraband, while 26.2% of males were found with contraband. When probable cause was the reason for the search, 60.6% of females and 65.7% of males were found to be carrying contraband.

Hit rates do not seem to answer the question of why Black motorists are so over searched nor why females are so under searched.

## CONCLUSIONS

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The preceding sections of this report have been data dense and now we turn to making sense of what they mean. That will be done in two ways; 1) there will be a comparison of the results of the study in 2004 to the results of the 2015 study, and 2) there will come a comparison of trends in the data from 2013 to 2015. The 2004 study has two components, the study itself which used data from 2003 and a follow up analysis of GRPD stop data for the year 2004.

There are small increases in the stops of Hispanics from 2004 to 2015. The odds ratio for their stops increased from 1.0 to 1.3 in the 2013-14 data and remained at that level in 2015, both of which are clearly in the benign area. Hispanics were also not over searched. The odds ratios for the searches of Hispanic motorists in the 2004 study was 0.5 and that had risen to slightly under 1 during the 2013-2015 period. With regard to female motorists, again we see little or no change in regard to stops. Females, as was the case in 2004, are stopped less often than would be expected by their presence among motorists. Additionally, they were searched far less than would be expected based on their rate of stops.

The same cannot be said when we come to Black motorists. In the 2004 report the odds ratio for stops of Black motorists was 1.4. The following year, when LC reanalyzed data for the year 2004, that odds ratio had decreased slightly to 1.3. By contrast, the odds ratio for Black motorists in 2015 was 2.0. That is a very large increase. Part of the present study was the analysis of data from 2013 and 2014. These data were combined and the odds ratio for Black motorists was 1.85. This indicates that too many Black motorists were being stopped in 2013-2014 and the increase in the over stopping of Black motorists continued in 2015. The pattern that is seen from data collected in 2003 for the 2004 study to the 2004 data is a slight decrease from 2003 to 2004 followed by a very large increase in the next data point that we have in 2013-

2014 followed by another increase between 2013-14 to 2015. We simply do not know when the increase seen between 2004 and the 2013-2014 began.

White motorists were stopped at a rate that is very much less than the rate that would be expected based on their presence in traffic. Recall that the odds ratios for stops of White motorists was 0.77 in 2013-2014 and decreased to 0.71 in 2015. As we have said earlier in this report, when one group is over stopped another group will be under stopped and in this instance, it is White motorists that are under stopped.

With regard to searches, we see the same pattern for Black motorists as is seen in their stop data. Recall that in the 2004 data there were so few probable cause searches that they could not be analyzed. In that data, for consent searches using the proportion of Black motorists stopped as a benchmark the odds ratio for the searching of Black motorists was 1.3. The odds ratios for consent searches was 2.69 in 2013, 2.5 in 2014, and dropping to 1.91 in 2015. While the trend is encouraging, the difference between the 2004 study and these 3 years is very large. Further, the benchmark being used for these calculations is one that results when Black motorists are stopped at twice the theoretically neutral level.

For Probable Cause searches of Black motorists, the odds ratios for the years 2013 to 2015 are 3.97, 3.07 and 2.94. Again, the reader should be aware that the benchmark for these very high odds ratios came from an analysis that found Black motorists were stopped at very close to twice the rate that would be expected given their presence in the traffic. Again, we see that those odds ratios are decreasing, but even the 2015 ratio of 2.94 is very high.

When hit rates were considered, it was quite apparent that Black and Hispanic motorists were carrying contraband at or below the level of White motorists. Thus, one explanation for why Black motorists were searched at such high levels was negated. The reason hit rates are

important is that if Black motorists are found to be carrying contraband at higher levels than are White motorists, the explanation for their over searching may be that there were other signs that officers perceived which led them to make the searches. However, when the hit rates for searches of Black and White motorists are essentially the same, then race may well be the major or only reason that Black motorists were searched.

## RECOMMENDATIONS

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1. GRPD should have the stop and search data for 2016 analyzed as soon as possible to determine whether:
  - A. The increases in stops of Black motorists continued during that year.
  - B. There is any evidence that the City Managers 12 point plan appeared to influence GRPD officers to reduce searches as posited by a GRPD spokesman for 2015.
  - C. There were any other changes from earlier years in the stopping patterns of GRPD.
2. GRPD should make public their stop data with an analysis each year for at least the next 4 years. The existing benchmarks should not present a problem. Our previous experience leads us to believe that the benchmarks used in this report are good for the next 4 to 5 years.
3. GRPD should immediately begin a comprehensive review of its policies and procedures to determine whether any of these administrative tools contribute to the over stopping of Black motorists.
  - A. This review should be conducted by a group that consists of the Chief, Command Staff representatives, other supervisory levels and officers as well as at least one external policing expert. In addition, this group should include one or more members of the Grand Rapids community.
  - B. Being cognizant of the unintended consequences of an earlier policy decision, changing the recording of race/ethnicity to simply race as was detailed in this report, all policies and procedures should be scrutinized to determine their effect on minority motorists.
4. GRPD should carefully review its data collection efforts to assure that relevant data is accurately recorded. These efforts should attend to the following:
  - A. Accurately recording race and ethnicity of motorists
  - B. Collecting more data on post stop activity, e.g. were motorists asked to exit their vehicles and/or were they handcuffed
  - C. Revising the type of stop data to be more inclusive of the type of moving or equipment violations recorded.
  - D. When the motorist, passenger or vehicle is searched, the results of these searches should be recorded.

5. GRPD should assess and evaluate its training offerings for ensuring that their staff engage in bias free policing. All levels of GRPD sworn and unsworn personnel should have regular bias free policing training that incorporates implicit bias subject matter.
  - A. All officers should receive the full training session(s) within their first year of employment with GRPD and participate in a “re-fresher” session at least once every 2 years.
  - B. Included in the training sessions should be a discussion on the GRPD’s actual hit rate (instances where contraband is located incident to a search) for GRPD for all motorists to assure that officers understand that over stopping/over searching either Black or Hispanic motorists does not increase the rate that contraband is found.
  - C. The training should emphasize that biased based policing, including the targeting of minority motorists is deleterious to efforts to achieve cooperation between community members and GRPD.
6. GRPD should assess and evaluate its staff reward and recognition program as well as their promotion practices to determine if they have a practice of promoting and or honoring individuals whose behavior and performance support outcomes that result in disparate treatment of racial/ethnic or gender minorities.
7. GRPD should assess and evaluate its Field Training Officers (FTOs) to assure that they are not advertently or inadvertently training new officers in practices that result in the targeting of minority motorists.
8. GRPD should assess and evaluate the training given to FTOs to assure that these officers are aware of the need to protect against bias based policing.
9. GRPD should assess and evaluate its early warning system to determine which officers are stopping and/or searching minority motorists at a higher rate than their peers.
10. GRPD should immediately begin a process of bringing officers and citizens together to discuss this report and the larger issue of minority and police relations. This is a difficult conversation and should be conducted by trained facilitators who have facilitated these types of engagement efforts previously.
11. GRPD should, in cooperation with a local group with expertise in community surveying, begin to survey the community on a regular basis to obtain feedback from citizens. This effort should be carefully designed to tap both positive and negative opinions and to reach

all portions of the community but with special emphasis on minority groups. This should include oversampling of those groups that are hard to reach and using a Spanish language survey where appropriate.

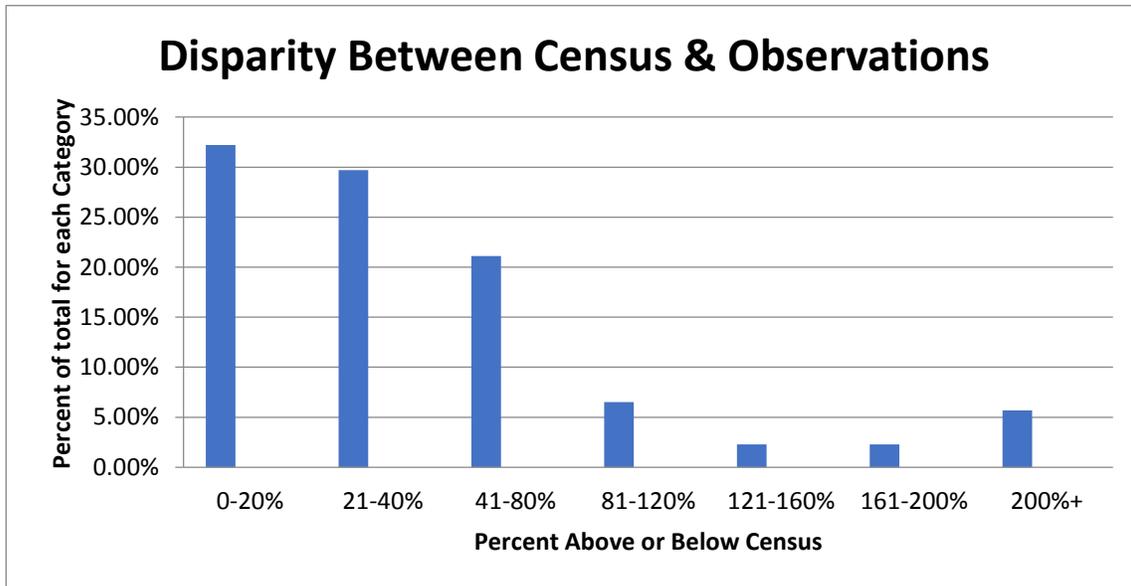
12. Within 6 months of the release of this report GRPD should inform the Grand Rapids community which of these recommendations they intend to follow and report to the community the basis for their decision and when the results of the recommendation will be made public where appropriate. Every 6 months thereafter, the City should report to the community the outcomes of their efforts.

## APPENDIX I

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### Benchmarks Compared to Census Data

In the 1990s many people opined that Census data would be a good benchmark against which to compare police stop data. However, as research in the area has increased, it has become increasingly apparent that Census data are inappropriate. Figure 1 shows a comparison of the disparity between the percentage of minorities driving at specific locations in urban areas in 14 cities/counties in 4 states and the District of Columbia and the percentage of minorities living in the Census tracts that encompass those areas. To be more specific, observational data was collected at 220 intersections in those 14 cities/counties and compared with Census tract information for the percentage of minorities living at those locations. In every instance the comparison included Black motorists/residents and in addition, data on Hispanic and Asian motorists/residents was collected at many of the locations. In all, the figure includes 511 comparisons between minority drivers and minority residents. The figure shows how close/far off Census data were in predicting the driving population.



**Table 15 the amount of error associated with predicting the driving population from Census data.**

The story that these data tell is that Census data are over 40% off the mark over a third of the time and it is not possible to know whether Census data will over or under estimate the driving population.

Whatever the data may show in other areas, the question can always be raised as to how close a fit Census data is to the driving population in Grand Rapids. Observations were made at 20 locations in Grand Rapids and we report on the comparison of Black, Hispanic and White motorists at those locations to the Census tract data for persons of driving age who live at those locations.

Results for each race/ethnicity for each demographic group are contained in the next 3 tables.

Location	Black Population	Black Benchmark	Difference	Comparative Disparity
28th & Breton	18.1%	21.8%	-3.7%	-20.4%
28th & Eastern	27.9%	30.6%	-2.7%	-9.6%
Alpine & Leonard	8.8%	13.8%	-5.0%	-56.8%
Alpine & Sylvia	5.3%	10.0%	-4.7%	-88.7%
Bridge & Stocking	8.7%	15.0%	-6.3%	-72.4%
Burton & Division	16.1%	30.3%	-14.2%	-88.2%
College & Leonard	18.2%	19.2%	-1.0%	-5.5%
College & Michigan	13.6%	10.7%	2.9%	21.3%
Division & Alger	17.3%	28.6%	-11.3%	-65.3%
Eastern & Hall	65.4%	52.5%	12.9%	19.7%
Franklin & Eastern	67.5%	53.3%	14.2%	21.0%
Grandville & Hall	14.3%	19.6%	-5.3%	-37.1%
Hall & Madison	67.9%	53.4%	14.5%	21.4%
Lake Eastbrook & Sparks	25.5%	16.6%	8.9%	34.9%
Lake Michigan & Covell	0.8%	4.8%	-4.0%	-500.0%
Leonard & Fuller	23.0%	19.1%	3.9%	17.0%
Leonard & Turner	10.2%	13.2%	-3.0%	-29.4%
Madison & Burton	35.8%	46.5%	-10.7%	-29.9%
Michigan & Fuller	8.9%	13.7%	-4.8%	-53.9%
Wealthy & Division	24.8%	23.2%	1.6%	6.5%

**Table 16 Comparison of Black residents v. Black drivers at each of 20 locations. The comparative disparity is obtained by subtracting the benchmark percentage from the Census percentage and dividing by the Census percentage. Therefore, a negative comparative disparity means that the race/ethnicity is underrepresented by Census data when compared to traffic.**

In 6 of the 20 locations Census data would under or over represent Black motorists by 40% or more. In 13 of the locations Census under represents Black drivers and over represents them in 7 locations.

With White drivers there is a somewhat similar situation.

Location	White Population	White Benchmark	Difference	Comparative Disparity
28th & Breton	72.8%	65.2%	7.6%	10.4%
28th & Eastern	60.2%	53.3%	6.9%	11.5%
Alpine & Leonard	73.3%	67.0%	6.3%	8.6%
Alpine & Sylvia	80.2%	75.2%	5.0%	6.2%
Bridge & Stocking	73.4%	66.0%	7.4%	10.1%
Burton & Division	50.8%	42.3%	8.5%	16.7%
College & Leonard	71.9%	70.0%	1.9%	2.6%
College & Michigan	77.9%	80.3%	-2.4%	-3.1%
Division & Alger	58.2%	36.8%	21.4%	36.8%
Eastern & Hall	23.6%	39.7%	-16.1%	-68.2%
Franklin & Eastern	21.2%	39.7%	-18.5%	-87.3%
Grandville & Hall	44.4%	40.3%	4.1%	9.2%
Hall & Madison	16.6%	36.3%	-19.7%	-118.7%
Lake Eastbrook & Sparks	60.9%	75.2%	-14.3%	-23.5%
Lake Michigan & Covell	94.0%	85.7%	8.3%	8.8%
Leonard & Fuller	69.0%	74.9%	-5.9%	-8.5%
Leonard & Turner	68.3%	75.9%	-7.6%	-11.1%
Madison & Burton	49.5%	40.0%	9.5%	19.2%
Michigan & Fuller	83.9%	78.9%	5.0%	6.0%
Wealthy & Division	62.6%	65.2%	-2.6%	-4.2%

**Table 17 Comparison of White residents v. White drivers at each of 20 locations. The comparative disparity is obtained by subtracting the benchmark percentage from the Census percentage and dividing by the Census percentage. Therefore, a negative comparative disparity means that the race/ethnicity is underrepresented by Census data when compared to traffic.**

There are only 3 locations where White drivers are under or over represented by 40% or more. They are under represented in 8 of the locations and over represented in 12.

Finally we consider Hispanic drivers.

Location	Hispanic Population	Hispanic Benchmark	Difference	Comparative Disparity
28th & Breton	5.3%	8.9%	-3.6%	-67.9%
28th & Eastern	8.9%	12.4%	-3.5%	-39.3%
Alpine & Leonard	22.4%	17.2%	5.2%	23.2%
Alpine & Sylvia	14.2%	13.0%	1.2%	8.5%
Bridge & Stocking	21.2%	16.3%	4.9%	23.1%
Burton & Division	45.5%	25.3%	20.2%	44.4%
College & Leonard	8.7%	8.8%	-0.1%	-1.1%
College & Michigan	7.2%	5.7%	1.5%	20.8%
Division & Alger	33.3%	31.1%	2.2%	6.6%
Eastern & Hall	12.4%	6.7%	5.7%	46.0%
Franklin & Eastern	12.3%	5.6%	6.7%	54.5%
Grandville & Hall	68.9%	38.7%	30.2%	43.8%
Hall & Madison	19.2%	8.2%	11.0%	57.3%
Lake Eastbrook & Sparks	7.1%	4.2%	2.9%	40.8%
Lake Michigan & Covell	3.4%	6.8%	-3.4%	-100.0%
Leonard & Fuller	6.8%	5.8%	1.0%	14.7%
Leonard & Turner	26.1%	9.1%	17.0%	65.1%
Madison & Burton	16.9%	11.1	5.8%	34.3%
Michigan & Fuller	6.6%	5.1%	1.5%	22.7%
Wealthy & Division	12.7%	9.0%	3.7%	29.1%

**Table 18 Comparison of Hispanic residents v. Hispanic drivers at each of 20 locations. The comparative disparity is obtained by subtracting the benchmark percentage from the Census percentage and dividing by the Census percentage. Therefore, a negative comparative disparity means that the race/ethnicity is underrepresented by Census data when compared to traffic.**

Hispanic drivers are under or over represented by 40% or more in 8 of the 20 locations.

They are over represented in 16 of the locations.

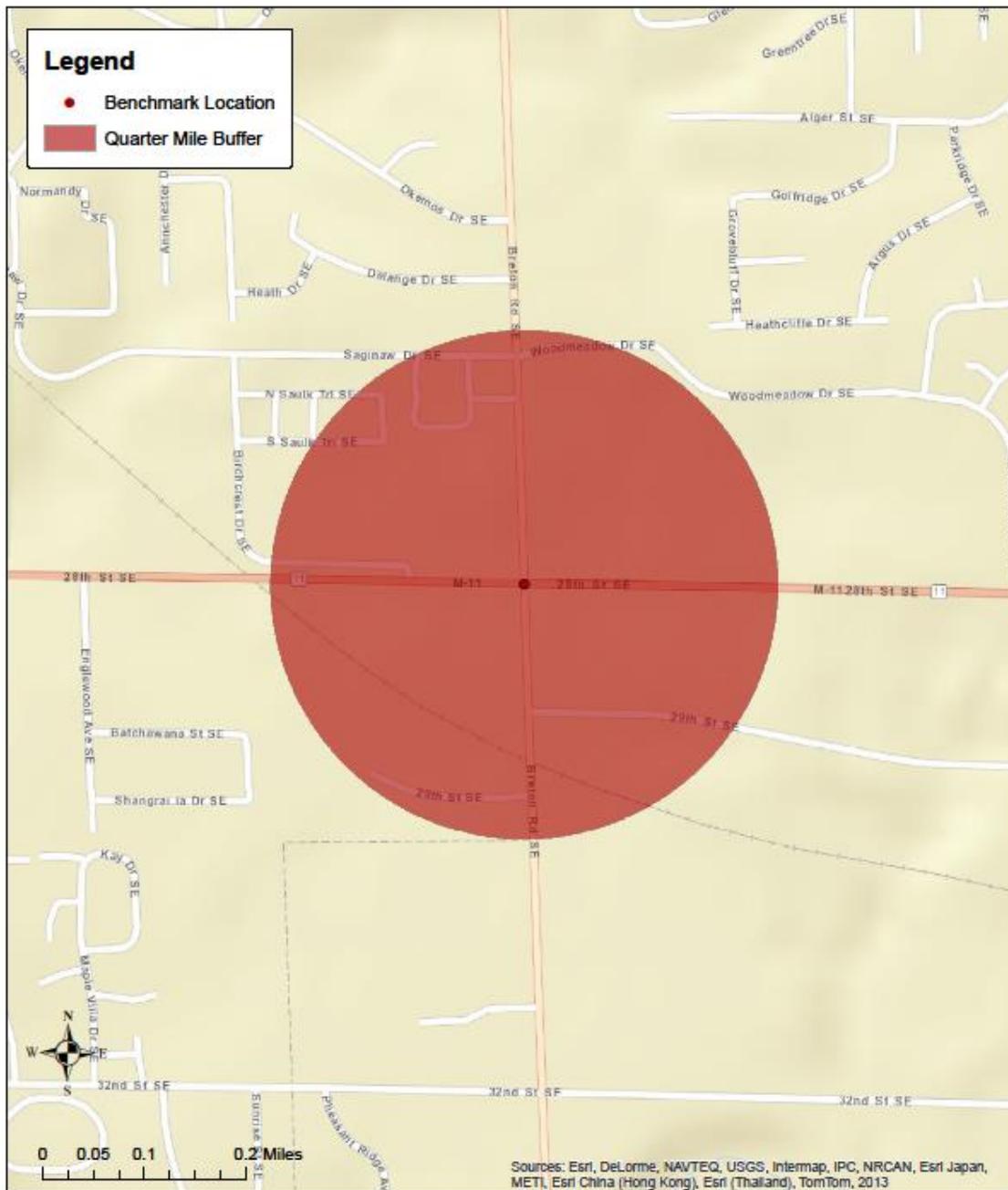
In short, Census data is an extremely unreliable measure of the race/ethnicity of traffic in Grand Rapids.

## APPENDIX II

### Maps of Surveyed Intersections Map 2 28th & Breton



#### 28th St SE & Breton Ave SE Quarter Mile Buffer



### Map 3 28th & Eastern



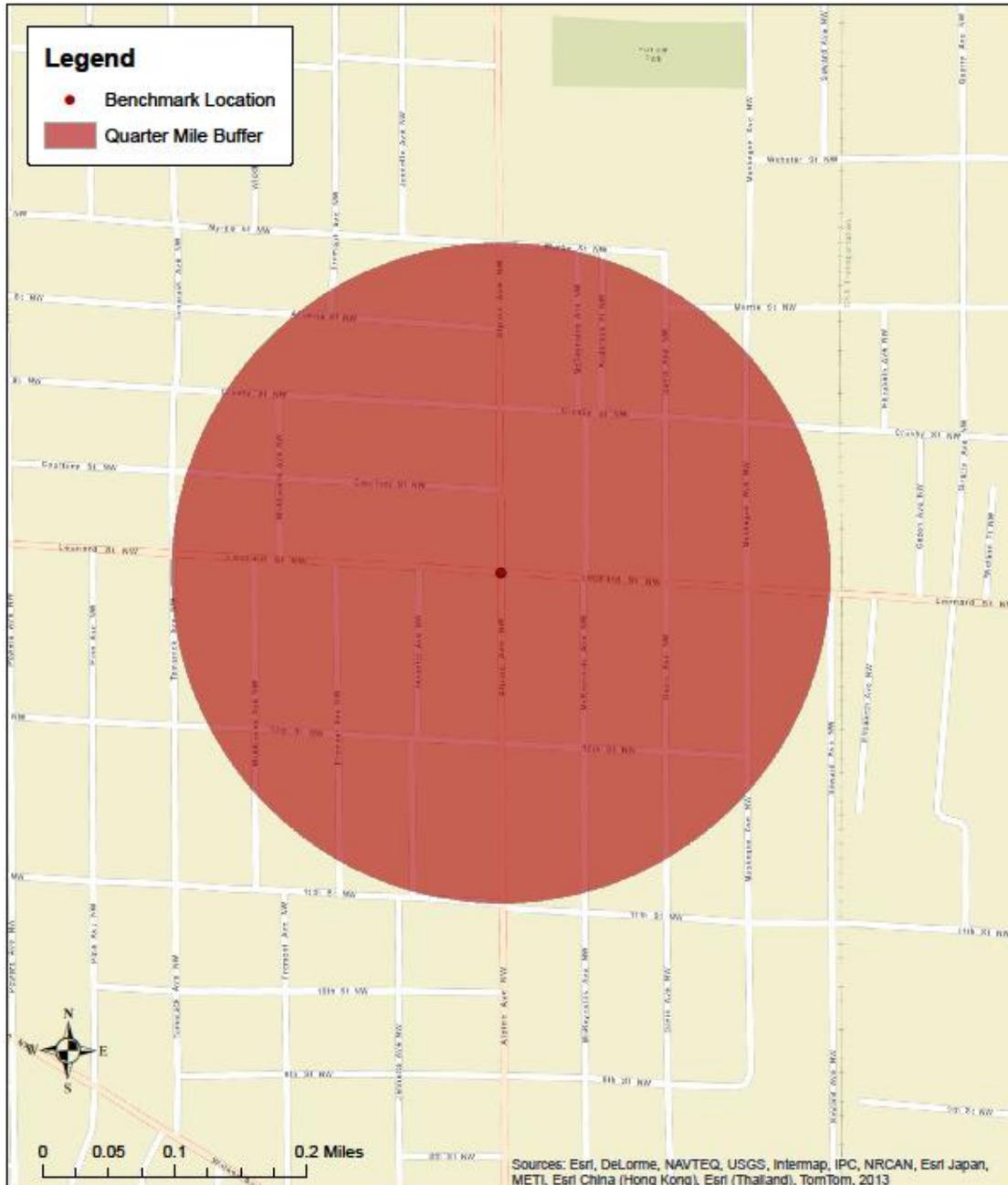
## 28th St SE & Eastern Ave SE Quarter Mile Buffer



### Map 4 Alpine & Leonard



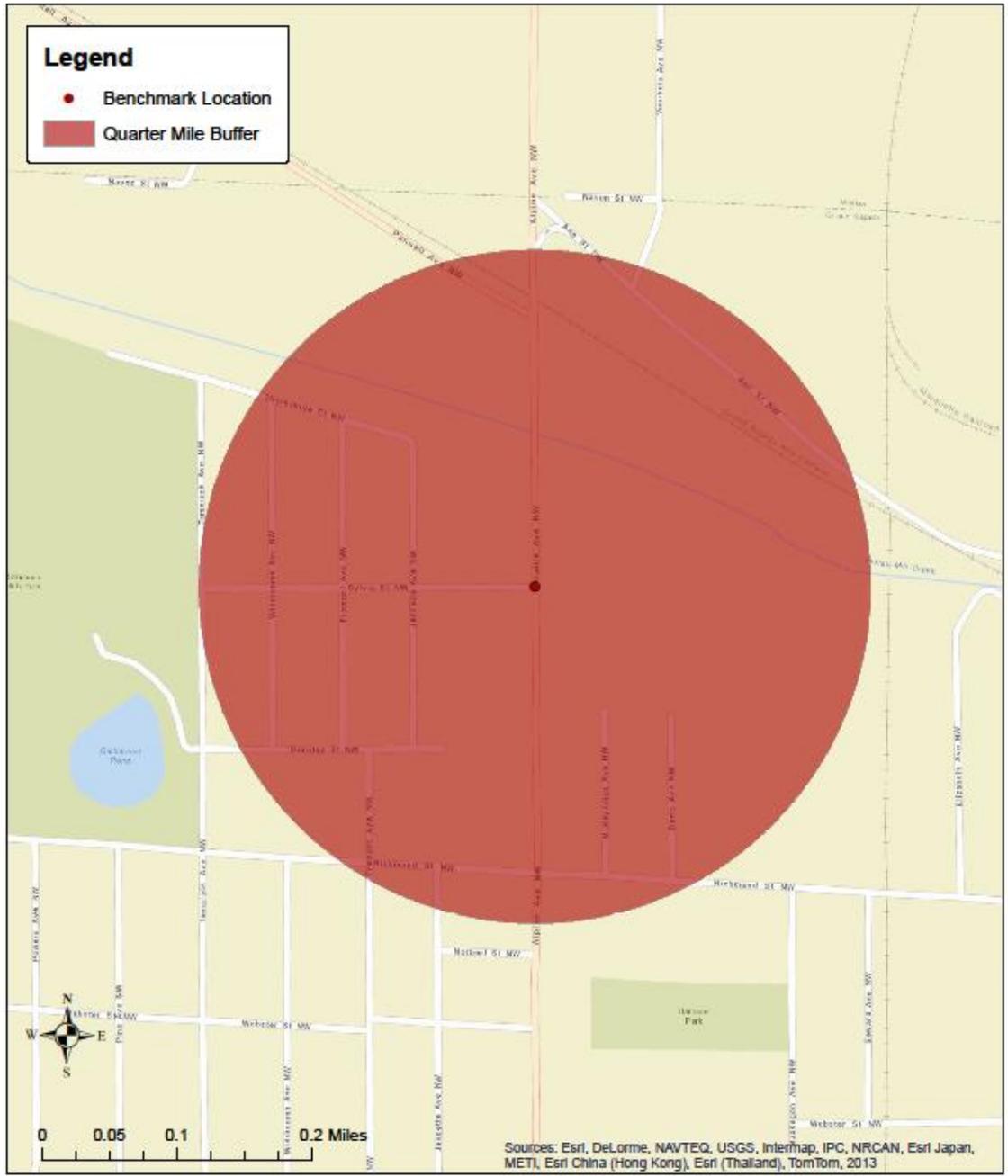
## Alpine Ave NW & Leonard St NW Quarter Mile Buffer



### Map 5 Alpine & Sylvia



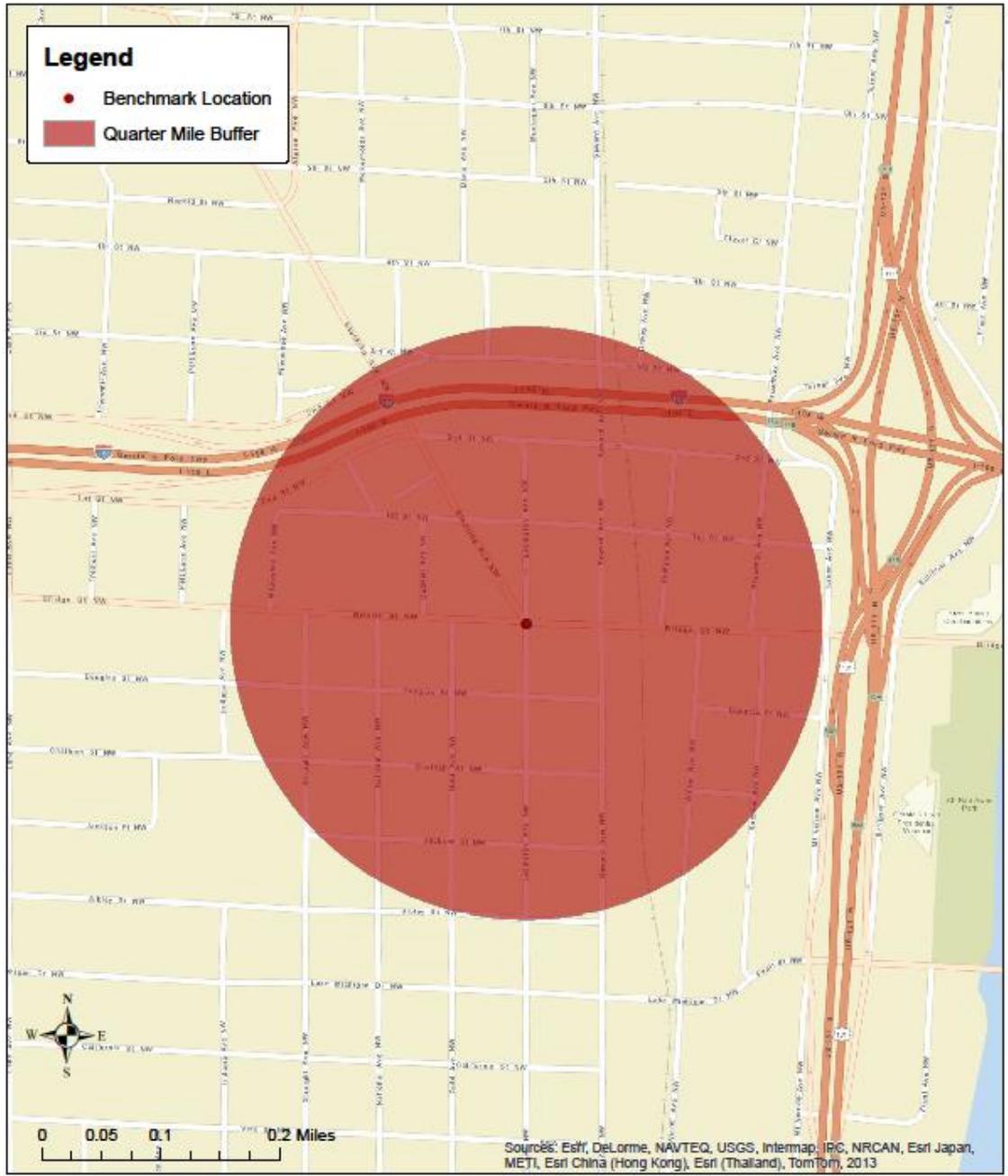
## Alpine Ave NW & Sylvia St NW Quarter Mile Buffer



### Map 6 Bridge & Stocking



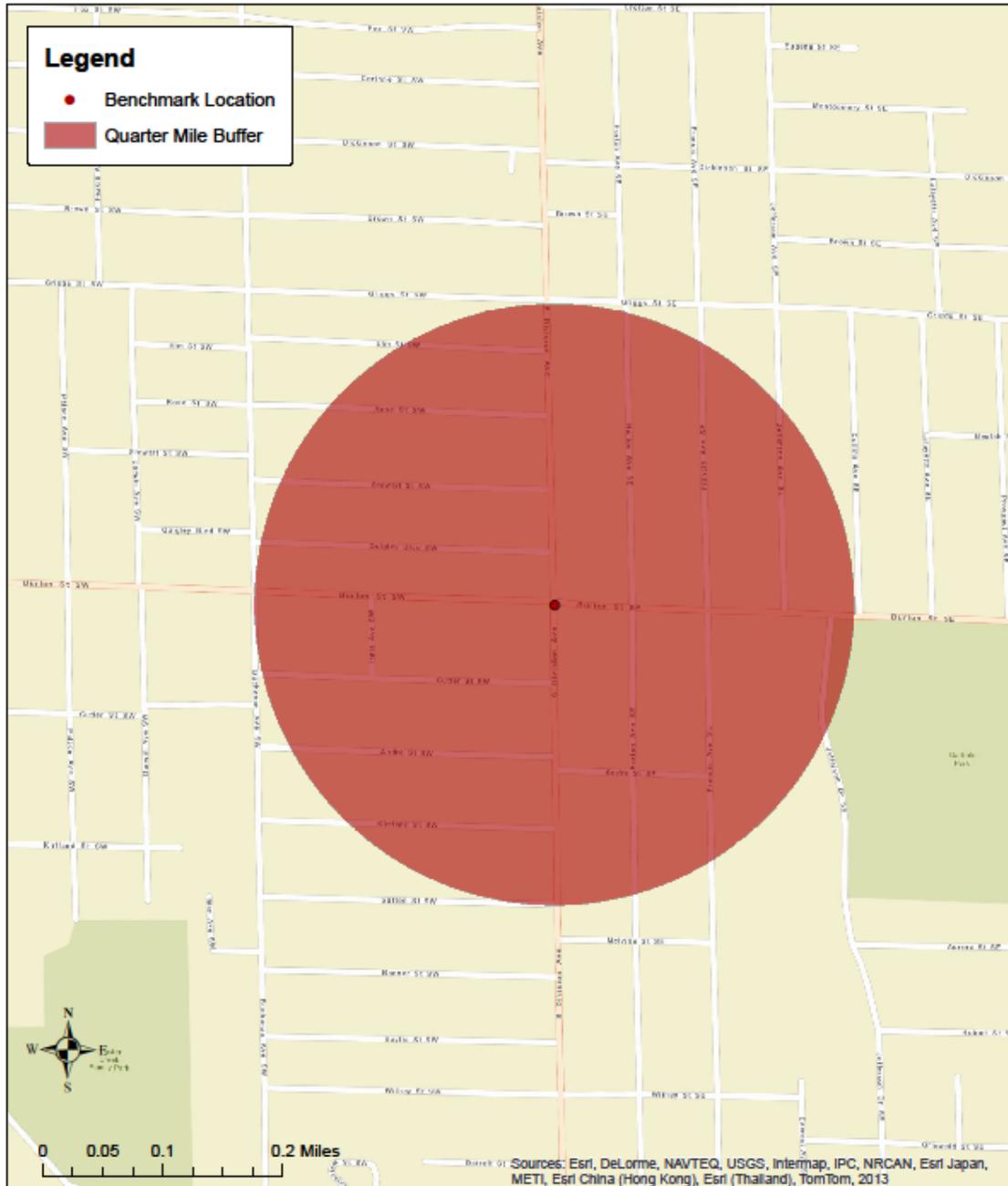
## Bridge St NW & Stocking Ave NW Quarter Mile Buffer



Map 7 Burton & Division.



### Burton St SE & S Division Ave Quarter Mile Buffer



### Map 8 College & Leonard



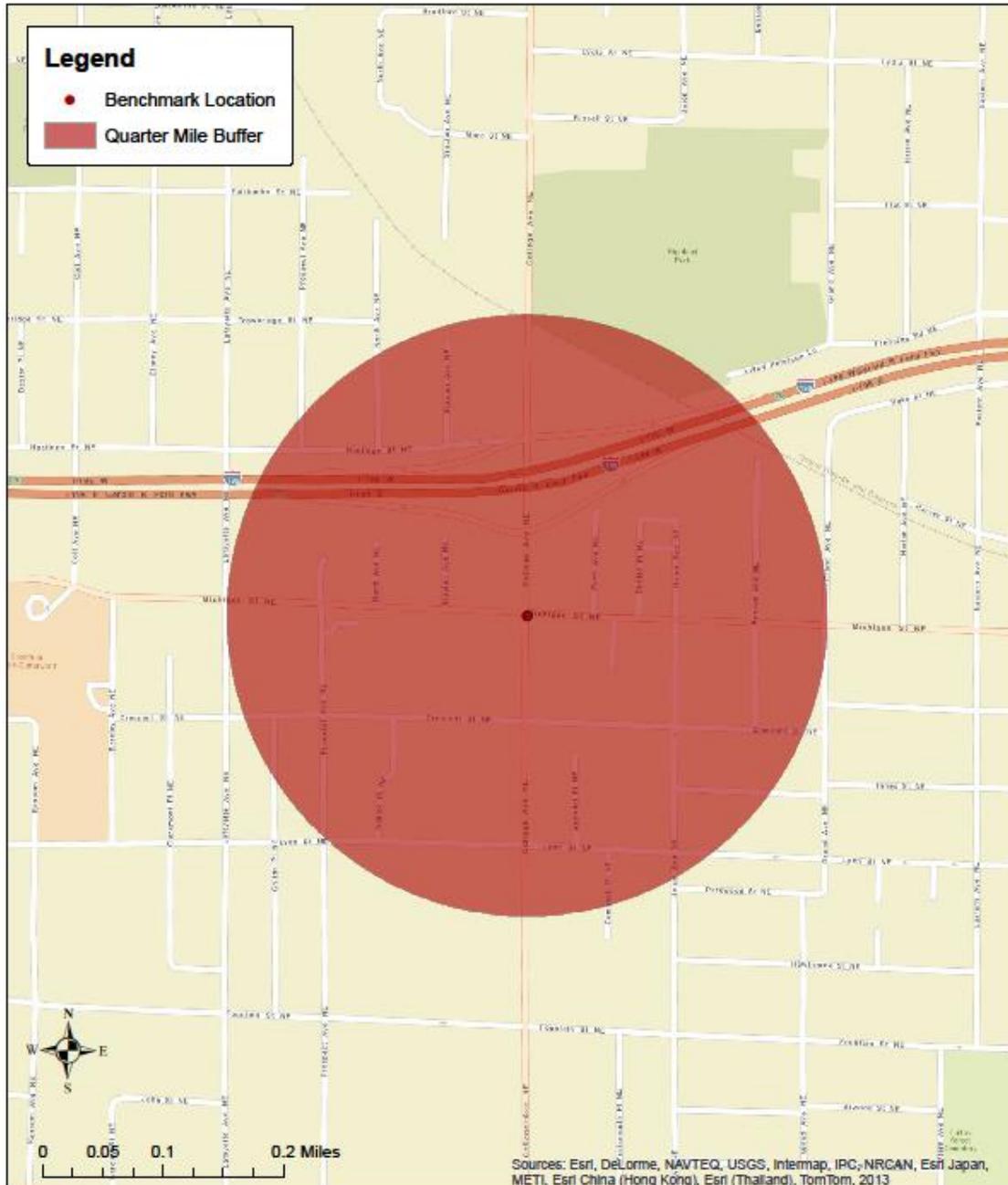
## College Ave NE & Leonard St NE Quarter Mile Buffer



### Map 9 College & Michigan



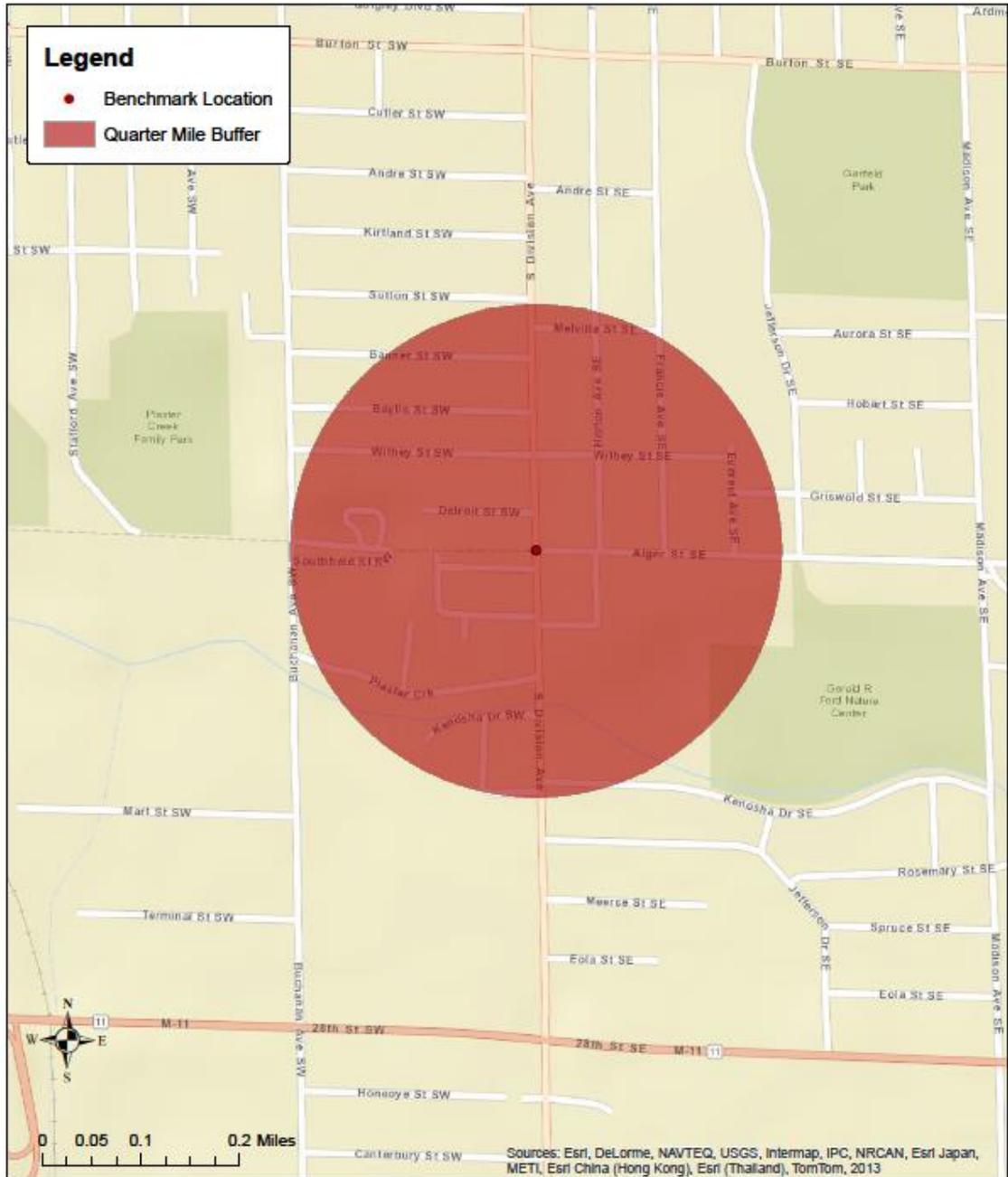
## College Ave NE & Michigan St NE Quarter Mile Buffer



### Map 10 Division & Alger



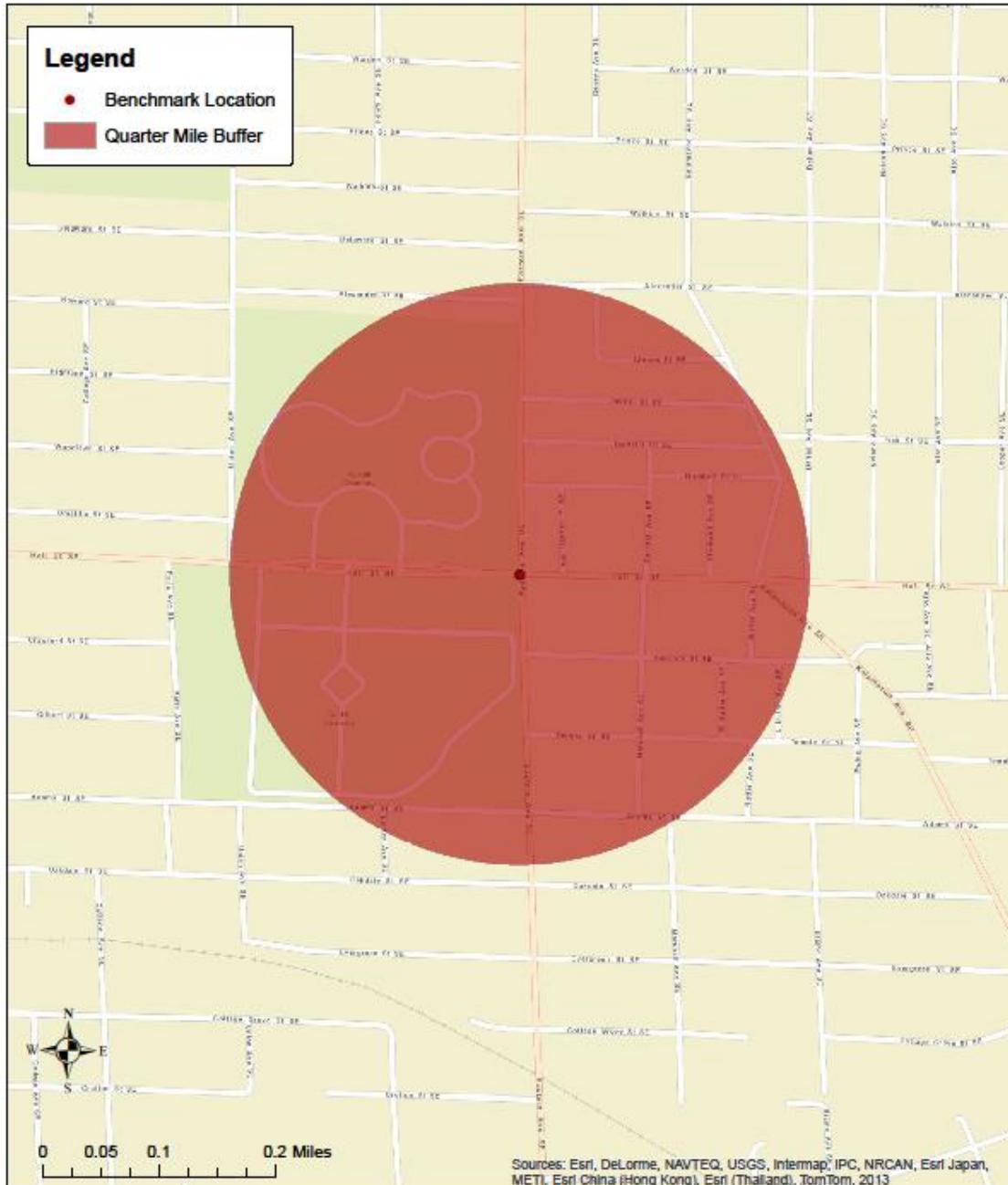
## S Division Ave & Alger St SE Quarter Mile Buffer



### Map 11 Eastern & Hall



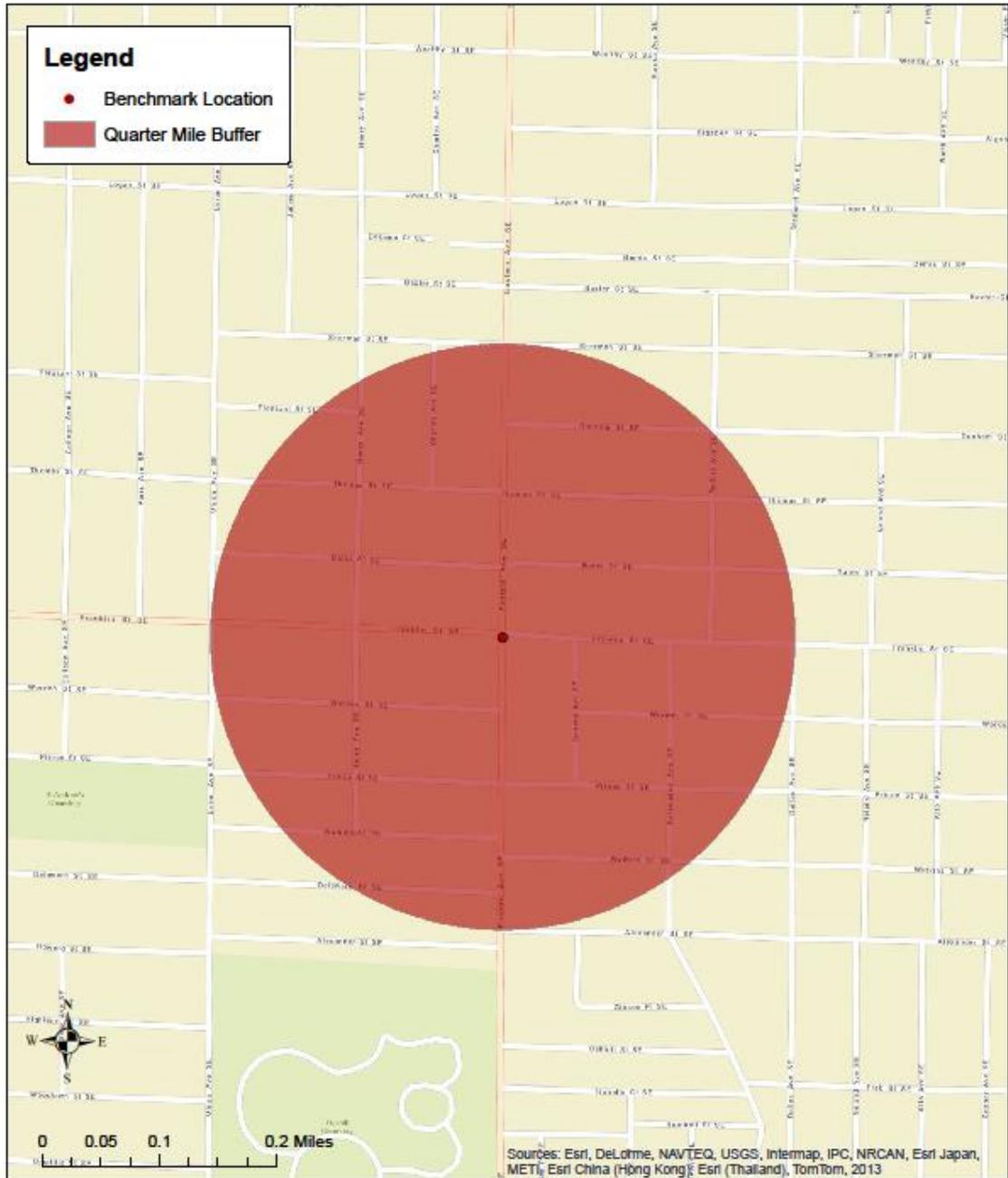
## Eastern Ave SE & Hall St SE Quarter Mile Buffer



### Map 12 Franklin & Eastern



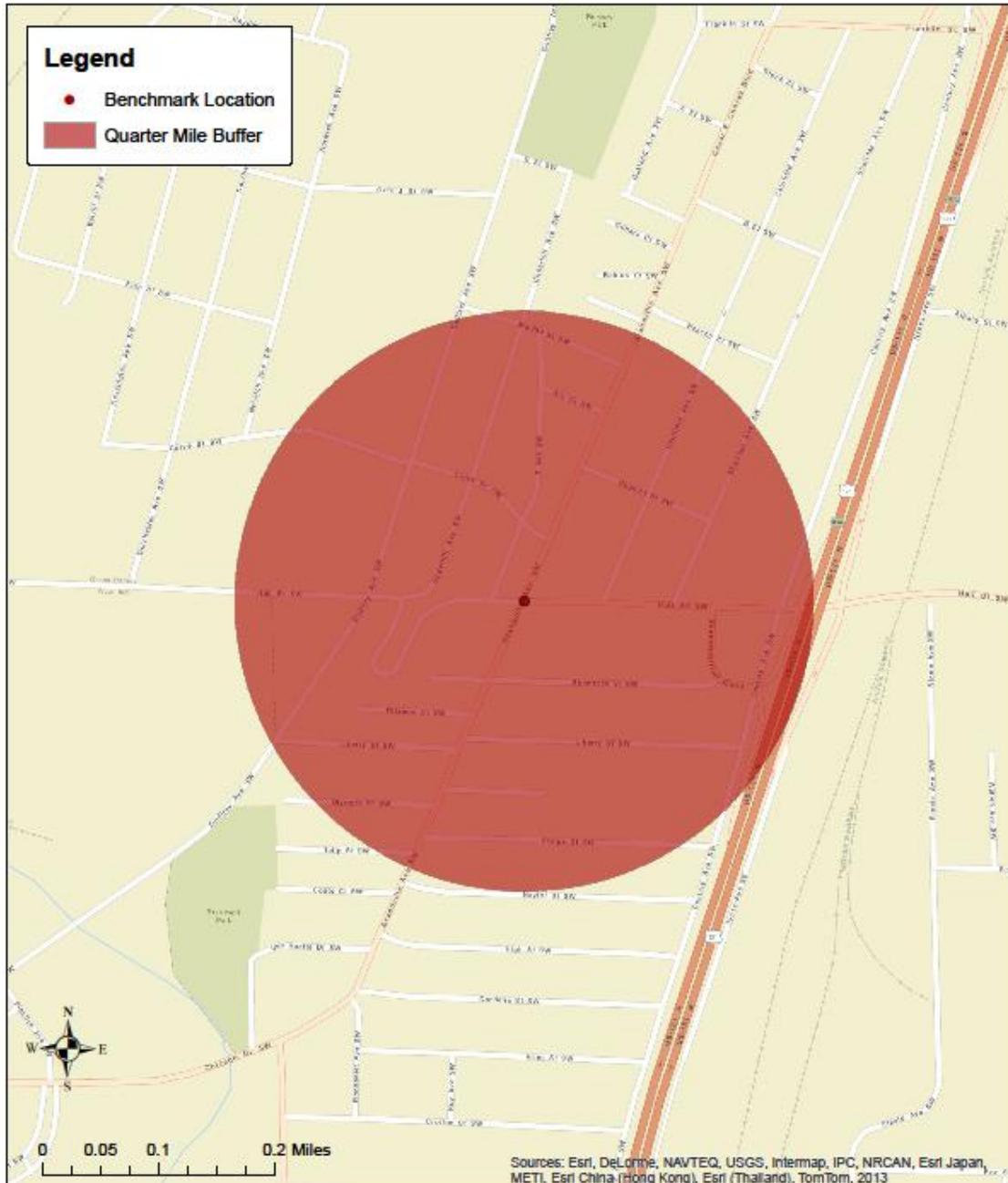
## Franklin St SE & Eastern Ave SE Quarter Mile Buffer



### Map 13 Grandville & Hall



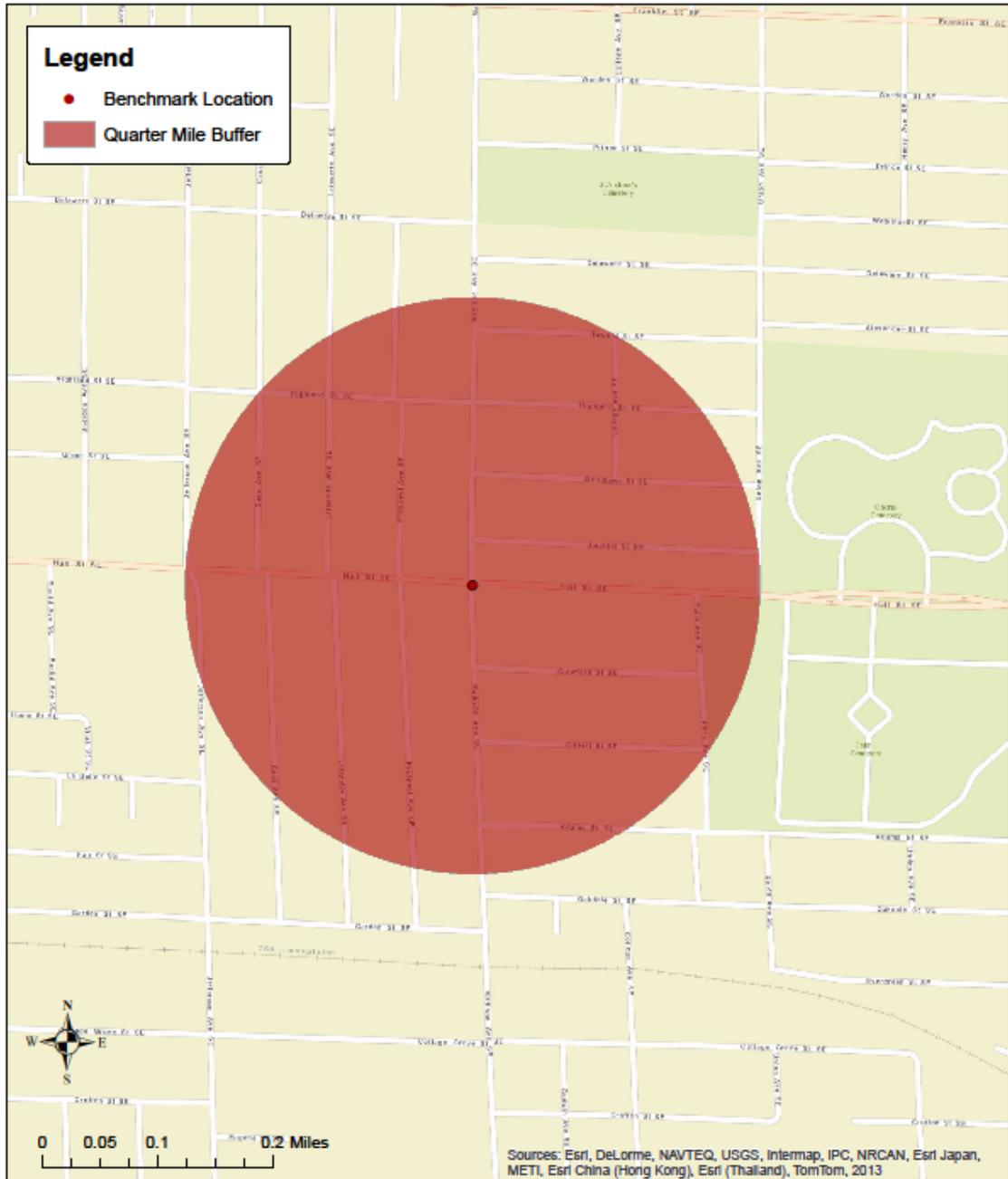
## Grandville Ave SW & Hall St SW Quarter Mile Buffer



### Map 14 Hall & Madison



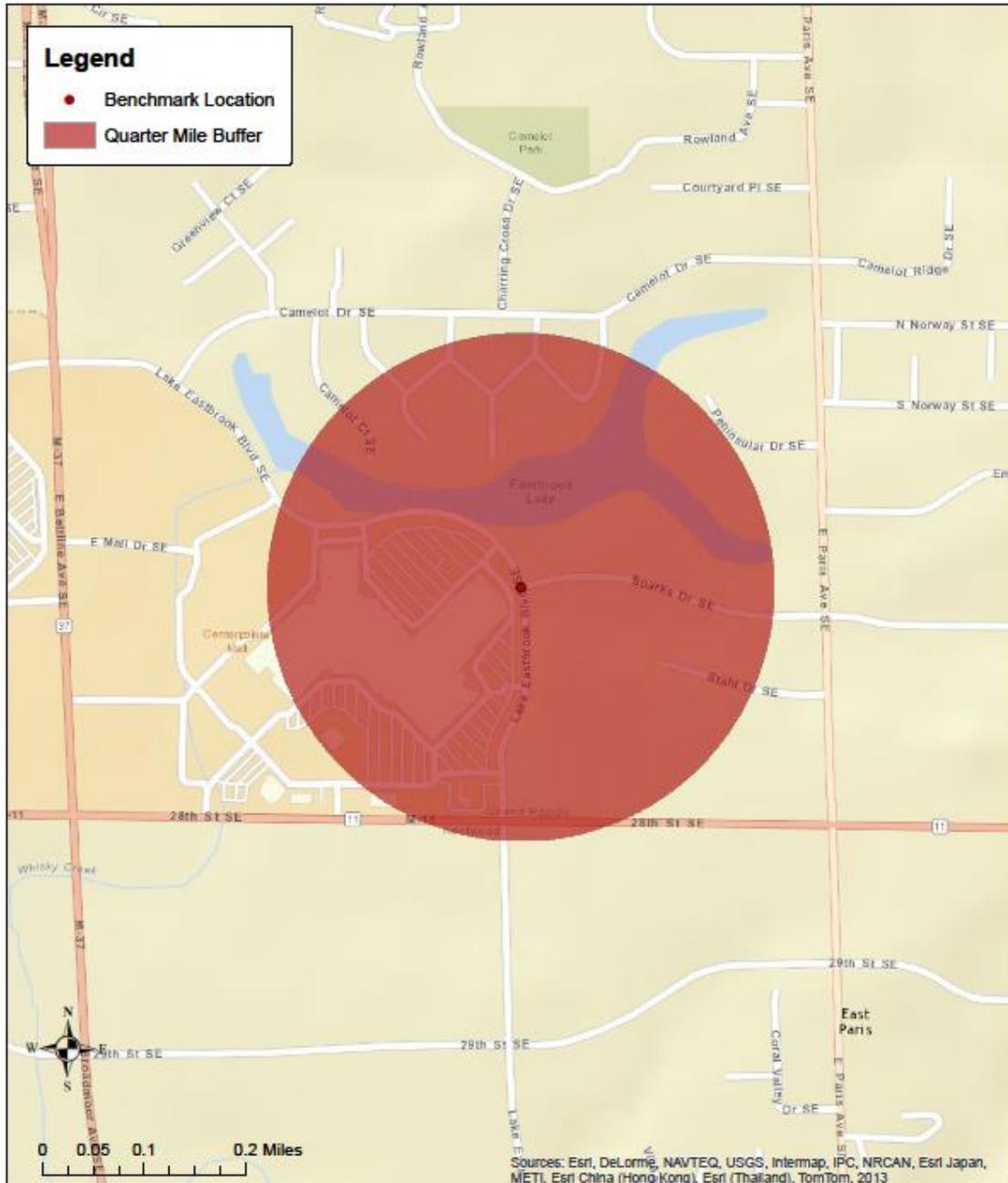
## Hall St SE & Madison Ave SE Quarter Mile Buffer



Map 15 Lake Eastbrook & Sparks



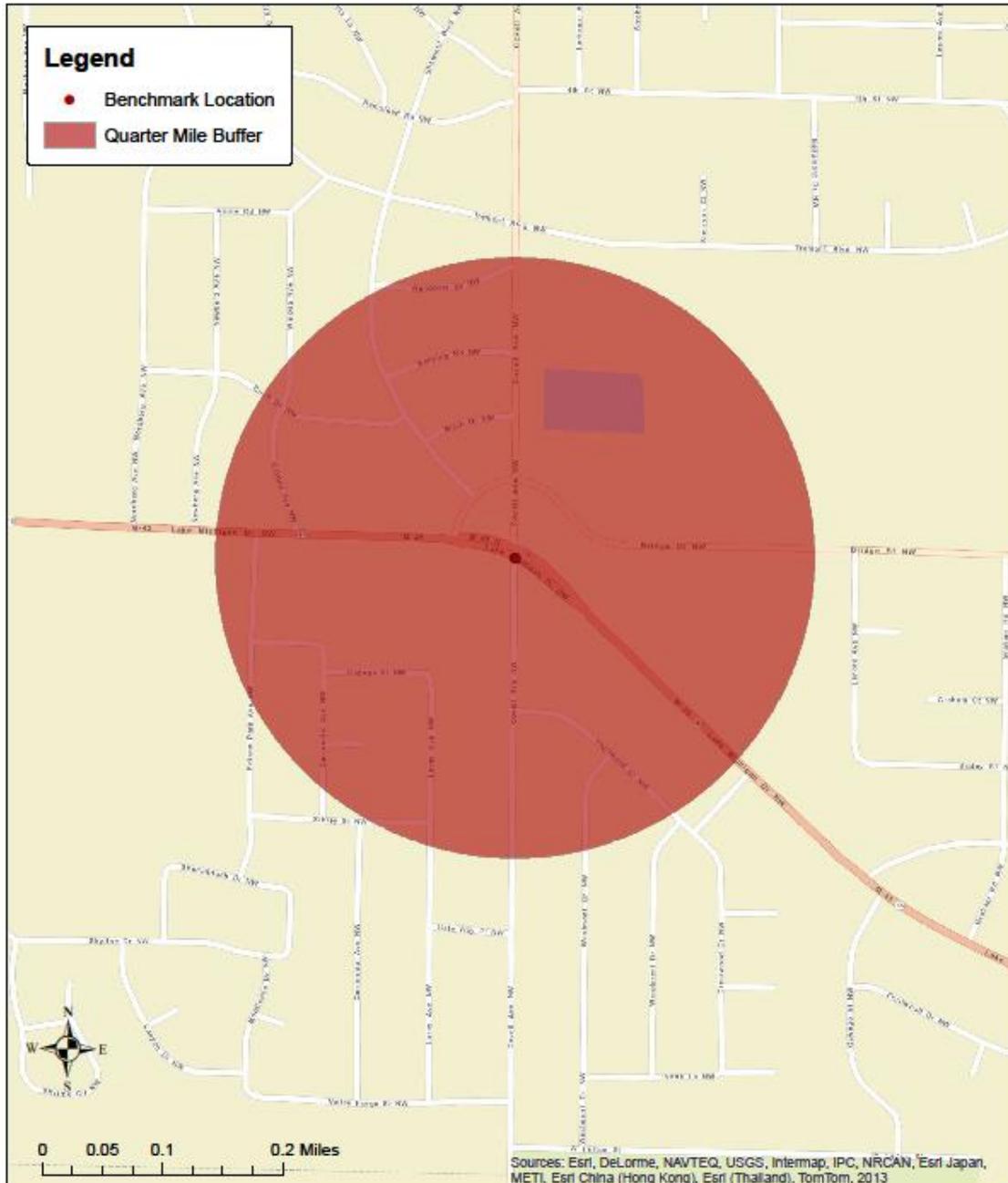
## Lake Eastbrook Blvd SE & Sparks Dr SE Quarter Mile Buffer



### Map 16 Lake Michigan & Covell



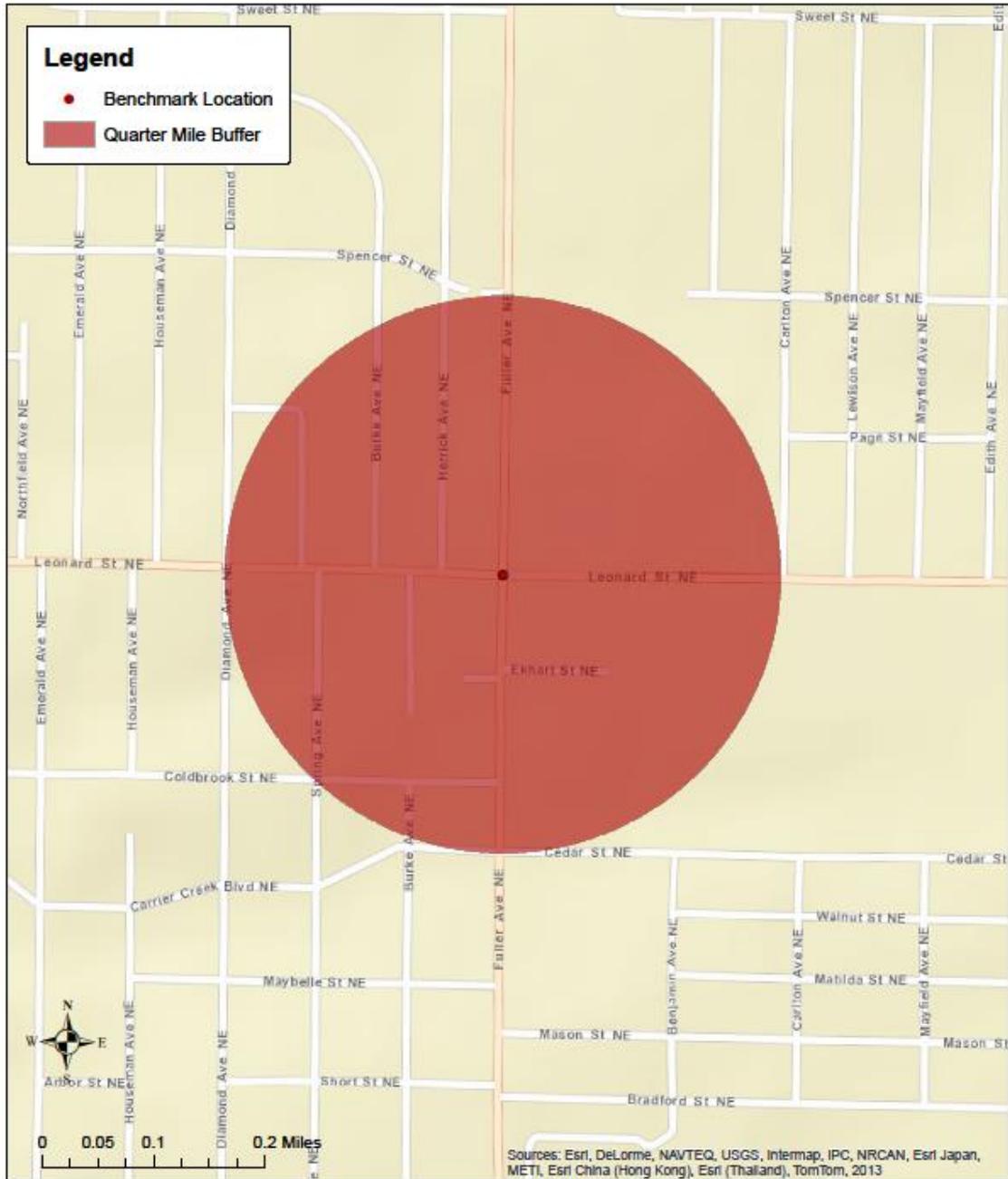
## Lake Michigan Dr NW & Covell Ave NW Quarter Mile Buffer



### Map 17 Leonard & Fuller



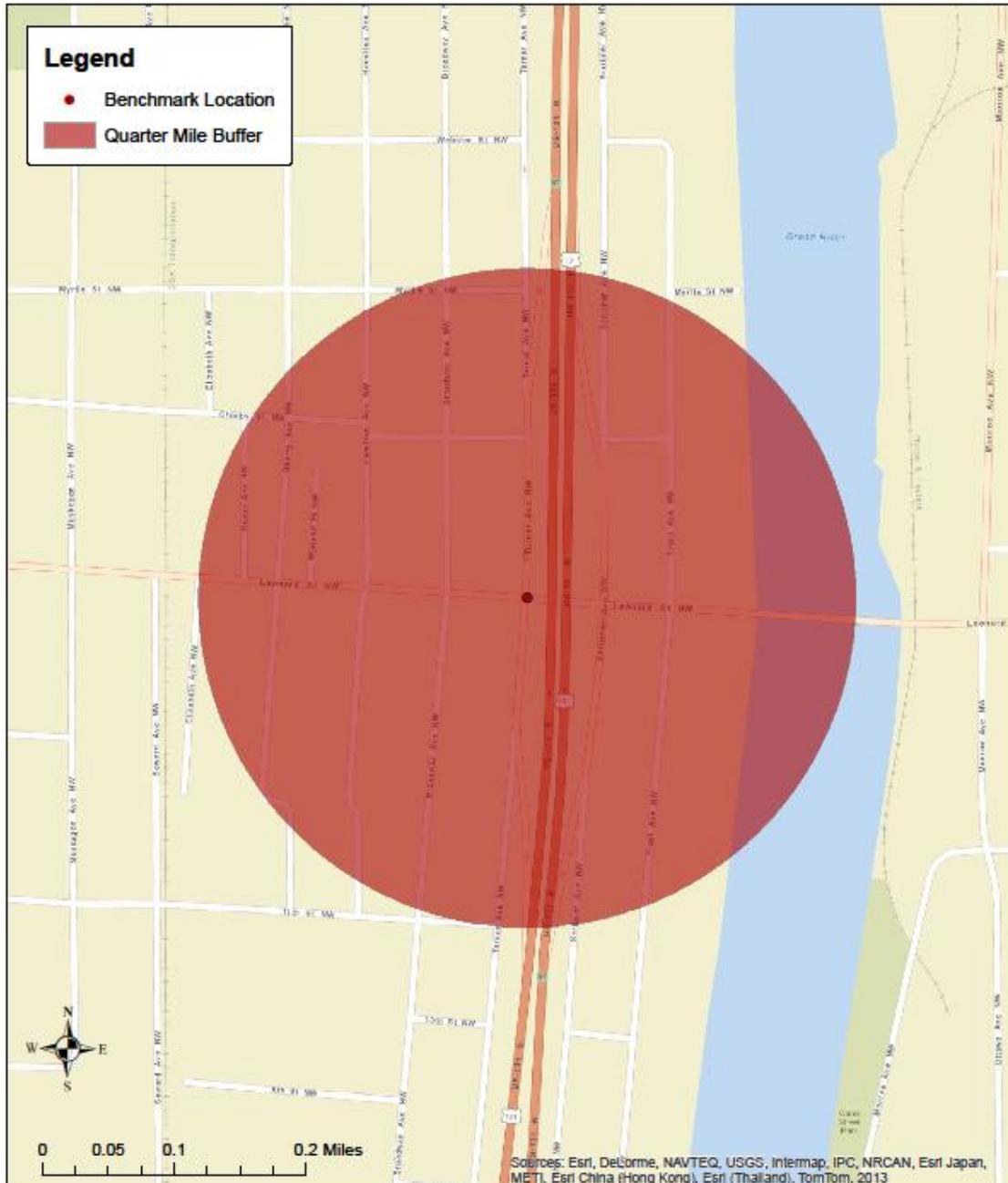
## Leonard St NE & Fuller Ave NE Quarter Mile Buffer



### Map 18 Leonard & Turner



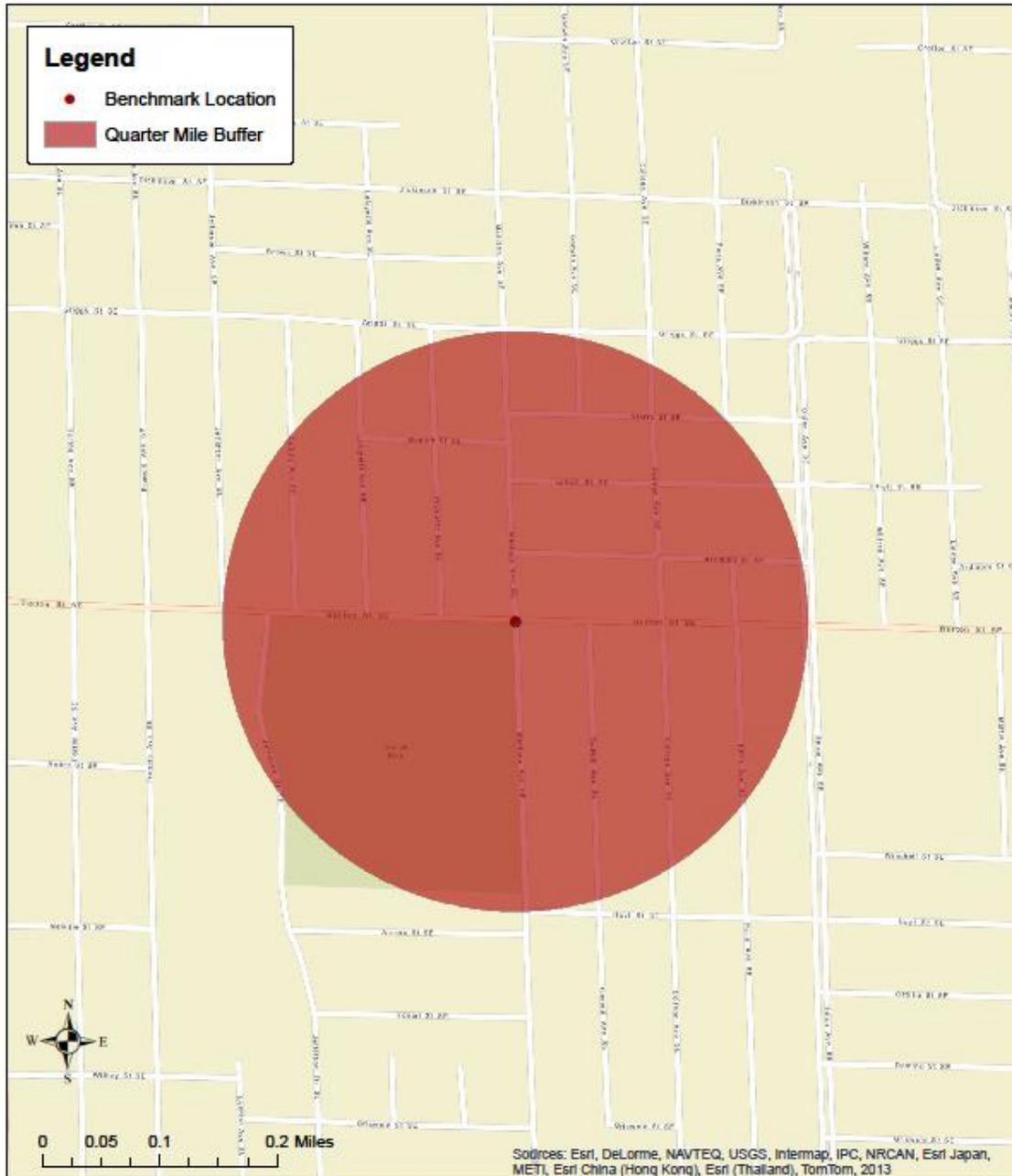
## Leonard St NW & Turner Ave NW Quarter Mile Buffer



### Map 19 Madison & Burton



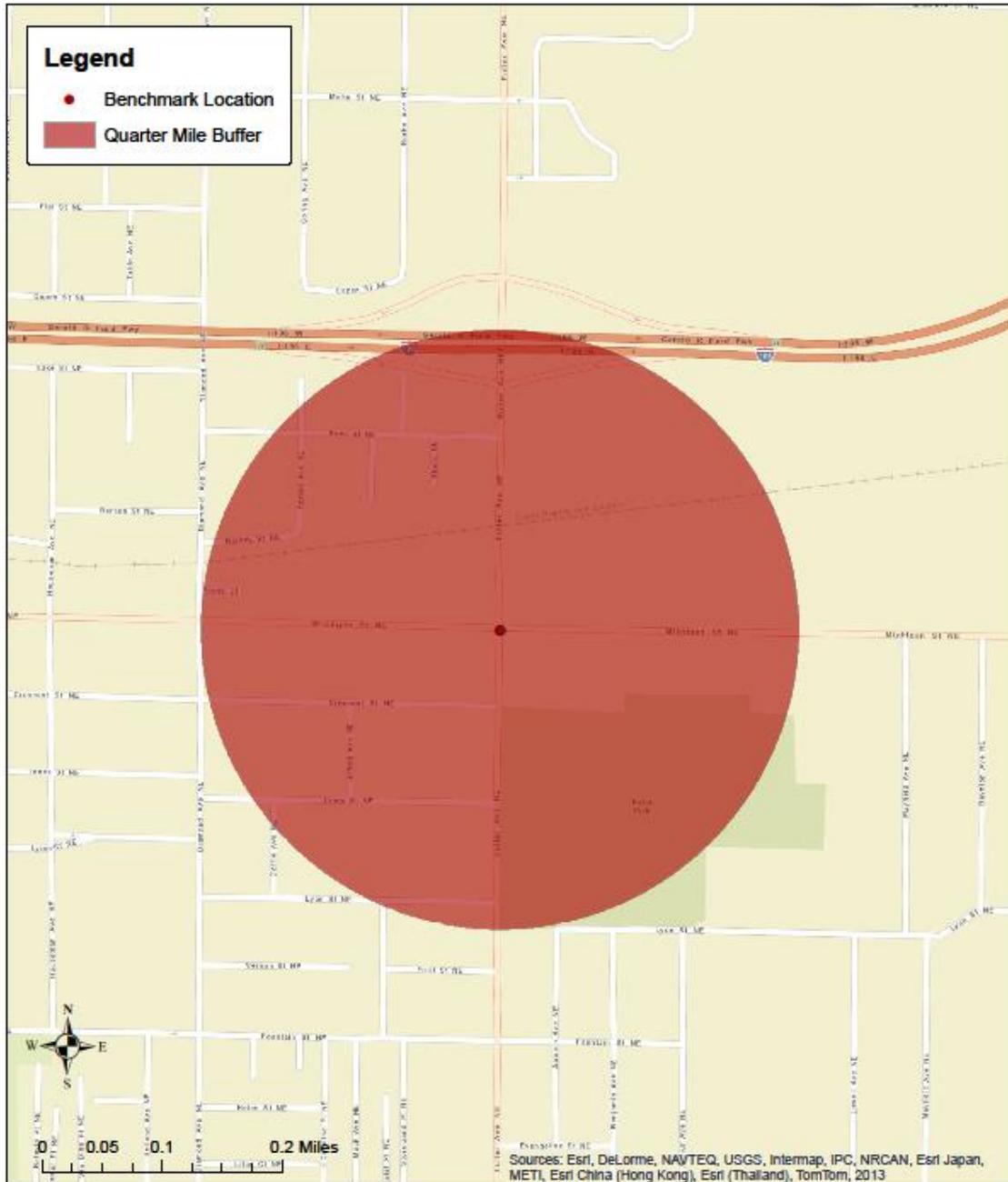
## Madison Ave SE & Burton St SE Quarter Mile Buffer



### Map 20 Michigan & Fuller



## Michigan St NE & Fuller Ave NE Quarter Mile Buffer



### Map 21 Wealthy & Division



## Division Ave S & Wealthy St SE Quarter Mile Buffer

