Racial Profiling: A Persistent Civil Rights Challenge Even in the Twenty-First Century

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Racial Profiling: A Persistent Civil Rights Challenge Even in the Twenty-First Century

Ronnie A. Dunn†

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Introduction

The death of Samuel Dubose, a forty-three-year-old, unarmed African American male shot in the head by a University of Cincinnati police during an off-campus traffic stop, is but the latest in a string of deadly police-involved encounters between police and citizens. The list of such deadly encounters includes the shooting deaths of eighteen-year-old Michael Brown in Ferguson, Missouri, in August 2014, twelve-year-old Tamir Rice in Cleveland, Ohio, in November of 2014, and fifty-year-old Walter Scott in North Charleston, South Carolina, in April of 2015. There was also the case of forty-three-year-old Eric Garner, who died in Staten Island, New York, as a result of a chokehold applied by a white New York City police officer. The Cleveland Police were also involved in the death of Tanisha Anderson, a thirty-seven-year-old mentally ill woman who died while in police custody during a crisis-intervention call made by her family a week prior to the shooting death of twelve-year-old Rice, who was playing with an Airsoft replica BB gun in a city park that police mistook for a real gun. And while the name and age of the decedents, region of the country, and circumstances

in each case differ, there are at least two variables that remain relatively consistent: the race of the victim, primarily black, and that of the officer, overwhelmingly white.

Along with charges of excessive and deadly use of force, each of these cases entailed allegations of racial bias on the part of the police and thrust the issue of racial profiling once again into the national spotlight. Protests and demonstrations in several cities across the country in the wake of a Ferguson grand jury’s decision not to indict the officer involved in the Brown case and in response to Gray’s death in Baltimore turned violent resulting in millions of dollars in property damage and large numbers of arrests.8 These cases have brought the issues of race, suspicion, the presumption of guilt, and the freedom of movement of people of color in public space—among the most persistent and seemingly obstinate social dilemmas in American society—to the forefront of the public consciousness and national discourse.

Germane to the issue of racial profiling is the freedom of mobility, which is an essential element of the concept of liberty, and a hallmark of citizenship in a democratic society. The ability for all citizens to move about freely in public space unfettered by undue laws, restrictions, or impediments, whether imposed by the state, social custom, or private citizens, is an inherent value embedded within America’s founding principles. This understanding of liberty was recently expressed by the late Supreme Court Justice Antonin Scalia, in writing for the conservative bloc of the Court in an immigration case before the Court alleging violation of the plaintiff’s constitutional right of “liberty.” As one commentator summarized, “[T]he original understanding of the Constitution suggests a relatively narrow conception of liberty, which included a right not to be imprisoned or restrained, or to be prohibited from moving from one place to another.”9 And although the rights and freedoms of citizenship were not extended to all racial groups in America until the passage of the Thirteenth, Fourteenth, and Fifteenth Amendments to the United States Constitution, which were specifically intended to ensure that all citizens, regardless of race, national origin,


or “previous condition of servitude,” fell heir to the rights, liberties, and privileges of full-citizenship.10

As noted by Kimberly Phillips in her discussion of the circumscribed movement of blacks during the Great Black Migration, “[g]eographic mobility may have been a hallmark of freedom for former slaves, but white planters (and far too often northern whites as well) perceived black mobility as a crime,” and not as a right.11 And in emphasizing the significance of the automobile in helping blacks escape the discriminatory indignities of Jim Crow segregation, Thomas Sugrue notes that, “blacks who could afford to travel by car did so as a way of resisting the everyday racial segregation of buses, trolleys, and trains. . . . Driving gave southern blacks a degree of freedom that they did not have on public transportation or in most public places.”12 Ironically, despite the gains of various Civil Rights campaigns such as the Montgomery Bus Boycott, the Freedom Rides, the Supreme Court ruling in Brown v. Board of Education,13 and the Civil Rights Act of 1964,14 which ostensibly outlawed segregation and discrimination in public accommodations, including public and interstate conveyance, the problem of freedom of mobility for blacks and increasing segments of racial, ethnic, immigrant, and religious minority populations persists in the United States well into the twenty-first century.

The Supreme Court’s 1996 ruling in Whren v. United States15 held that even the most minor traffic offense provided police with the legal justification for a traffic stop and widened the use of police discretion.16 Prior to Whren, officers needed “probable cause,” to believe that illegal activity had or was about to occur in order to execute a traffic stop. Under Whren, this expanded use of “pretextual stops” became a tool used by law enforcement in the nation’s War on Drugs.17 Some legal scholars and civil rights and civil liberties groups, argued this expanded

16. Id. at 820.
use of pretextual stops is an erosion of citizens’ Fourth and Fourteenth Amendment protections against “unreasonable search and seizure” and “equal protection under the law,” that exacerbates racial profiling.  

This problem is most evident in the growing body of empirical data and research on involuntary contacts or stops of citizens by police. While the issue regarding the frequency of involuntary contact between citizens and law enforcement and security personnel can occur in a variety of contexts, including at airports, United States border crossings, and while shopping, research in this area has primarily focused on police traffic stops of motorists, and more recently on pedestrian stops. The occurrence of the latter two types of police stops of citizens of color happen with such frequency that distinct idioms have been coined to identify each, “DWB” “Driving While Black or Brown,” and “Stop-and-Frisk,” respectively. And although much recent media attention and public debate has been focused on “Stop-and-Frisk” as of late, particularly in light of the landmark ruling in Floyd, et al. v. City of New York, that the New York Police Department engaged in a pattern and practice of discriminatory policing (i.e., racial profiling) nationally the most frequent incidents of police-citizen contacts take place in the context of traffic stops. In 2005, 56.4% of all police-citizen encounters and, in 2008, 59.2% occurred as a result of a traffic stop.

Despite the differences that exist in the social context within which involuntary encounters with law enforcement occurs or in the names associated with each, they are all forms of racial profiling. In essence, racial profiling by law enforcement, or others including private citizens, is the use of a person’s race or ethnicity as a proxy for suspicion of involvement in some form of criminal activity or threat. Some scholars, as well as critics and proponents of racial profiling, suggests the police will use a traffic stop for a minor traffic infraction, or the tactic known as “stop and talk” in relation to pedestrian stops, as a “pretext” to
initiate further police actions such as a search of an individual’s motor vehicle, person, or both for guns, drugs, or other types of contraband.  

I. Empirical Studies of Racial Profiling

Since the majority of involuntary police stops of citizens occur within the context of traffic enforcement, a significant number of empirical studies of racial profiling have examined traffic stop patterns within a given police jurisdiction. These studies generally use sociodemographic data from official police records such as traffic citations or citizen contact forms to compare by race or ethnicity with some measure of the respective population eligible to be stopped or ticketed within the given jurisdiction. A key debate among scholars conducting research in this area has been, “what is the appropriate measure or ‘benchmark’ against which to compare the number of traffic citations or stops for each group?”

Some researchers have used a measure of the driving population within a selected section of the municipality or geographic area in question as the base or denominator against which the ticketing demographic data is compared. This measurement of the driving population is generally conducted through an observational survey or a census of the driving public in the respective area during particular time periods (e.g. rush hour or off-peak driving hours). Conducting a traffic census is the most precise method of measuring the driving population eligible to be stopped or ticketed within a particular geographic area. Although this method can provide insight into potential problems with biased policing within the particular sub-area under observation, the driving and ticketing distribution patterns observed are limited in their generalizability to the larger jurisdiction. And while replicating these methods in a representative sample of sub-areas might enhance the generalizability of

24. See, e.g., David A. Harris, Profiles in Injustice: Why Racial Profiling Cannot Work 37–52 (2002) (looking at the reality of stop and frisk tactics on the street and the use of criminal profiling as racial profiling); Dunn & Reed, supra note 18, at 2, 4 (examining the reality and impact of pretextual traffic stops, including a study of traffic ticketing in Cleveland, Ohio).


the findings, this approach would require considerable resources, particularly, research personnel, which could make such an analysis cost prohibitive.27

Other studies have utilized traffic stop data collection forms, which are to be completed by police after each traffic stop, whether a traffic citation is written or only a verbal warning is given.28 In such studies, the traffic stop data collection forms are used in place of traffic tickets and compared to the driving population in order to determine whether racial or ethnic disparities exist in the police traffic enforcement patterns. By recording information on all traffic stops, not just those resulting in a traffic ticket, this method offers insight on whether there are racial or ethnic or other sociodemographic differences in whom the police cite versus those that are in essence diverted from the criminal justice system with receipt of only a warning.

The major weakness of this method however, is the issue of subject reactivity or the reliance on police officers to collect, accurately record, and report the data to be examined for analysis. The knowledge of the police that their performance is being studied, in this instance, for evidence of potentially racially discriminatory policing, provides a strong personal incentive to compromise the data. This occurred in a study conducted in Richmond, Virginia, which utilized this data collection method. In this study it was determined that the police only completed the citizen contact form in 64 percent of all traffic stops.29 This illustrates the threat to the validity of the data collected by this method and the credibility of the resulting study, particularly within the affected communities.30

Other studies have utilized travel-demand or gravity models imputed with racial or ethnic demographic census data to measure the driving population for a given geographic area or jurisdiction.31 Gravity models,
which are typically developed by regional planning agencies, are sets of mathematical equations utilized by transportation planners to measure traffic volume in order to determine the infrastructure capacity needs of streets, roads, highways, and bridges. In their study of the racial distribution of traffic ticketing patterns Dunn and Reed\textsuperscript{32} refined the gravity model estimate of the driving population by incorporating racial demographic data for persons of driving age (i.e., fifteen to eighty-five years of age) to the percentage of the city’s driving population drawn from each outlying contributing geographical area included in the model. The percentage of the driving population that each racial or ethnic group represents is then compared to the traffic ticketing data for the police jurisdiction in question.

Although this method does not provide as precise a measure of the driving population as the direct observation of a traffic census, it does provide a cost-efficient, relatively precise measure of the driving population at the macro-geographical level. The use of gravity model data integrated with social demographic census data is employed in the current study, given its ability to measure driving populations and analyze racial or ethnic traffic ticketing distribution patterns across large geographical areas.\textsuperscript{33}

\textbf{II. Study Setting & Design}

This study was designed to examine the use of police discretion as reflected in traffic stops in a sample of police jurisdictions within Cuyahoga County, the largest of the state’s eighty-eight counties, of which Cleveland is the county seat and the core of the largest metropolitan region in the state of Ohio\textsuperscript{34} This study was commissioned by the then-Cuyahoga County Prosecutor in 2009 in response to a newspaper series published in The Plain Dealer, the largest daily newspaper in the state, which documented racial disparities in drug related cases within the county’s criminal justice system.\textsuperscript{35} Cuyahoga County has a population population . . .”); Dunn & Reed, \textit{supra} note 18, at 86 (performing “[a] comparative analysis of traffic ticket distribution by race within the context of the racial demographics of [Cleveland’s] six police districts”).

\textsuperscript{32} See Dunn & Reed, \textit{supra} note 18 (summarizing the results of the study).

\textsuperscript{33} See Dunn, \textit{supra} note 26, at 555 (“[T]his study provides an incremental advancement to the research methods used to measure racial disparities in traffic ticketing of minorities by using traffic flow data derived from a gravity model . . .”).

\textsuperscript{34} This comes from a comparison of the population demographics of the state’s largest metropolitan areas (Cleveland, Columbus, and Cincinnati) in the 2010 United States Census, U.S. Census Bureau, 2010 American Community Survey 1-Year Estimates (2010) [hereinafter ACS 1-Year].

\textsuperscript{35} If You’re Arrested for Drugs, You’re More Likely to Get a Second Chance If You’re White, \textit{Plain Dealer} (Oct. 19, 2008), http://blog.cleveland.com/
of 1,280,122 and fifty-eight municipalities within its borders.\textsuperscript{36} Whites represent 63.6% of the county population, blacks represent 29.7%, and other minorities constitute the remaining 6.7% of the residents.\textsuperscript{37} Cleveland and the three suburban jurisdictions included in this study were selected based on their racial or ethnic and socioeconomic demographics, as well as their police agency’s willingness to participate in the study.\textsuperscript{38}

Cleveland, the second largest city in Ohio, has the largest black and minority population in the state.\textsuperscript{39} The majority of the county’s black population lives in Cleveland, east of the Cuyahoga River, which has historically been the racial dividing line in the region.\textsuperscript{40} The majority of black suburbanites live in older, inner-ring suburbs east of the city as blacks represent less than two percent of the population in many of the county’s remaining suburbs.\textsuperscript{41} The median household income in the county in 2010 was $41,347.\textsuperscript{42} The median household income for whites was higher than that for the county at $49,819\textsuperscript{43} while that for blacks was significantly below that of the county at $26,464.\textsuperscript{44} Asians had the highest median household income in the county at $64,063 while all


\textsuperscript{37.} QuickFacts Cuyahoga County, supra note 36.

\textsuperscript{38.} Several suburban jurisdictions included in the initial sample of cities were unwilling to participate in this study. Cleveland is the only city among the initial sample that was willing to participate, and none of the participating suburbs were included in the initial sample selected.

\textsuperscript{39.} ACS 1-Year, supra note 34.

\textsuperscript{40.} W. DENNIS KEATING, OPEN HOUSING IN METROPOLITAN CLEVELAND, IN CLEVELAND: A METROPOLITAN READER 301 (W. Dennis Keating, David C. Perry & Norman Krumholz eds., 1995).

\textsuperscript{41.} Id.

\textsuperscript{42.} Amounts shown in 2010 inflation-adjusted dollars. ACS 1-Year, supra note 34 (Selected Economic Characteristics).

\textsuperscript{43.} ACS 1-Year, supra note 34 (Median Household Income in the Past 12 Months) (in 2010 Inflation-Adjusted Dollars) (White Alone Householder).

\textsuperscript{44.} ACS 1-Year, supra note 34 (Median Household Income in the Past 12 Months) (in 2010 Inflation-Adjusted Dollars) (Black or African American Alone Householder).
other minority groups had higher incomes than black households. The median value of a single-family home in the county is $125,700 compared to $73,100 for a single-family home in Cleveland, $217,600 in Shaker Heights, $114,800 in Brook Park, and $226,900 in Westlake.

Relevant to the focus of this study is the portion of the population that drive, of which 79.1% of county residents reportedly drive themselves to work alone and another 7.8% carpool. Fifty-seven (56.7) percent of the residents age sixteen or older in the county are employed while 34.8% are not in the labor force. And roughly a quarter (24.5%) of county residents sixteen years of age or above live at 149% or less of the poverty level.

A. Cleveland

Blacks represent 53.3% of the Cleveland’s population, whites represent 37.3%, and other minorities make up the remaining 9.4% of its residents. While city leaders laud its ethnic diversity, Cleveland consistently ranks among the most racially segregated cities in the nation (down from the top five as of the 2010 Census). The city has historically been and continues to be to a significant but declining degree, segregated along an east-west black-white racial divide. The majority of blacks are concentrated on the east side of the city and the county, particularly in the inner-ring suburbs, while the majority of whites are concentrated on the west side of the city and county as well as in outer-ring eastern suburbs. There is a small but growing Hispanic population located on the city’s lower west side as well as a small Asian community on the lower east side of the central business district. Other minorities

45. ACS 1-YEAR, supra note 34 (Median Household Income in the Past 12 Months) (in 2010 Inflation-Adjusted Dollars) (Asian Alone Householder); (Hispanic or Latino Householder); (American Indian and Alaska Native Alone Householder); (Some Other Race Alone Householder); (Two or More Races Householder).

46. QuickFacts Cuyahoga County, supra note 36.

47. ACS 1-YEAR, supra note 34 (Selected Economic Characteristics).

48. Id.

49. Id.


are scattered throughout predominately white neighborhoods and municipalities throughout the city and county.\textsuperscript{52}

Cleveland, like other Rustbelt cities, has experienced a precipitous economic decline to its once robust industrial- and manufacturing-based economy, which at its peak in the 1950s was home to almost one million (914,808) residents.\textsuperscript{53} As of 2010, the population was slightly more than one-third of what it was at its height.\textsuperscript{54} The median household income is $27,470 and 30.4\% of all families and forty-six percent of families with children younger than eighteen years of age live at or below the poverty level.\textsuperscript{55} The city has been ranked the most impoverished big city in the nation more than once over the last decade and is consistently near the top of the list for this dubious distinction.\textsuperscript{56} Given the loss of hundreds of thousands of blue-collar jobs paying a middle-class income and residents, and the corresponding erosion of the tax base, the city is plagued with the concomitant problems of underfunded and underperforming schools, high dropout, unemployment, and crime rates among other social and economic challenges.

Despite these seemingly intractable and mutually reinforcing maladies, Cleveland has a considerable number of assets, amenities, and attractions that make it the centerpiece of the state’s largest urbanized area and a travel destination drawing people from near and far. Although significantly diminished from its former vitality, manufacturing still represents a considerable segment of the city’s economic base, and it is home to the second largest employer in the state, The Cleveland Clinic, which along with other healthcare institutions, has made the biomedical and healthcare industry a key economic driver of the city and region’s economy.\textsuperscript{57} The city is also home to world-class cultural


\textsuperscript{54} Cleveland (city) QuickFacts from the U.S. Census Bureau, supra note 50.

\textsuperscript{55} ACS 1-Year, supra note 34 (Selected Economic Characteristics).


\textsuperscript{57} See Economic Impact Report, CLEVELAND CLINIC FOUND. (Feb. 28, 2016) http://my.clevelandclinic.org/about-cleveland-clinic/overview/community/economic-impact-report [https://perma.cc/FJ7W-VVM5] (“As the largest employer in Northeast Ohio and the second largest in Ohio, Cleveland Clinic has made significant contributions to the state and local economies, totaling
and educational institutions including a world-renowned orchestra, museum of art, private institution of higher education, and three major league sports franchises (NFL, MLB, and NBA). In addition, the city has first-class entertainment, dining, and shopping venues, and has been selected to host the 2016 Republican National Convention, all of which should enhance its status as a travel destination for the foreseeable future.

B. Shaker Heights

Shaker Heights is an upper-middle class inner-ring suburb abutting one of Cleveland’s predominately black east side neighborhoods. Shaker has a population of approximately 28,000 residents, and is recognized as one of the first planned suburbs in the nation, and as a national model of a successfully sustained, racially integrated city. Whites represent 55% of the city’s population, blacks are 37.1%, and other minorities are 7.9% of the population. As a result of the civil rights movement and passage of the Fair Housing Act, after initial use of discriminatory tactics by realtors and mortgage lenders to exclude blacks and other minorities, the city enacted ordinances banning unethical practices that perpetuated white flight and racial transition, and actively engaged in initiatives to maintain a racial equilibrium and promote integration.

Shaker has a median family income of $76,476 and 15.2% of households have annual incomes above $200,000 while only 6.1% of families live below poverty level. Given its diversity, Shaker represents one of the few affluent communities in the Cleveland Metropolitan-area with a sizeable African American population. There are no predominately black, upper-middle class suburbs within the Cleveland Metro area, unlike the Washington D.C. or Atlanta Metropolitan areas where a number of predominately black upper-income suburbs are found. In essence,

$12.6 billion in 2013. The activities of Cleveland Clinic also supported more than 93,000 Ohio jobs, representing more than $5.9 billion in total earnings.”).

60. ACS 1-YEAR, supra note 34.
62. KEATING, supra note 40; JOHN U. OGBU, BLACK AMERICAN STUDENTS IN AN AFFLUENT SUBURB: A STUDY OF ACADEMIC DISENGAGEMENT xii (2003).
when higher income blacks in the Greater Cleveland area choose to live in an upper income community, they generally have to move into majority white areas, or persuade a critical mass of upper income blacks to gentrify traditionally low-income, black neighborhoods, which was attempted with limited success in the 1990s in one of the Cleveland neighborhoods that experienced a race riot in the 1960s.

C. Brook Park

Brook Park is an industrial, blue-collar suburb located fourteen miles southwest of Cleveland, along an interstate highway. The city has a population of 19,027 residents of which whites make up 94.1%, blacks are 4.0%, and other minorities constitute the remaining 4.1%. Although the city has a working-class character, as it is home to Ford Motor Company manufacturing facilities, the median family income in the city is $51,967 with 28.4% of families having annual incomes between $75,000 and $149,999 and only 4.8% of families living below the poverty line. A NASA Research Center is also located in Brook Park as is the Cleveland-Hopkins International Airport and a trade and exposition center, each of which contributes to the volume of motor vehicle traffic in the municipality.

D. Westlake

Westlake is an affluent suburb located twelve miles west of downtown Cleveland in the western edge of the county. Its population of 32,729 residents is 91.2% white, 1.6% black, and 7.2% of some other racial heritage. The median family income in the city is $71,974 and 12.4% of families have a household income above $200,000 and only 3.1% of families live below the poverty level. Almost half (49.1%) of the population twenty-five years of age and above have a bachelor’s degree or higher with 20.9% having a graduate or professional degree.

68. ACS 3-Year, supra note 67 (Educational Attainment for the Population 25 Years and Over).
Given the relative affluence of Westlake and its proximity to downtown Cleveland (fifteen minutes by the interstate highway) where the city’s major sports facilities are located, many of the professional athletes from Cleveland’s major sports franchises make their home in this suburb. Also, one of the regions’ most upscale shopping or “lifestyle centers,” is located in Westlake, making it a popular retail, dining, and entertainment destination.

III. The Data

The gravity model used in this study was obtained from the regional planning agency that services a five-county region, but includes data from the thirteen-county region from which Cleveland’s driving population is drawn. The data in the gravity model included trips to and from (as points of origin and destination) Cleveland, Shaker, Brook Park, Westlake, and other jurisdictions within the county, as well as the abutting counties and the contiguous United States that contribute to the county’s driving population within a twenty-four-hour period. The racial composition of the driving population for each municipality was defined by integrating data from the gravity model with age and racial demographic data extrapolated from the 2010 Census for the municipalities and geographic areas included in the model.

Table 1: 24-Hour Trip Distribution Model

<table>
<thead>
<tr>
<th>City</th>
<th>Total Round Trips</th>
<th>White % DP</th>
<th>Black % DP</th>
<th>Other % DP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleveland</td>
<td>3,239,555</td>
<td>54.6</td>
<td>38.4</td>
<td>6.9</td>
</tr>
<tr>
<td>Shaker</td>
<td>221,502</td>
<td>58.1</td>
<td>35.3</td>
<td>6.6</td>
</tr>
<tr>
<td>Brook Park</td>
<td>191,711</td>
<td>78.8</td>
<td>16.2</td>
<td>5</td>
</tr>
<tr>
<td>Westlake</td>
<td>399,163</td>
<td>83.4</td>
<td>11</td>
<td>5.5</td>
</tr>
</tbody>
</table>

*Trip generation: 4 trips per person and roughly 10 trips per household (based on 1994 NOACA Travel Survey)
**Trip Distribution: unit is number of trips by person for an average weekday

The age and racial demographic data of the residents living within the target cities (i.e., Cleveland, Shaker, Brook Park, and Westlake) were used in conjunction with the racial demographic census data from each contributing jurisdiction in the gravity model to specify the driving population estimate of the target city (see Table 1 above). Driving age population data for persons between the ages of fifteen and eighty-five years of age were combined with data from the 2010 Census detailed

69. The driving-age population is defined as those between ages of fifteen and eighty-five with fifteen being the age at which a person can legally drive.
tables “Sex and Age.”70 These data tables were downloaded from the Census Bureau website for the total population and persons of both sexes within the following racial groups from the contributing jurisdictions: White alone, Black alone, American Indian and Alaska Native alone, Asian alone, Native Hawaiian and Other Pacific Islander alone, Some other race alone, and Two or more races. All racial groups with the exception of white and black were categorized as “other.”

The age cohort columns for people between the ages of fifteen and eighty-five were compiled and totals for each racial group were computed. The total for all persons in each racial group of driving age was divided into the overall driving age population for each municipality. The racial characteristics (percentages) of the driving-age population were then attributed to the proportion of motorists added to each municipality’s driving population from each contributing jurisdiction in the gravity model. The sums for each racial group were then added to provide an overall total for each racial group within the county and areas beyond. This measurement provides a refined estimate of persons driving on each city’s streets, including the race of the majority of motorists of legal driving-age that live both within and outside of a particular city.

IV. Analysis of Traffic Ticketing Data

In addition to data on the race and gender of the motorist, the traffic ticketing data requested from each jurisdiction included the date and location of the traffic stop, the year and make of the vehicle, the offenses the motorist was cited for,71 if the vehicle was involved in an accident, and whether an arrest was made. The data recorded by the jurisdictions varied as did that which each provided. In general, the race of the motorist, the location, whether an arrest was made, and whether the vehicle was involved in an accident were the primary variables on the traffic tickets that were used to analyze the traffic ticketing data from the various jurisdictions where possible.72 The police department in Brook Park recorded the racial demographic data on traffic citations as either Caucasian or minority rather than by specific racial group (e.g. white, black, Asian, etc.).

70. See U.S. Census Bureau, 2010 Demographic Profile Data (2010) (providing demographic information for relevant cities).

71. The number of offenses a motorist could be cited for per ticket differed by jurisdiction. Five offenses were the most that could be recorded on one citation in any of the jurisdictions.

72. Although the same data variables were requested for all of the police departments, the arrest and accident data was not included in all of the datasets.
There were considerable problems with the data obtained from all of the police jurisdictions including misspellings, omissions, inconsistent use of variables or codes to record offenses among others. After the data was cleaned (corrected), the driving population estimates for each city were compared to the actual number of traffic tickets from the database for each respective jurisdiction administered to members of each racial group. The estimated percentage of motorists in each racial group in each municipality’s driving population derived from the gravity model and census data were then compared against the percentage of traffic tickets received by members of each racial group. These figures were used to compute a ratio reflecting the proportional share of tickets received by each group in relation to their percentage of the driving population.

This traffic-ticket-to-driving-population ratio was then used to compute a ratio of the likelihood of being ticketed by the police in each jurisdiction if a motorist is black or of another racial minority group in comparison to whites. These statistics indicate whether blacks or other minorities are disproportionately ticketed relative to whites within the respective jurisdictions. The traffic ticketing data was also examined to determine the percentage of traffic stops that resulted in arrest where feasible. These data were then analyzed by race and the type of charge for cases from each jurisdiction in the study sample.

Maps were also created using Geographic Information Systems (GIS) techniques and statistical analyses to display the geographic distribution of traffic tickets by race within the context of the residential racial demographics of census tracts in Cleveland and Shaker. This was not feasible in Westlake and Brook Park where few street intersections and addresses or only street names were recorded in the ticketing data provided. Similar to the calculations used to determine a group’s proportional share of tickets at the city-level, a ratio was created for each racial group using the number of tickets received by each race divided by the total number of traffic tickets written within a particular census tract. This ratio was then divided by the percentage of the residential population each racial group represents within the census tract. A census tract wherein a racial group’s ticket distribution exceeds their

73. See Farrell et al., supra note 31 (describing a similar study).
74. Although the use of the percentage of the driving age population each racial group represents is a more precise measure of the population against which ticketing disparities should be measured, the use of the residential population measure at the census tract level helps to contextualize the racial ticketing disparities at the neighborhood or police district level. It also helps to illuminate the areas where significant disparities exist in relation to each groups’ presences as residents, which could be indicative of differential enforcement practices or, i.e., “spatial profiling.” See Dunn & Reed, supra note 18, at 93–94.
proportion of the residential population would reflect a ratio value greater than one (1.00) (i.e., their proportional share or parity).\textsuperscript{75}

V. FINDINGS: THE RACIAL CHARACTERISTICS OF CITIES’ DRIVING POPULATIONS & TICKETING PATTERNS

A. Cleveland

Cleveland has an estimated driving population of 3,239,555 motorists (vehicles) that travel its streets within a twenty-four-hour period. Whites represented 54.6\% (1,769,759) of the driving population, blacks were 38.4\% (1,245,345), and other minorities were 6.9\% (224,744) of the motorists on the city’s streets. Of the 83,123 traffic tickets in the Cleveland Police Department database, blacks received fifty-nine percent (49,142) of the traffic citations in 2009. Whites received thirty-three percent (27,739) of the traffic tickets during this period while motorists of other races received 7.51\% (6,242) of the citations (see Table 2 below).\textsuperscript{76}

Blacks in Cleveland received one and a half times (1.53) their proportional share of traffic tickets, while whites received slightly less than two-thirds (0.60) of their share, and other minorities received eight percent more than their proportional share of tickets (1.08). In comparison to whites, blacks driving in Cleveland are two and a half times (2.55) as likely to be ticketed by police as whites, while members of other racial groups are one and eight-tenths times (1.80) as likely to be ticketed in

\textsuperscript{75} Although the use of residential demographic data alone does not provide the most precise measure for assessing racial disparities in traffic ticketing distribution, it does illuminate the geographic characteristics of the racial traffic ticketing patterns within specific subsections of a jurisdiction.

\textsuperscript{76} It should be noted that Cleveland implemented the use of traffic cameras in 2005. The city installed thirty-six stationary cameras that capture speeders and red light violators at various locations throughout the city while six mobile cameras in police cruisers are used to catch speeders. According to The Plain Dealer, 84,000 traffic camera tickets were issued in 2010, forty-four percent of which were administered by the police cruiser mobile camera units (i.e., speeding citations). Mark Gillispie, City’s Traffic-Camera Setup Gets Pulled Over by Council, Plain Dealer, Apr. 21, 2011, at B1–B5. The 84,000 traffic tickets administered by traffic cameras combined with the 83,123 tickets written by police officers equals a total of 167,123 traffic tickets issued in the city in 2010. Id. The race/ethnicity of motorists is not recorded on the traffic camera tickets. However, there are research methods that can be employed to estimate motorists’ race using the residential address/zip code to which the ticket was mailed as a proxy for race, given the racially segregated characteristics of Northeast Ohio communities. See Albert J. Meehan & Michael C. Ponder, Race and Place: The Ecology of Racial Profiling of African American Motorists, 19 JUST. Q. 399, 399–400 (2002).
the city as whites. Essentially blacks and, to a lesser degree, other minorities received a disproportionate share of the traffic tickets written citywide given the percentage of the driving population they comprised, while whites received less than their proportional share of the traffic citations. As shown by the ratio of tickets received by each racial group in comparison to their percentage of the driving population in Table 2.

Examining the traffic ticketing distribution by race or gender cohort, black males were the majority of those cited for traffic violations at thirty-seven percent (30,892), followed by white males (18,775) and black females (18,249) at twenty-two percent each, and white females at eleven percent (8,964). Other minority males received five percent (4,444) of the traffic citations and females belonging to other racial groups were two percent (1,782) of those ticketed.

**Table 2: Central City Ticketing Patterns**

<table>
<thead>
<tr>
<th>Tickets</th>
<th>Driving Population</th>
<th>Ratios&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>83,123</td>
<td>3,239,555</td>
</tr>
<tr>
<td>Black</td>
<td>49,142</td>
<td>1,253,953</td>
</tr>
<tr>
<td>White</td>
<td>27,739</td>
<td>1,771,616</td>
</tr>
<tr>
<td>Other</td>
<td>6,242</td>
<td>220,751</td>
</tr>
</tbody>
</table>

<sup>i</sup> Driving population estimates taken from the regional planning agency 2010 Compress Trip Distribution Model for the County. Racial group data imputed from 2010 U.S. Census to the gravity model.

<sup>a</sup> The ticket/DP ratio reflects the percentage of tickets received for each group in comparison to their percentage of the driving population. The likelihood ratio represents the chances of nonwhites being ticketed in comparison to whites.

In Cleveland, motorists could be cited for up to five offenses on each traffic ticket. Fifty-four percent (44,721) of the traffic tickets had two offenses, twenty-three percent (19,085) had three offenses, seven percent (6,028) had four offenses, and 1.8% (1,573) had five offenses. “Maximum speed and assured clear distance ahead” (i.e., “speeding”) was the most frequent primary traffic offense (which is generally presumed to be the reason for the traffic stop) motorists were cited for during the observation period. Speeding accounted for 19.5% (16,186) of the traffic citations followed by 15.9% (13,164) for driving under suspension or revocation of a driver’s license, and driver’s or commercial driver’s license required; restriction violation combined, and 13.9%

77. Using blacks as the reference group, whites were only forty percent (0.40) as likely to be ticketed by police in Cleveland as were blacks, while other minorities were seventy-two percent (0.72) as likely to be ticketed in comparison to blacks.

974
(11,578) of citations for seatbelt violations. Other offenses that accounted for considerable portions of the traffic citations included traffic control device signal term and light violations (8.7%), and stop-sign violations (seven percent).

Examining the frequency of type of traffic citation by race, whites were forty-seven percent of motorists cited for speeding, blacks were forty-five percent, and other minorities were eight percent. Blacks were 47.6% of those committing red-light or traffic-signal violations followed by whites at 43.8% and other minorities at 8.5%. Blacks were sixty-one percent of motorists cited for seatbelt violations, whites were thirty-one percent, and other minorities were eight percent. Blacks were the vast majority of those cited for driving under suspension at seventy-nine percent, while whites accounted for fifteen percent and other minorities were six percent of those cited for driving under suspension or revocation of a driver’s license.

<table>
<thead>
<tr>
<th>Race</th>
<th>Speeding</th>
<th>Red light</th>
<th>Driving Under Suspension</th>
<th>Expired Plates</th>
<th>Seatbelt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>45%</td>
<td>47.6%</td>
<td>79%</td>
<td>61%</td>
<td>61%</td>
</tr>
<tr>
<td>White</td>
<td>47%</td>
<td>43.8%</td>
<td>15%</td>
<td>32%</td>
<td>31%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
<td>8.5%</td>
<td>6%</td>
<td>7%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Analyzing and mapping the traffic ticketing distribution patterns by race and census tract using GIS computer software revealed significant disparities in a large number of census tracts where the tickets administered to blacks far exceed their percentage of the residential population in the census tract. In a number of Cleveland census tracts the index for blacks not only exceeded 1, but had values that ranged as high as 15 to 123 times their proportional share (see Map 1), meaning blacks were ticketed 15 to 123 times above what would be expected given their percentage of the residential population. The most extreme index values of 123.52 and 33.8 were found respectively in a census tract located on the city’s predominately white far West Side, and on the city’s East Side in a census tract that is home to the city’s world renown cultural, educational, and healthcare institutions noted earlier. This

78. Census tracts are small, relatively permanent statistical subdivisions of a county that usually have between 1,200 to 8,000 people within their boundaries and are designed to be homogeneous in regards to the characteristics, economic status and social conditions of the population. Geographic Terms and Concepts—Census Tract, United States Census Bureau, https://census.gov/geo/reference/gtc/gtc_ct.html [https://perma.cc/UC84-PGJ6] (last visited March 26, 2016).

79. The Case Western Reserve University NEO Cando database was used to cross reference and identify census tracts by neighborhood. 2010 CLEVELAND
“cultural center” as well as one of the healthcare institutions in the tract has their own police agencies, which have Memorandums of Agreement with the Cleveland Police Department giving them mutual legal jurisdiction in the area. Blacks received twenty-one percent of the tickets in the far West Side tract where they were only 0.17% of its residential population and seventy-five percent of the tickets in the cultural center tract where blacks were 2.21% of the residents.

Three other census tracts located on the West Side had relatively high ticketing indices of 22.4, 16.5 and 16.1 for blacks. The tracts with indices of 22.4 and 16.1 are located in a different West Side neighborhood while the tract with the 16.5 index for blacks is located in the same far West Side neighborhood identified above. Ironically, both of

Map 1—Black Index


City of Cleveland, The Future of Public Safety 17–18 (2011) (discussing committee that reviews and revises established memorandums of understanding between Cleveland Police and other departments, such as University Circle and Cleveland Clinic).

Created July 11, 2012. Traffic Ticket Data acquired from the Cleveland Police Department; municipal boundary data acquired from the Cuyahoga County GIS; all other data acquired from the United States Census Bureau.
these West Side neighborhoods have long been considered “a haven of police officers, firefighters, and other city employees (primarily white given the city’s racially segregated geography),” that were required to live in the city of Cleveland under its residency rule which was overturned by the Ohio Supreme Court in 2009.82

Overall, the primary areas where the indices for blacks were less than one—meaning they were less likely to be ticketed than their share of the population would suggest—were largely in predominately black census tracts on the city’s East Side. The same pattern generally held true for whites as well in that their indices were typically higher in predominately black census tracts, and below one in tracts where they represent the majority of the residential population. There were, however, many more predominately white census tracts where the index value is considerably below one or parity. There were nine census tracts where the ticketing to residential population index for whites exceeded parity by double-digits.83 The highest white indices of 23.75 and 17.15 were found in census tracts on the city’s predominately black East Side. These high indices tracts were located near an interstate highway interchange and along an arterial traffic route leading to inner-ring Shaker.

Map 2—White Index84


83. Infra Map 2.

84. Created July 11, 2012. Traffic Ticket Data acquired from Cleveland Police Department; municipal boundary data acquired from Cuyahoga County GIS; all other data acquired from US Census Bureau.
The amount of high-index white census tracts was less than the number for blacks, as were the total of all tickets administered to the two groups. There were a total of thirty-eight census tracts where the index value for whites exceeded two (twice their proportional share) compared to fifty-two such tracts for blacks. Hispanics and Latinos had relatively few census tracts where their index value exceeded one, and there were four tracts where the index value ranged from two to four. There were no census tracts in which Asians had an index in excess of one.85

Map 3—Hispanic/Latino Index86

85. See infra Maps 3 & 4. The data was not available to conduct this analysis for other racial or ethnic minority groups.

86. Created July 11, 2012. Traffic Ticket Data acquired from the Cleveland Police Department; municipal boundary data acquired from the Cuyahoga County GIS; all other data acquired from United States Census Bureau.
Turning to traffic stops in which an arrest was made, blacks accounted for seventy-two percent (3,700) of the 5,098 arrests. Whites were twenty-two percent (1,127) of those arrested as a result of a traffic stop or citation, and other minorities were six percent. “Driving under suspension or revocation” was the offense related to the majority of arrests at thirty-five percent (1,771), followed by driving without a “driver’s or commercial driver’s license,” which accounted for eleven percent (574) of arrests, and “speeding” which constituted six percent (291) of arrests.

In that blacks were the overwhelming majority of those cited for “driving under suspension or revocation” (seventy-nine percent), they were likewise the majority of those arrested. Given their percentage of the driving population and with all other factors being equal, blacks were arrested at 1.86 times their percentage of all motorists. Both other minorities and whites were arrested less than would be expected given their proportion of the driving population, at seventy-five percent and forty percent of arrest respectively. In comparison to whites, blacks were almost four and two-thirds times (4.65) as likely to be arrested after a traffic stop resulting in a ticket, while other minorities were almost twice (1.87) as likely to be arrested in association with a traffic citation as whites.

87. Created July 11, 2012. Traffic Ticket Data acquired from the Cleveland Police Department; municipal boundary data acquired from the Cuyahoga County GIS; all other data acquired from the United States Census Bureau.
There were only 1,753 accidents associated with the traffic citations included in the ticketing database. Analysis of traffic citations involving an accident by race revealed that blacks were involved in fifty-one percent (903) of such traffic incidents, whites accounted for thirty-nine percent (688), and other minorities were the remaining nine percent (163). Comparing the number of traffic accidents for each racial group with their overall traffic citations, 2.5% of traffic tickets received by whites involved an accident, 2.6% of citations to other minorities involved an accident, and 1.8% of traffic citations received by blacks involved a traffic accident.

### B. Shaker Heights

Shaker Heights has a driving population of 221,502 motorists driving within its 6.3-square-mile borders within a twenty-four-hour period. Whites represent fifty-eight percent (128,625) of the driving population, blacks are thirty-five percent (78,183), and other minorities make up the remaining seven percent (14,612) of the city’s driving population. There were 12,243 traffic tickets administered in Shaker during the observation period covered in this study. Race was missing on 154 traffic citations. Of the 12,089 tickets noting race, blacks received sixty-two percent (7,492) of the traffic tickets written in the city, whites received thirty-six percent (4,314), and other minorities received two percent (283) of the traffic citations.

Blacks received more than one and three-fourths (1.76) their proportional share of traffic tickets in Shaker relative to their percentage of the driving population and were 2.86 times as likely to be ticketed by police in the city as were whites. By comparison, whites received

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88. In Cleveland, the police only respond to a traffic accident if someone is injured, the vehicles are totally disabled, or the accident involves a city-owned vehicle, for example an EMS or a Fire Safety vehicle.

89. **Supra** Table 4.

90. **Infra** Table 5.

91. **Infra** Table 5.

---

Table 4: Central City Citations with Arrests & Accidents Associated

<table>
<thead>
<tr>
<th>Arrests</th>
<th>Percentage</th>
<th>Ratios</th>
<th>Accidents</th>
<th>Percentage</th>
<th>Tickets within Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>100</td>
<td>--</td>
<td>1,753</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>5,098</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>3,700</td>
<td>72.6</td>
<td>1.86</td>
<td>4.65</td>
<td>903</td>
</tr>
<tr>
<td>White</td>
<td>1,127</td>
<td>22.1</td>
<td>0.40</td>
<td>--</td>
<td>688</td>
</tr>
<tr>
<td>Other</td>
<td>271</td>
<td>5.3</td>
<td>0.75</td>
<td>1.87</td>
<td>163</td>
</tr>
</tbody>
</table>

88. In Cleveland, the police only respond to a traffic accident if someone is injured, the vehicles are totally disabled, or the accident involves a city-owned vehicle, for example an EMS or a Fire Safety vehicle.

89. **Supra** Table 4.

90. **Infra** Table 5.

91. **Infra** Table 5.
sixty-two percent of their proportional share of tickets and were slightly more than one-third as likely to be ticketed by police as blacks. Other minorities received thirty-five percent of their proportional share of traffic citations written in the city and had a fifty-eight percent likelihood of being ticketed by police in comparison to whites and were twenty percent as likely to be ticketed in the city as blacks.92

Table 5: Shaker Heights Ticketing Patterns

<table>
<thead>
<tr>
<th>Tickets</th>
<th>Driving Population</th>
<th>Tickets/DP</th>
<th>Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>White Ref.</td>
<td>Black Ref.</td>
</tr>
<tr>
<td>Total</td>
<td>12,089</td>
<td>221,502</td>
<td>--</td>
</tr>
<tr>
<td>Black</td>
<td>7,492</td>
<td>128,625</td>
<td>35%</td>
</tr>
<tr>
<td>White</td>
<td>4,314</td>
<td>78,183</td>
<td>58%</td>
</tr>
<tr>
<td>Other</td>
<td>283</td>
<td>14,612</td>
<td>7%</td>
</tr>
</tbody>
</table>

By race or gender cohort, black males received thirty-four percent (4,133) of the traffic tickets in Shaker, followed by black women at twenty-eight percent (3,351). White males were the recipients of nineteen percent (2,322) of the traffic tickets, and white females were sixteen percent (1,992). Minority males (155) and females (128) of other races were one percent each of motorists ticketed in Shaker. The most frequent traffic citation in Shaker was for “speeding,” of which there were 3,265 tickets (twenty-seven percent of total), followed by 1,025 (eight percent) “red light violations,” 849 citations (seven percent) for “driving under suspension,” and 832 tickets (seven percent) for “expired plates.” There were also a considerable number of tickets given for “stop signal” (627), “seatbelt” (476), “headlights” (474), and (447) “driver’s license” violations.93

By race, whites were in the majority of those cited for speeding and stop sign violations.94 Whites received fifty-five percent (1,804) of citations for speeding and seventy-four percent for stop signal violations (464), while blacks were forty percent (1,322) of those cited for speeding and twenty percent (125) of stop signal violations, and other minorities were five percent (139) and six percent (38), respectively. With the exception of speeding and stop signal citations, blacks received the

92. Using blacks as the reference group, whites were thirty-five percent as likely to be ticketed by police in Shaker while other minorities were twenty percent as likely to be ticketed as blacks.

93. Supra Table 5.

94. Infra Table 6.
majority of tickets for the most prevalent traffic violations in Shaker during the observation period. Blacks were the recipients of fifty-nine percent (607) of the citations for red light violations, compared to whites at thirty-six percent (373) of the recipients, and other minorities at five percent (45). Blacks received ninety-two percent of the tickets for driving under suspension, and seventy-one percent (592) for expired plates, compared to six percent (51) and twenty-five percent (210) for whites, and two percent (14) and four percent (30) for other minorities, respectively.

Table 6: Shaker - Frequency of Citations by Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Speeding</th>
<th>Red light</th>
<th>Driving Under Suspension</th>
<th>Exp. Plates</th>
<th>Stop Signal</th>
<th>Seatbelt</th>
<th>Headlights</th>
<th>Drivers License</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>40%</td>
<td>59%</td>
<td>92%</td>
<td>71%</td>
<td>20%</td>
<td>83%</td>
<td>74%</td>
<td>88%</td>
</tr>
<tr>
<td>White</td>
<td>55%</td>
<td>36%</td>
<td>6%</td>
<td>25%</td>
<td>74%</td>
<td>14%</td>
<td>14%</td>
<td>11%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
<td>5%</td>
<td>2%</td>
<td>4%</td>
<td>6%</td>
<td>3%</td>
<td>12%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Of the other traffic citations administered with considerable frequency, blacks accounted for eighty-three percent (394) of those cited for seatbelt violations, seventy-four percent (351) cited for headlight violations, and eighty-eight percent (392) of those cited for a driver’s license offense (other than driving under suspension or revocation). This is in comparison to whites receiving fourteen percent (69) of the seatbelt citations, fourteen percent (109) of headlight violations, and eleven percent for “other” driver’s license offenses. Other minorities were the recipients of three percent (13) of seatbelt citations, twelve percent (14) of headlight offenses, and one percent (4) of those cited for other driver’s license offenses.

Analyzing and mapping the ticketing data by race and census tract, the indices for blacks exceeded their proportional share of residents in all census tracts in Shaker while the indices for no other racial/ethnic group were equal to or exceeded one (parity) with the exception of that for Hispanics/Latinos where the index in one census tract was 1.2 (see Maps 5-8). In fact, the indices in the two census tracts with the highest percentage of white residents at 86.2 and eighty-five percent had indices of 0.79 and 0.75 respectively. The indices for blacks in these census tracts where they represented seven and 8.3 percent of the residential population were 3.78 and 3.69 respectively. Conversely, in the census tracts with the highest black populations of ninety-two and seventy-eight percent, blacks had indices of 1.04 and 1.16, compared to indices of 0.70 and 0.42 for whites who were five and fifteen percent of the residential population in these census tracts respectively.
C. Brook Park

The daily driving population of Brook Park is 191,171 motorists. Whites represent seventy-nine percent (151,178) of this driving population, blacks are sixteen percent (31,192), and minorities of other races make up the remaining five percent (9,852) of motorists using thoroughfares in this area four miles southwest of Cleveland. As noted, the Brook Park racial ticketing data was recorded as Caucasian (hereafter referred to as “white”) and minority.95

There were 3,232 traffic tickets written in Brook Park in 2009, only 3,159 of which noted race. Whites received eighty-four percent (2,666) of the traffic citations given out during the observation period while minority motorists were the recipients of sixteen percent (493) of the traffic tickets. Given their percentage of the driving population whites received 1.06 times or six percent above their proportional share of traffic tickets. Blacks and other minorities combined represent twenty-one percent (sixteen and five percent respectively) of the driving population and received seventy-six percent of their proportional share of traffic tickets.

Table 7: Brook Park Ticketing Patterns

<table>
<thead>
<tr>
<th>Tickets</th>
<th>Driving Population</th>
<th>Ratios</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tickets/DP</td>
<td>White Ref.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,139 --</td>
<td>191,171 --</td>
<td>--</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td>2,666 84%</td>
<td>151,178 79%</td>
<td>1.06</td>
</tr>
<tr>
<td><strong>Minority</strong></td>
<td>493 16%</td>
<td>41,044 21%</td>
<td>0.76</td>
</tr>
</tbody>
</table>

Minority motorists were seventy-two percent as likely to be ticketed by police in Brook Park as whites. Conversely, whites had a thirty-nine percent greater likelihood of being ticketed by police than minorities driving through this suburb of Cleveland.96 Speeding (1,238) was once again the most prevalent traffic violation for which motorists were cited representing thirty-nine percent, followed by 164 stop sign violations (five percent), 146 red light offenses (four percent), and 106 seatbelt violations (three percent).

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95.  *Supra* Part IV.

96.  Statistics might not equal 100 percent due to rounding. *Infra* Map 5.
Examining the ticketing data by race or gender group shows that white males were fifty-four percent (1,709) of those ticketed, followed by white females at thirty percent (957). Minority men were the next most frequently cited at eleven percent (358) while minority women were four percent of those ticketed in Brook Park. Whites were eighty-eight percent of those ticketed for speeding compared to minorities, which were eleven percent. White males represented fifty-four percent of those cited for speeding, while white females were thirty-four percent, minority males were eight percent, and minority females were three percent.

Whites were also the majority of motorists cited for stop sign violations in that they received ninety-seven percent (159) of such violations compared to three percent (five) for minorities. White males received fifty-seven percent of stop sign citations, white females received forty percent and minority men received the remainder. Accordingly, whites were the recipients of eighty-seven percent of the red light citations with white males receiving fifty-five percent of these tickets, and white females receiving thirty-one percent compared to minority men who received seven percent and minority women receiving five percent of the remaining thirteen percent of red-light violations.

97. Created July 11, 2012. All data acquired from United States Census Bureau; the Cuyahoga County GIS, and the Brook Park Police Department.
D. Westlake

Westlake, an outer-ring suburb west of Cleveland has a daily driving population of 399,163 motorists. Whites represent eighty-four percent (333,494) of this driving population, blacks are eleven percent (44,459) of the motorists, and other minorities constitute the remaining six percent (24,093) of the suburb’s driving population. There were 2,525 records contained in the database provided by the Westlake Police Department. Of these, 2,191 were recorded as traffic citations only, 332 were recorded as arrests, and two were blank in this field. Of the 332 arrests, 312 were related to a traffic stop whereas twenty were not related to a motor vehicle traffic infraction. Therefore, there were 2,503 traffic citations administered in Westlake during the observation period.

Table 8: Westlake Ticketing Patterns

<table>
<thead>
<tr>
<th>Tickets</th>
<th>Driving Population</th>
<th>Ratios</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tickets/DP</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2,503</td>
<td>399,163 --</td>
<td>--</td>
</tr>
<tr>
<td>White</td>
<td>2,254</td>
<td>333,494 90%</td>
<td>1.07</td>
</tr>
<tr>
<td>Black</td>
<td>202</td>
<td>44,459  11%</td>
<td>0.72</td>
</tr>
<tr>
<td>Other</td>
<td>45</td>
<td>24,093   6%</td>
<td>0.33</td>
</tr>
</tbody>
</table>

Whites were the recipients of ninety percent (2,254) of the traffic tickets, blacks received eight percent (202), and other minorities received two percent (forty-five) of the traffic citations in Westlake. Whites received 1.07 times their proportional or expected share of traffic tickets in relation to their percentage of the driving population, while blacks received seventy-two percent of their expected share and other minorities received a third (thirty-three percent) of their proportional share.

Examining the traffic ticketing data by race or gender cohort, white males received the majority of traffic tickets in Westlake at 54 percent (1,348) followed by white females with 36 percent (899), black males at five percent (129), and black females at three percent (71). Other minority males were one percent (35) of those ticketed while women of other races received less than one percent (11) of traffic citations (0.4 percent) in Westlake. The majority of traffic tickets in Westlake were for speeding (thirty-nine percent), followed by expired or unlawful license plate (seven percent), and operating a vehicle under the influence of

98. *Infra Table 8.*
99. *Infra Table 8.*
alcohol and drugs (seven percent), and traffic control device violations (five percent).

VI. Discussion

While statistically significant racial disparities in ticketing patterns were found in each of the four jurisdictions, the disparities were extremely higher for blacks or minorities in Cleveland and Shaker, cities where minorities represented a larger segment of the driving and residential populations, than the disparities among whites in Brook Park and Westlake. Whites were ticketed slightly above their proportional share of the driving population or parity in these municipalities at, 1.06 and 1.07 respectively.

Blacks in Cleveland received fifty-three percent more than their proportional share of traffic tickets (1.53) and were two and a half (2.51) times as likely to be ticketed by police in the city as whites. Other minorities were ticketed ten percent above their proportional share (1.10) and were 1.8 times as likely to be ticketed by police as whites. Black males were ticketed more frequently in Cleveland than members of any other race or gender group and fifteen percent more than the second most ticketed groups—white males and black females at twenty-two percent each. As noted, the most frequent primary traffic offense, which would usually be the reason for the traffic stop, was speeding, of which whites were the majority of those cited at forty-seven percent. The next two most frequent primary traffic offenses were “driving under suspension” and “seatbelt” violations, both of which are nonmoving traffic violations. Blacks were a significant majority of the recipients of both of these types of citations, seventy-nine and sixty-one percent respectively. Based on their proportion of the driving population, blacks were 7.63 times as likely to be ticketed for driving under suspension and 2.77 times as likely to be ticketed by police for a seatbelt violation as whites in Cleveland. In Shaker blacks were ninety-two and eighty-three percent of the recipients of driving under suspension and seatbelt violations and were 26.2 and 9.87 times as likely to be ticketed by police for these violations respectively, as whites. Overall in both jurisdictions, whites were primarily ticketed for moving violations while blacks were more likely to be ticketed for nonmoving violations (e.g. driving under suspension, and seatbelt violations).

100. This figure was computed by dividing the percentage of tickets received for each offense by each respective group’s percentage of the driving population. This figure for blacks was then divided by the figure for whites, using whites as the reference group.
Of particular interest is that in Ohio not wearing a seatbelt is a secondary offense punishable only if a motorist is caught violating another traffic law.\textsuperscript{101} According to the Insurance Institute for Highway Safety, Ohio is one of sixteen states in which “police must have some other reason to stop a vehicle before citing an occupant for failing to buckle up.”\textsuperscript{102} In the Cleveland Police Department ticketing database seatbelt violations were entered as the primary offense 219 times of which blacks were the recipients of sixty-six percent of the tickets, whites were twenty-six percent, and other minorities were nine percent.\textsuperscript{103} Seatbelt violations were recorded as a secondary offense 278 times and blacks were the recipients seventy-one percent of the time, whites were twenty-three percent, and other minorities were six percent of those ticketed. Many of the citations in which seatbelts were recorded as a secondary offense cited “driving under suspension” as the primary offense (129). Blacks received seventy-five percent of such tickets, whites received nineteen percent, and other minorities received five percent.

As noted, blacks were a significant majority of motorists cited for nonmoving traffic violations in both Cleveland and Shaker whereas whites are the majority of motorists cited for speeding in both jurisdictions\textsuperscript{104} And while driving without a seatbelt and driving under suspended license are traffic violations nonetheless and have considerable public safety implications, what is of particular note given the vast disparities in the administration of these tickets is that in addition to both being nonmoving violations, neither are traffic offenses that can be readily observed. Speeding, on the other hand, is a moving violation which can be readily observed whether with the naked eye or with a radar or laser speed detection device. It is also one of the most egregious

\begin{footnotes}
\footnotetext[101]{With the exception of jurisdictions that have enacted ordinances making seatbelts a primary offense, for example South Euclid within Cuyahoga County. John Horton, \textit{Tougher Seat Belt Law in South Euclid Made Drivers Buckle: Road Rant, Plain Dealer} (May 13, 2013), http://www.cleveland.com/roadrant/index.ssf/2013/05/tougher_seat__belt__law__in__ south.html [https://perma.cc/3TY8-6PEN].}


\footnotetext[103]{Ronnie A. Dunn & Douglas Riebel, \textit{An Analysis of Racial Traffic Ticketing Distribution Patterns in Selected Jurisdictions Within Cuyahoga County} 31–32. The Shaker ticketing database did not contain information regarding multiple offenses on a citation.}

\footnotetext[104]{\textit{See supra} Part V (quantifying traffic citations by race for moving and non-moving offenses in Cleveland and Shaker).}
\end{footnotes}
and dangerous traffic threats to public safety, along with “driving under the influence” and “texting or talking on a cell phone while driving.”

Not only are the nonmoving offenses that blacks are more frequently cited for not as readily observable but they also require an additional level of inquiry or investigation on the part of the police officer to detect. Two police administrators from different local police agencies within the county reported that the observation of seatbelt violations are “typically made just before or while the officer is approaching the driver,” meaning the officer would generally have to be in close proximity to the vehicle once a traffic stop has been made to determine whether the driver and passengers were wearing their seatbelts.

Confirming that seatbelt violations are not generally a primary offense in the state, the first police executive stated that “I expect officers under my command to enforce seatbelt laws as a secondary violation. I do not support stopping drivers solely for a seatbelt violation.” He did note however that there are some campaigns such as “Click It or Ticket,” that are specifically geared to stopping drivers for seatbelt violations in order to increase safety, which he reported he does not support.

The legal status of a driver’s license, whether it is under suspension, restrictions, or revocation, can generally be determined either before or after a traffic stop. According to the second police executive, “when something about a vehicle catches an officer’s attention they can do a ‘rolling check’ with the dispatcher to get information about the vehicle and then ask the dispatcher to run the social security number attached to the plate for driving status,” before a stop is executed. Both law enforcement executives report that in many instances these rolling checks do not result in a traffic stop and the driver is often “unaware that his car and social security number has been run by the police.” According to the first police administrator, after the stop “an officer may request a check on the operator’s status in addition to checking for possible warrants. This is typically done to verify the identity of the driver and ensure accurate information is placed on a

105. As of 2010, speeding and driving under the influence accounted for thirty-two and thirty-one percent, respectively, of fatal traffic accidents. U.S. Dep’t of Transp., Traffic Safety Facts 4, 6 (2010). The non-use of a seatbelt accounted for 27.4% of traffic fatalities. U.S. Dep’t of Transp., Traffic Safety Facts 41 (2010).

106. Telephone Interview with police administrators in Cuyahoga County (Apr. 4 & 5, 2012).

107. Id.
108. Id.
109. Id.
110. Id.
ticket if one is going to be issued.”\textsuperscript{111} He concluded by adding that “all traffic stops should be based on reasonable suspicion or probable cause.”\textsuperscript{112}

Given these factors and the vast racial disproportionality found in the ticketing data for both Cleveland and Shaker, particularly in the administering of driving under suspension and seatbelt citations, it raises questions regarding the use of police discretion. If under normal circumstances, a police officer is only able to determine that a person is not wearing their seatbelt after making a traffic stop, what was the objective probable cause for the traffic stop in the first place in those cases citing seatbelts as the primary offense? And could the high number of blacks cited for driving under suspension be the result of blacks disproportionately being the subject of the traditional anonymous “rolling check” or the electronic surveillance that Meehan and Ponder found in their study wherein police use the mobile data terminal (MDT) (on-board computer) in their cruisers to run checks on black motorists?\textsuperscript{113}

While neither of these questions can be answered definitely given the limitations of the data and the type of macro-level analysis conducted in this study, in light of the magnitude of the racial disparities found in Cleveland and Shaker, particularly in regards to the administering of nonmoving violations (seatbelts) and status offenses (driving under suspension), the weight of the evidence strongly suggests that these disparities are not the result of random probability. In other words, under normal circumstances and assuming random selection among all motorists, given the racial composition of the driving population and all other factors being equal, it is statistically improbable that such extreme racial disparities would result by chance.

Are there other factors that could help explain the vast racial disparities in the amount of driving under suspension and seatbelt violations received by blacks? The high “hit rate” among blacks for driving under suspension appears to provide empirical evidence of Meehan and Ponder’s contention that, “many officers believe that querying vehicles with African Americans produces more ‘hits’—that is, the computer returns information indicating legal problems with the vehicles or drivers.”\textsuperscript{114} According to these authors, it is the expectation of productivity of this electronic surveillance of blacks and its attendant rewards that motivate this practice among officers in accordance with the “expectancy theory.”\textsuperscript{115} This argument is consistent with the comments of a

\textsuperscript{111} Id.
\textsuperscript{112} Id.
\textsuperscript{113} Meehan & Ponder, supra note 76, at 417–23.
\textsuperscript{114} Id. at 418 (emphasis omitted).
\textsuperscript{115} Id. (citing Stephen D. Mastrofski, R. Richard Ritti, & Jeffrey B. Snipes, \textit{Expectancy Theory and Police Productivity in DUI Enforcement}, 28 L. &
judge on the county Court of Common Pleas that stated, “traffic stops are used by the police as a means to initiate other police actions.” 116 Similar to the “rational discrimination” argument used in defense of racial profiling by some law enforcement officers 117 that targeting blacks is good, proactive police work, given the disproportionate number of blacks in prison particularly for drug-related crimes, suspecting that a black may have a want, a warrant, or are somehow otherwise legally encumbered, police will disproportionately initiate a MDT query of blacks. 118 If blacks are disproportionately the subject of police-initiated, proactive surveillance either through MDT queries or “rolling checks,” this can help explain their high number of driving under suspension cases.

Driving under suspension is clearly a violation of the law. There is no legally justifiable defense for driving without a valid driver’s license, with the exception of in limited emergency situations, which the state revised code makes allowances for. There are however, a number of legal factors that can contribute to the prevalence of this particular violation among blacks. Specifically, the judge noted that there are forty-seven offenses within the state revised code that can result in an individual’s driver’s license being suspended. 119 Seventeen of these offenses are not related to an individual’s driving behavior or their operation of a motor vehicle, but are collateral sanctions or penalties that are levied as a result of a conviction for another crime. 120 Examples include failure to pay child support or any drug conviction, for which a person’s driver’s license can be suspended anywhere from six months to five years, according to the Common Pleas judge. 121

Recognizing the deleterious effects of such sanctions, and that driving is a necessity that significantly impacts one’s ability to earn a livelihood and support oneself and one’s family in today’s society, the Ohio

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113 (1994) (applying the expectancy theory of organizational psychology to police enforcement of driving under the influence)).

116. The comment was made unsolicited during a meeting between thirteen Common Pleas judges and Greater Cleveland Congregations, an interfaith organization of which the author is a member and was in attendance. Common Pleas Judges, Meeting of Greater Cleveland Congregations (Mar. 12, 2012).


118. Meehan & Ponder, supra note 76, at 417.


120. Id.

121. Id.
state legislature enacted a Collateral Sanctions Bill,\textsuperscript{122} designed to remove many of the barriers to successful reentry into the community for ex-offenders, particularly those obstacles that further impede employment for this already socially stigmatized population. As stated in a memorandum supporting the bill, “we found that people will drive anyway, incurring fines in the thousands of dollars . . . re-instatement of driver’s license is expensive, so people that can’t pay will continue to drive, licensed or not.”\textsuperscript{123} Faced with the reality that the suspension of one’s driver’s license for unrelated offenses served as an additional barrier to employment upon release for many, the bill reduced some of the penalties for driving under suspension and increased the options for the payment of reinstatement fees.\textsuperscript{124}

**Conclusion**

The extreme racial disparities found in nonmoving traffic violations (i.e., driving under suspension and without a seatbelt) among blacks in Cleveland and Shaker,\textsuperscript{125} offenses that are generally detected either through electronic surveillance or once a traffic stop has been made, are consistent with Meehan and Ponder’s conclusion that, “officers must be ‘hunting’ for, or clearly noticing, African American drivers,” in these jurisdictions.\textsuperscript{126} This practice among law enforcement officers creates a “self-fulfilling prophecy,” in that if black motorists are disproportionately surveilled, stopped, and cited for traffic offenses by police, its cumulative effect can help explain the disproportionate number of blacks that ultimately have their driver’s licenses suspended. And given the strong inducements to drive noted earlier, a considerable segment of these motorists continue to drive, are eventually caught again, and this cycle only repeats itself, with escalating legal and financial consequences accruing to the motorist.

The loss of one’s driving privileges can undoubtedly pose a significant economic and social impact on the individual as well as their family. This loss of mobility severely affects an individual’s ability to commute

\textsuperscript{122} Act effective Sept. 28 2012, Am. Sub. S.B. No. 337, 2012 Ohio Laws 131 (modifying, among other things, the penalty for driving under suspension if that suspension was a penalty for a violation not directly involving the operation of a motor vehicle).

\textsuperscript{123} Memorandum from the office of Ohio State Senator Shirley Smith (Oct. 13, 2012) (on file with author). According to the memorandum, “most recently it has cost the state $121 million to provide legal defense to the indigent.” Id.

\textsuperscript{124} Id.

\textsuperscript{125} A Pattern of Suspicion: Dateline Investigates Claims of Racial Profiling (NBC Dateline 2004).

\textsuperscript{126} Meehan & Ponder, supra note 76, at 417.
to and from work and can further exacerbate an already precarious jobs-to-jobs-skills mismatch\textsuperscript{127} that exists in this and similar metropolitan regions, where many of the low- and semi-skilled industrial- and manufacturing-related jobs that remain are found in factories and warehouses located in industrial parks in suburbs on the urban periphery such as Brook Park and Westlake.

The disproportionate surveillance, stopping, and ticketing of black and minority motorists observed in this study, particularly in relation to driving under suspension, constitutes a form of domestic surveillance by local law enforcement comparable to the “sneak and peek” power Congress granted federal law enforcement under the PATRIOT Act to conduct investigations of target citizens without their knowledge.\textsuperscript{128} In this instance, the police, in their proactive efforts to predict, detect, and apprehend criminal activity, ostensibly operating under a stereotypical rationale of the disproportionate involvement in crime of blacks or minorities, are practicing a form of statistical discrimination that has “a disparate impact on African Americans” comparable to that found by the U.S. Department of Justice in their investigation of the Ferguson Police Department.\textsuperscript{129} As noted, this practice can have profound adverse social, economic, and legal consequences for black and minority motorists, which can further contribute to their disproportionate contact with the police, and, in turn, perpetual and potentially deeper involvement within the criminal justice system. Lastly, it also represents the persistent contradiction of these citizens’ Fourth and Fourteenth Amendment protections against “unreasonable search and seizure,” and of “equal protection under the law.” In essence, this is a less overt, high-tech, Jim Crow–like discrimination conducive for the information-age twenty-first century, facilitated by the dictates of \textit{Whren}.


\textsuperscript{129} U.S. DEPT. OF JUSTICE, CIVIL RIGHTS DIVISION, INVESTIGATION OF THE FERGUSON POLICE DEPARTMENT 63–70 (2015). The Cleveland Police Department came under a DOJ investigation for a pattern or practice of excessive use of force in 2013 and signed a consent decree with DOJ in May 2015. While the DOJ investigation did not examine racial profiling, the consent decree did include provisions to address racial profiling and biased policing, which was a salient theme voiced by the community during DOJ’s engagement with the community. Settlement Agreement at 10, United States v. City of Cleveland (No. 1:15-cv-01046). The empirical research in this case study was provided to DOJ investigators as well as other research studies of the CPD and testimony by this author.