

A Critique of the 2017 Report by Lamberth Consulting Regarding Traffic Stop Data Analysis within Grand Rapids Michigan

Richard R. Johnson, Ph.D.

This report is a critique of the information revealed after reading the report entitled, *Grand Rapids Implicit Bias Training and Traffic Stop Analysis*, that was submitted to the city of Grand Rapids, Michigan in April, 2017 by Lamberth Consulting. This critique is based on the information contained in the Lamberth Consulting report through the lens of my own personal experience with racial profiling data collection studies in Illinois, Ohio, and Pennsylvania, knowledge of the existing racial profiling research literature, and my 16 years of experience conducting social scientific research on issues related to law enforcement.

While reviewing the Lamberth Consulting report, I found many methodological issues that I found disturbing, and that were inconsistent with the normal practices of social science or the practices of other recognized racial profiling researchers. These issues are described in detail below.

Benchmark Data Collector Bias

Lamberth Consulting collected data on the racial proportions of drivers observed driving at 20 specific roadway segments, chosen at random from a list of areas with the highest amounts of vehicle stops initiated by members of the Grand Rapids Police Department. To gather these data, Lamberth Consulting employed nine observers who were stationed at these 20 locations on various days, and various times of day, over a period of three months. After completing a brief training period, these nine observers watched traffic and wrote down the sexes and races of the drivers observed driving at each location. This general method has been used by other research teams other than Lamberth Consulting. However, the way Lamberth Consulting conducted the details of this data collection process differed in ways used by other research teams, and these differences may have produced biased data.

Data Collectors Recruited from Among Those with Anti-police Animus

Previous studies that have relied on using trained observers to collect these data have ensured that the individuals employed as data collectors were all well qualified. These previous studies employed advanced university students in the social sciences who had a firm understanding of research data collection procedures and had completed courses in research methods. Even when undergraduate students were used, emphasis was placed on making sure the data collectors had a firm understanding of such concepts as data validity, reliability, measurement error, and the scientific method. After being recruited, the data collectors received at least one full day of training in the specific data collection technique that would be utilized during the study.¹ Individuals such as these were utilized in order to reduce the likelihood of biased data collection.

Lamberth Consulting, on the other hand, did not specify any of these background characteristics. In fact, they specifically recruited individuals who may have had a bias against the Grand Rapids Police Department from the very start. On page 30 of their report, Lamberth Consulting revealed that they contacted local college criminal justice programs about the observer opportunity, but also

recruited from members of the public who attended community meetings to accuse the Grand Rapids Police Department of mistreating African-Americans. The report states:

“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.”

In its report, Lamberth Consulting does not reveal from which pools (college students or community meeting attendees) these surveyors primarily came. It also failed to describe the background qualifications these data collectors may have had. The fact that 44% of the surveyors were black, and 11% were Hispanic, suggests a disproportionate number came from the community meetings. Whereas 55% of the surveyors used were black or Hispanic, enrollment statistics from Grand Valley State University reveal that only 5% of GVSU students are black and 3% are Hispanic.² At Calvin College, only 3% of the students enrolled are black, and 2% are Hispanic.³ Even Grand Rapids Community College, which does not emphasize research activities, has an enrollment that is only 14% black and 7% Hispanic.⁴

This is not to say that African-Americans and Hispanics are unqualified to serve as data collectors, or are more likely to be biased in their data collection activities. The average individual who is African-American or Hispanic is no more or less likely to be biased as a white or Asian individual. The problem arises not in their race, but in their membership among those at the community meetings. On page 17 of its report, Lamberth Consulting describes these “lively” community meetings in the following manner.

“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 participants attending those meetings.”

It would appear that Lamberth Consulting recruited data collectors from this group of individuals who “expressed anger, frustration, and mistrust of GRPD” to be their “unbiased” data collectors. Lamberth Consulting failed to provide any further descriptive information about the qualifications and backgrounds of these individuals. Were any convicted criminals? Did any have close relatives who were convicted criminals? Had any ever filed a complaint against the police department? Did they even live in Grand Rapids, or were they protestors from outside the community? No such details were provided to allow us to decide if any had character issues that might have biased how they recorded data.

It is also interesting that when Lamberth Consulting conducted its earlier study in Grand Rapids in 2004, it strictly used university students as data collectors and found little racial disparity in stops by the Grand Rapids Police Department. When Lambeth Consulting repeated its study with data collectors recruited from groups protesting the police, however, suddenly a high degree of disparity was revealed, raising the possibility of bias among the benchmark data collectors.

Data Collected without Checks and Balances

In addition to recruiting data collectors from among a sample of individuals already biased against the Grand Rapids Police Department, Lamberth Consulting allowed these individuals to work

alone, without checks and balances. The other researchers who have utilized roadway observation benchmarks have employed a system of at least pairs of individuals working together. This method improves the validity and reliability of the data by requiring both observers to agree on the sex and race of the driver. In these other studies, if the observers disagreed on the driver's race or sex, it was recorded as *race unknown*.⁵ No such checks and balances were utilized by Lamberth Consulting in this study.

This may explain the extremely unusual accuracy at which the Lamberth Consulting observers determined driver race and sex. In one study, conducted by sociologists from Oakland University in Rochester, Michigan, pairs of observers were used to determine the racial composition of drivers on the roadways of one suburb. These observers were selected from among university students trained in social science research methods, and they worked in pairs. Conducting observations during daylight and darkness, they observed 6,269 vehicles, but were unable to determine the race of 39% of the drivers observed.⁶

Another study, conducted by the Pacific Institute for Research and Evaluation, used computerized speed cameras to record the speed of oncoming vehicles on the New Jersey Turnpike, and take a high-definition photo of the front windshield of the vehicle. The study then employed multiracial teams of 3 individuals each to carefully examine the photos and agree upon the race and sex of the driver in each photo. Despite the fact that these research assistants had the benefit of a high pixel quality photo, and unlimited time to examine each photo, these researchers were unable to determine the race of 38% of the 38,745 drivers examined.⁷

In a third study conducted across 27 counties in Pennsylvania, a research team from the University of Cincinnati employed 50 university students (all with a GPA above 3.0) who received 16 hours of training and practice in roadway data collection methods and worked in pairs. These individuals gathered data on 161,169 vehicles that were observed only during daylight and in clear weather conditions. Nevertheless, they were unable to determine the race of up to 18% of drivers observed.⁸

It is, therefore, rather astounding that the nine observers of unknown qualifications that were employed by Lamberth Consulting received only three hours of training, worked alone, conducted observations during the day and at night, worked in a variety of weather conditions, and yet accurately identified the races of all but 2.2% of the drivers observed. Such a high missing data rate is one more reason to question the validity of these roadway observation benchmarks.

Roadway Benchmark Sample Contamination

In order to have a proper benchmark for comparison to vehicle stops made by the Grand Rapids Police Department during 2013, 2014, and 2015, Lamberth Consulting's benchmark needed to approximate the roadway traffic patterns encountered around these 20 locations across these three years. In other words, Lamberth Consulting needed to take every step possible to ensure that the same types of people were driving at these locations during their 2016 data collection, and driving in generally the same manner, as drivers were during 2013, 2014, and 2015. Any significant changes in traffic patterns, the racial composition of who was driving, and the manner in which people were driving during the traffic observation period would render these observations invalid

as a benchmark. The Lamberth Consulting report presents ample evidence to suggest that the methods they used to conduct the study contaminated their data sample.

Public Notified of Observation Locations

First, Lamberth Consulting publicly disclosed the times and locations where they would be collecting roadway observation data before the data were collected. On page 29 of its report, Lamberth Consulting revealed that during a series of six community meetings during August 2016, before the roadway observation data were collected, it informed more than 300 community members of the locations where traffic measurements would be made. Recall that the report earlier indicated that these meetings were attended by a large number of individuals who expressed a “significant amount of anger, frustration, and mistrust of GRPD.” Some of these individuals may have been motivated by personal, legal, or political reasons to try to disrupt a fair evaluation of the Grand Rapids Police Department by encouraging their friends, family, and neighbors to avoid driving through these locations during the period of the data collection.

These community meetings were also attended by television and newspaper journalists who reported the locations of the data collection through media outlets that reached the entire metropolitan area. Research has frequently revealed a significant public concern about being observed by government entities, so it is quite possible that many citizens (criminal and noncriminal alike) would try to avoid these 20 roadway locations if they knew they were under observation by a company contracted by the city and its police department.⁹ As the police are only to target lawbreakers for vehicle stops, it is also important to note there is an extensive body of research that has revealed increased observation in public spaces significantly deters lawbreaking behavior. One analysis of 44 rigorous studies revealed that the conspicuous placement of security cameras, so that members of the public could notice the cameras, reduced crime by 51% in parking lots and 16% on city streets.¹⁰ Disclosing the locations of the observations so broadly may have significantly altered the normal traffic patterns and diverted many citizens, especially members of the criminal element, from these locations.

Data Collection was Too Conspicuous

In its report, Lamberth Consulting also revealed that its nine observers did not collect their data in an unobtrusive manner. Most other researchers that have conducted biased-based policing analyses with the use of roadway observations have taken great care to collect their data as unobtrusively as possible, so as not to influence the traffic patterns at the locations.¹¹ On the other hand, on pages 33-34 of the Lamberth Consulting report it states:

“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.”

This text revealed that, not only did the Lamberth Consulting researchers widely distribute the locations where the observations would be conducted, they made the observation even more obtrusive by failing to try to conceal the observers and assigning a police officer to stand nearby

the observer. This also suggests there was a police car parked in the vicinity as well, as the officers were unlikely to have walked to these locations. This begs the question why the observers were not concealed in a parked car that matched the surroundings. As the observers did not feel threatened, why was the police presence necessary? Similar studies conducted by other researchers, even those targeting the observation of crime hot spots, have not utilized a police escort, and taken great care not to stand out in the environment.¹²

The very conspicuous nature of the roadway observations, and the police presence, may have changed the makeup of the drivers in the areas, and very likely altered patterns of traffic or criminal offending. Extensive research, spanning many decades and locations, has consistently revealed that a visible police presence significantly reduces criminal and traffic offending.¹³ Therefore, those interested in offending – those the police are most likely to stop – would avoid the area while the observations were being conducted, thus reducing the normal number of persons in the benchmark that the police should be most likely to legally stop.

Other Interference with Normal Traffic and Crime Patterns

Another change created by the study that likely changed traffic patterns was the utilization of mobile lighting. On page 34 of the Lamberth Consulting report it states:

“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.”

Not only did this activity further add to the conspicuousness of the data collection efforts, these lighting changes would have altered the driving and offending behavior at these locations. Highway safety research has revealed that the placement of roadway lighting influences both traffic patterns and driving behavior.¹⁴ A review of many dozens of studies about the effects of public lighting changes revealed that increasing street lighting in commercial districts reduces crime at those locations by about 23%, reduces fear of crime among residents of the community, and increases the amount of people now willing to travel to the location to shop from other parts of the city.¹⁵

These alterations to the street lighting did not take place during 2013-2015, so data collected during these significant alterations do not approximate the conditions at these intersections during the time periods of the vehicle stops analyzed in this report. Furthermore, it is interesting that the researchers needed additional lighting in order to observe the sexes and races of the drivers in the area, while Lamberth Consulting failed to consider that police officers working in that same area would find it equally difficult to determine the races and sexes of motorists, thus making racial profiling by officers impossible.

Any additional changes to these 20 locations that may have altered traffic patterns would have further contaminated the benchmark population. On page 37 of its report, Lamberth Consulting mentions that roadway construction interfered with their data collection visibility on four occasions. Roadway construction dramatically alters roadway patterns and would have created different conditions for the roadway observation period than existed during the 2013-2015 police

vehicle stops. Seasonal changes in the weather also significantly effects traffic patterns and criminal offending patterns, especially in climates such as West Michigan.¹⁶ Therefore Lamberth Consulting's benchmark tells us nothing about traffic patterns at any time other than the fall season. Unfortunately, Lamberth Consulting force-fit its fall roadway pattern benchmark (however flawed) onto vehicle stops made by the Grand Rapids Police Department during all four seasons of the year.

Benchmark Failed to Account for Offending

The use of the proportions of drivers on the roadway as a benchmark, even if it had been done correctly, is also flawed in its design. If no police bias is present, officers should only be stopping lawbreakers – those who are believed to have committed a violation of a traffic or criminal law. A proper benchmark, therefore, should measure the sex and racial proportions of traffic or criminal lawbreakers at these 20 locations, not just drivers. On previous occasions Lamberth Consulting has argued that there are no race or sex differences in traffic or criminal offending.¹⁷ Such an assertion ignores a large body of research evidence that suggests consistent sex and race differences in the traffic offending population.

Evidence of Offending Differences in Traffic Violations

Many studies have found that, compared to women, men disproportionately speed and are disproportionately involved in serious traffic crashes, thus explaining their higher auto insurance rates when compared to women.¹⁸ Clearly, therefore, when focusing in on only drivers who commit traffic violations, there will be proportionately more men stopped.

Studies in Massachusetts, New Jersey, North Carolina, Ohio, and Pennsylvania, have revealed results that African-Americans disproportionately make up drivers speeding by more than 15 miles per hour over the speed limit when compared to whites and Hispanics.¹⁹ Asian drivers were disproportionately less likely to speed at such high rates when compared to whites. Studies in California and Virginia found that African-American drivers disproportionately made up the drivers who disregarded red light traffic signals.²⁰ Nationwide studies have revealed for decades that African-American drivers are disproportionately represented among drivers involved in serious traffic crashes.²¹ National studies have also found African-Americans are significantly less likely to wear a seatbelt or use a child restraint than are drivers of other races.²²

While we do not know for sure that the male and African-American drivers operating vehicles around the 20 locations studied in Grand Rapids were disproportionately violating traffic laws, we also cannot assume that they were not. Numerous studies suggest that they were. If the traffic patterns at these 20 specific locations in Grand Rapids were similar to the other locations studied around the country, then regardless of how many male or African American drivers were observed, they would be at greater risk of being lawfully stopped for committing traffic violations. If the GRPD vehicle stops Lamberth Consulting analyzed were made for violations of traffic laws, then it would be crucial to use a benchmark that samples the racial proportions of drivers who violated traffic laws at these 20 locations, not just drivers in general.

Did Not Consider Non-Traffic Reasons for Stops

This raises another issue, which is the legal justification for these vehicle stops. Law enforcement officers may legally stop and detain a vehicle if they observe it commit a violation of the traffic laws, but this is not the only reason for which officers may lawfully stop a car. If the officer sees an occupant of a car commit a crime, the officer does not need to wait for a traffic violation before stopping the car. If an officer, for example, sees an individual lean out of a car and brandish a firearm at a pedestrian or occupants of another car, the officer may immediately stop the car and arrest the individual that was observed brandishing the firearm.²³

A third legal justification police officers have for stopping vehicles is reasonable suspicion. Defined by the U.S. Supreme Court in the case of *Terry v. Ohio* (1968), law enforcement officers may stop, frisk, and detain individuals if the officers have a reasonable suspicion (less than probable cause but more than a mere hunch) that the person has committed, is committing, or is about to commit a crime. The most common examples of “Terry Stops” involving a vehicle are stops of vehicles that match the description of a vehicle used in the commission of a nearby recent crime.

Consider, for example, if an armed robbery just occurred at a gas station on South Division Street, and the two male robbers fled northbound in a dark, early 2000s Honda, according to the panicked 911 caller. If officers 2 miles north of the gas station observed a maroon, 2002 Honda Accord with two male occupants traveling north on Division Street, the officers could stop the vehicle based on reasonable suspicion without any need for witnessing a traffic violation. It is *reasonable to be suspicious* (i.e., reasonable suspicion) of this vehicle based on the radio broadcast about the suspects from the armed robbery.²⁴

At the bottom of page 41 of its report, Lamberth Consulting revealed that the GRPD stop data contained “reason for stop” on each stop conducted by the officers, yet stops were not analyzed differently by reason for stop. Stops based on probable cause evidence of the commission of a crime, and stops based on reasonable suspicion of the possible involvement in crime, have nothing to do with the general patterns of who is using the roadway, or even who is violating the traffic laws. Unfortunately, Lamberth Consulting did not reveal what proportions of GRPD stops were for reasons other than a traffic violation. Comparison with other jurisdictions, however, could prove useful for our analysis here.

Since 2001, all law enforcement agencies within the state of Missouri report their traffic stop data to the state attorney general, who publicly publishes this data by agency (found here: <https://ago.mo.gov/home/vehicle-stops-report/2015-executive-summary>). Examining the data for the period 2011 through 2015 for the two largest cities in the state revealed that 9% of vehicle stops in Kansas City, and 17% of vehicle stops in St. Louis, were for reasons other than a traffic violation. In other words, 1 to 2 out of every 10 vehicle stops in cities were based on evidence of a crime, not a traffic violation.

The Lamberth Consulting report indicated that the 20 locations selected in Grand Rapids were locations primarily associated with high levels of calls to the police, with only 4 locations (20%) being areas of high traffic crashes. Several studies have indicated that in areas of high crime and disorder, police officers tend to ignore minor violations (such as minor traffic offenses) and

concentrate more on criminal offenses. If Grand Rapids is like most other cities, GRPD officers probably concentrated more on criminal behavior-based stops than traffic violation behavior stops at many of these 20 locations.²⁵

It is likely, therefore, that a higher than normal proportion of stops at these locations were associated with criminal, rather than traffic, reasons for stop. If this was the case, these stops needed a better benchmark, one that measured the racial proportions of crime involvement at these 20 locations. One benchmark measure that Lamberth Consulting could have used in this situation, and has been validated for use in other studies, is criminal suspect descriptions provided by crime victims around these 20 locations.²⁶

Evidence of Offending Differences in Crime Involvement

Lamberth Consulting would have had access to data on criminal offender descriptions from the GRPD records management system. While the public does not have access to suspect description data by location (as Lamberth Consulting would have had), citywide suspect description data are available through the FBI's National Incident Based Reporting Service. We downloaded this data (reported to the FBI by GRPD) for 2014 from the archives at the University of Michigan (located here: <https://www.icpsr.umich.edu/icpsrweb/>), which revealed the GRPD investigated 15,245 crimes that year. These reports identified 11,907 criminal suspects by race and sex, as reported by the victims in these crimes.

Despite the fact that the U.S. Census statistics indicate that 20.9% of the Grand Rapids population is black, 64.4% of the criminal suspects identified by crime victims were said to be black. Despite the fact that 49% of the Grand Rapids population is male, 74.7% of the criminal suspects identified by crime victims were said to be male. Citywide, therefore, crime victim reports of offenders suggested African-Americans were **206%** more likely to have committed a crime than would be expected based on their representation within the population. As a result, one could expect citywide GRPD stops based legally and ethically on criminal suspect descriptions to be more likely to be of African-Americans than one would expect based on the driving or residential population. Likewise, based on crime victim reports, males were 52% more likely to have committed a crime than expected based on the population, resulting in male over-representation in crime-related vehicle stops.

This disproportionate involvement in crime becomes even more dramatic when narrowing in on violent crime. Using data from articles published in the *Grand Rapids Press MLive* newspaper, we determined the sex and race of all assailants in Grand Rapids murder cases from January 1, 2014 through May 1, 2017. News articles revealed 22 murderer descriptions, of which 86% were male (76% more than expected in the population) and 90% were black (**329%** more than expected in the population). Stops by the GRPD involving violent criminal offenses, therefore, are even more likely to, legally and ethically, involve males and African-Americans because of their disproportionate representation among violent crime offenders within Grand Rapids.

These findings are similar to those at the national level. Studies of self-reported criminal behaviors have consistently found that males have engaged in far more criminal behavior, especially violent behavior, than have women. These self-reports also reveal that, compared to non-Hispanic white respondents, African-Americans and Hispanics are more likely to report involvement in violent

crime, while Asians are least likely to report involvement in any sort of crime. African-Americans, Hispanics, and non-Hispanic whites are equally likely to report involvement in property crime.²⁷ Additionally, one study of the NCIC national crime information computer revealed that of the 1.9 million arrest warrants contained in this nationwide database, 29% of the warrants were for black defendants despite the fact African-Americans made up 12.6% of the U.S. population. As a result, nationwide, African-Americans are 81% more likely to have a warrant for their arrest than would be expected based on the population.²⁸

Legal and ethical police vehicle stops that are associated with violent crimes, therefore, likely disproportionately involve black and Hispanic vehicle occupants. According to data in the annual reports issued by GRPD, during 2013 and 2014, GRPD investigated 23 homicides, 907 robberies involving violence, 143 forcible rapes, and 1,651 aggravated assaults that involved a deadly weapon or serious bodily injury. This adds up to 2,724 serious violent crimes (almost all concentrated around the 20 locations studied by Lamberth Consulting) without even counting minor misdemeanor assaults. This reveals many opportunities for GRPD officers to have made vehicle stops based on a criminal investigation rather than a traffic violation.

Further evidence that the GRPD stops heavily emphasized criminal investigations comes from the search data analyzed by Lamberth Consulting in its report. On page 49 of the Lamberth Consulting report it is revealed that 10% of vehicle stops involved a search incident to an arrest. This means officers had enough evidence to arrest an individual on a criminal offense in 1 out of every 10 vehicle stops. This is an unusually high percentage when compared to vehicle stops elsewhere. Referring again to the vehicle stop data publicly available from the Missouri Office of the Attorney General, only 3% of vehicle stops in Kansas City, and 6% of stops in St. Louis, resulted in enough evidence to make a criminal arrest. The GRPD stops analyzed by Lamberth Consulting were 2-to-3 times more likely to turn up evidence of a crime or a person wanted on an arrest warrant than stops in other cities.

Failure to Disaggregate by Time of Day

While the accuracy of the Lambeth Consulting benchmark can be questioned, it was noted on page 37 of the report it states the following:

“...in every one of the 20 locations that were benchmarked, the proportion of Black motorists race 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.”

“...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.”

Despite noting this statistically significant temporal difference, the Lamberth Consulting report failed to disaggregate their analyses by time period at each location. This omission could easily

have concealed a valid explanation for disparities in total aggregated data if there is greater justification for stops (i.e., more crimes occurring) during the periods with proportionately more black drivers on the road.

Treatment of Probable Cause Searches as Discretionary

Another concern about the Lamberth Consulting study is its treatment of searches based on probable cause as a discretionary activity used by law enforcement officers to discriminate against persons of color. This is inexplicable since they did not treat searches incident to an arrest in this manner. The Fourth Amendment to the U.S. Constitution clearly indicates that probable cause is the legal standard necessary for making an arrest or obtaining a search warrant.²⁹ If arrests (and searches incident to arrest) are both based on probable cause, why were searches based on probable cause treated differently?

Probable cause, as defined by the courts, is not a hunch – it is evidence.³⁰ Observing a syringe and a small baggy that appears to contain heroin on the center console of a vehicle is an example of probable cause. Seeing fresh blood all over a driver's shirt and a knife on the floorboard of the car is another example of probable cause. Does Lamberth Consulting suppose that officers would ignore such evidence for white drivers and only act upon this evidence when the driver is African-American or Hispanic? The GRPD searches based on this level of evidence also proved to be highly accurate in detecting criminal activity as 60% to 74% found illegal contraband. The Lamberth Consulting analysis should have focused solely on consent searches where officers are acting only on a hunch and lack enough evidence to give them authority to search.

No External Peer Review

The final critique of the Lamberth Consulting report, and probably the primary contributor to the errors mentioned above, was the neglect of Lamberth Consulting to involve any system of external peer review by other research experts into its methods. When research is conducted in a university environment, or is conducted in conjunction with funding from a federal government source, the researchers are required to pass an external examination and evaluation of their methods by a panel of researchers. Often referred to as boards for ethical research, or institutional review boards, these panels of experienced researchers must review and approve the methods and ethics of the studies. Before a university professor can begin conducting research, the professor must submit a proposal to this review board and gain permission to proceed. During the research study this review board periodically monitors the study methods to ensure the professor is following the methods that were approved. After the study is complete, the professor must submit a final report to this board summarizing the study and certifying that ethical methods were followed.³¹

After professors and other scientists complete their research studies, they generally publish their findings as articles in peer-reviewed research journals. The publication process involved in a research journal involves having two or three accomplished researchers unaffiliated with the study review the article manuscript and determine if the methods used were sound, and if the study was of sufficient significance to be worthy of publication. This peer-review process helps ensure that faulty research findings are weeded out and not published in the scientific literature.³²

Unfortunately, Lamberth Consulting did not engage either of these mechanisms in its study. It utilized no panel of outside experts in racial profiling studies to review and approve its methods. It published its report without any process of peer-review from outside experts in racial profiling studies. Throughout its report, Lamberth Consulting cited sources to support its methods, but almost all of the documents cited for support were earlier studies conducted by Lamberth Consulting that also failed to submit to any external review process. The report neglected to cite or discuss the rigorous, peer-reviewed research on vehicle stop data analysis that often contradicts the methods used in this Grand Rapids study.³³ The Lamberth Consulting report also cites legal cases in which Lamberth Consulting's reports were submitted as evidence of racial profiling by the police, but fails to mention examples where rebuttal testimony or new studies by other prestigious vehicle stop researchers have contradicted Lamberth Consulting's methods or findings.³⁴

Beyond questioning some of the research methods used in the study, an external review board process would also have likely raised concerns about a conflict of interest involved in both conducting this study and being a vendor for implicit bias training for the city of Grand Rapids. Because of this conflict of interest, one could argue (rightly or wrongly) that it would have been in Lamberth Consulting's financial best interest to have found significant racial disparities in order to continue to receive contracts for further implicit bias testing and cultural awareness training. Failing to have an external ethical review process opens Lamberth Consulting up for such an allegation.

Conclusion

Based on the serious issues described in this critique (and even more minor issues not discussed in this report), important questions exist regarding the validity of the Lamberth Consulting report entitled, *Grand Rapids Implicit Bias Training and Traffic Stop Analysis*, submitted to the city in April, 2017.

References Cited:

-
- ¹ See, for example, the following: Engel, R. S., Calnon, J. M., Tillyer, R., Johnson, R. R., Liu, L., Wang, X. (2005). *Project on Police-Citizen Contacts: Year 2 Final Report*. Cincinnati, OH: University of Cincinnati; Smith, W. R., Tomaskovic-Devey, D., Zingraff, M. T., Mason, H. M., Warren, P. Y., Wright, C. P., McMurray, H., & Fenlon, C. R. (2003). *North Carolina Highway Traffic Study, Final Report*. Raleigh, NC: North Carolina State University
- ² Statistics for Grand Valley State University from Cappex Inc. found here: <https://www.cappex.com/colleges/Grand-Valley-State-University/campus-life>
- ³ Statistics for Calvin College from Cappex Inc. found here: <https://www.cappex.com/colleges/Calvin-College/campus-life>
- ⁴ Statistics for Grand Rapids Community College from Cappex Inc. found here: <https://www.cappex.com/colleges/Grand-Rapids-Community-College/campus-life>
- ⁵ See Engel et al. (2005) and Smith et al (2003).
- ⁶ Meehan, A. J., & Ponder, M. (2002). How roadway composition matters in analyzing police data on racial profiling. *Police Quarterly*, 5(3), 306-333.

-
- ⁷ Lange, J. E., Johnson, M. B., & Voas, R. B. (2005). Testing the racial profiling hypothesis for seemingly disparate traffic stops on the New Jersey turnpike. *Justice Quarterly*, 22(2), 194-223.
- ⁸ Engel, R. S., Calnon, J. M., Tillyer, R., Johnson, R. R., Liu, L., Wang, X. (2005). *Project on Police-Citizen Contacts: Year 2 Final Report*. Cincinnati, OH: University of Cincinnati.
- ⁹ Dinev T., Hart, P., & Mullen, M. R. (2008). Internet privacy concerns and beliefs about government surveillance: an empirical investigation. *Journal of Strategic Information Systems*, 17(1), 214-233; Goold, B. J. (2010). Privacy rights and public spaces: CCTV and the problem of the "unobservable observer." *Criminal Justice Ethics*, 21(1), 21-27.
- ¹⁰ Welsh, B. C., & Farrington, D. P. (2009). Public area CCTV and crime prevention: an updated systematic review and meta-analysis. *Justice Quarterly*, 26(4), 716-745.
- ¹¹ See, for example, Engel et al., (2005); Lange et al., (2005). Meehan & Ponder (2002); Smith, W. R., Tomaskovic-Devey, D., Zingraff, M. T., Mason, H. M., Warren, P. Y., Wright, C. P., McMurray, H., & Fenlon, C. R. (2003). *North Carolina Highway Traffic Study, Final Report*. Raleigh, NC: North Carolina State University; Tillyer, R. & Engel, R. S. (2012). Racial differences in speeding patterns: exploring the differential offending hypothesis. *Journal of Criminal Justice*, 40(4), 285-295.
- ¹² Mastrofski, S. D., Parks, R. B., Reiss, A. J., Worden, R. E., DeJong, C., Snipes, J. B., Terrill, W. (1998). *Systematic Observation of Public Police: Applying Field Research Methods to Policy Issues*. Washington, DC: National Institute of Justice.
- ¹³ Braga, A. A., Papachristos, A. V., & Hureau, D. M. (2014). Effects of hot spots policing on crime: an updated systematic review and meta-analysis. *Justice Quarterly*, 31(4), 633-663.
- ¹⁴ Bullough, J. D., Donnell, E. T., & Rea, M. S. (2013). To illuminate or not to illuminate: roadway lighting as it affects traffic safety at intersections. *Accident Analysis and Prevention*, 53(1), 65-77.
- ¹⁵ Farrington, D. P., & Welsh, B. C. (2002). *Effects of Improved Street Lighting on Crime: A Systematic Review*. London, UK: Home Office; Pease, K. (1999). A review of street lighting evaluations; crime reduction effects. In Painter & Tilley (eds.) *Surveillance of Public Space* (pp. 47-76). Monsey, NY: Criminal Justice Press.
- ¹⁶ Andreson, M. A., & Malleson, N. (2013). Crime seasonality and its variation across space. *Applied Geography*, 43(1), 25-35; Ibrahim, A. T., & Hall, F. L. (1994). *Effect of Adverse Weather Conditions on Speed-Flow-Occupancy Relationships*. Washington, DC: The National Academies of Sciences, Engineering, and Medicine; Rotten, J. & Cohn, E. G. (2000). Weather, disorderly conduct, and assaults: from social contract to social avoidance. *Environment and Behavior*, 32(5), 651-673; Yoon, J., Noble, B., & Liu, M. (2007). Surface street traffic estimation. *Proceedings from the 5th International Conference on Mobile Systems, Applications, and Services*, 220-232.
- ¹⁷ For example, see John Lamberth testimony in *State of New Jersey v. Soto* 734 A. 2d 350 (1996).
- ¹⁸ Engel et al., (2005); Lange et al., (2005); *National Highway Traffic Safety Administration* (2000). *Relative Risk of Fatal Crash Involvement by BAC, Age, and Gender*. Washington, DC: U.S. Department of Transportation. Smith et al., (2003); Tillyer & Engel (2012).
- ¹⁹ Engel et al., (2005); Lange et al., (2005); Lundman, R. J. & Kowalski, B. R. (2009). Speeding while black? Assessing the generalizability of Lange et al.'s (2001, 2005) New Jersey Turnpike speeding survey findings. *Justice Quarterly*, 26(3), 504-527; Smith et al., (2003); Tillyer & Engel (2012).

-
- ²⁰ Eger, R. J., Fortner, C. K. & Slade, C. P. (2015). Red light cameras and racial profiling. *Police Quarterly*, 18(4), 397-413; Herbert-Martinez, K. L., & Porter, B. E. (2006). Characterizing red light runners following implementation of a photo enforcement program. *Accident Analysis & Prevention*, 38, 862-870.
- ²¹ Braver, E. R. (2003). Race, Hispanic origin, and socioeconomic status in relation to motor vehicle death rate and risk factors among adults. *Accident Analysis and Prevention*, 35, 295-309.
- ²² Wells, J. K., Williams, A. F., & Farmer, C. M. (2002). Seatbelt use among African-Americans, Hispanics, and whites. *Accident Analysis and Prevention*, 34(4), 523-529.
- ²³ Samaha, J. (2014). *Criminal Procedure, 9th Edition*. New York, NY: Cengage.
- ²⁴ Ibid.
- ²⁵ Brown, M. (1988). *Working the Street*. Thousand Oaks, CA: Sage; Johnson, R. R., & Olschansky, E. L. (2010). The ecological theory of police response: a state police agency test. *Criminal Justice Studies*, 6(1), 119-131; Hassell, K. D. (2006). *Police Organizational Cultures and Patrol Practices*. New York, NY: LFB Scholarly Publishing; Herbert, S. (1997). *Policing Space*. Minneapolis, MN: University of Minnesota Press; Johnson, R. R., & Rhodes, T. N. (2009). Urban and small town comparison of citizen demand for police services. *International Journal of Police Science and Management*, 11(1), 27-38; Klinger, D. A. (1997). Negotiating order in patrol work: an ecological theory of police response to deviance. *Criminology*, 35(2), 277-306; Moskos, P. (2008). *Cop in the Hood*. Princeton, NJ: Princeton University Press; Phillips, S. W., & Sobol, J. J. (2012). Police decision making: an examination of conflicting theories. *Policing: An International Journal of Police Strategies and Management*, 35(3), 551-565. Slovak, J. S. (1986). *Styles of Urban Policing*. New York, NY: New York University Press; Sobol, J. J. (2010). Social ecology and police discretion: the influence of district crime, cynicism, and workload on the vigor of police response. *Journal of Criminal Justice*, 38(4), 481-488.
- ²⁶ Ridgeway, G. (2007). *Analysis of Racial Disparities in the New York Police Department's Stop, Question, and Frisk Practices*. Santa Monica, CA: RAND.
- ²⁷ Berg, M. T. (2014). Accounting for racial disparities in the nature of violent victimization. *Journal of Quantitative Criminology*, 30, 629-650; Broidy, L. M., Stewart, A. L., Thompson, C. M., Chrzanowski, A., Allard, T., & Dennison, S. M. (2015). Life course offending pathways across gender and race / ethnicity. *Journal of Developmental and Life-Course Criminology*, 1(2), 118-149; Felson, R. B., Deane, G., & Armstrong, D. P. (2008). Do theories of crime or violence explain race differences in delinquency? *Social Science Research*, 37, 624-641; Felson, R. B., & Kreager, D. A. (2015). Group differences in delinquency: What is there to explain? *Race and Justice*, 5(1), 58-87; Haynie, D. L., Weiss, H. E., & Piquero, A. (2008). Race, the economic maturity gap, and criminal offending in young adulthood. *Justice Quarterly*, 25(4), 595-622; Piquero, A. P., & Brame, R. W. (2008). Assessing the race-crime and ethnicity-crime relationship in a sample of serious adolescent delinquents. *Crime and Delinquency*, 54(3), 390-422; Piquero, N. L., Sealock, M. D. (2010). Race, crime, and general strain theory. *Youth Violence and Juvenile Justice*, 8(3), 170-186.
- ²⁸ Bierie, D. M. (2014). Fugitives in the United States. *Journal of Criminal Justice*, 42, 327-337.
- ²⁹ Samaha (2014).
- ³⁰ Ibid.
- ³¹ Babbie, E. (2005). *The Basics of Social Research, 3rd Edition*. New York, NY: Thompson-Wadsworth; Trochim, W. M. (2001). *Research Methods Knowledge Base*. Cincinnati, OH: Atomic; Westerfelt, A. & Dietz, T. J. (2001). *Planning and Conducting Agency-Based Research*. Boston, MA: Allyn and Bacon.

³² Babbie (2005); Pyrczak, F. (2008). *Evaluating Research in Academic Journals*. Glendale, CA: Pyrczak Publishing; Trochim (2001).

³³ See, for starters, the following: Engel, R. S., & Calnon, J. M. (2004). Comparing benchmark methodologies for police-citizen contacts: traffic stop data collection for the Pennsylvania State Police. *Police Quarterly*, 7(1), 97-125; Engel, R. S., & Johnson, R. R. (2006). Toward a better understanding of racial and ethnic disparities in search and seizure rates. *Journal of Criminal Justice*, 34(6), 605-617; Lange, J. E., Johnson, M. B., & Voas, R. B. (2005). Testing the racial profiling hypothesis for seemingly disparate traffic stops on the New Jersey turnpike. *Justice Quarterly*, 22(2), 194-223; Smith, M. R., Rojek, J. J., Petrocelli, M., & Withrow, B. (2017). Measuring disparities in police activities: a state of the art review. *Policing: An International Journal of Police Strategies and Management*, 40(2), 166-183; Withrow, B. L. (2005). *Racial Profiling: From Rhetoric to Reason*. Upper Saddle River, NJ: Pearson-Prentice Hall; Withrow, B. L., & Williams, H. (2015). Proposing a benchmark based on vehicle collision data in racial profiling research. *Criminal Justice Review*, 40(4), 449-469.

³⁴ See, for example, the 2005 testimony of Dr. Robin Engel and Dr. Brian Withrow in the New Jersey case of *Jackson v. Williams et al.* (Civil Action 00-4875), and the following peer-reviewed journal article: Lange, J. E., Johnson, M. B., & Voas, R. B. (2005). Testing the racial profiling hypothesis for seemingly disparate traffic stops on the New Jersey turnpike. *Justice Quarterly*, 22(2), 194-223.