Connecticut RACIAL PROFILING PROHIBITION PROJECT

STATE OF CONNECTICUT

TRAFFIC STOP DATA ANALYSIS AND FINDINGS, 2013-14

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This report was written by the Institute for Municipal and Regional Policy (IMRP) at Central Connecticut State University with the help of the Connecticut Economic Resource Center, Inc. (CERC). The authors from CERC applied the statistical tests known as the "Veil of Darkness," and "KPT Hit Rate." In addition to these statistical tests, CERC developed the descriptive statistics using the peer group methodology.

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FORWARD

> *Racial profiling sends the dehumanizing message to our citizens that they are judged by the color of their skin and harms the criminal justice system by eviscerating the trust that is necessary if law enforcement is to effectively protect our communities.*
>
> US Department of Justice
> June 17, 2003

Over the past fifteen years, racial profiling has been recognized as an issue of national, state, and local importance. Members of the public have increasingly questioned whether police officers target individuals based on their race, ethnicity, age, gender or membership in a protected class. Nationally, disparities found in traffic stops have come under scrutiny by the public, policymakers, and civil rights groups. Large disparities found in traffic enforcement have been long criticized by minority groups as unfair. As a result of this evolution of public consciousness, law enforcement agencies face an increased level of scrutiny from the public.

The March 2015 interim report of the President's Task Force on 21st Century Policing stated:

> *Trust between law enforcement agencies and the people they protect and serve is essential in a democracy. It is key to the stability of our communities, the integrity of our criminal justice system, and the safe and effective delivery of policing services.*

The analysis in this report is an important step towards fostering a transparent dialogue between law enforcement and the public at large in Connecticut. Although there has always been widespread public support for the equitable treatment of individuals across racial demographics, recent national headlines have brought this issue to the forefront of American consciousness and created a contentious national debate about policing practices. This report not only aligns with the goals of the President's Task Force on 21st Century Policing, but also comes at a time when the national debate surrounding fair policing has reached a crescendo. This report is intended to present the results from the analysis in the most transparent and unbiased manner possible. These results are presented in the hope of promoting a fact-based dialogue among police, policy makers, and the citizens of Connecticut.

In Connecticut, law enforcement agencies conduct approximately 650,000 traffic stops each year. Traffic stops are one of the most common encounters the public has with police. The data analysis in this report helps to improve the understanding of routine police interactions with Connecticut citizens. Those routine police interactions have a major effect on the public's view of police legitimacy. Legitimacy can be defined as a feeling of obligation to obey the law and to defer to the decisions made by legal authorities (Tyler and Fegan, 2008). There has been much research conducted over the last three decades on the importance of police legitimacy. The research indicates that the public cares as much about how police interact with them as they do about the outcomes that legal actions produce. People are more likely to obey the law when they believe those who are enforcing it have the legitimate authority to tell them what to do (Tyler, 1990).

Minority groups have historically expressed lower levels of trust and confidence in law enforcement. Conversely, although acknowledging that 'bad actors' do exist, law enforcement often feel as though legitimate police work can be mistakenly perceived as bias, or even overt racism. In

order to increase and sustain public trust and confidence in law enforcement we must take a hard look at any existing disparities in traffic stop data and address the causes for the disparities. Recently, the conversation has centered around the impact of unconscious bias on police behavior. The science of implicit bias indicates that it might be a cause of a disproportionate number of stops among minority drivers.

Rice and White (2010) describe unconscious bias in the following passage:

> *Social cognition theorists suggest that the primary way people simplify and manage complex flows of information is by reducing it into social categories. People tend to categorize themselves and others into groups automatically. When we lack unique identifying information about people, we tend to focus on obvious status characteristics such as sex, race, or age. Once people are categorized, racial and other stereotypes automatically and often unconsciously become activated and influence behavior.*

Training sponsored by the U.S. Department of Justice references early research on the psychology of bias indicating that prejudice is based on a person's negative attitudes towards groups and that the person with prejudice is aware of it (presented by Fridell, 2014). Bias that exists when the individual is aware of it is called "explicit bias." But bias in society has changed over the last several decades and is often more unconscious today. Bias can exist even in the most well intentioned individual because of a person's automatic tendency to categorize individuals. The lack of information about an individual reinforces our tendency to unconsciously rely on our group associations to complete the picture. Research has examined the manifestation of bias in various professional groups such as doctors, educators, prosecutors, and others.

The Justice Department's guidebook developed for its Fair and Impartial Policing Program describes implicit bias:

> *In policing, implicit bias might lead the line officer to automatically perceive crime in the making when she observes two young Hispanic males driving in an all-Caucasian neighborhood. It may manifest among agency command staff who decide (without crime-relevant evidence) that the forthcoming gathering of African American college students bodes trouble, whereas the forthcoming gathering of white undergraduates does not. Moving beyond racial and ethnic biases, implicit bias might lead an officer to be consistently "over vigilant" with males and low income individuals and "under vigilant" with female subjects or people of means. Where there is a crash with two different versions of what happened, implicit bias might lead the officer to believe the Caucasian man in the white shirt driving the expensive car as opposed to the Hispanic man in jeans driving a less expensive car.*
>
> *So the bad news is that prejudice remains widespread and manifests below consciousness, even in those of us who eschew, at a conscious level, prejudice and stereotypes. The good news comes from the large body of research that has identified how individuals can reduce their implicit biases or, at least, ensure that their implicit biases do not affect their behavior. Scientists have shown that implicit biases can be reduced through positive contact with stereotyped groups and through counter-stereotyping, whereby individuals are exposed to information that*

is the opposite of the cultural stereotypes about the group. Another set of remedies doesn't require that we rid ourselves of implicit biases that took a lifetime to develop. The social psychologists have shown that, with information and motivation, people can implement "controlled" (unbiased) behavioral responses that override automatic (discrimination promoting) associations and biases.

This report is evidence that Connecticut is well positioned to lead the nation in addressing the issue of racial profiling and increasing trust between the public and law enforcement. This achievement was made possible through the participation and cooperation of the Racial Profiling Prohibition Advisory Board members. These participants brought a variety of perspectives to the conversation and included members from Connecticut state government, state and local police, researchers, and civil rights advocacy groups.

A major component of the advisory board's work following this report will focus on the impact of implicit bias on modern policing. The information contained in this report will provide an initial foundation for an evolving dialogue around this important issue. Connecticut's data-driven approach allows the conversation to move beyond anecdotal and position-based views on the issue. An atmosphere of open-mindedness, empathy and honesty is necessary to successfully engage in a conversation about how to ensure fairness and justice in the criminal justice system that will ultimately lead to sustained police legitimacy.

When any part of the American family does not feel like it is being treated fairly, that's a problem for all of us. It's not just a problem for some. It's not just a problem for a particular community or a particular demographic. It means that we are not as strong as a country as we can be. And when applied to the criminal justice system, it means we're not as effective in fighting crime as we could be.

President Barack Obama
December 2014

EXECUTIVE SUMMARY OF FINDINGS

The Alvin W. Penn Racial Profiling Prohibition Act (Public Act 99-198) was first enacted in 1999 and prohibits racial profiling in the State of Connecticut. The law prohibits any law enforcement agency in the state from stopping, detaining, or searching motorists when the stop is motivated solely by considerations of the race, color, ethnicity, age, gender or sexual orientation of that individual (Connecticut General Statutes Sections 54-1l and 54-1m). In 2012 and 2013, the Connecticut General Assembly made several changes to this law to create a system to address concerns regarding racial profiling in Connecticut. In accordance with these changes, police agencies began collecting data pertaining to all traffic stops on October 1, 2013.

In 2012, the Racial Profiling Prohibition Project Advisory Board was established to advise the Office of Policy and Management (OPM) in adopting the law's standardized methods and guidelines. The Institute for Municipal and Regional Policy (IMRP) at Central Connecticut State University was tasked to help oversee the design, evaluation, and management of the racial profiling study mandated by Public Act No. 12-74 and Public Act No. 13-75, "An Act Concerning Traffic Stop Information." The project staff worked with the state's Criminal Justice Information System (CJIS) to develop a system to collect consistent and universal traffic stop information and submit it to CJIS electronically on a monthly basis.

The project staff enlisted the Connecticut Economic Resource Center, Inc. (CERC) to recommend and conduct an advanced statistical analysis of the data once the data collection system had been deemed to be operating sufficiently. The authors from CERC applied the statistical tests presented in Sections V and VI of the report. In addition, CERC developed and applied the peer group analysis presented along with the other descriptive measures in Section IV. The authors from IMRP conducted the analyses contained in Section IV of the report on the estimated driving population, resident only stops and state average. The body of the report represents collaboration between members from both organizations.

The statistical evaluation of policing data in Connecticut is an important step towards developing a transparent dialogue between law enforcement and the public at large. The release of this report is evidence that Connecticut is well positioned to lead the nation in addressing the issue of racial profiling and increasing trust between the public and law enforcement. Although the analysis and findings presented in this report were conducted through a collaboration between IMRP and CERC, the ability to conduct such an analysis is primarily attributable to the efforts of state policy makers and the Racial Profiling Prohibition Project Advisory Board. The advisory board brought a variety of perspectives to the conversation and included members from Connecticut state government, state and local police, researchers, and civil rights advocacy groups.

There are a total of 92 municipal police departments: 29 departments employing more than 50 officers, 50 employing between 20 and 50 officers, and 13 with fewer than 20 officers. State police are comprised of 13 distinct troops. Although there are an additional 81 jurisdictions that do not have organized police departments and are provided police services by the state police, either directly or through provision of resident troopers, these stops were categorized with their overarching state police troops. Additionally, a total of 13 special agencies have the authority to conduct traffic stops. This report presents the results from an analysis of the

620,000 traffic stops conducted by the aforementioned agencies during the 12-month study period from October 1, 2013 through September 30, 2014.[1]

E.1: THE METHODOLOGICAL APPROACH OF THE ANALYSIS

Assessing racial disparities in policing data has been used for the last two decades as a policy tool to evaluate whether there exists the possibility that racial bias is occurring within a given jurisdiction. Although there has always been widespread public support for the equitable treatment of individuals across racial demographics, recent national headlines have brought this issue to the forefront of American consciousness and created a national debate about policing practices. The statistical evaluation of policing data in Connecticut is one important step towards developing a transparent dialogue between law enforcement and the public at large. As such, it is the goal of this report to present the results of that evaluation in the most transparent and unbiased manner possible.

The research strategy underlying the statistical analysis presented in this report was developed with three guiding principles in mind. Each principle was considered throughout the research process and when selecting the appropriate results to display publicly. A better understanding of these principles helps to frame the results presented in the technical portions of the analysis. In addition, by presenting these principles at the onset of the report, readers have a better context to understand the framework of the approach.

> *Principle 1: Acknowledge that statistical evaluation is limited to finding racial and ethnic disparities that are indicative of racial and ethnic bias but that, in the absence of a formal procedural investigation, cannot be considered comprehensive evidence.*
>
> *Principle 2: Apply a holistic approach for assessing racial and ethnic disparities in Connecticut policing data by using a variety of approaches that rely on well-respected techniques from existing literature.*
>
> *Principle 3: Outline the assumptions and limitations of each approach transparently so that the public and policy makers can use their judgment in drawing conclusions from the analysis.*

The structure of the report is organized to lead the reader through a host of descriptive and statistical tests that vary in their assumptions and level of scrutiny. The idea behind this approach is to apply multiple tests as a screening filter for the possibility that any one test is producing inaccurate results.

- Sections I and II provide general background and the methodological approach used in the study.
- Section III: The analysis begins by first presenting the stop characteristics from the Connecticut policing data.
- Section IV: This section leads the reader through four descriptive measures that evaluate racial and ethnic disparities. There were seven distinct analytical tools used to evaluate whether racial and ethnic disparities exist in the policing data. The four techniques

[1] There were only 595,194 traffic stops used in the analysis because all stops made by Stamford were excluded due to technical issues and potential selection in the resulting sample.

contained in Section IV are descriptive in nature and should be viewed with a degree of caution.[2] These intuitive measures are less stringent than more sophisticated statistical tests, but provide a useful context from which to view the data. These techniques are extremely useful in helping to identify irregularities in the data and create a context that helps to better understand the results of the more advanced statistical techniques.

- Section V: This section analyzes racial and ethnic disparities in the rate of motor vehicle stops by applying a well-respected methodology known as the *Veil of Darkness*. The *Veil of Darkness* is a statistical technique that was developed by Jeffery Grogger and Greg Ridgeway (2006) and published in the *Journal of the American Statistical Association*. The *Veil of Darkness* examines a restricted sample of stops occurring during the "intertwilight window" and assesses relative differences in the ratio of minority to non-minority stops that occur in daylight as compared to darkness. The assumption being that if police officers wished to profile motorists, they would be more likely to do so during daylight hours when race and ethnicity are more easily discernible. The analysis described in this section is considered to be the most rigorous and broadly applicable of all the tests presented in this analysis.
- Section VI: This section assesses post-stop behavior, particularly the incidence of vehicular searches, by applying two estimation strategies. This section illustrates the application of an analysis of hit rates using the classic approach developed by Knowles, Persico and Todd (2001). Although some criticism has arisen concerning the technique, it contributes to an understanding of post-stop police behavior in Connecticut. In addition to this technique, a more recent contribution by Joseph Ritter (2013) that assesses the relative frequency of search rates across racial and ethnic groups is applied. Although the analytical techniques presented in Section VI are not as widely endorsed as the *Veil of Darkness*, they provide an additional statistically sound mechanism to contrast findings from Section V.

E.2: FINDINGS FROM THE ANALYSIS OF POLICING DATA, 2013-14

This section summarizes the findings from the analysis conducted in Sections IV, V and VI of the main report.

Aggregate Findings for Connecticut

A total of 13.5 % of motorists stopped during the analysis period were observed to be Black. A comparable 11.7 % of stops were of motorists from a Hispanic descent. The results from the *Veil of Darkness* analysis indicated that minority stops were more likely to have occurred during daylight hours than at night. The statistical disparity provides evidence in support of the claim that certain officers in the state are engaged in racial profiling during daylight hours when motorist race and ethnicity is visible. These results were robust to the addition of a variety of controls including time of day, day of the week, state traffic volume, department level fixed effects, and department volume controls. The results from the post-stop analysis confirm that the disparity carries through to post-stop behavior for Hispanics.

Although we find results at the state level, it is important to note that it is specific officers and departments that are driving these statewide trends. In an effort to better identify the source of these racial and ethnic disparities, each analysis was repeated at the department level.[3] The departments that were identified as having a statistically significant disparity are presumed to be

[2] The justification behind this cautionary note is presented in the introduction to Section IV.
[3] The post-stop analysis in Section VI could not be conducted for many departments because of an insufficient small sample size.

driving the statewide results. Although it is possible that specific officers within departments that were not identified may be engaged in racial profiling, these behaviors were not substantial enough to influence the department level results. It is also possible that a small number of individual officers within the identified departments are driving the department level trends.

The five departments identified to exhibit a statistically significant racial or ethnic disparity that may indicate the presence of racial and ethnic bias include:

Groton Town

The Groton municipal police department was observed to have made 23.7% minority stops of which 8.3% were Hispanic and 13.6% were Black motorists.[4] The results from the *Veil of Darkness* indicated that minority motorists, across all racial and ethnic categories, were more likely to have been stopped during daylight as opposed to darkness hours. The results were robust to the inclusion of a variety of controls and sample restriction that excluded equipment violations. Although the post-stop analysis could not be conducted due to an insufficient sample of vehicular searches, the analysis using the *Veil of Darkness* produced sufficiently strong results to make a determination that these results indicate the presence of a significant racial and ethnic disparity that is occurring in Groton. The results of these analyses indicate that further investigation into the source of the observed statistical disparity is warranted.

Granby

The Granby municipal police department was observed to have made 9% minority stops of which 2.8% were Hispanic and 5.7% were Black motorists. The results from the *Veil of Darkness* indicated that minority motorists, across all racial and ethnic categories, were more likely to have been stopped during daylight as opposed to darkness hours. The results were strongest in the sample that was restricted to motor vehicle violations and were potentially being masked by the inclusion of equipment violations in the combined sample. Although the post-stop analysis could not be conducted due to an insufficient sample of vehicular searches, the analysis using the *Veil of Darkness* produced sufficiently strong results to make a determination that these results indicate the presence of a significant racial and ethnic disparity that is occurring in Granby. The results of these analyses indicate that further investigation into the source of the observed statistical disparity is warranted.

Waterbury

The Waterbury municipal police department was observed to have made 64.8%[5] minority stops of which 33.2% were Hispanic and 32.3% were observed as Black motorists. The *Veil of Darkness* for the subsample of motor vehicle violations showed a marginally significant racial disparity across all racial definitions except for Hispanics alone. Minority motorists, for these demographic groups, were more likely to have been stopped during daylight as opposed to darkness hours. The results were strongest in the sample that was restricted to motor vehicle violations and were potentially being masked by the inclusion of equipment violations in the combined sample. The results of the post-stop analysis also indicated that minority motorists, as compared to their Caucasian counterparts, were being searched more frequently relative to the rate at which they were found with contraband. The results of the pre- and post-stop analyses both indicate the presence of a

[4] These results do not include stops for the police departments with jurisdiction over Groton Long Point or Groton City.

[5] The minority stop percentage is derived from all non-Caucasian drivers stopped, which does not include drivers identified as White and Hispanic.

significant racial and ethnic disparity that is occurring in Waterbury. The results of these analyses indicate that further investigation into the source of the observed statistical disparity is warranted.

State Police Troop C

State Police Troop C was observed to have made 15.2% minority stops of which 5.6% were Hispanic and 7.2% were observed to be Black motorists. The *Veil of Darkness* for the subsample of motor vehicle violations showed a significant racial disparity across all racial definitions. Minority motorists, for these demographic groups, were more likely to have been stopped during daylight as opposed to darkness hours. The results were stronger in the sample that was restricted to motor vehicle violations. The results of the post-stop analysis also indicated that minority motorists, as compared to their Caucasian counterparts, were being searched more frequently relative to the rate at which they were found with contraband. The results of the pre and post-stop analysis both indicate the presence of a significant racial and ethnic disparity that is occurring in State Police Troop C. The results of these analyses indicate that further investigation into the source of the observed statistical disparity is warranted.

Troop C covers 10 towns, five of which are resident trooper towns, including Mansfield. The 26 resident troopers assigned to these five towns represent the largest component of the Resident Trooper Program in the state. In addition, four of the five resident trooper towns employ a total of 24 full- or part-time constables to augment the law enforcement coverage provided by the resident troopers. Shift assignments are determined by the towns, not the State Police with the majority of the resident troopers assigned to the day shift. The interrelationship of these staffing patterns with overall Troop C operations is one of the factors that will be considered when further investigating the Troop C data for the source of the statistical disparity.

State Police Troop H

State Police Troop H was observed to have made 37.5% minority stops of which 13.5% were Hispanic and 22.5% were observed to be Black motorists. The *Veil of Darkness* for the subsample of motor vehicle violations showed a significant racial disparity across all racial definitions. Minority motorists, for these demographic groups, were more likely to have been stopped during daylight as opposed to darkness hours. The results were stronger in the sample that was restricted to motor vehicle violations. Although the post-stop analysis could not be conducted due to an insufficient sample of vehicular searches, the analysis using the *Veil of Darkness* produced sufficiently strong results to make a determination that these results indicate the presence of a significant racial and ethnic disparity that is occurring in State Police H. The results of these analyses indicate that further investigation into the source of the observed statistical disparity is warranted.

Departments Identified from Descriptive Analysis

In addition to the five departments identified to exhibit statistically significant racial or ethnic disparities that may indicate the presence of racial and ethnic bias, 12 departments were identified using the descriptive tests. The descriptive tests are designed as a screening tool to identify the jurisdictions where consistent disparities that exceed certain thresholds have appeared in the data. They compare stop data to four different benchmarks: (1) statewide average, (2) the estimated driving population, (3) resident-only stops, and (4) peer groups. Although it is understood that certain assumptions have been made in the design of each of the four measures, it is reasonable to believe that departments with consistent data disparities that separate them from the majority of other departments should be subject to further review and analysis with respect to the factors that may be causing these differences.

The other important factor is the relative size of the disparities. For this portion of the study, a threshold of 10 percentage points is the point at which a department's data is considered sufficient for identification. In a number of instances, the disparities were significantly above the threshold.

In seven departments the screening process shows stop data that exceeded the disparity threshold levels in at least three of the four benchmark areas as well as in a majority of the 12 possible measures. Those departments are (1) Wethersfield, (2) Hamden, (3) Manchester, (4) New Britain, (5) Stratford, (6) Waterbury, and (7) East Hartford. The project staff will continue to study the data and attempt to identify the factors that may be causing these differences. In addition, these departments should evaluate their own data to better understand any relevant patterns.

The screening process also detected an additional five departments whose stop data exceeded the disparity threshold levels in at least three of the four benchmarks, and six of the 12 possible measures. Those departments are (1) Meriden, (2) New Haven, (3) Newington, (4) Norwich and (5) Windsor. Going forward, the data for these five departments will continue to be monitored to determine whether any changes relative to the descriptive benchmarks indicate the need for further analysis.

E.3: CONCLUSIONS AND NEXT STEPS

The reporting elements included in the 2012 and 2013 revisions to the Alvin W. Penn Racial Profiling Prohibition Act represent one of the largest and most comprehensive efforts to collect policing data in any state in the nation or individual jurisdiction to date. The analysis in this report represents the application of a series of well-respected statistical techniques and the development of several useful descriptive statistics that help to better contextualize those findings. The data made available through this project, however, creates an opportunity to develop increasingly sophisticated statistical tests that build on those applied in this analysis and take advantage of the unique variables available in the dataset. This analysis of racial and ethnic disparities in Connecticut policing data is not the end of the process but should be considered the foundation for an ongoing dialogue.

This report makes it clear that racial and ethnic disparities do not, by themselves, provide conclusive evidence of racial profiling. Statistical disparities do, however, provide significant evidence of the presence of idiosyncratic data trends that warrant further analysis. Such further analysis could include propensity score matching, a sophisticated analytical technique that has been used to identify racial and ethnic disparities at the officer level. These analyses typically use propensity scores to match stops based on a multitude of observable characteristics. The researcher then constructs a benchmark for each officer by gathering a collection of the most similar stops and using it to compare the proportion of minority stops.

The analysis conducted in this report at the department level should serve as an initial step towards the identification of racial and ethnic disparities in policing data. The statistical disparities identified in the department level analysis could be driven by specific department-wide practices or by individual officers. An officer level analysis using propensity score matching can help distinguish between these two cases and better identify the sources of the observed disparities. That analysis would help to identify if individual officers are driving department level disparities and help to better target implicit bias training as well as other corrective measures.

As the project moves forward, this data will allow researchers to develop increasingly sophisticated statistical techniques that can help to better identify racial and ethnic disparities. Future reports

will also make available multiple years of data and allow the application of many statistical techniques to departments where the sample size was too small in this analysis. Additionally, future reports will be able to illustrate the progress of the state toward eliminating disparities in police traffic stops.

It is also highly recommended that all departments make a commitment to the Department of Justice sponsored training program on "Fair and Impartial Policing (FIP)." The FIP program was established to train police officers and supervisors on fair and impartial policing by understanding both conscious and unconscious bias. This program will be offered to police agencies throughout the state on an ongoing basis. The project staff will also work with the Police Officers Standard and Training Council to incorporate the FIP curriculum into recruit training.

Although further analysis and training are important, a major component of addressing racial profiling in Connecticut is bringing law enforcement officials and community members together in an effort to build trust by discussing relationships between police and the community. The project staff has conducted several public forums throughout the state to bring these groups together and will continue these dialogues into the foreseeable future. They serve as an important tool to inform the public of their rights and the role of law enforcement in serving their communities.

In the coming weeks, the project staff will publish a detailed guide of steps that can be taken by all law enforcement agencies to address disparities in their communities. As a potential model, we will look to the measures enacted by the Department of Justice in East Haven to address racial profiling. Data analysis can be a useful tool to identify a potential problem, but addressing it requires a number of large and small steps to be taken. Through its ongoing work with OPM in implementing the Alvin Penn Act, the IMRP is committed to working with all law enforcement agencies to make improvements that will lead to enhanced relationships between the police and community.

NOTE TO THE READER

The information presented in this report includes traffic stop data collected from October 1, 2013 through September 30, 2014 for 168 of 169 municipalities in Connecticut. Across these municipalities, there are 92 municipal police departments[6]. An additional 81 fall under State Police jurisdiction: 56 of those have resident state troopers and the other 25 are served by the State Police troops responsible for the town. Additionally, a total of 13 special agencies have the authority to conduct traffic stops.

The Stamford Police Department has been excluded from this data analysis. The Stamford Police Department reported conducting approximately 25,000 traffic stops during the 12-month period covered in this report. Unfortunately, the software program used to capture racial profiling data was not connected to the state data collection portal for all traffic stops. After discovering the problem, the project staff worked with the police department to manually secure the missing files. Review of the traffic stop data indicated that a large number of traffic stops were missing some component of the required information. Because of the high number of stops that were missing data, it is not appropriate to proceed with any analysis. The project staff has been working with the Stamford Police Department to re-train officers on proper data collection procedures and to connect their software to the state portal. We anticipate a full inclusion of Stamford data in next year's report. Please note that safeguards have been put in place for all departments that are connected to the state portal that prevent this error from occurring in other departments. Since Stamford is currently the only department not connected to the state portal, this is not a concern for the other agencies.

In addition a small number of agencies had technical difficulties implementing the electronic data collection system and did not begin collecting information on October 1, 2013. All outstanding technical issues were resolved with these departments. Those agencies are included in this analysis, but their data is for a limited time period. The agencies for which there is limited data are listed below along with the date when data collection began:

- New London Police Department(March 1, 2014)
- Suffield Police Department(April 1, 2014)
- West Haven Police Department (April 1, 2014)

Lastly, a software error for State Police and 23 municipal agencies prevented the proper recording of the Middle Eastern ethnicity designation. The error was part of a software setting that was corrected for data recorded beginning August 1, 2014. Due to the large number of errors, there is no analysis that includes Middle Eastern drivers in this report. Future reports will include this ethnic category.

[6] Groton has three distinct departments: Groton City, Groton Town, and Groton Long Point. In addition, Putnam has its own police department and is also under State Police jurisdiction

I. BACKGROUND

First enacted in 1999, Connecticut's anti-racial profiling law, the Alvin W. Penn Racial Profiling Prohibition Act (Public Act 99-198), prohibits any law enforcement agency from stopping, detaining, or searching any motorist when the stop is motivated solely by considerations of the race, color, ethnicity, age, gender or sexual orientation of that individual (Connecticut General Statutes Sections 54-1l and 54-1m). In 2012 and 2013, the Connecticut General Assembly made several changes to this law to create a system to address racial profiling concerns in Connecticut.

Through September 30, 2013, police agencies collected traffic stop information based on requirements outlined in the original 1999 Alvin W. Penn law. Beginning October 1, 2013, police agencies had to submit traffic stop data for analysis under the new methods outlined by the Office of Policy and Management (OPM), as required by the amended racial profiling prohibition law. The law also authorized the OPM secretary to order appropriate penalties (i.e., the withholding of state funds) when municipal police departments, the Department of Emergency Services and Public Protection (DESPP), and other police departments fail to comply.

In 2012, the Racial Profiling Prohibition Project Advisory Board was established to advise OPM in adopting the law's standardized methods and guidelines. The Institute for Municipal and Regional Policy (IMRP) at Central Connecticut State University was tasked to help oversee the design, evaluation, and management of the racial profiling study mandated by PA 12-74 and PA 13-75, "An Act Concerning Traffic Stop Information." The IMRP worked with the advisory board and all appropriate parties to enhance the collection and analysis of traffic stop data in Connecticut.

The National Highway Traffic and Safety Administration (NHTSA) provided resources for this project through a grant administered by the Connecticut Department of Transportation. The Racial Profiling Prohibition Project Advisory Board and the project staff have been meeting since May 2012 in an effort to outline a plan to successfully implement the requirements of the 2012 and 2013 legislation. The focus of the project's early phase was to better understand traffic stop data collection in other states. After an extensive review of best practices, working groups were formed and met monthly to discuss the different aspects of the project. These working groups included Data and System, Public Awareness, and Training work groups. The full advisory board held more than 20 meetings and the working groups met approximately 50 times.

The advisory board and IMRP also worked with law enforcement officials to create a data collection system that is efficient and not overly burdensome to the police collecting it, and that provides information that is easy to work with when it is submitted. Police agencies in Connecticut vary in their levels of sophistication and technological capacity with respect to how they collect and report data. The project staff worked with the state's Criminal Justice Information System (CJIS) to develop a system to collect consistent and universal traffic stop information and submit it to CJIS electronically on a monthly basis.

The IMRP developed and maintains a project website (www.ctrp3.org) that informs the public of the advisory board's activities, statewide informational forums, and related news items on racial profiling. The website includes meeting agendas and minutes, press releases, and links to register for events. The website is updated weekly. In addition to the project website, the IMRP partnered with the Connecticut Data Collaborative to publish all traffic stop data on a quarterly basis. The public can download the information in its original form or view summary tables for easy use. A full set of analytical tools will be available for more advanced users who are interested in data analysis.

Although much of the initial focus of this project was to develop a standardized method for data collection and analysis, there are other important components. The initiatives include a public awareness and education campaign, effective training for officers and departments, and a rigorous complaint process. Information about all of these initiatives is provided on the project website. These initiatives collectively represent different tools available to help educate and prevent the occurrence of racial profiling in policing. These tools were implemented in the hope of building and enhancing trust between communities and law enforcement in Connecticut.

In February 2014, the U.S. Department of Justice, Community Oriented Policing Services division, sponsored a train-the-trainer program in Connecticut on "Fair and Impartial Policing (FIP)." The FIP program was established to train police officers and supervisors on fair and impartial policing by understanding both conscious and unconscious bias. This program will be offered to police agencies throughout the state over the next year. The project staff will also work with the Police Officers Standard and Training Council to incorporate the FIP curriculum into recruit training.

Lastly, a major component of addressing racial profiling in Connecticut is bringing law enforcement officials and community members together to discuss relationships between police and the community. The project staff has conducted several public forums throughout the state to bring these groups together and will continue these dialogues in the foreseeable future. They serve as an important tool to inform the public of their rights and the role of law enforcement in serving their communities.

II: METHODOLOGICAL APPROACH UNDERLYING THE ANALYSIS

Assessing racial disparities in policing data has been used for the last two decades as a policy tool to evaluate whether racial bias exists within a given jurisdiction. Although there has always been widespread public support for the equitable treatment of individuals of all races, recent national headlines have brought this issue to the forefront of American consciousness and prompted a contentious national debate about policing practices. The statistical evaluation of policing data in Connecticut is one important step towards developing a transparent dialogue between law enforcement and the public at large. As such, this report's goal is to present the results of that evaluation in the most transparent and unbiased manner possible.

As the number of jurisdictions that have passed laws mandating the collection of policing data has increased, economists and statisticians have become involved in the process by providing new and increasingly sophisticated analytical techniques. Prior to the development of these empirical methods, traditional policing data assessments were based on population-based benchmarks. Although population-based benchmarks are still frequently applied in practice because of their intuitive appeal and inherent cost-effectiveness, these test statistics cannot withstand strict scrutiny as the only way to identify disparities. In an effort to achieve the goal of a transparent and unbiased evaluation, the analysis in this report applies a series of sophisticated econometric estimation methods as the primary diagnostic mechanism.

The research strategy underlying this statistical analysis was developed with three guiding principles in mind. Each principle was considered throughout the research process and when selecting the appropriate results to disseminate to the public. A better understanding of these principles helps to frame the results presented in the technical portions of the analysis. In addition, presenting these principles at the outset of the report gives readers a better context within which to understand the framework of the approach.

> *Principle 1: Acknowledge that statistical evaluation is limited to finding racial and ethnic disparities that are indicative of racial and ethnic bias but that, in the absence of a formal procedural investigation, cannot be considered comprehensive evidence.*
>
> *Principle 2: Apply a holistic approach for assessing racial and ethnic disparities in Connecticut policing data by using a variety of approaches that rely on well-respected techniques from existing literature.*
>
> *Principle 3: Outline the assumptions and limitations of each approach transparently so that the public and policy-makers can use their judgment in drawing conclusions from the analysis.*

This report is organized to lead the reader through a host of descriptive and statistical tests that vary in their assumptions and level of scrutiny. The intent behind this approach is to apply multiple tests as a screening filter for the possibility that any one test (1) produces false positive results or (2) indicates existing disparities. The analysis begins by first presenting the descriptive statistics from the Connecticut policing data along with several intuitive measures that evaluate racial and

ethnic disparities. These intuitive measures are considered less stringent tests, but provide a useful context for viewing the data.

The fifth section of this report analyzes racial and ethnic disparities in the rate of motor vehicle stops by applying a well-respected methodology colloquially known as the "Veil of Darkness." The last section assesses post-stop behavior, particularly the incidence of vehicular searches, by applying two estimation strategies. We conclude the report by summarizing our analysis of disparities in the rate of motor vehicle stops and post-stop behavior at the state and department levels. The findings presented in the conclusion draw from each of our evaluation mechanisms and identify only those departments where statistically significant racial and ethnic disparities across multiple tests are observed.

In short, we move forward with the overall goal of identifying the statistically significant racial and ethnic disparities in Connecticut policing data. A variety of statistical tests are applied to the data in the hope of providing a comprehensive approach based on the lessons learned from academic and policy applications. Our explanations of the underlying mechanisms and assumptions that underlie each of the tests are intended to provide policymakers and the public with enough information to assess the data and draw their own conclusions from the findings.

Finally, we emphasize the message that any statistical test is only truly capable of identifying racial and ethnic disparities. Such findings provide a mechanism to signal the potential of racial profiling; but they cannot, without further investigation, lead to the conclusion that racial profiling exists.

III: CHARACTERISTICS OF TRAFFIC STOP DATA

This section examines general patterns of traffic enforcement activities in Connecticut for the study period of October 1, 2013 to September 30, 2014. Statewide and agency activity information can be used to identify variations in traffic stop patterns and help law enforcement and local communities understand more about traffic enforcement. Although some comparisons can be made between similar communities, we caution against comparing agencies data in this section of the report. Please note that the tables included in this report present information for only a limited number of departments. Complete tables for all agencies are included in the technical appendix.

In Connecticut, more than 620,000 traffic stops were conducted during the 12-month study period.[7] Almost 59% of the total stops were conducted by the 91 municipal police departments, 37.5% of the total stops were conducted by state police, and the remaining 4% of stops were conducted by other miscellaneous policing agencies. Figure 1 shows the aggregate number of traffic stops by month along with each demographic category. As can be seen below, the volume of traffic stops has a seasonal variation pattern. However, the proportion of minority stops remains relatively consistent across the year.

Figure 1: Aggregate Traffic Stops by Month of the Year

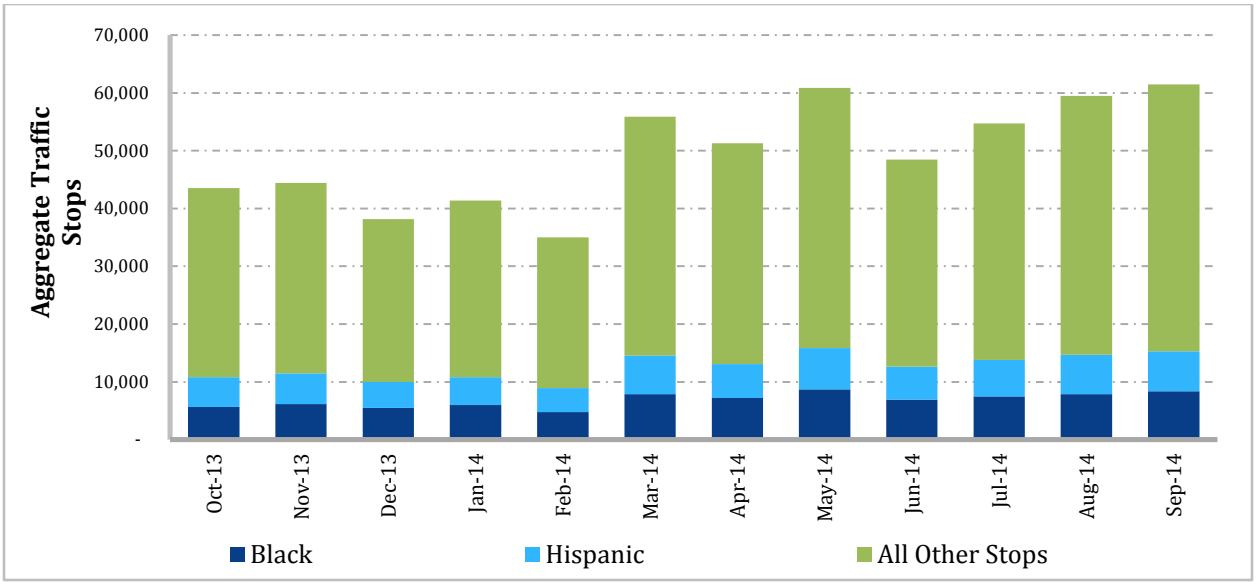
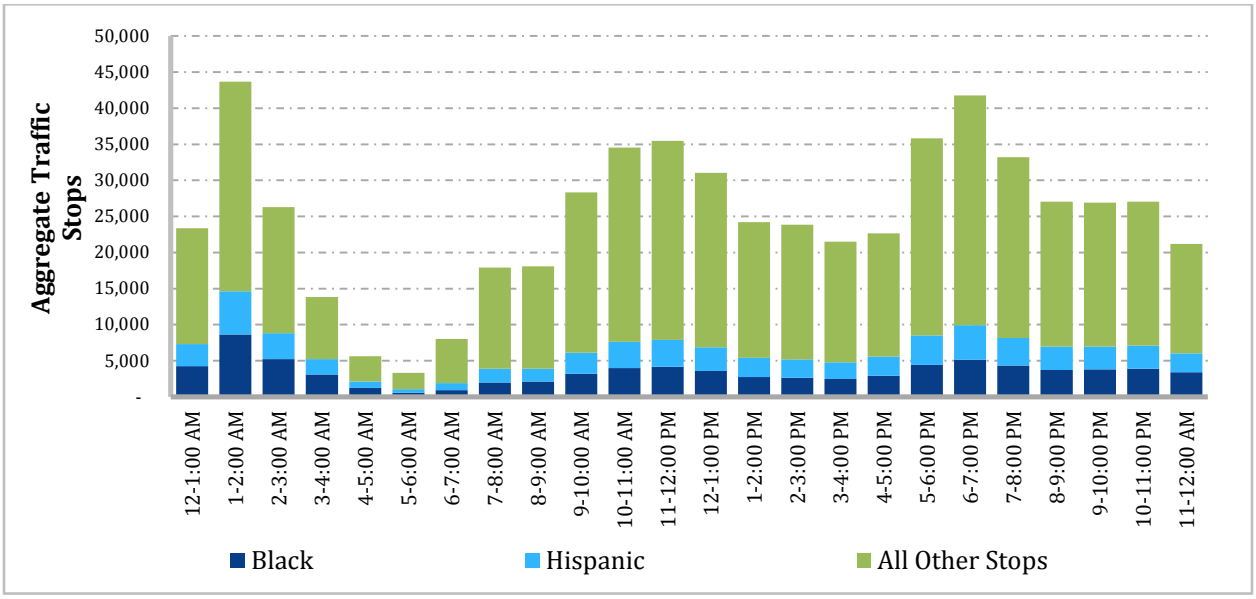


Figure 2 displays traffic stops by time of day for the entire analysis period. As can be seen from the figure, the total volume of traffic stops fluctuates significantly across different times of the day. The highest hourly volume of traffic stops in the sample occurred from one to two in the morning and accounted for 7.3% of all stops. It is not surprising that the volume of traffic stops increases between these hours as this is when liquor laws mandate that bars close in Connecticut and when law enforcement would be most likely to stop a driver. The lowest volume of traffic stops occurred between five and six in the morning and continued at a suppressed level during the morning commute. The low level of traffic stops during the morning commute is likely due to an interest in

[7] There were only 595,194 traffic stops used in the analysis because all stops made by Stamford were excluded due to technical issues and potential selection in the resulting sample.

maintaining a smooth flow of traffic during these hours. Discretionary traffic stops might be less likely to be made during these hours relative to others in the sample.

Figure 2: Aggregate Traffic Stops by Time of Day



The evening commute, in contrast to the morning commute, represents a period when a significant proportion of traffic stops are made. Although there is a large spike in traffic stops during one and two in the morning, the surge seen between the hours of five and eight at night represents the most significant period of traffic enforcement. In aggregate, stops occurring between these hours represented 18.6% of total stops. Interestingly, there seems to be a significant correlation between the proportion of minority stops and the overall volume of stops. In particular, the share of Hispanic and Black stops increase when the total volume of stops increase.

Figure 3: Average Number of Traffic Stops by Month for Police Agencies

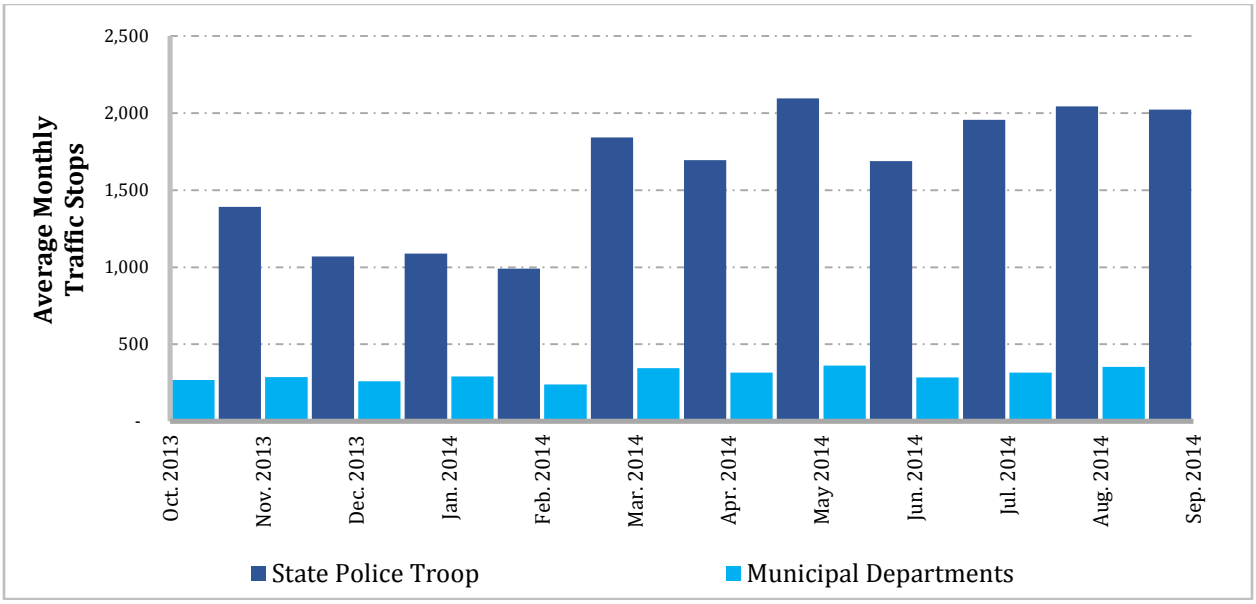


Figure 3 illustrates the average number of traffic stops by month for municipal police agencies and the State Police. The data illustrates a fairly stable pattern of municipal traffic stop enforcement with the average number of traffic stops ranging from 239 to 376 each month for each agency. State police traffic stops are less stable by month relative to the municipal departments and range from a low of 991 to a high of 2,096. This may be due to the nature of State Police traffic enforcement activity that fluctuates for a variety of reasons including enforcement campaigns around the holidays.

The level of and reason for traffic stop enforcement varies greatly across agencies throughout the state for a number of reasons. For example, some enforcement is targeted to prevent accidents in dangerous areas, combat increased criminal activity, or respond to complaints from citizens. Those agencies with active traffic units produce a higher volume of traffic stops. The rate of traffic stops per 1,000 residents in the population helps to compare the stop activity between agencies. The five municipal police agencies with the highest stop rate per 1,000 residents are Newtown, Berlin, Ridgefield, Westport, and Redding. Conversely, Shelton, Waterbury, Portland, Bridgeport, and Suffield have the lowest rate of stops per 1,000 residents. Table 1 shows the distribution of stops for the highest and lowest level of enforcement per 1,000 residents for police agencies.

Table 1: Municipal Police, Highest and Lowest Rates of Traffic Stops

Town Name	16+ Population*	Traffic Stops	Stops per 1,000 Residents
Connecticut	2,825,946	595,194	211
Municipal Departments with the Highest Rate of Traffic Stops			
Newtown	20,792	9,402	452
Berlin	16,083	6,644	413
Ridgefield	18,111	7,366	407
Westport	19,410	7,193	371
Redding	6,955	2,537	365
Derby	10,391	3,725	358
Woodbridge	7,119	2,465	346
Plainville	14,605	4,999	342
Old Saybrook	8,330	2,783	334
Ansonia	14,979	4,883	326
Municipal Departments with the Lowest Rate of Traffic Stops			
Shelton	32,010	618	19
Waterbury	83,964	1,742	21
Portland	7,480	160	21
Bridgeport	110,355	4,717	43
Suffield	12,902	556	43
Middlebury	5,843	266	46
Avon	13,855	667	48
Weston	7,255	410	57
Wolcott	13,175	797	60
East Haven	24,114	1,555	64

* The population 16 years of age and older was obtained from the United States Census Bureau 2010 Decennial Census.

Table 2 presents some basic demographic data on persons stopped in Connecticut between October 1, 2013 and September 30, 2014. Nearly two-thirds (63.9%) of drivers stopped were male and the vast majority of drivers (87.2%) were Connecticut residents. Of the stops conducted by police departments other than State Police 92.2% were Connecticut residents. Of the stops made by State Police 79.4% were Connecticut residents. About one-third (38%) of drivers stopped were under the age of 30 compared to 22% over 50. The vast majority of stops in Connecticut were White Non-Hispanic drivers (73.1%);13.5% were Black Non-Hispanic drivers; 11.7% were Hispanic drivers; and 1.8% were Asian/Pacific Islander Non-Hispanic and American Indian/Alaskan Native Non-Hispanic drivers.

Table 2: Statewide Driver Characteristics

Race and Ethnicity		Gender		Residency		Age	
White	73.1%	Male	63.9%	Connecticut Resident	87.2%	16 to 20	8%
						21 to 30	30%
Black	13.5%					31 to 40	19%
All Other Races	1.8%	Female	36.1%	Nonresident	12.8%	41 to 50	19%
						51 to 60	14%
Hispanic	11.7%					Older than 61	8%

Table 3 presents data on the characteristics of the traffic stops in the state. Most traffic stops were made for a violation of the motor vehicle laws (88%) as opposed to a stop made for an investigatory purpose. The most common violation drivers were stopped for was speeding (26.9%). After a driver was stopped, almost half (47.7%) were given a ticket while most of the remaining drivers received some kind of a warning (44.3%). The rate of tickets versus warnings differs greatly among communities and is a topic that is discussed later in this report. Statewide, less than 1% of traffic stops resulted in a Uniform Arrest Report and only 2.9% of stops resulted in a vehicle search.

Table 3: Statewide Stop Characteristics

Classification of Stop		Basis for Stop	
Motor Vehicle Violation	88.0%	Speeding	26.9%
Equipment Violation	9.8%	Registration	9.4%
Investigatory	2.2%	Cell Phone	9.0%
Outcome of Stop		Defective Lights	8.9%
Uniform Arrest Report	0.9%	Misc. Moving Violation	7.5%
Misdemeanor Summons	5.5%	Traffic Control Signal	6.7%
Infraction Ticket	47.7%	Stop Sign	5.8%
Written Warning	17.9%	Seatbelt	4.1%
Verbal Warning	26.4%	Display of Plates	2.9%
No Disposition	1.6%	Suspended License	1.3%
Vehicles Searched	2.9%	All Other	17.4%

Basis for Stop

In addition to the difference in the volume of traffic stops across communities, agencies stopped drivers for a number of different reasons. Police record the statutory reason for stopping a motor vehicle for every stop. Those statutes are then sorted into 13 categories from speeding to registration violation to a stop sign violation. For example, all statutory violations that are speed

related are categorized as speeding. Although speeding is the most often cited reason for stopping a motor vehicle statewide, the results vary by jurisdiction. Table 4 shows the top 10 departments where speeding (as a percentage of all stops) was the most common reason for the traffic stop.

Table 4: Highest Speeding Stop Rates across All Departments

Department Name	Total Stops	Speed Related
New Milford	4,049	63.0%
Suffield	556	62.9%
Portland	160	62.5%
Southington	5,395	52.9%
Newtown	9,402	49.9%
Ridgefield	7,366	47.4%
Guilford	2,711	46.3%
Weston	410	45.4%
Wolcott	797	44.8%
Simsbury	3,281	42.7%

The average municipal police department stops for speeding violations is 24.6% compared to the State Police average of 32.3%. Due to the nature of State Police highway operations, it is reasonable that its average for speeding is higher. In New Milford, Suffield, Portland, and Southington, more than 50% of the traffic stops were for speeding violations. On the other hand, Bridgeport, New London, Eastern Connecticut State University (ECSU), Yale University, and the State Capitol Police stopped drivers for speeding less than 5% of the time. The three special police agencies (ECSU, Yale, and State Capitol Police) have limited jurisdiction and it is reasonable that they are not stopping a high percentage of drivers for speeding violations. Registration violations have been cited as a low discretion reason for stopping a motor vehicle, particularly due to the increased use of license plate readers to detect registration violations. Statewide, 9.4% of all traffic stops are for a registration violation. Table 5 presents the top 10 departments with the highest percentage of stops for registration violations.

Table 5: Highest Registration Violation Rates across All Departments

Department Name	Total Stops	Registration Violations
Branford	6,891	24.6%
North Branford	1,340	23.7%
Trumbull	2,974	23.1%
Watertown	1,784	20.5%
Stratford	2,956	19.6%
Greenwich	8,041	19.6%
West Hartford	8,221	19.2%
Wilton	3,893	18.5%
Hamden	5,442	17.6%
Troop L	13,790	17.51%

Some Connecticut residents have expressed concern about the stops made for violations that are perceived as more discretionary in nature; therefore potentially making the driver more susceptible to possible police bias. Those stops are typically referred to as pretext stops and might include stops for defective lights, excessive window tint, or a display of plate violation each of

which, though a possible violation of state law leaves the police officer with considerable discretion with respect to actually making the stop. A statewide combined average for stopping drivers for any of these violations is 12.9%. Sixty-two municipal police departments exceeded that statewide average. The departments with the highest percentage of stops conducted for these violations are Wethersfield (33%), South Windsor (31.7%), Clinton (31.6%), Newington (31%), and Torrington (30.8%). None of the State Police troops exceeded the statewide average.

In communities with a larger proportion of stops due to these violations, it is recommended that the departments be proactive in discussing the reasons for these stops with members of the community and examine for themselves whether or not such stops produce disparate enforcement patterns.

Outcome of the Stop

Many have argued that it is difficult for police to determine the defining characteristics about a driver prior to stopping and approaching the vehicle. Similar to variations found across departments for the reason for the traffic stop, there are variations that occur with the outcome of the stop. These variations illustrate the influence that local police departments have on the enforcement of state traffic laws. Some communities may view infraction tickets as the best method to increase traffic safety, while others may consider warnings to be more effective. This analysis should help police departments and local communities understand their level and type of traffic enforcement when compared to other communities.

Table 6: Highest Infraction Rates across All Departments

Department Name	Total Stops	Infraction Ticket
Highest Municipal Departments		
Danbury	6,182	82.3%
Meriden	3,209	70.2%
Derby	3,725	68.6%
Department of Motor Vehicles	2,317	66.5%
Trumbull	2,974	64.2%
Hartford	8,254	61.9%
Branford	6,891	59.1%
Bridgeport	4,717	59.1%
Greenwich	8,041	58.4%
Norwalk	7,900	56.4%
Highest State Police Troops		
Non-Troop State Police	15,636	85.9%
Troop F	25,617	77.7%
Troop G	27,506	77.1%
Troop H	18,790	73.2%
Troop C	27,826	70.7%

Almost half (47.7%) of drivers stopped in Connecticut receive an infraction ticket, while 44.3% receive either a written or verbal warning. Individual jurisdictions vary in their post-stop enforcement actions. Danbury issued infraction tickets in 82.3% of all traffic stops, which is the highest in the state. Middlebury only issued infraction tickets in 1.1% of all traffic stops, which is the lowest rate in the state. For State Police, officers not assigned to a troop issued the highest

infractions (85.9%) and Troop B issued the lowest number of infractions (47.9%). Table 6 presents the highest infraction rates across all departments.

On the other hand, Putnam and Middlebury issued warnings 93% of the time (the highest rate) and Danbury issued warnings 13.4% of the time (the lowest rate). For State Police, Troop B issued the highest percentage of warnings (42.3%) and the group of officers not assigned to a troop issued the lowest percentage of warnings (9.9%).Table 7 presents the highest warning rates across all departments.

Table 7: Highest Warning Rates across All Departments

Department Name	Total Stops	Resulted in Warning
Highest Municipal Departments		
Putnam	2,308	92.9%
Middlebury	266	92.9%
Suffield	556	87.2%
Portland	160	86.9%
Plainfield	1,240	84.0%
West Haven	3,865	82.6%
Plymouth	2,610	82.2%
Thomaston	942	82.0%
Guilford	2,711	81.9%
Redding	2,537	81.0%
Highest State Police Troops		
Troop B	6,159	42.3%
Troop L	13,790	40.0%
Troop D	16,662	33.0%
Troop A	23,667	28.6%
Troop K	21,787	27.4%

Statewide, less than 1% of all traffic stops result in the driver being arrested. As with infraction tickets and warnings, municipal departments vary in the percentage of arrests associated with traffic stops. The New London police department issued the most uniform arrest reports from a traffic stop with 7.3% of all stops resulting in an arrest. West Hartford and Waterbury arrested more than 5% of all drivers stopped. The variation in arrest rates for State Police is much smaller across troop levels. In all State Police troops, the driver was arrested less than 1% of the time. Troop L conducted the most stops resulting in an arrest (0.9%). Table 8 presents the highest arrest rates across all departments.

Table 8: Highest Arrest Rates across All Departments

Department Name	Total Stops	Arrests
New London	1,524	7.3%
West Hartford	8,221	5.9%
Waterbury	1,742	5.3%
Canton	1,751	4.3%
Wallingford	9,178	3.7%
Hartford	8,254	3.4%
Plainfield	1,240	2.6%
Groton Town	6,252	2.5%
New Haven	11,159	2.4%
Farmington	4,525	2.1%

Rarely do traffic stops in Connecticut result in a vehicle being searched. During the study period, only 2.9% of all traffic stops resulted in a search. Although searches are rare in Connecticut, they do vary across jurisdictions and the data provides information about enforcement activity throughout the state. When they search a vehicle, officers must report, the supporting legal authority, and whether contraband was found. Forty-five departments exceeded the statewide average for searches, but the largest disparity was found in Waterbury (28.8%), Bridgeport (11.1%), and Milford (9.7%). Of the remaining departments, 23 searched vehicles more than 5% of the time, 33 searched vehicles between 2% and 5% of the time, and 36 searched vehicles less than 2% of the time. No State Police troops exceeded the statewide average for searches. The highest search rate was in Troop A (2.3%). Table 9 presents the highest search rates across all departments.

Table 9: Highest Searches Rates across All Departments

Department Name	Total Stops	Resulted in Search
Highest Municipal Departments		
Waterbury	1,742	28.8%
Bridgeport	4,717	11.1%
Milford	4,358	9.7%
New London	1,524	8.5%
West Hartford	8,221	8.2%
Derby	3,725	8.2%
Middletown	3,700	8.1%
Norwalk	7,900	8.0%
Yale University	1,050	7.5%
New Haven	11,159	7.5%
Highest State Police Troops		
Troop A	23,667	2.3%
Troop H	18,790	2.2%
Troop L	13,790	2.1%
Troop I	13,670	1.7%
Troop G	27,506	1.6%

IV: DESCRIPTIVE STATISTICS AND INTUITIVE MEASURES

This section presents a comparison between the department-level data and the state average and describes two benchmarks (Estimated Driving Population and Department Peer Groups) that enhance existing population-based methods. Although these benchmarks cannot provide a rigorous enough analysis to draw conclusions regarding racial profiling, they highlight those jurisdictions where disparities are significant enough to justify further analysis that attempts to find reasons for the disparity. Bias could be one explanation for such disparities, but not the only reason. As will be discussed in more detail, any benchmark approach contains implicit assumptions that must be recognized and understood. These benchmarks help to provide additional context to compare and contrast our findings using more the advanced econometric methods explained later in this report.

IV.A: PROBLEMS WITH APPROACHES USING TRADITIONAL BENCHMARKS

A traditional approach to evaluating racial and ethnic disparities in policing data has been to apply population-based benchmarks. Although these benchmarks vary in their construction, the general methodology is consistent. Typically, the approach amounts to using residential data from the U.S Census Bureau to compare with the rate of minority traffic stops in a given geographic jurisdiction. In recent years, researchers have refined this approach by adjusting the residential census data to account for things like commuter sheds, access to vehicles, and temporal data discontinuities. The population-based benchmark is an appealing approach for researchers and policymakers both because of its ease of implementation and intuitive interpretation. There are, however, numerous implicit assumptions that underlie the application of these benchmarks and are seldom presented in a transparent manner.

The goal of this analysis is to evaluate racial and ethnic disparities in the Connecticut policing data using both (1) intuitive measures that compare the data against uniformly applied benchmarks and (2) sophisticated econometric techniques that compare the data against itself without relying on benchmarks. The goal of this section is to clearly outline the assumptions that often accompany traditional benchmarks. We do, however, present two nontraditional benchmarks in this chapter that develop a more convincing approximation and can be used to descriptively assess the data. By presenting these benchmarks alongside our more econometric methods, we provide the context for our findings. In addition, the descriptive data presents jurisdictional information in cases where samples may be too small to provide statistically meaningful results from the more stringent tests.

Although there are a number of examples, the most prominent application of a population-based benchmark is a study by the San Jose Police Department (2002) that received a great deal of criticism. A more recent example is the report by researchers from Northeastern University (McDevitt et al. 2014) using Rhode Island policing data. Although adjusted and unadjusted population-based benchmarks can be intuitively appealing, they have drawn serious criticism from academics and policymakers alike because of the extent to which they are unable to account for all of the possible unobserved variables that may affect the driving population in a geography at any given time (Walker 2001; Fridell 2004; Persico and Todd 2004; Grogger and Ridgeway 2006; Mosher and Pickerill 2012). In an effort to clarify the implicit assumptions that underlie these approaches, an informal discussion of each is presented.

The implicit assumption that must be made when comparing the rate of minority stops in policing data to a population-based (or otherwise constructed) benchmark include the following.

Destination Commuter Traffic

The application of population-based benchmarks does not account for drivers who work but do not live in a given geography. Again, the application of population-based benchmarks implicitly assumes that the demographic distribution of destination commuter traffic, on average, matches the population-based benchmark. This assumption is trivial for geographies with low levels of industrial or commercial development where destination commuter traffic is small. On the other hand, areas with a high level of industrial or commercial development attract workers from neighboring geographies and this assumption becomes more tenuous. This differential impact creates a non-random distribution of error across geographies. While this shortcoming is impossible to avoid using population-based analysis, McDevitt et al. made a notable effort to promote this concept in 2004 by attempting to adjust static residential population demographics to create "estimated driving populations" for jurisdictions in Rhode Island. This study attempts to build on those earlier efforts to improve this approach.

Pass-through Commuter Traffic

A small but not insubstantial amount of traffic also comes from pass-through commuters. Although most commuter traffic likely occurs via major highways that form the link between origin and destination geographies, the commuter traffic in some towns likely contains a component of drivers who do not live or work in a given geography but must travel through the area on their way to work. As in the previous case, the application of a population-based benchmark must implicitly assume that the demographic distribution of these drivers matches the population-based benchmark. The distribution of error associated with this assumption is, again, very likely non-random. Specifically, it seems likely that a town's proximity to a major highway may impact the level of pass-through commuter traffic from geographies further away from the major highway and, as a result, affect the magnitude of the potential error. Unfortunately, little useful data exists to quantify the extent to which this affects any particular jurisdiction. Alternatives that survey actual traffic streams are prohibitively expensive and time-consuming to conduct on a statewide basis and, unfortunately, are subject to their own set of implicit assumptions that can affect distribution of error.

Recreational Traffic

Surges in recreational traffic are not accounted for in evaluation methods that utilize population-based benchmarks. In order to apply population-based benchmarks as a test statistic, it must be implicitly assumed that the demographic distribution of recreational traffic, on average, matches the population-based benchmark. Although these assumptions are not disaggregated as with commuter traffic above, this assumption must apply to both destination and pass-through commuter traffic. Although the assumption is troublesome on its face, it becomes more concerning when considering the distribution of the associated error. Specifically, recreational traffic likely has a differential effect across geographies and the error term is, as a result, non-random.

Differential Exposure Rates

The exposure rate can be defined as the cumulative driving time of an individual on the road. The application of a population-based benchmark must implicitly assume that exposure rates are, on average, equivalent across the demographic groups being examined. Although exposure rates may differ across demographic groups based on cultural factors that exclude quantification, there are

also many more factors that play an important role. An example might be the differences in age distribution across racial demographics. If a specific minority population is, on average, younger and younger drivers have a greater exposure rate than older drivers; then one might falsely attribute a racial or ethnic disparity across these groups when there is simply a difference in the aggregate exposure rate. Although census-based estimation methods exist to apply these demographically based exposure differences to a given population, they are best suited to situations where a single or very limited number of jurisdictions must be analyzed.

Temporal Controls

The lack of temporal controls in population-based benchmarks does not account for differences in the rate of stops across different times and days in the week. Assuming, that the above four assumptions hold and the population-based benchmark is representative of the demographic distribution of the driving population, then temporal controls are not an issue. However, if any of these assumptions do not hold, the lack of temporal controls may further magnify potential bias. Imagine that we believe that only the assumption pertaining to exposure rates is invalid. It seems plausible that younger drivers are more likely to drive on weekend evenings than older drivers. If more stops were being made on weekend evenings than during the week and, as described above, minority groups were more prevalent in younger segments of the population; then we might observe a racial or ethnic disparity simply because population-based benchmarks do not allow us to control for these temporal differences in policing patterns.

When one or more of the implicit assumptions associated with a population-based benchmark is violated, it can become a biased test statistic of racial disparities in policing data. Furthermore, since the source and direction of any such bias may be unknown, it can become difficult to determine if the possible bias is upward or downward, thus creating the potential for both false positive or false negative results. The bias might also be non-random across different geographies. Specifically, it becomes unclear how the magnitude or distribution of the non-random bias was distributed across the state. It might be that the bias disproportionately impacts urban areas compared to rural areas, tourist destinations compared to non-tourist destinations, geographies closer to highways, or based on similar policing patterns.

The question then becomes: If the assumptions inherent in population-based benchmarks make them less than ideal as indicators of possible bias, why include them in a statewide analysis of policing data? One answer is that excluding them as part of a multi-level analysis guarantees only that when they are inevitably used by others as a way to interpret the data, it is highly likely to be done inappropriately. Comparing a town's stop percentages to its resident populations in the same demographic groups may not be a good way to draw conclusions about its performance but, in the absence of better alternatives, it inevitably becomes the default method for making comparisons. Providing an enhanced way to estimate the impact commuters have on the driving population and primarily analyzing the stops made during the periods of the day when those commuters are the most likely to be a significant component of the driving population improves the comparisons that will be made beyond the default level and avoids some, though not all, of the implicit assumptions described earlier in this section.

Another answer to the question is that the population-based and other benchmarks are not used as indicators of bias, but rather as descriptive indicators for differentiating one town's data from another town's data. Since the purpose of this study is to uniformly apply a set of descriptive measures and statistical tests to all towns in order to identify possible candidates for more targeted analysis, having a broad array of possible applicable measures enhances the robustness of the

screening process. Relying solely on benchmarking to accomplish this would not be effective, but using these non-statistical methods to complement and enhance the more technical statistical treatments of the policing data results in a screening product that examines the data from the most possible angles.

The third answer to the question is that, particularly at this time when there is only a single year of data available to analyze, the benchmarks and intuitive measures developed for this study can be useful in cases where insufficient sample sizes make it difficult to draw meaningful conclusions from the statistical tests. The descriptive measures can serve a supportive role in this regard.

IV.B: STATEWIDE AVERAGE COMPARISON

Although it is relatively easy to compare individual town stop data to the statewide average, this can be misleading if done without regard to differences in town characteristics. If for example, the statewide average for a particular racial category of drivers stopped was 10% and the individual data for two towns was 18% and 38% respectively, a superficial comparison of both towns to the statewide average might suggest that the latter town, at 38%, could be performing less satisfactorily. However, that might not actually be the case if the town with the higher stop percentage also had a significantly higher resident population of driving age people than the statewide average. It is important to establish a context within which to make the comparisons when using the statewide average as a descriptive benchmark.

Comparing town data to statewide average data is frequently the first thing the public does when trying to understand and assess how a police department may be conducting traffic stops. Although these comparisons are inevitable and have a significant intuitive appeal, the reader is cautioned against basing any conclusions about the data exclusively upon this measure. In this section, a comparison to the statewide average is presented alongside the context necessary to understand the pitfall of interpreting these statistics on face value.

The method chosen to make the statewide average comparison is as follows:

- The towns' that exceeded the statewide average for the three racial categories being compared to the state average were selected.
- The amount that each town's stop percentage exceeded the state average stop percentage was determined.
- The amount that each town's resident driving age population exceeded the state average for the racial group being measured was determined.
- The net differences in these two measures was determined and used to assess orders of magnitude differences in these factors.

While it is clear that a town's relative proportion of driving age residents in a racial group is not, in and of itself, capable of explaining differences in stop percentages between towns, it does provide a simple and effective way to establish a baseline for all towns from which the relative differences between town stop numbers become more apparent. To provide additional context, two additional factors were identified: (1) if the town shares a border with one or more towns whose 16 and over resident population for that racial group exceeds the state average and (2) the percentage of nonresident drivers stopped for that racial group, in that town.

In the sections that follow, there are identifications for each of the three categories (Black, Hispanic, and Minority) in the towns for which this process indicated the largest distances between the net stop percentage and net resident population using 10 or more points as a threshold. Tables

showing the calculations for all of the towns, rather than just those showing distance measures of more than 10 points can be found in the Appendix to this report. Readers should note that this section focuses entirely on towns that exceeded the statewide average for stops in these racial groups.

Comparison of Black Drivers to the State Average

For the study period from October 1, 2013 through September 30, 2014, the statewide percentage of drivers stopped by police who were identified as Black was 13.5 %. A total of 29 towns stopped a higher percentage of Black drivers than the state average, 11 of which exceeded the statewide average by more than 10 percentage points. Five towns exceeded the statewide average by very small margins (1.5 percentage points or less). The statewide average for Black residents (16+) is 9.1%. Of the 29 towns that exceeded the statewide average for Black drivers stopped, 16 also have Black resident populations (16 +) that exceeded the statewide average.

After the stop and resident population percentages were adjusted using the method described above, a total of six towns were found to have a relative distance between their net Black driver stop percentage and net Black population percentage of more than 10 points. These were Hamden, Manchester, Orange, Stratford, Wethersfield, and Woodbridge. Table 10 shows the data for these six towns. Two other towns, Trumbull and Waterbury, fell just below the 10-point threshold at 9.6 and 9.3 points respectively. They are not included in Table 10 but their data can be found along with the rest of the 29 towns in the Appendix of this report.

Each of the six towns has at least one contiguous town with a resident Black population that exceeds the state average. Hamden borders New Haven; Stratford borders Bridgeport; and Manchester borders East Hartford. Woodbridge borders three such towns (New Haven, Hamden, and Ansonia). Wethersfield borders Hartford and East Hartford. Orange borders New Haven and West Haven.

In three of the six towns, Woodbridge, Wethersfield, and Orange, more than 90% of the Black drivers who were stopped were not residents of the town. The statewide average for stopped Black drivers who were not residents of the town in which they were stopped was 58.2%.

Table 10: Statewide Average Comparisons for Black Drivers for Selected Towns

Municipal Department	Black Stops	Difference Between Town and State Average	Black Residents Age 16+	Difference Between Town and State Average	Distance Between Net Differences	Nonresident Black Stops
Hamden	38.0%	24.5%	18.3%	9.2%	15.4%	55.3%
Stratford	28.9%	15.4%	12.8%	3.6%	11.8%	61.6%
Manchester	24.6%	11.1%	10.2%	1.0%	10.1%	52.6%
Woodbridge	18.7%	5.2%	1.9%	-7.2%	12.4%	95.7%
Wethersfield	18.6%	5.1%	2.8%	-6.4%	11.5%	90.1%
Orange	17.3%	3.8%	1.3%	-7.8%	11.6%	97.4%
Connecticut	13.5%	0.0%	9.1%	0.0%	NA	58.2%

Comparison of Hispanic Drivers to the Statewide Average

For the study period from October 1, 2013 through September 30, 2014, the statewide percentage of drivers stopped by police who were identified as Hispanic was 11.7%. A total of 33 towns stopped a higher percentage of Hispanic drivers than the state average, nine of which exceeded the

statewide average by more than 10 percentage points. Twelve of the 33 towns exceeded the statewide average by 1.5 percentage points of less.

The statewide average for Hispanic residents (16+) was 11.9%. The ratio of stopped Hispanic drivers to Hispanic residents (16 +) on a statewide basis was nearly equal (11.7% Hispanic drivers' stopped/11.9% Hispanic residents). Of the 33 towns that exceeded the statewide average for Hispanic drivers stopped, 15 also have Hispanic resident populations (16 +) that exceeded the statewide average, although Stratford's Hispanic population exceeded the average by only 0.01%.

After the stop and resident population percentages were adjusted using the method described above, a total of seven towns were found to have a relative distance between their net Hispanic driver stop percentage and net Hispanic population percentage of more than 10 points. The seven towns were Berlin, Darien, Greenwich, New Britain, Newington, Trumbull, and Wethersfield. Table 11 shows the data for the seven towns. Two additional towns, Wilton and Orange, fell just below the 10-point threshold at 9.9 and 9.8 points respectively. They are not included in Table 11 but their data can be found along with the rest of the 29 towns in the Appendix of this report.

Six of the seven towns have at least one contiguous town with a resident Hispanic population (16 +) that exceeds the state average. New Britain does not share a border with such a town. Each of the other six towns borders two such towns as follows: Wethersfield (Hartford and East Hartford), Newington (Hartford and New Britain), Greenwich (Stamford and Port Chester NY), Trumbull (Stratford and Bridgeport), Darien (Stamford and Norwalk) and Berlin (New Britain and Meriden).

In four of the seven towns, Wethersfield, Trumbull, Darien, and Berlin, more than 90% of the Hispanic drivers stopped were not residents of the town. The nonresident stop rate for Hispanic drivers in Newington was over 86%. Conversely, less than 18% of the Hispanic drivers stopped in New Britain were nonresidents. The statewide average for stopped Hispanic drivers who were not residents of the town in which they were stopped was 58.3 %.

Table 11: Statewide Average Comparisons for Hispanic Drivers for Selected Towns

Municipal Department	Hispanic Stops	Difference Between Town and State Average	Hispanic Residents Age 16+	Difference Between Town and State Average	Distance Between Net Differences	Non-Residents Hispanic Stops
New Britain	45.0%	33.4%	31.8%	19.8%	13.5%	17.4%
Wethersfield	30.7%	19.1%	7.1%	-4.8%	23.9%	90.9%
Newington	20.8%	9.2%	6.4%	-5.5%	14.7%	86.4%
Greenwich	19.0%	7.3%	9.2%	-2.8%	10.1%	75.3%
Trumbull	16.2%	4.5%	5.1%	-6.9%	11.4%	92.1%
Darien	15.8%	4.1%	3.5%	-8.4%	12.6%	92.8%
Berlin	13.0%	1.3%	2.7%	-9.2%	10.6%	94.4%
Connecticut	11.7%	0.0%	11.9%	0.0%	NA	58.3%

Comparison of Minority Drivers to the State Average

The final category involves all drivers classified as "Minority." This Minority category includes all racial classifications except for white drivers. Specifically it covers Blacks, Hispanics, Asian/Pacific Islander, American Indian/Alaskan Native, and Other Race classifications included in the census data.

For the study period from October 1, 2013 through September 30, 2014, the statewide percentage of stopped drivers who were identified as Minority was 26.9%. A total of 30 towns stopped a higher percentage of Minority drivers than the state average, 17 of which exceeded the state average by more than 10 percentage points.

The statewide average for Minority residents (16+) was 25.2%. Of the 30 towns that exceeded the statewide average for Minority drivers stopped, 19 also have Minority resident populations (16 +) that exceeded the statewide average.

After the stop resident population percentages were adjusted using the method described above, a total of 15 towns were found to have a relative distance between their net Minority driver stop percentage and net Minority driving age population percentage of more than 10 points. Table 12 shows the data for these 15 towns. The complete data for all 30 towns can be found in the Appendix to this report.

All but three of the towns have at least one contiguous town with a resident Minority driving age population that exceeds the state average, including West Hartford and Woodbridge with three such towns and South Windsor with four. Wethersfield, Newington Trumbull, Orange, and Darien border two such towns. Hamden, Stratford, Manchester, and Groton border one such town. Waterbury, New Britain and Meriden have no such contiguous towns.

Eight of the 15 towns reported more than 80% of the stops of Minority drivers involved nonresidents. Two towns, Waterbury and New Britain, reported less than 25% nonresidents among the Minority drivers stopped. The statewide average for stopped Minority drivers who were not residents of the town in which they were stopped was 58.3 %.

Table 12: Statewide Average Comparisons for Minority Drivers for Selected Towns

Municipal Department	Minority Stops	Difference Between Town and State Average	Minority Residents Age 16+	Difference Between Town and State Average	Distance Between Net Differences	Non-Residents Minority Stops
Waterbury	64.8%	37.9%	48.1%	22.9%	15.0%	11.0%
New Britain	63.4%	36.4%	45.0%	19.8%	16.7%	21.6%
Wethersfield	50.9%	23.9%	12.5%	-12.8%	36.7%	90.1%
Meriden	48.1%	21.2%	34.9%	9.6%	11.5%	21.2%
Hamden	47.3%	20.4%	30.9%	5.7%	14.7%	56.6%
Stratford	47.1%	20.2%	27.2%	2.0%	18.2%	63.9%
Manchester	43.4%	16.5%	28.0%	2.7%	13.7%	51.4%
Newington	37.6%	10.7%	14.5%	-10.7%	21.4%	84.8%
Trumbull	34.9%	7.9%	11.9%	-13.3%	21.2%	90.0%
West Hartford	34.4%	7.4%	21.8%	-3.4%	10.9%	83.1%
Groton City	32.4%	5.5%	20.4%	-4.8%	10.3%	58.5%
Orange	32.1%	5.1%	10.8%	-14.5%	19.6%	95.2%
South Windsor	29.8%	2.9%	14.6%	-10.6%	13.5%	82.3%
Darien	29.6%	2.7%	7.2%	-18.1%	20.8%	93.7%
Woodbridge	28.4%	1.5%	12.8%	-12.4%	13.9%	94.0%
Connecticut	26.9%	0.0%	25.2%	0.0%	NA	58.3%

Special Police Departments

This section briefly discussed the data from those special police departments whose stop data exceeded the statewide averages for Black, Hispanic, or Minority drivers. It is important to note that currently there is no effective method for benchmarking the data from these special departments due to their operations unique characteristics. However, since many of these departments are situated in urban environments, the population demographics for the municipalities which host them can serve as a proxy benchmark provided it is viewed with caution. Conclusions should not be drawn for these departments until appropriate benchmarks have been determined.

In the following five special departments, stops for Black drivers exceeded the statewide average: (1) Department of Motor Vehicle (15.3%), (2) Central Connecticut State University (16.8%), (3) State Capitol Police (25.1%), (4) Yale University (37.9%), and (5) Southern Connecticut State University (52.2%). The Department of Motor Vehicle only exceeded the statewide average by 1.8% and the State Capitol Police made only 275 stops which is marginal with respect to yielding valid percentage distributions. The remaining three agencies made a sufficient number of stops to yield valid percentage distributions.

With regard to Hispanic drivers, four special departments exceeded the statewide average for Hispanic stops: (1) Western Connecticut State University (23.7%), (2) State Capitol Police (23.6%), (3) Central Connecticut State University (14.7%), and (4) Yale University (11.9%). Western Connecticut State University did not conduct a sufficient number of stops to yield a valid percentage. Yale University exceeded the statewide average by an insignificant amount (0.3%) and the remaining two agencies did not yield disparities when applied to the host town's population.

Lastly, six special departments exceeded the statewide average for all Minority stops: (1) Department of Motor Vehicles (27.0%), (2) Southern Connecticut State University (61.9%), (3) Yale University (53.1%), (4) State Capitol Police (50.6%), (5) Western Connecticut State University (42.1%), and (6) Central Connecticut State University (32.9%). The Department of Motor Vehicle exceeded the statewide average by an insignificant amount (0.1%) and Western Connecticut State University did not conduct a significant number of stops to yield a valid percentage. When compared to the demographics of the host town the results show no disparities.

While several special departments exceeded the statewide stop average for drivers in one or more of the three demographic categories, only the stops made by the Southern Connecticut State University (SCSU) police department involving Black drivers is worth noting. While this data shows a disparity above the 10-point threshold applied to municipal departments when using the New Haven demographics as a proxy benchmark, it should be viewed differently due to the relatively small number of stops made by SCSU and the comparison to the New Haven demographic data. It is suggested that the SCSU data involving Black stops continue to be monitored and that the department review its data to determine any factors that may be influencing these numbers.

IV.C: ESTIMATED DRIVING POPULATION COMPARISON

Adjusting "static" residential census data to approximate the estimated driving demographics in a particular jurisdiction provides a more accurate benchmark method than previous census-based approaches. At any given time, nonresidents may use any road to commute to work, or travel to and from entertainment venues, retail centers, tourist destinations, etc. in a particular town. It is impossible to account for all driving in a community at any given time, particularly for the random, itinerant driving trips sometimes made for entertainment or recreational purposes. However, residential census data can be modified to create a reasonable estimate of the possible presence of

many nonresidents likely to be driving in a given community because they work there and live elsewhere. This methodology is an estimate (not an exact count) of the composition of the driving population during typical commuting hours.

Previously, the most significant effort to modify census data was conducted by Northeastern University's Institute on Race and Justice. The institute created the estimated driving population (EDP) model for traffic stop analyses in Rhode Island and Massachusetts. A summary of the steps used in the analysis is shown below in Table 13.

Table 13: Northeastern University Institute on Race and Justice Methodology for EDP Models in Rhode Island and Massachusetts

Step 1	Identify all the communities falling within a 30 mile distance of a given target community. Determine the racial and ethnic breakdown of the resident population of each of the communities in the contributing pool.
Step 2	Modify the potentially eligible contributing population of each contributing community by factoring in (a) vehicle ownership within the demographic, (b) numbers of persons within the demographic commuting more than 10 miles to work, and (c) commuting time in minutes. The modified number becomes the working estimate of those in each contributing community who may possibly be traveling to the target community for employment.
Step 3	Using four factors (a) percentage of state employment, (b) percentage of state retail trade, (c) percentage of state food and accommodation sales, and (d) percentage of average daily road volume, rank order all communities in the state. Based on the average of all four ranking factors, place all communities in one of four groups thus approximating their ability to draw persons from the eligible nonresident pool of contributing communities.
Step 4	Determine driving population estimate for each community by combining resident and nonresident populations in proportions determined by which group the community falls into as determined in Step 3. (Range: 60% resident/40% nonresident for highest category communities to 90% resident/10% nonresident for lowest ranking communities)

Although the EDP model created for Rhode Island and Massachusetts is a significant improvement in creating an effective benchmark, limitations of the census data at the time required certain assumptions to be made about the estimated driving population. They used information culled from certain transportation planning studies to set a limit to the towns they would include in their potential pool of nonresident commuters. Only those towns located within a 30 minute driving time of a target town were included in the nonresident portion of the EDP model. This approach assumed only those who potentially could be drawn to a community for employment, and did not account for how many people actually commute. Retail, entertainment, and other economic indicators were used to rank order communities into groups to determine the percentage of nonresident drivers to be included in the EDP. A higher rank would lead to a higher percentage of nonresidents being included in the EDP.

Since development of the Rhode Island and Massachusetts model, significant enhancements were made to the U.S. Census Bureau data. It is now possible to get more nuanced estimates of those who identify their employment location as somewhere other than where they live. Since the 2004 effort by Northeastern University to benchmark Rhode Island and Massachusetts data, the Census Bureau has developed new tools that can provide more targeted information that can be used to create a more useful estimated driving population for analyzing weekday, daytime traffic stops.

The source of this improved data is a database known as the LEHD Origin-Destination Employer Statistics (LODES). LEHD is an acronym for "Local Employer Household Dynamics" and is a partnership between the U.S. Census Bureau and its partner states. LODES data is available through an on-line application called *OnTheMap* operated by the Census Bureau. The data estimates where people work and where workers live. The partnership's main purpose is to merge data from workers with data from employers to produce a collection of synthetic and partially synthetic labor market statistics including LODES and the Quarterly Workforce Indicators.

Under the LEHD Partnership, states agree to share Unemployment Insurance earnings data and the Quarterly Census of Employment and Wages data with the Census Bureau. The LEHD program combines the administrative data, additional administrative data, and data from censuses and surveys. From these data, the program creates statistics on employment, earnings, and job flows at detailed levels of geography and industry. In addition, the LEHD program uses these data to create workers' residential patterns. The LEHD program is part of the Center for Economic Studies at the U.S. Census Bureau.

It was determined that the data available through LODES, used in conjunction with data available in the 2010 census, could provide the tools necessary to create an advanced EDP model. The result was the creation of an individualized EDP for each of the 169 towns in Connecticut that reflects, to a certain extent, the estimated racial and ethnic demographic makeup of all persons identified in the data as working in the community but residing elsewhere. Table 14 shows the steps in this procedure.

Table 14: Central Connecticut State University Institute for Municipal and Regional Policy Methodology for EDP Model in Connecticut

Step 1	For each town, LODES data was used to identify all those employed in the town, but residing in some other location regardless of how far away they lived from the target community.
Step 2	ACS* five-year average estimated data was used to adjust for individuals commuting by some means other than driving, such as those using public transportation.
Step 3	For all Connecticut towns contributing commuters, racial and ethnic characteristics of the commuting population were determined by using the jurisdictions' 2010 census demographics.
Step 4	For communities contributing more than 10 commuters who live outside of Connecticut, racial and ethnic characteristics of the commuting population were determined using the jurisdictions' 2010 census demographics.
Step 5	For communities contributing fewer than 10 commuters who live outside of Connecticut, racial and ethnic characteristics of the commuting population were determined using the demographic data for the county in which they live.
Step 6	The numbers for all commuters from the contributing towns were totaled and represent the nonresident portion of the given town's EDP. This was combined with the town's resident driving age population. The combined nonresident and resident numbers form the town's complete EDP.
Step 7	To avoid double counting, those both living and working in the target town were counted as part of the town's resident population and not its commuting population.

*American Community Survey, U.S. Census Bureau

Structured in this way, each town's EDP should reflect an improved estimate of the racial and ethnic makeup of the driving population who might be on a municipality's streets at some time during a

typical weekday/daytime period. The more sophisticated methodology central to the LODES data should make this EDP, even with its inherent limitations, superior to previous uses of an EDP model. To an extent, it mirrors the process used by the Census Bureau to develop from ACS estimates the commuter-adjusted daytime populations (estimates of changes to daytime populations based on commutation for employment) for minor civil divisions in several states, including Connecticut. This type of data is subject to a margin of error based on differing sample sizes and other factors. For the estimated daytime populations the Census Bureau calculated for 132 Connecticut communities, it reported margins of error ranging from 1.1% (Bridgeport) to 9.6% (East Granby). The average margin of error for all 132 towns was 3.7%.

It is important to understand that the EDPs used in this report are a first attempt to use this tool in assessing traffic stop data. Much of the data used to create the EDPs comes from the same sources the Census Bureau used to create its commuter-adjusted daytime population estimates so it is reasonable to expect a similar range in the margins of error in the EDP. While the limitations of the model must be recognized, its value as a new tool to help understand some of the traffic stop data should not be dismissed. It represents a significant improvement over the use of resident census demographics as an elementary analytical tool and it can hopefully be improved as the process of analyzing stop data progresses.

It was determined that a limited application of the EDP can be used to asses stops that occur during typical morning and evening commuting periods, when the nonresident workers have the highest probability of actually being on the road. Traffic volume and populations can change significantly during peak commuting hours. For example, Bloomfield has a predominately Minority resident population (61.5%). According to *OnTheMap*, 17,007 people work in Bloomfield, but live somewhere else and we are estimating that about 73% of those people are likely to be white. The total working population exceeds the driving age resident population of 16,982 and it is reasonable to assume that the daytime driver population would change significantly due to workers in Bloomfield. According to the ACS Journey to Work survey, 73% of Connecticut residents travel to work between 6:00am and 10:00am. The census currently does not have complete state level data on residents' travel from work to home. In the areas where evening commutation information is available, it is consistently between the hours of 3:00pm and 7:00pm. In addition to looking at census information to understand peak commuting hours, the volume of nonresident traffic stops in several Connecticut communities was also reviewed; based on our theory that the proportion of nonresidents stopped should increase during peak commuting hours.

The only traffic stops included in this analysis were stops conducted Monday through Friday from 6:00am to 10:00am and 3:00pm to 7:00pm (peak commuting hours). Overall, when compared to their respective EDP, 66 departments had a disparity between the Minorities stopped and the proportion of non-whites estimated to be in the EDP. For many of these departments the disparity was very small (less than five percentage points). In the remaining 25 communities, the disparity was negative meaning that more whites were stopped than expected in the EDP numbers. However, the negative disparities were also very small in most communities. There were 81 departments with a disparity for Black drivers stopped and 61 departments with a disparity for Hispanic drivers stopped when compared to the respective EDPs. Because there are margins of error inherent in the EDP estimates, we believe that a reasonable threshold for determining if a department shows a disparity in its stops should be when the difference between its stop and its EDP percentages exceeds 10 percentage points. Therefore, the following table identifies all departments where the percentage of stops made in any of the three categories: (1) Minority (all race/ethnicity), (2) Black non-Hispanic and (3) Hispanic exceeded the EDP by more than 10 percentage points.

Table 15: Highest Ratio of Stops to EDP

Department Name	Number of Stops	Stops	EDP	Absolute Difference	Ratio
Minority (All Non-White)					
Wethersfield	1,521	47.5%	16.4%	31.1%	2.9
New Britain	1,390	62.1%	39.0%	23.1%	1.6
East Hartford	3,015	62.6%	40.1%	22.5%	1.6
Stratford	611	44.4%	27.2%	17.2%	1.6
Trumbull	1,203	34.9%	18.2%	16.7%	1.9
New Haven	2,454	63.3%	46.6%	16.7%	1.4
Waterbury	491	55.6%	39.8%	15.8%	1.4
Newington	1,728	32.2%	17.1%	15.1%	1.9
Hartford	3,216	63.5%	48.8%	14.7%	1.3
Manchester	804	40.3%	26.2%	14.2%	1.5
Darien	1,232	29.2%	15.2%	14.1%	1.9
Hamden	1,430	41.1%	27.6%	13.5%	1.5
Meriden	903	43.6%	30.4%	13.2%	1.4
Windsor	2,156	46.3%	33.6%	12.7%	1.4
Orange	1,025	29.0%	16.6%	12.3%	1.7
West Hartford	2,508	35.2%	24.0%	11.1%	1.5
Norwich	2,184	35.4%	24.3%	11.1%	1.5
West Haven	805	44.0%	33.8%	10.2%	1.3
Black					
New Haven	2,454	45.5%	22.9%	22.6%	2.0
East Hartford	3,015	35.5%	17.0%	18.4%	2.1
Hamden	1,430	30.0%	15.1%	14.9%	2.0
Hartford	3,216	35.8%	21.1%	14.7%	1.7
Windsor	2,156	34.7%	20.7%	14.0%	1.7
Woodbridge	969	16.6%	3.7%	12.9%	4.5
Manchester	804	22.3%	9.7%	12.6%	2.3
Bloomfield	1,992	44.9%	32.5%	12.4%	1.4
Stratford	611	23.7%	11.8%	12.0%	2.0
Wethersfield	1,521	16.6%	4.8%	11.8%	3.4
Norwich	2,184	18.8%	7.4%	11.4%	2.6
Waterbury	491	24.9%	14.2%	10.6%	1.8
Orange	1,025	15.1%	4.6%	10.5%	3.3
Hispanic					
Wethersfield	1,521	29.3%	8.6%	20.7%	3.4
New Britain	1,390	45.8%	26.2%	19.6%	1.8
Newington	1,728	18.4%	7.7%	10.7%	2.4

The above EDP analysis was confined to the 92 municipal police departments in Connecticut. There are 80 municipalities in Connecticut that either (1) do not have their own departments and rely upon the State Police for their law and traffic enforcement services or (2) have one or more resident state troopers who either provide their police services or supervise local constables or law enforcement officers. Most of these communities are smaller and located in Connecticut's more rural areas. Once the State Police stops made on limited access highways were removed from the data, we found that these towns generally had too few stops during the 6 am to 10 am and 3 pm to 7 pm periods to yield meaningful comparisons. Of the 80 towns, only Andover (159), Ashford (126), Beacon Falls (112), and Mansfield (180) made more than 100 stops during the two peak

commuting periods. Consequently, these towns were not considered appropriate candidates for the EDP analysis, although their data is included in the Appendix to this report.

IV.D: RESIDENT ONLY STOP COMPARISON

Some questioned the accuracy of the estimated driving population. As a result, we have limited the following analysis to stops involving only residents of the community making the stop and compared them to the community demographics based on the 2010 decennial census for residents 16 and over.

Table 16: Highest Ratio of Resident Population to Resident Stops

Department Name	Number of Residents	Residents	Resident Stops	Minority Residents Stops	Difference
Minority (All Non-White)					
Waterbury	83,964	48.1%	1,381	72.8%	24.7%
New Britain	57,164	45.0%	3,968	69.3%	24.3%
East Hartford	40,229	51.6%	3,581	71.7%	20.1%
Bloomfield	16,982	61.5%	1,829	80.7%	19.1%
Windsor	23,222	43.9%	2,015	62.9%	19.0%
New Haven	101,488	62.9%	6,543	80.7%	17.9%
Meriden	47,445	34.9%	2,326	52.3%	17.4%
Willimantic	20,176	34.6%	1,886	50.9%	16.3%
Manchester	46,667	28.0%	1,638	43.9%	16.0%
Norwich	31,638	29.1%	3,743	44.9%	15.9%
Hamden	50,012	30.9%	2,453	45.5%	14.6%
Stratford	40,980	27.2%	1,216	41.4%	14.2%
Wethersfield	21,607	12.5%	1,072	26.0%	13.6%
Bristol	48,439	12.7%	2,467	24.7%	12.0%
Derby	10,391	20.6%	563	32.2%	11.6%
Middletown	38,747	23.5%	1,721	34.5%	11.0%
Vernon	23,800	14.1%	1,524	24.2%	10.1%
Black					
New Haven	101,488	32.3%	6,543	54.8%	22.5%
Bloomfield	16,982	54.8%	1,829	75.9%	21.2%
Windsor	23,222	32.2%	2,015	52.7%	20.5%
Hamden	50,012	18.3%	2,453	37.7%	19.4%
East Hartford	40,229	22.5%	3,581	40.4%	17.8%
Waterbury	83,964	17.4%	1,381	34.9%	17.5%
Norwich	31,638	9.0%	3,743	24.2%	15.2%
Stratford	40,980	12.8%	1,216	27.0%	14.2%
Manchester	46,667	10.2%	1,638	24.2%	14.1%
Middletown	38,747	11.7%	1,721	24.6%	13.0%
Norwalk	68,034	13.1%	4,522	24.4%	11.3%
Hispanic					
New Britain	57,164	31.8%	3,968	51.9%	20.1%
Willimantic	20,176	28.9%	1,886	43.2%	14.3%
Danbury	64,361	23.3%	2,479	37.0%	13.7%
Meriden	47,445	24.9%	2,326	35.3%	10.4%

Overall, when compared to the census, 57 departments stopped more Minority resident drivers than white drivers. Again, the disparity for many of these departments was very small. In the remaining 32 communities, the disparity was negative meaning that more whites were stopped than expected based on the population numbers. However, the negative disparities were also very small in most communities. Almost all departments (86 of 92) had a disparity for Black drivers stopped and 50 departments had a disparity for Hispanic drivers stopped when compared to the resident driving age population. Although we are comparing resident stops to the resident census, there are some factors that could lead to some disparities in traffic stops. However, departments with a difference of 10 percentage points or more between the resident stops and the census are significant enough to note. Therefore, the information is presented for all departments whose stops of resident drivers exceed their resident census data by more than 10 percentage points in three categories: (1) Minority (all race/ethnicity), (2) Black non-Hispanic and (3) Hispanic.

IV.E: DEPARTMENT PEER GROUP COMPARISON

Traditional approaches that rely on population-based benchmarks to evaluate policing data must implicitly make a variety of very strong assumptions about the underlying risk-set. An alternative descriptive measure where we assume that the true benchmark is equivalent to the weighted average of the most similar geographies to the baseline geography is provided. The similarity is assessed using a matching function based on Mahalanobis distance. This matching function is used to identify a subset of the most similar geographies to a baseline geography of interest. Then a benchmark is constructed from the aggregate data of the five most similar geographies to compare the data from the baseline geography of interest with that of the benchmark. The technical aspects of this method are discussed before presenting the findings from this descriptive analysis.

The Mahalanobis distance $d_{m,l}$ of a multivariate random vector $x_l = (x_{l,1}, \dots, x_{l,N})$ representing an independent geography l from a vector $x_m = (x_{m,1}, \dots, x_{m,N})$ representing the baseline geography m where $m \neq l$ with covariance matrix S is defined formally in Equation 1.

$$d_{m,l}(x_m, x_l) = \sqrt{(x_l - x_m)^T S^{-1} (x_l - x_m)} \quad \textbf{(1)}$$

The Mahalanobis distance was used to create benchmark regions for each town in Connecticut using a variety of data elements collected from various sources.[8] The benchmark regions were created by aggregating the top five towns found to be most like the baseline geography. Although the Mahalanobis distance is a unit-less measure and says nothing about orders of magnitude, it is transitive and represents an ordering of towns from most like to most unlike the baseline geography. The ordering of independent geographies by their likeness to a given baseline geography will be referred to as a Mahalanobis vector throughout this discussion.

The Mahalanobis vector d_m of a multivariate random vector $x_m = (x_{m,1}, \dots, x_{m,N})$ representing a baseline geography m is an ordering of the Mahalanobis distances $d_{m,l}$ for each independent geography $l \in L$ and is defined formally as in Equation 2.

[8] The variables used in the Mahalanobis distance are detailed in the Appendix along with their requisite sources.

$$d_m = \begin{bmatrix} d_{m,l=1} \\ d_{m,l=2} \\ \vdots \\ d_{m,l=L} \end{bmatrix} = \begin{bmatrix} \sqrt{(x_{l=1} - x_m)^T S^{-1} (x_{l=1} - x_m)} \\ \sqrt{(x_{l=2} - x_m)^T S^{-1} (x_{l=2} - x_m)} \\ \vdots \\ \sqrt{(x_{l=L} - x_m)^T S^{-1} (x_{l=L} - x_m)} \end{bmatrix} \quad \textbf{(2)}$$

The 10 towns with the highest discrepancy between the rate of minority traffic stops and that observed in their respective geographic peer-group are presented in Table 17. The results indicate that primarily urban geographies, or those closely neighboring urban geographies, show up as having the largest discrepancy. Despite accounting for neighboring geographic communities in the construction of the peer-groups, it is believed that location-based discrepancies are driving a large part of these results. As has been discussed in great detail throughout this section, these results are presented descriptively. Although the use of peer groups compares actual policing data from a basket of similar communities, it is still rooted to some extent, in population-based data and subject to a similar set of assumptions.

Table 17: Comparison of Minority Stops by Department and Departmental Peer-Group

	Non-Caucasian		Non-Caucasian or Hispanic		Black		Hispanic		Black or Hispanic	
	Dep.	PG	Dep.	PG	Dep.	PG	Dep.	PG	Dep.	PG
Greenwich	10%	10%	29%	18%	7%	7%	19%	8%	26%	16%
Hamden	39%	12%	47%	22%	38%	10%	8%	11%	46%	21%
New Haven	48%	11%	67%	21%	47%	10%	20%	11%	66%	20%
New Britain	20%	12%	63%	24%	18%	11%	45%	13%	62%	23%
East Hartford	38%	15%	63%	23%	36%	12%	26%	9%	61%	21%
Waterbury	33%	11%	65%	29%	32%	10%	33%	18%	64%	27%
Bristol	10%	6%	24%	13%	9%	5%	14%	8%	23%	12%
Bridgeport	42%	14%	69%	25%	39%	12%	29%	12%	67%	24%
Norwalk	24%	13%	45%	25%	23%	12%	21%	12%	44%	24%
Stratford	30%	12%	47%	24%	29%	11%	18%	12%	47%	23%

Note 1: The variables used to construct the peer groups are outlined in the Appendix.

IV.F: CONCLUSIONS FROM THE DESCRIPTIVE COMPARISONS

The descriptive tests outlined in the above sections are designed to be used as a screening tool to identify those jurisdictions with consistent data disparities that exceed certain thresholds. The tests compare stop data to four different benchmarks: (1) statewide average, (2) the estimated driving population, (3) resident-only stops, and (4) peer groups, that each cover three driver categories: Black, Hispanic, and Minority. Town data is then measured against the resulting total of 12 descriptive measures for evaluation purposes.

Although the design of each of the four measures is based on certain assumptions, it is reasonable to conclude that departments that consistently show data disparities separating them from the significant majority of other departments can be recommended for further review and analysis to determine the potential cause for these differences.

Another important factor is the relative size of the disparities. For this portion of the study, a threshold of 10 percentage points was selected as the point at which a department's data would be considered sufficient for identification. In a number of instances, the disparities were significantly above the threshold.

Table 18 identifies the 12 towns with significant disparities divided into two tiers. The first tier includes the seven jurisdictions whose stop data was found to exceed the disparity threshold levels in at least three of the four benchmark areas as well as in a majority of the 12 possible measures. This designation warrants additional study to further review the data and attempt to understand the factors that may be causing these differences. It is also recommended that these departments, as well as those included in the second tier of the table, evaluate their own data to try and better understand any patterns.

The second tier of Table 18 shows the five departments that exceeded the 10-point disparity threshold in six of the 12 possible measures. In all of these departments there were disparities in at least three of the four benchmark areas. Going forward, the data for these five departments will continue to be monitored for changes over time relative to the descriptive benchmarks that may indicate the need for further analysis.

All of the 33 departments that were identified in the descriptive analysis with benchmark disparities and the actual values that exceeded the threshold level are included in the Appendix of the report.

Table 18: Departments with the Greatest Number of Disparities Relative to Descriptive Benchmarks

Department Name	Statewide Average			Estimated Driving Population			Resident Population			Peer Group			Total
	M	B	H	M	B	H	M	B	H	M	B	H	
Tier 1													
Wethersfield	X	X	X	X	X	X	X			X		X	9
Hamden	X	X		X	X		X	X		X	X		8
Manchester	X	X		X	X		X	X		X	X		8
New Britain	X		X	X		X	X		X	X		X	8
Stratford	X	X		X	X		X	X		X	X		8
Waterbury	X			X	X		X	X		X	X	X	8
East Hartford				X	X		X	X		X	X	X	7
Tier 2													
Meriden	X			X			X		X	X		X	6
New Haven				X	X		X	X		X	X		6
Newington	X		X	X		X				X		X	6
Norwich				X	X		X	X		X	X		6
Windsor				X	X		X	X		X	X		6

Note 1: M=Minority, B=Black, H=Hispanic

IV.G: MOVING FROM BENCHMARKS TO FORMAL EVALUATION

The descriptive statistics and benchmarks presented in this section are an excellent first step at understand patterns in Connecticut policing data. Although these simple statistics present an intriguing story, conclusions should not be drawn from these measures. The three statistical tests of racial and ethnic disparities in the policing data are based solely on the policing data itself and rely on the construction of a theoretically derived identification strategy and a natural experiment. These results have been applied by academic and police researchers in numerous areas across the country and are generally considered to be the most current and relevant approaches to assessing policing data.

V: ANALYSIS OF TRAFFIC STOP DISPARITIES

Alternative methods to traditional benchmark-based approaches have become increasingly popular because they do not require such a restrictive set of assumptions. The most notable of these approaches draws from a 2006 article published in the *Journal of the American Statistical Association* by Jeffrey Grogger and Greg Ridgeway. In the article, Grogger and Ridgeway develop a unique and statistically sound methodology for testing racial disparities in the rate of minority traffic stops. The central assumption of their paper, known as the *Veil of Darkness* is that police officers have an impaired ability to determine the race of a driver at night and cannot racially profile during traffic stops. The police officers, however, can tell the race of drivers during the day and can, if they wish, racially profile motorists. To test for disparities in the rate of minority traffic stops, the authors develop a sophisticated and intuitive statistical model.

V.A: METHODOLOGY AND EMPIRICAL FRAMEWORK

The *Veil of Darkness* method evaluates whether there exists statistically significant disparities in the likelihood of being stopped by law enforcement in minority groups relative to their non-minority counterparts. The *Veil of Darkness* utilizes a natural experiment to evaluate the existence of racial disparities that centers principally on seasonal patterns of solar variation. Specifically, the *Veil of Darkness* asks whether there is a higher likelihood of a minority being stopped by police in the presence of daylight than in darkness relative to non-minorities. The most significant advantage of the *Veil of Darkness* methodology compared to a population-based benchmark is that it does not require as problematic and unrealistic assumptions about the underlying risk-set. In addition, the framework allows for differential rates of traffic stops to exist across races. As discussed previously, traditional benchmarks require many large assumptions that are often considered to be largely unrealistic. In contrast, the *Veil of Darkness* has less rigid assumptions and draws a comparative sample from the actual distribution of police stops.

Grogger and Ridgeway (2006) propose that the true measure of racial profiling would be based on K_{ideal} taking the form of the parameter seen in Equation 3.

$$K_{ideal} = \frac{P(S|V=1, m=1)P(S|V=0, m=0)}{P(S|V=1, m=0)P(S|V=0, m=1)} \quad \textbf{(3)}$$

The racial profiling parameter presented in Equation 3 is composed of a binary random variable S indicating an officer's decision to stop a vehicle, a variable m representing whether the driver is of minority descent, and a variable V representing pre-stop race visibility. It can be seen in Equation 3 that $K_{ideal} = 1$ in the absence of racial profiling. This occurs because the probability of a minority driver being stopped relative to a nonminority driver is constant whether or not race or ethnicity of the driver is visible prior to the stop.

Grogger applies Baye's rule and rearranges Equation 3 to form Equation 4.

$$K_{ideal} = \frac{P(m=1|V=1, S)P(m=0|V=0, S)}{P(m=0|V=1, S)P(m=1|V=0, S)} * \frac{P(m=1|V=0)P(m=0|V=1)}{P(m=0|V=0)P(m=1|V=1)} \quad \textbf{(4)}$$

The first term in K_{ideal} is the ratio of the risk of a minority driver being stopped when demographics are visible relative to when these demographics are not visible. The second term in K_{ideal} can be considered an odds ratio of the relation between visibility and the probability that a driver is of minority descent. One would expect that the second term in Equation 4 would equal unity if these relative risk measures were independent of visibility. In the absence of a measure able to fully capture visibility, Grogger and Ridgeway (2006) is followed by proposing the *Veil of Darkness* K_{vod} as a test statistic for K_{ideal}.

As will be discussed later, it is assumed that the risk-set described in the context of K_{ideal} is constant and the test statistic is formalized in Equation 5.

$$K_{vod} = \frac{P(m = 1|S, \delta = 0)P(m = 0|S, \delta = 1)}{P(m = 0|S, \delta = 0)P(m = 1|S, \delta = 1)} \quad \textbf{(5)}$$

The test statistic K_{vod} is a function of the relative probability ratio where m is a binary indicator variable representing whether the driver is of minority descent. The variable S is a binary random variable indicating an officer's decision to stop a vehicle and δ is a binary variable indicating the presence of darkness. The darkness indicator is, in the absence of a better suited variable, used to proxy for a true measure of visibility V at the time the stop occurs.

As is explained in Grogger and Ridgeway (2006), the test statistic K_{vod} will be greater than or equal to the parameter K_{ideal} and exceed unity if the following conditions hold;

1) $K_{ideal} > 1$; The true parameter shows that there is a racial or ethnic disparity in the rate of minority police stops.
2) $P(V|\delta = 0) > P(V|\delta = 1)$; Darkness reduces the ability of officers to discern the race and ethnicity of motorists.
3) $\frac{P(m=1|V=0)P(m=0|V=1)}{P(m=0|V=0)P(m=1|V=1)} = 1$; The relative risk-set is constant across the analysis window.

As Grogger notes, estimating the test statistic K_{vod} does not provide a quantitative measure for evaluating racial bias in policing data. Grogger goes on to illustrate, however, that K_{vod} can provide a qualitative test statistic to evaluate the presence of a racial bias. More concretely, the *Veil of Darkness* identifies the presence of a racial or ethnic disparity if the test statistic K_{vod} exceeds one.

If it is believed that Propositions 1 through 3 hold, then one can simply estimate the model presented in Equation 6 using a logistic regression.

$$log \frac{P(m|\delta)}{1 - P(m|\delta)} = \beta_0 + \delta + \mu \quad \textbf{(6)}$$

In practice, however, it seems unlikely that Proposition 3 will hold without additional controls included in Equation 6. Grogger and Ridgeway (2006) amends Equation 6 by including neighborhood fixed effects and a time spline. Ridgeway (2009) applies the *Veil of Darkness* in Cincinnati, OH and amends his initial work with Grogger by including monthly controls. Ridgeway includes these controls, as well as a specification focusing on the month before and after daylight savings time, to account for possible seasonal variation in the composition of the risk-set. Worden et al. (2010) apply the *Veil of Darkness* to policing data in Syracuse, NY but include time of day controls as fixed effects rather than a spline. In addition, the authors include day of the week

controls in their estimation equation. Ritter et al. (2013) takes an approach that includes many of the controls included by these previous applications and expands his analysis with a specification that combines the *Veil of Darkness* with a post-stop analysis.

Motivated by the contributions that have been made to control for possible violations of Proposition 3, an estimation equation in Equation 7 is presented that includes several unique controls to accommodate this concern.

$$log\frac{P(m|\delta,X)}{1-P(m|\delta,X)} = \beta_0 + \beta_1\delta + X'\beta_2 + \mu \qquad \textbf{(7)}$$

The estimation equation presented in Equation 7 includes a vector X of fixed effects for time of day, day of week, police department, time of day interacted with police department, and day of week interacted with police department. Additionally, a daily volumetric measure of state traffic stops and its interaction with police department fixed effects is included. The *Veil of Darkness* test statistic is estimated in the model through the constant where $K_{vod}(X) = -\beta_1$. As discussed previously, the magnitude of the coefficient should not be used to quantitatively evaluate relative differences in racial disparities across departments. The sign and level of significance, however, are sufficient indicators that can be used to qualitatively determine the existence of a racial or ethnic disparity.

The volumetric measure included in this regression is a contribution that requires particular attention. The volumetric component and its interaction with police department fixed effects is included to account for possible violations of Proposition 3. Specifically, there is a concern that seasonal variation in recreational driving might impact the proportion of minority drivers in the risk-set. This possibility is only a concern, in the absence of the volumetric control, because the variation of darkness is driven principally by season. As a result, Proposition 3 could be violated if a particular season is more likely to include recreational drivers of a certain race than other seasons. Previous applications of *the Veil of Darkness* had no need to accommodate such a concern because they focused on data from a large urban environment that was unlikely to have as much seasonal variation in recreational driving. As a proxy for recreational driving, the total volume of daily traffic stops occurring across Connecticut and its interaction with police department fixed effects is included.

The use of observations that occur within the intertwilight period serves as an additional effort to ensure that Proposition 3 is not violated. The intertwilight period, as defined by Grogger and Ridgeway (2006), is a specific timeframe that allows for every time of the day to experience periods of darkness and daylight throughout the course of the year. As was discussed previously, this variation is the mechanism used to identify the existence of racial disparities in the policing data. In addition, the use of a consistent time period with variation in the occurrence of darkness further ensures that Proposition 3 will not be violated and that the risk-set will be consistent over time.

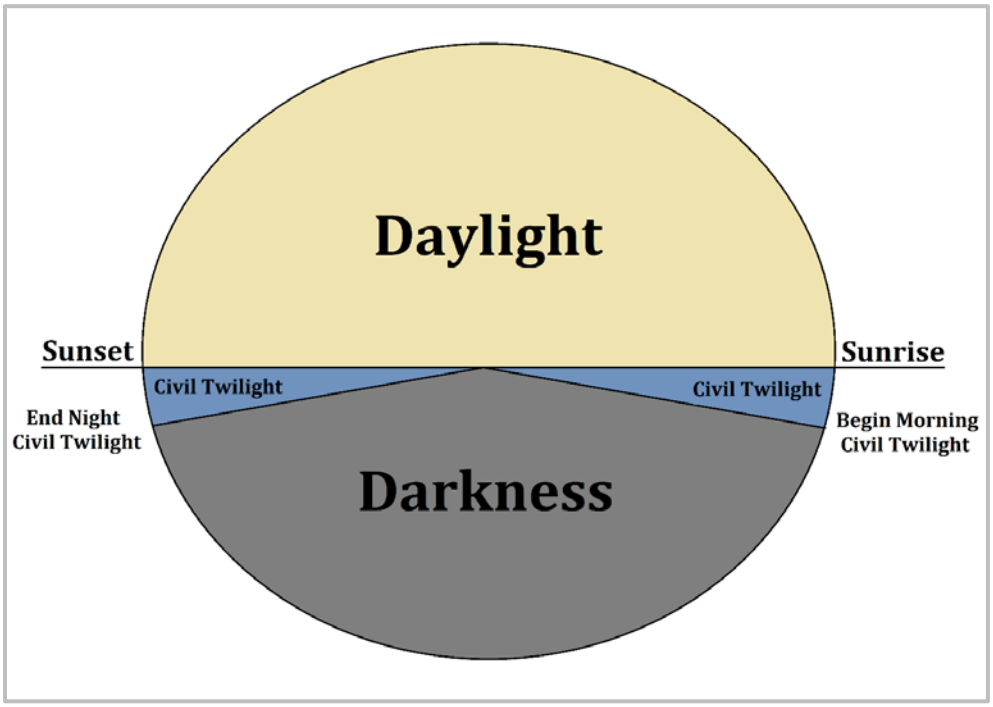
An additional feature of Equation 7 pertains to the general form of the logistic regression. Although not discussed in his 2006 work, Grogger's regression from where the derived estimation equation can be considered a 'reverse regression'. Although Grogger utilizes this form because it would be impossible to model the entire risk-set, a convenient facet of his framework is that officer-observed race is the dependent variable. As is discussed by Leamer (1978), reverse regression is particularly useful when a variable is thought to potentially suffer from problems of measurement error. In particular, one might be concerned that there is potential measurement error in officer-observed race and ethnicity. Although the alternative specification would not even be possible to estimate,

Grogger's framework is useful beyond the convenience of its form because of this additional feature.

V.B: CONSTRUCTING THE VEIL OF DARKNESS SAMPLE

The *Veil of Darkness* analysis requires that periods of darkness and daylight for each day in the sample are identified. Following Grogger and Ridgeway (2006), the analysis is restricted by only examining the intertwilight period. In their analysis, Grogger and Ridgeway identify the earliest beginning and latest end to civil twilight that occurs within their sample and use that period for the majority of their analysis. As is shown in Figure 4, civil twilight is defined as the period when the sun is between 0 and 6 degrees below the horizon and where its luminosity is transitioning from daylight to darkness. The motivation for limiting the analysis to the intertwilight period is to help control for possible differences in the driving population. Specifically, it is asked whether there is a disparity between the likelihood of a minority driver being stopped in daylight as compared to darkness after including a number of statistical controls.

Figure 4: Diagram of Civil Twilight and Solar Variation



There are significant differences between this analysis and that conducted by Grogger and Ridgeway (2006), Ridgeway (2006; 2009a; 2009b), and Ritter (2013). These differences stem primarily from the fact that this analysis spans an entire state and the former analyses only examined a large urban geography. The estimation procedure has been amended from that applied in Grogger and Ridgeway (2006) and Ridgeway (2006; 2009a; 2009b) to accommodate an application at this geographic level. Although there are minor issues related to the identification of the intertwilight period, the largest alteration to the traditional *Veil of Darkness* framework pertains to the estimation equation. Each of these amendments will be noted and discussed in detail throughout the text.

The analysis focuses on officer-reported traffic stop data collected in Connecticut from October 2013 through September 2014. As noted, all data including the race and ethnicity of the person stopped, is recorded by the police officer making the stop. The analysis focuses on assessing racial disparities that occur at the department level. There were a total of 92 municipal police departments with 29 departments employing greater than 50 officers, 50 employing between 20 and 50 officers, and 13 that had fewer than 20 officers. State police were disaggregated into 13 distinct troop categories. Although there are an additional 81 jurisdictions that do not have organized police departments and are provided police services by the state police, either directly or through provision of resident troopers, these stops were categorized with their overarching state police troops due to current data limitations.

The analysis was conducted using three distinct intertwilight periods: the dawn, dusk, and a combined intertwilight period. The dawn intertwilight period is constructed from astronomical data and occurs in the morning hours. The dusk intertwilight period, on the other hand, is constructed from the same astronomical data but occurs in the evening hours. The combined intertwilight period relies on a sample that is created by pooling these timeframes. Grogger and Ridgeway (2006) relied solely on an analysis conducted within the dusk intertwilight period due to a significantly reduced sample size in the dawn intertwilight period. This analysis, however, has a significantly large enough sample size to include the dawn intertwilight period as an additional mechanism to scrutinize the findings.

Any observation in the policing data that fell between these times was included in this dawn intertwilight period sample. Following Grogger and Ridgeway (2006), the analysis is restricted to the intertwilight period but this definition was amended to accommodate the unique aspects of the Connecticut policing data. In addition, Grogger and Ridgeway (2006) focus primarily on the dusk intertwilight period while this analysis includes both the dusk and dawn intertwilight periods.

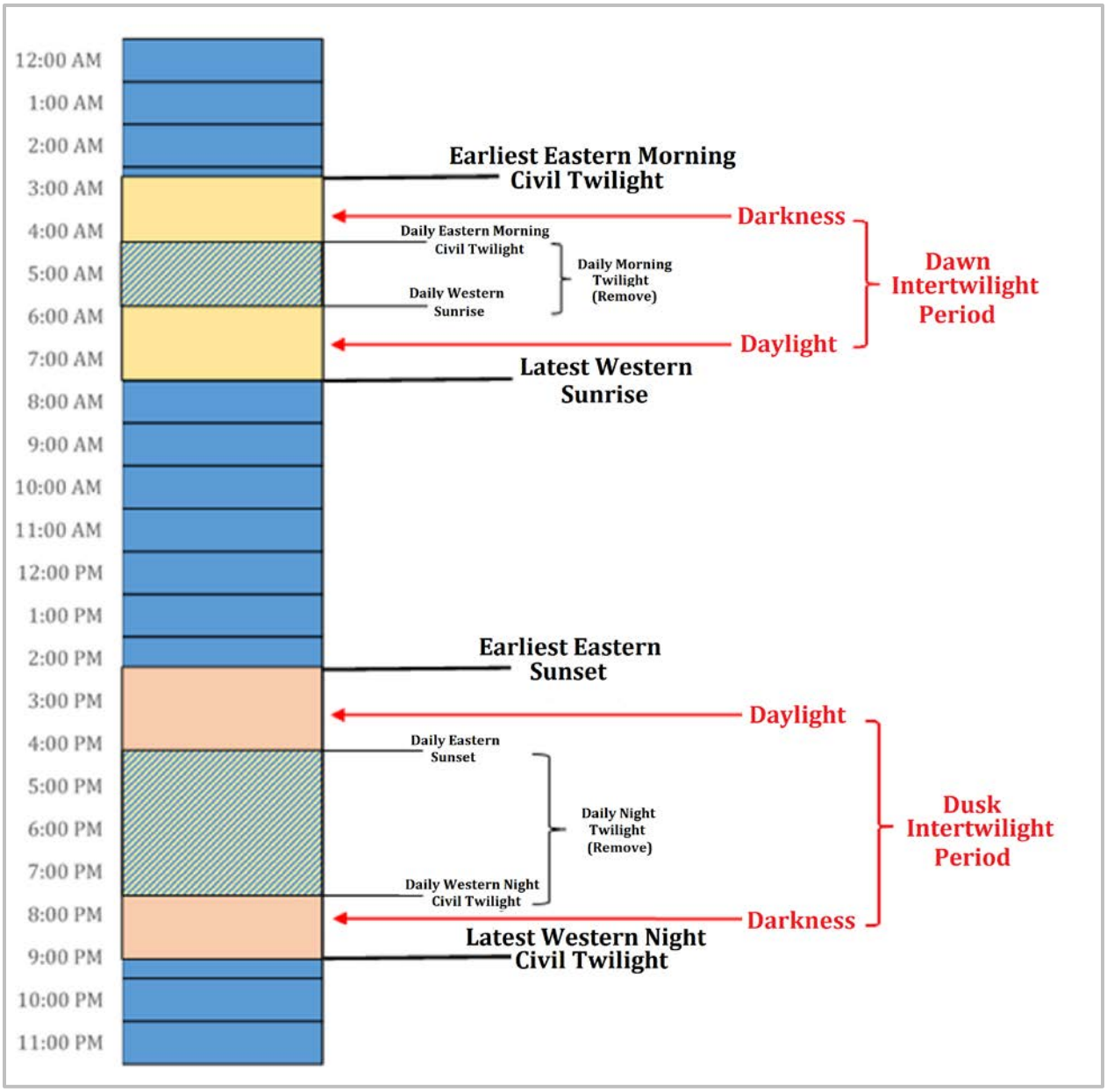
The intertwilight periods were constructed using Astronomical data collected from the United States Naval Observatory (USNO). The dawn intertwilight period was constructed to capture the period spanning from the earliest start of civil twilight observed throughout the year through the latest sunrise. In contrast, the dusk intertwilight period spanned the period from the earliest sunset observed to occur throughout the year to the latest end of civil twilight. As discussed previously, past applications of the *Veil of Darkness* have focused on single large urban geographies and have had no need to consider the possibilities of differential astronomical impacts.

The definition of both the dawn and dusk intertwilight periods is amended to accommodate cross-municipal variation in astronomical impacts by utilizing data from the easternmost (Sterling, CT) and westernmost (Stamford, CT) points available in the USNO data. The dawn intertwilight period was identified as the time period between 4:38 AM when the earliest eastern start of civil twilight occurred on June 11, 2014 and 7:25 AM when the latest western sunrise occurred on November 1, 2013. Conversely, the dusk intertwilight period was identified as the time period between 4:17 PM when the earliest eastern sunset occurred on June December 12, 2014 and 9:04 PM when the latest western end to civil twilight occurred on July 2, 2014. The combined intertwilight period, as the name indicates, simply pools these two periods. Only observations from the policing data that occurred within either the dawn or dusk intertwilight period were included in the *Veil of Darkness* analysis.

The USNO data was merged with the policing data and used to identify the presence of darkness. Again, the presence of darkness was the primary explanatory variable used to identify the presence of racial disparities in the Connecticut policing data. As a result, any observation in the data that

occurred during twilight on any given day was dropped from the analysis because luminosity inherently varies within this period. The twilight period varied on a daily basis throughout the year and was also identified using the USNO data. Twilight was defined in the dawn intertwilight period as the time between the daily eastern start of civil twilight and western sunset. Similarly, twilight was defined in the dusk intertwilight period as the time between the daily eastern sunset and western end to civil twilight. The full delineation of the policing data is displayed graphically in Figure 5.

Figure 5: Delineation of Dusk and Dawn Intertwilight Periods



V.C: STATE LEVEL RESULTS FOR THE VEIL OF DARKNESS

First, Equation 7 is estimated at the state level. It is important to note that the findings from this estimation should be considered an average effect for the state. It is impossible to disaggregate the source of the disparity by department or officer in this specification. Although an analysis at the officer level is beyond the current scope of this report, detailed findings are presented for each department in a later section. These results should be considered descriptive and as a formal specification test for results at the department level.

Table 19 presents the results from the *Veil of Darkness* applied at the state level during the dusk intertwilight period. These results were estimated using Equation 7 with the standard errors being clustered at the department level. The estimates presented in Table 19 include controls for time of day, day of the week, state traffic volume, and police department. In addition, controls for idiosyncratic effects by interacting time of day with police department, day of the week with police department, and state traffic volume with police department were included. The estimates were creating using five distinct definitions of minority status and are annotated accordingly.

Table 19: State *Veil of Darkness* Analysis at the Dusk Intertwilight Period

	(1)	(2)	(3)	(4)	(5)
	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
Darkness	-0.114**	-0.128***	-0.065**	-0.092***	-0.094***
	(0.046)	(0.043)	(0.033)	(0.031)	(0.035)
Psuedo-R2	0.11	0.12	0.12	0.08	0.13
N	133,739	136,762	131,723	132,702	136,330

Note 1: The coefficients are presented along with their level of significance. A coefficient concatenated with * represents a p-value of .1, ** represents a p-value of .05, and *** represents a p-value of .01 significance.
Note 2: The results are clustered at the department-level and the standard errors are presented in parentheses.
Note 3: All specifications include controls for time of the day, day of the week, state traffic volume, police department, an interaction between time of day and police department fixed effects, an interaction between day of the week and police department fixed effects, and an interaction between volume and police department fixed effects.
Note 4: The daily volume control used in each model are calculated at the requisite intertwilight period.

The results presented in Table 19 are estimated solely using the dusk intertwilight period. As mentioned, a variety of controls that accommodate any potential changes to the underlying risk-set are included. The results for the first specification indicate the presence of a racial or ethnic disparity in the rate of traffic stops when a binary indicator variable for any non-Caucasian racial demography (regardless of ethnicity) is used as the dependent variable. The second specification encompasses the first but includes Caucasian individuals identified as Hispanic and finds the same result at a higher level of significance. The third specification includes only individuals identified as Black (regardless of ethnicity) and regains statistical significance. The fourth specification, on the other hand, includes only individuals identified as Hispanic (regardless of race) and has an even higher level of significance. The fifth specification combines the fourth and fifth minority definitions and finds a racial or ethnic disparity with a high level of statistical significance. Although all but one of the specifications indicate the presence of a disparity in the rate of traffic stops across minority groups in the state, it is impossible to discern the specific geographies where these disparities exist.

The results presented in Table 20 are estimated using the dawn intertwilight period. The dawn, unlike the dusk, intertwilight period is less apt to be subject to changes in the risk-set due to

recreational driving. Although daily state traffic volume is still included, there is less concern about recreational driving during the dawn intertwilight period simply because it occurs during morning rush-hour. It should be noted that the sample size is significantly smaller in the dawn intertwilight period than in the dusk. As before, the estimates were creating using five distinct definitions of minority status and are annotated accordingly.

Table 20: State *Veil of Darkness* Analysis at the Dawn Intertwilight Period

	(1)	(2)	(3)	(4)	(5)
	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
Darkness	-0.181***	-0.162***	-0.117**	-0.075	-0.113***
	(0.058)	(0.045)	(0.048)	(0.054)	(0.041)
Psuedo-R2	0.08	0.08	0.08	0.07	0.12
N	23,986	25,155	23,421	23,527	24,984

Note 1: The coefficients are presented along with their level of significance. A coefficient concatenated with * represents a p-value of .1, ** represents a p-value of .05, and *** represents a p-value of .01 significance.
Note 2: The results are clustered at the department-level and the standard errors are presented in parentheses.
Note 3: All specifications include controls for time of the day, day of the week, state traffic volume, police department, an interaction between time of day and police department fixed effects, an interaction between day of the week and police department fixed effects, and an interaction between volume and police department fixed effects.
Note 4: The daily volume control used in each model are calculated at the requisite intertwilight period.

The results presented in Table 20 are estimated solely using the dawn intertwilight period. As mentioned, a variety of controls that accommodate any potential changes to the underlying risk-set are included. The results for the first specification indicate the presence of a racial or ethnic disparity in the rate of traffic stops when a binary indicator variable for any non-Caucasian racial demography (regardless of ethnicity) is used as the dependent variable. The second specification encompasses the first but includes Caucasian individuals identified as Hispanic and finds the same result at the same level of significance. The third specification includes only individuals identified as Black (regardless of ethnicity) and regains statistical significance. The fourth specification includes only individuals identified as Hispanic (regardless of race) and loses statistical significance. The fifth specification combines the fourth and fifth minority definitions and finds a racial or ethnic disparity with a higher level of statistical significance. All but one of these specifications indicate the presence of a disparity in the rate of traffic stops across minority groups in the state. As discussed previously, however, it is impossible to discern the specific geographies within the state where these disparities exist.

Table 21 presents the results from the *Veil of Darkness* applied at the state-level during the combined dusk and dawn intertwilight period. These results were estimated, as before, using Equation 7 with the standard errors being clustered at the department level. The estimates presented in Table 21 include controls for time of day, day of the week, state traffic volume, and police department. In addition, controls for idiosyncratic effects by interacting time of day with police department, day of the week with police department, and volume with police department are included. The estimates were creating using five distinct definitions of minority status and are annotated accordingly.

Table 21: State *Veil of Darkness* Analysis at the Combined Dusk and Dawn Intertwilight Period

	(1)	(2)	(3)	(4)	(5)
	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
Darkness	-0.131***	-0.138***	-0.078**	-0.094***	-0.102***
	(0.047)	(0.042)	(0.033)	(0.03)	(0.033)
Psuedo-R2	0.1	0.11	0.12	0.08	0.12
N	158,473	162,542	156,078	157,260	162,044

Note 1: The coefficients are presented along with their level of significance. A coefficient concatenated with * represents a p-value of .1, ** represents a p-value of .05, and *** represents a p-value of .01 significance.
Note 2: The results are clustered at the department-level and the standard errors are presented in parentheses.
Note 3: All specifications include controls for time of the day, day of the week, state traffic volume, police department, an interaction between time of day and police department fixed effects, an interaction between day of the week and police department fixed effects, and an interaction between volume and police department fixed effects.
Note 4: The daily volume control used in each model are calculated at the requisite intertwilight period.

The results presented in Table 21 are estimated using the combined dusk and dawn intertwilight period. As mentioned, a variety of controls that accommodate any potential changes to the underlying risk-set are included. The results for the first specification indicate the presence of a racial or ethnic disparity in the rate of traffic stops when a binary indicator variable for any non-Caucasian racial demography (regardless of ethnicity) is used as the dependent variable. The second specification encompasses the first and includes Caucasian individuals identified as Hispanic and finds the same result at the same level of significance. The third specification includes only individuals identified as Black (regardless of ethnicity) and regains statistical significance. The fourth specification, on the other hand, includes only individuals identified as Hispanic (regardless of race) and is highly statistically significant. The fifth specification combines the fourth and fifth minority definitions and finds a racial or ethnic disparity with a high level of statistical significance. All of these specifications indicate the presence of a disparity in the rate of traffic stops across minority groups in the state.

The three sets of estimates are consistent across the dusk, dawn, and combined intertwilight periods. The combined intertwilight period adequately replicates the results using Grogger's (2006) dusk intertwilight period but has the added advantage of increasing the sample size. As a result, the analysis moves forward by using only the combined sample for the remainder of the *Veil of Darkness* analysis.[9] Although the results from this section find a statistically significant disparity in the rate of minority traffic stops in Connecticut, these results do not identify the geographic source of this variation. The results of a department level analysis are presented in a later section and help to identify the source of this disparity.

V.D: STATE LEVEL ROBUSTNESS CHECKS ON THE VEIL OF DARKNESS

The purpose of this section is to present robustness checks on these initial specifications conducted at the state level. Two possible sources of bias that threaten the validity of the initial findings are presented. The first threat pertains to the existence of possible unobserved covariates while the second concerns non-random measurement error. In the case of the first threat, a quantitative

[9] The results of later specifications were also estimated for the dusk and dawn periods individually. Although these results are not presented in this report, they are included in the Appendix.

robustness check is presented that controls for these concerns and proves these initial findings to be valid. Although one is unable to quantitatively control for the second threat, a qualitative description of how to assess the findings is presented. This qualitative description serves as a cautionary note about certain specifications and serves to help bound the estimates. The conclusion from these robustness checks is that these initial findings are robust from both of these threats and the initial estimates withstand this stricter level of scrutiny.

The *Veil of Darkness* analysis presented above could conceivably be biased as a result of unobserved covariates. Specifically, this would be a problem if these covariates varied in the presence of darkness and are predicative of the likelihood of a minority individual being stopped by law enforcement. Differential rates of equipment violations, such as headlights or other vehicle lighting equipment, are an unobserved covariate that would be most likely to cause such a bias. Imagine that minority groups are more likely to have specific equipment violations (i.e. lighting violations) which are only observable at night. If this were the case, the binary indicator for darkness would be biased upwards and potentially miss a racial or ethnic disparity that exists. In an effort to account for the potential existence of these unobserved covariates, the initial stopping violation is controlled for and the results from *Veil of Darkness* using this sample in Table 22 are presented.

Table 22: State *Veil of Darkness* Analysis at the Combined Dusk and Dawn Intertwilight Period for Motor Vehicle Violations

	(1)	(2)	(3)	(4)	(5)
	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
Darkness	-0.117**	-0.137***	-0.061*	-0.106***	-0.099***
	(0.048)	(0.043)	(0.036)	(0.029)	(0.035)
R2	0.103	0.111	0.115	0.076	0.117
N	138,891	143,032	136,613	138,228	142,592

Note 1: The coefficients are presented along with their level of significance. A coefficient concatenated with * represents a p-value of .1, ** represents a p-value of .05, and *** represents a p-value of .01 significance.
Note 2: The results are clustered at the department-level and the standard errors are presented in parentheses.
Note 3: All specifications include controls for time of the day, day of the week, state traffic volume, police department, an interaction between time of day and police department fixed effects, an interaction between day of the week and police department fixed effects, and an interaction between volume and police department fixed effects.
Note 4: The daily volume control used in each model are calculated at the requisite intertwilight period.

The results presented in Table 22 are estimated using only motor vehicle violations occurring in the combined intertwilight period. This sample excludes all stops made for investigative purposes and equipment violations. As can be seen by comparing the sample sizes in Table 21 and Table 22, motor vehicle violations make up the largest proportion of stops. The results presented in Table 22 align with those estimates from the entire sample in terms of sign and the level of statistical significance. Interestingly, the specification that includes Blacks and additional minority groups is stronger than the specification for that group alone. That result, however, may be due to a small sample size of Black drivers in the restricted sample. The conclusion from this robustness check, however, is that the initial findings are robust to this more restrictive specification.

Another source of potential bias pertains specifically to the dependent variable in this analysis that is constructed from officer-observed demography. The concern stems from the potential for non-random measurement error in officer-observed demography. Although one expects there to be a degree of random measurement error in all racial and ethnic variables, there is little concern about this because it should be absorbed by the residual. The measurement error that is concerning,

however, is problematic if it is associated with visibility. More concretely, there is a concern that demography is less subject to measurement error during daylight hours than at night.

Although there is no readily available robustness check for this concern, a possible qualitative rationale for having more confidence in certain specifications than others is considered. It seems likely that ethnicity, unlike race, is more susceptible to non-random measurement error that varies based on visibility. Ethnicity varies across racial groups and is not always associated with easily observable physical or cultural characteristics. If one believes that this is the case, it seems plausible that officer-observed ethnicity is more likely to be misreported during periods of low visibility. The measurement error could result in an increased likelihood for an officer to accurately record an individual's ethnicity during daylight hours. As a result, the indicator variable from darkness might be biased towards identifying a racial or ethnic disparity that is, in fact, driven by the measurement error.

As mentioned, there is less concern with nonrandom measurement error occurring in this way with racial demography. Although racial demography may be subject to the same measurement error, it seems likely that it will occur to a significantly lesser degree. Along these lines, the specifications that include only racial demography as the criteria for creating the dependent variable to be the most reliable are considered. The specifications that include Caucasian drivers of Hispanic ethnicity, on the other hand, should be viewed with more skepticism when coupled with insignificant results for the specifications that do not include race alone.

V.E: DEPARTMENT LEVEL RESULTS AND ROBUSTNESS CHECKS FOR THE VEIL OF DARKNESS

The *Veil of Darkness* analysis presented at the state level shows that a statistically significant disparity exists in the rate of minority traffic stops. That analysis, however, does not attempt to locate the geographic source of the disparity in terms of police departments. The analysis presented in this section seeks to better identify the source of the observed disparities in terms of department. By amending Equation 7 to accommodate these questions and create estimates at the department level, one can proceed with the analysis.

First, amend Equation 7 to accommodate this goal and create estimates at the department level.

$$log\frac{P(m_d|\delta_d, X_d)}{1 - P(m_d|\delta_d, X_d)} = \beta_{d,0} + \beta_{d,1}\delta + X_d{}'\beta_{d,2} + \mu_d \qquad \textbf{(8)}$$

The estimation equation presented in Equation 8 includes a vector X_d of fixed effects for time of day and day of week that are estimated separately for each department. As before, a daily volumetric measure of state traffic stops is included. The *Veil of Darkness* test statistic is estimated in this model through the constant where $K_{vod}(X) = -\beta_{\mathrm{d1}}$ and represents a department-level disparity rather than a statewide average. As before, the magnitude of the coefficient should not be used to quantitatively evaluate relative differences in racial disparities across departments. The sign and level of significance, however, are sufficient indicators that can be used to qualitatively determine the existence of a racial or ethnic disparity.

First, the *Veil of Darkness* during the combined intertwilight window individually for each department is presented and a selection of these results is presented in Table 23. The four

departments presented in Table 23 represent those jurisdictions that showed the most statistically significant disparity across all five specifications along with Waterbury.[10] Waterbury is included in the table because a correlation between equipment violations and darkness may be creating an upward bias on the estimates from the combined sample of motor vehicle and equipment violations. All four of the other geographies showed an observed and statistically significant disparity that was robust across the minority definition regardless of the inclusion of racial and ethnic demography. As mentioned throughout this report, the results of this test provide evidence of a racial or ethnic disparity that indicates possible existence of department level racial profiling. Determining whether racial profiling exists in these departments, however, is beyond the scope of this report and requires additional investigation.

Table 23: Department *Veil of Darkness* Analysis at the Combined Dusk and Dawn Intertwilight Period

		(1)	(2)	(3)	(4)	(5)	
		Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Granby	Darkness	-1.352*	-1.088*	-1.352*	-0.514	-1.088*	386
		(0.754)	(0.58)	(0.754)	(0.874)	(0.58)	
Groton Town	Darkness	-0.665***	-0.516***	-0.706***	-0.179	-0.504***	1,608
		(0.218)	(0.178)	(0.234)	(0.25)	(0.183)	
Waterbury	Darkness	-0.588	-0.532	-0.561	0.094	-0.497	393
		(0.392)	(0.372)	(0.392)	(0.373)	(0.368)	
State Police-Troop C	Darkness	-0.624***	-0.569***	-0.408***	-0.395**	-0.418***	8,961
		(0.122)	(0.0995)	(0.137)	(0.154)	(0.106)	
State Police-Troop H	Darkness	-0.495***	-0.406***	-0.420***	-0.065	-0.340***	4,479
		(0.134)	(0.115)	(0.138)	(0.158)	(0.116)	

Note 1: The coefficients are presented along with their level of significance. A coefficient concatenated with * represents a p-value of .1, ** represents a p-value of .05, and *** represents a p-value of .01 significance.
Note 2: The standard errors are presented in parentheses.
Note 3: All specifications include controls for time of the day, day of the week, and volume fixed effects.
Note 4: The daily volume control used in each model are calculated at the requisite intertwilight period.

The results from Table 23 should be considered a department level average. As discussed in the context of the state level estimates, it is impossible to determine the source of these disparities using this framework and it is beyond the scope of this analysis. Specifically, this test is unable to identify specific officers that may be driving the results. In addition, it should be noted that these estimates may miss officer-level disparities that exist in departments that, on average, do not have disparities. Less formally, disparities at the officer level may wash out and not show up as statistically significant. That being said, the results presented in Table 23 only identify disparities that are large enough to affect the department level average.

There still exists the potential threat from unobserved covariates that was discussed in the state level analysis in the context of equipment violations. In an effort to gauge whether the initial department level findings are robust to excluding equipment violations, a sample of traffic stops resulting from motor vehicle violations is created and the estimates are presented in Table 24. In

[10] The comprehensive results for all departments are contained in the Appendix.

some cases the results became relatively stronger while in other cases they became weaker when using the sample of motor vehicle violations. These changes, however, only had a significant effect on Waterbury which showed no significance in the original sample but appeared to show a disparity across several minority definitions when the restricted sample was used. The lack of results in the initial specification may be due to a potential correlation between certain types of equipment violations and darkness that are masking an underlying disparity.

Table 24: Department *Veil of Darkness* Analysis at the Combined Dusk and Dawn Intertwilight Period for Motor Vehicle Violations

		(1)	(2)	(3)	(4)	(5)	
		Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Granby	Darkness	-2.031**	-1.307*	-2.031**	-0.283	-1.307*	287
		(0.934)	(0.688)	(0.934)	(1.035)	(0.688)	
Groton Town	Darkness	-0.537**	-0.497**	-0.506*	-0.245	-0.444**	1,280
		(0.243)	(0.200)	(0.260)	(0.286)	(0.205)	
Waterbury	Darkness	-0.786*	-0.747*	-0.762*	0.0677	-0.724*	354
		(0.448)	(0.407)	(0.447)	(0.416)	(0.403)	
State Police-Troop C	Darkness	-0.551***	-0.497***	-0.343**	-0.330**	-0.349***	8,197
		(0.126)	(0.103)	(0.142)	(0.161)	(0.111)	
State Police-Troop H	Darkness	-0.440***	-0.326***	-0.361**	0.00921	-0.259**	4,214
		(0.141)	(0.119)	(0.145)	(0.164)	(0.121)	

Note 1: The coefficients are presented along with their level of significance. A coefficient concatenated with * represents a p-value of .1, ** represents a p-value of .05, and *** represents a p-value of .01 significance.
Note 2: The standard errors are presented in parentheses.
Note 3: All specifications include controls for time of the day, day of the week, and volume fixed effects.
Note 4: The daily volume control used in each model are calculated at the requisite intertwilight period.

The results presented in the state level analysis provide strong evidence that a disparity exists in the rate of minority traffic stops in Connecticut. The results from Tables 23 and Table 24 indicate that a large share of the disparity at the state level is being driven by these five departments. This fact becomes more readily apparent when the large sample size for some of these departments is considered. The source of these disparities from within the individual departments, however, is not obtainable from this analysis but could be statistically evaluated using a technique like propensity score matching. As mentioned previously, a shortcoming of the focus on the department level is that large racial disparities at the officer level may wash out when their traffic stops are combined with other officers within their department. Although not comprehensive, it is concluded that these five departments have an observed and statistically significant higher likelihood to stop a minority driver in the presence of daylight.

VI. ANALYSIS OF POST-STOP DISPARITIES

In this section the results of two models that rely on vehicular searches to identify racial and ethnic disparities is detailed. Analysis conducted using post-stop variables has historically been seen as favorable to benchmarks because it does not rely on any assumptions about the underlying risk-set. The focus on post-stop analysis has, however, decreased since the *Veil of Darkness* was developed and is able to accomplish these same feats with pre-stop data. The disadvantage of post-stop analysis is the small sample size when considering vehicular searches. In many cases, one is unable to estimate the model at the department level because of this issue. As a result, the *Veil of Darkness* is considered to be the primary test mechanism but these results are included as supporting evidence. In addition, it is likely that there will be an increased ability to apply these tests in the future when more data is available.

VI.A: STATE AND DEPARTMENT LEVEL RESULTS FOR THE KPT HIT RATE ANALYSIS

Knowles, Persico, and Todd (2001) present a behavior-based model for testing and identifying racial bias in police searches. The model incorporates rational motorist behavior, with respect to driving with contraband, and optimal officer response. The testable implication derived from this model is that the equilibrium search strategy, in the absence of group bias, will result in an equalization of the rate of contraband that is found relative to the total number of searches (i.e. the hit rate) across motorist groups. Knowles et al. (2001) outline a testable hypothesis and use a nonparametric test, the Pearson X^2 test, to evaluate their hypothesis. Since its initial presentation in the *Journal of Political Economy*, the test outlined by Knowles et al. that has subsequently become known as a test of the KPT hit rate, has been applied widely across the nation.

The logic of the KPT hit rate follows from a simplified game theoretic exposition. In the absence of racial bias, the costs of searching different groups of motorists are equal. Police officers make decisions to search in an effort to maximize their expectations of finding contraband. The implication being that police will be more likely to search a group that has a higher probability of carrying contraband, i.e. participate in statistical discrimination. In turn, motorists from the targeted demography understand this aspect of police behavior and respond by lowering their rate of carrying contraband. This iterative process continues within demographic groups until, in equilibrium, it is expected that an equalization of hit rates across groups is found.

Knowles et al. introduce racial bias via search costs incurred by officers that differ across demographic groups. An officer with a lower search cost for a specific demographic group will be more likely to search motorists from that group. The result of this action will be an observable increase in the number of targeted searches for that group. As above, the targeted group will respond rationally and reduce their exposure by carrying less contraband. Eventually, the added benefit associated with a higher probability of finding contraband in the non-targeted group will offset the lower cost of search for that group. As a result, one would expect the hit rates to differ across demographic groups in the presence of racial bias.

Knowles et al. (2001) develop a theoretical model with testable implications that can be used to evaluate statistical disparities in the rate of searches across demographic groups. Following

Knowles et al. an empirical test of the null hypothesis (that no racial or ethnic disparity exists) in Equation 9 is presented.

$$P(H = 1 \mid m, S) = P(H = 1 | S\ ) \ \forall\ r, c \qquad \textbf{(9)}$$

Equation 9 computes the probability of a search resulting in a hit across different demographic groups. If the null hypothesis was true and there was no racial or ethnic disparity across these groups, one would expect the hit rates across minority and non-minority groups to reach equilibrium. As discussed previously, this expectation stems from a game-theoretic model where officers and drivers optimize their behaviors based on knowledge of the other party's actions. In more concrete terms, one would expect drivers to lower their propensity to carry contraband as searches increase while officers would raise their propensity to search vehicles that are more likely to have contraband. Essentially, the model allows for statistical discrimination but binds if there is taste-based discrimination.

First, begin by aggregating all search data for Connecticut by demography and performing the non-parametric test of the KPT hit rate. The results of this test can be seen in Table 25 for five distinct minority definitions. Although the results show significance across all the specifications, only four of the five specifications find a disparity that indicates a bias towards searching minority groups. The differential presented in Table 25 represents the spread between the non-minority and minority hit rates. A positive differential indicates that the hit rate for non-minorities is higher in magnitude than for minority groups or that nonminority individuals are searched less frequently relative to their propensity to carry contraband. The results from Table 25 indicate that the ethnicity rather than race leads to a disparity in the rate of searches relative to hits.

Table 25: State KPT Hit Rate Analysis

	(1)	(2)	(3)	(4)	(5)
Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
Chi2 P-Value	0.000***	0.000***	0.000***	0.000***	0.000***
N	5,026	6,270	4,988	4,541	6,233
Differential	-0.018	0.006	-0.017	0.025	0.007

Note 1: The p-value of a chi squared tests has been concatenated for ease of use with * represents a p-value of .1, ** represents a p-value of .05, and *** represents a p-value of .01 significance.

As mentioned in the context of the *Veil of Darkness*, any analysis conducted at the state level does little to identify the geographic source of those disparities. In an effort to better identify the departments that are driving the state level disparity seen in Table 25, the results from the same analysis conducted at the department level in Table 26 is presented.[11] The five departments presented in Table 26 were found to have a statistically significant disparity in the hit rate of minority groups relative to their nonminority counterparts. Interestingly, one of the departments appears to have a disparity in the hit rate for Hispanic motorists that is driving the remainder of the results. Another department is similarly being driven by the hit rate for Black motorists. The other three departments appear to have a statistically significant disparity in the hit rate across all demographic groups where the sample size was large enough to have detectable results.

[11] The comprehensive results for all departments are contained in the Appendix.

Table 26: Department KPT Hit Rate Analysis

		(1)	(2)	(3)	(4)	(5)
		Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
West Hartford	Chi2 P-Value	0.379	0.002***	0.379	0.001***	0.002***
	N	234	286	234	261	286
	Differential	0.12	0.202	0.12	0.208	0.202
State Police-Troop C	Chi2 P-Value	0.013**	0.002***	0.017**	0.042**	0.003***
	N	174	174	173	147	173
	Differential	0.206	0.201	0.199	0.104	0.194
State Police-Troop F	Chi2 P-Value	0.012**	0.002***	0.012**	0.033**	0.002***
	N	88	88	88	69	88
	Differential	0.199	0.238	0.199	0.208	0.238
State Police-Troop I	Chi2 P-Value	0.003***	0.005***	0.005***	0.233	0.007***
	N	105	105	103	74	103
	Differential	0.033	0.068	0.029	0.064	0.065
Waterbury	Chi2 P-Value	0.004***	0.004***	0.004***	0.007***	0***
	N	42	65	42	45	65
	Hit Rate	0.018	0.112	0.014	0.114	0.146

Note 1: The p-value of a chi squared tests has been concatenated for ease of use with * represents a p-value of .1, ** represents a p-value of .05, and *** represents a p-value of .01 significance.

An important cautionary note about the KPT hit rate is necessary before a conclusive inference from this analysis alone is drawn. Firstly, it is acknowledged in the brief theoretical exposition that this test allows for statistical discrimination across minority groups and is only capable of identifying taste-based discrimination. Although this same assumption implicitly underlies the *Veil of Darkness,* it is an important consideration when assessing KPT's validity because it is outlined explicitly in the theoretical model.

In addition, there has been a contentious academic debate surrounding KPT since its inception. Several papers have explored generalizations and extensions of the framework and found that they invalidated some of the testable implications of the KPT hit rate (Antonovics and Knight 2004; Anwar and Fang 2006; Dharmapala and Ross 2003). Knowles and his colleagues responded to their critics with further refinements of their model that provide additional evidence of its validity (Persico and Todd 2004). Although the results from the KPT hit rate analysis provide excellent supporting evidence to the other tests, there is caution against considering the results in isolation. A larger sample size, possibly consisting of multiple years, would allow a more refined analysis that would align with that outlined by Dharmapala and Ross (2003) and prove to be more robust.

VI.B: STATE AND DEPARTMENT LEVEL RESULTS FOR THE SOLAR-POWERED MODEL OF STOPS AND SEARCHES

An alternative statistical test for racial and ethnic disparities that relies on post-stop policing data was developed by Joseph Ritter (2013) and applied to a 2002 sample of Minneapolis policing data. Ritter identifies an important post-stop implication of identifying racial bias through the *Veil of Darkness* methodology and deems it the *Solar-Powered Model of Stops and Searches*. Specifically, the probability of discretionary searches for minorities will decrease with visibility if there exists some statistical discrimination. In this section, a model built upon Ritter's framework and amended slightly to accommodate the Connecticut data is developed.

In the *Solar-Powered Model of Stops and Searches*, a dummy for vehicle search, given individual consent, is regressed on a darkness treatment. Following this *Veil of Darkness* implementation, additional controls to accommodate potential changes in the underlying risk-set is included. These controls include time of the day, day of the week, and daily state volumetric traffic stops. As before, one expects that these controls will help accommodate any potential variation in the risk-set and allow the identification solely from the darkness indicator alone.

The results at the state level rely on an estimation equation that is highly motivated by Ritter (2013) and presented in Equation 10.

$$log\frac{P(S|\delta,X,m)}{1-P(S|\delta,X,m)} = \beta_0 + \beta_{m,1}\delta + X'\beta_{m,2} + \mu_m \qquad \textbf{(10)}$$

The estimation equation presented in Equation 10 includes a vector X of fixed effects for time of day, day of week, police department, time of day interacted with police department, and day of week interacted with police department. As before, a daily volumetric measure of state traffic stops and its interaction with police department fixed effects is included. The key distinction between this model and the traditional *Veil of Darkness* approach is that it is estimated with stops on the left hand side. The regression is estimated separately, at the state level, for each of the five minority definitions. Although the mechanism used to identify disparities changes, the test statistic is estimated in this model through the same coefficient on darkness. As was the case with the traditional *Veil of Darkness* setup, the magnitude of the coefficient should not be used to quantitatively evaluate relative differences in racial disparities across departments. The sign and level of significance, however, are sufficient indicators that can be used to qualitatively determine the existence of a racial or ethnic disparity.

The intuition is relatively straightforward and the results are easy to interpret. Imagine that officers combine and rank many pre and post-stop driver characteristics, other than race, when determining whether or not to search a vehicle. If this was the case and profiling has some expected benefit, then one would expect that the search thresholds for these characteristics are different for minorities and non-minorities. One would also expect the rate of searches to stops to remain constant across daylight and darkness. If one observes an increased rate of searches during darkness hours, a possible conclusion would be to assert that officers are pulling over less minority drivers because they cannot discern their demographics prior to making a stop decision.

One would expect to observe a statistically significant and positive log odds ratio on the darkness indicator variable if officers have a lower threshold for stopping and searching minorities. Put simply, Ritter's model estimates the ratio of stops to searches for minority groups relative to non-minorities and asks whether that ratio changes when in the presence of darkness. In the presence of racial or ethnic disparity, darkness would change the optimal threshold for which an officer will stop and search a vehicle because these demographic features are visible to a lesser degree before a stop is made. As is implicit in the discussion of this mode, Ritter's *Solar-Powered Model of Stops and Searches* is an extremely strict criteria for detecting racial and ethnic disparities and relies on search data that reduces the sample size significantly.

The results of an application of Ritter's *Solar-Powered Model of Stops and Searches* to the aggregate state level data is presented in Table 27. These results were estimated using the sample that combined the dusk and dawn intertwilight periods. The results across all specifications had no statistical significance and found no evidence of a racial or ethnic disparity. Although no information is gained from these estimates, it does not necessarily mean that the model is incapable of replicating the same results found with the other econometric models. Conversely, these results simply indicate that the results at the state level do not show a disparity and if there exists a racial or ethnic disparity in certain departments, it is being washed out in the aggregate.

Table 27: State Solar Powered Search Analysis at the Combined Dusk and Dawn Intertwilight Period for Consensual Searches

	(1)	(2)	(3)	(4)	(5)
	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
Darkness	-0.217	-0.233	-0.362	-0.316	-0.281
	(0.289)	(0.215)	(0.311)	(0.275)	(0.214)
R2	0.177	0.132	0.178	0.167	0.126
N	10,839	22,713	9,347	8,108	21,193

Note 1: The coefficients are presented along with their level of significance. A coefficient concatenated with * represents a p-value of .1, ** represents a p-value of .05, and *** represents a p-value of .01 significance.
Note 2: The results are clustered at the department-level and the standard errors are presented in parentheses.
Note 3: All specifications include controls for time of the day, day of the week, state traffic volume, police department, an interaction between time of day and police department fixed effects, an interaction between day of the week and police department fixed effects, and an interaction between volume and police department fixed effects.
Note 4: The daily volume control used in each model are calculated at the requisite intertwilight period.

The next task is to seek to identify any departments that have an observed and statistically significant racial or ethnic disparity that is being washed out in the state level aggregate results. The concern here, however, is that this model may not be applicable to many departments because of the limited number of searches conducted in smaller jurisdictions. As was the case with the KPT hit rate analysis, those results that had enough searches to fully apply the model are presented. A larger time period or increased sample, however, might yield different results for those departments with an extremely small sample size.

Equation 10 is amended to accommodate a department level analysis and create estimates using Equation 11.

$$log\frac{P(m_d|\delta_d, X_d, m)}{1 - P(m_d|\delta_d, X_d, m)} = \beta_{m,d,0} + \beta_{m,d,1}\delta + X_{m,d}{}'\beta_{d,2} + \mu_d \quad \textbf{(11)}$$

Equation 11 is estimated during the combined intertwilight window individually for each department and a selection of these results is presented in Table 28. The four departments presented in Table 28 represent those jurisdictions that showed the most statistically significant disparity across all five specifications.[12] All four of these showed an observed and statistically significant disparity that was robust across the minority definition regardless of the inclusion of racial and ethnic demography. As mentioned throughout this report, the results of this test provide evidence of a racial or ethnic disparity that indicates possible existence of department level racial profiling. Determining whether racial profiling exists in these departments, however, is beyond the scope of this report and requires additional investigation.

Table 28: Department Solar Powered Search Analysis at the Combined Dusk and Dawn Intertwilight Period for Consensual Searches

		(1)	(2)	(3)	(4)	(5)	
		Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Glastonbury	Darkness	-33.29	1.965		4.511*	2.342	113
		(6212.0)	(1.296)		(2.624)	(1.465)	
Waterbury	Darkness		2.177*		2.858*	2.151*	120
			(1.202)		(1.602)	(1.199)	
State Police-Troop A	Darkness	1.307*	1.037*	1.348*	0.758	1.048*	1,278
		(0.694)	(0.537)	(0.708)	(1.007)	(0.537)	
State Police-Troop C	Darkness	3.047**	1.024	2.692**	-0.512	0.948	1,128
		(1.340)	(0.729)	(1.274)	(1.295)	(0.716)	

Note 1: The coefficients are presented along with their level of significance. A coefficient concatenated with * represents a p-value of .1, ** represents a p-value of .05, and *** represents a p-value of .01 significance.
Note 2: The standard errors are presented in parentheses.
Note 3: All specifications include controls for time of the day, day of the week, and volume fixed effects.
Note 4: The daily volume control used in each model are calculated at the requisite intertwilight period.

[12] The comprehensive results for all departments are contained in the Appendix.

VII: FINDINGS AND CONCLUSIONS

The statistical evaluation of policing data in Connecticut is an important step towards developing a transparent dialogue between law enforcement and the public at large. The release of this report is evidence that Connecticut is well positioned to lead the nation in addressing the issue of racial profiling and increasing trust between the public and law enforcement. Although the analysis and findings presented in this report were conducted through a collaboration between IMRP and CERC, the ability to conduct such an analysis is wholly attributable to the efforts of state policy makers and the Racial Profiling Prohibition Project Advisory Board. The advisory board brought a variety of perspectives to the conversation and included members from Connecticut state government, the legislature, state and local police, researchers, and civil rights advocacy groups.

There are a total of 92 municipal police departments: 29 departments employing more than 50 officers, 50 employing between 20 and 50 officers, and 13 with fewer than 20 officers. State police are comprised of 13 distinct troops. Although there are an additional 81 jurisdictions that do not have organized police departments and are provided police services by the state police, either directly or through provision of resident troopers, these stops were categorized with their overarching state police troops. Additionally, a total of 13 special agencies have the authority to conduct traffic stops. This report presents the results from an analysis of the 620,000 traffic stops conducted during the 12-month study period from October 1, 2013 through September 30, 2014.[13]

Seven distinct analytical tools were used to evaluate whether racial and ethnic disparities are present in the Connecticut policing data collected from October 1, 2013 through September 30, 2014. The first four analytical tools applied in the analysis are presented in Section IV of the main report. The three techniques contained in Section IV are descriptive in nature and should be viewed with a degree of caution.[14] These techniques are, however, extremely useful in helping to identify irregularities in the data and create a context that helps to better understand the results of more advanced statistical techniques.

The fifth section of the report illustrates the application of the *Veil of Darkness* to assess the existence of racial and ethnic disparities in stop data. The *Veil of Darkness* is a statistical technique that was developed by Jeffery Grogger and Greg Ridgeway (2006) and published in the *Journal of the American Statistical Association*. The *Veil of Darkness* examines a restricted sample of stops occurring during the "intertwilight window" and assesses relative differences in the ratio of minority to non-minority stops that occur in daylight as compared to darkness. The assumption being that if police officers wished to profile motorists, they would be more likely to do so during daylight hours when race and ethnicity are more easily discernible. The analysis conducted in Section V is considered to be the most rigorous and broadly applicable of all the tests presented in this analysis.

The final section of the report illustrates the application of an analysis of hit rates using the classic approach developed by Knowles, Persico and Todd (2001). Although some criticism has arisen concerning the technique, it contributes to an understanding of post-stop police behavior in Connecticut. In addition to this technique, a more recent contribution by Joseph Ritter (2013) that assesses the relative frequency of search rates across racial and ethnic groups is applied. Although

[13] There were only 595,194 traffic stops used in the analysis because all stops made by Stamford were excluded due to technical issues and potential selection in the resulting sample.

[14] The justification behind this cautionary note is presented in the introduction to Section III.

the analytical techniques presented in Section VI are not as widely endorsed as the *Veil of Darkness*, they provide an additional statistically sound mechanism to contrast findings from Section V.

VII.A: FINDINGS FROM THE ANALYSIS

This section represents a summary of the findings from the analysis conducted in Sections IV, V and VI of the main report.

Aggregate Findings for Connecticut

A total of 13.5% of motorists stopped during the analysis period were observed to be Black. A comparable 11.7% of stops were of motorists from a Hispanic descent. The results from the *Veil of Darkness* analysis indicated that minority stops were more likely to have occurred during daylight hours than at night. The statistical disparity provides evidence in support of the claim that certain officers in the state are engaged in racial profiling during daylight hours when motorist race and ethnicity is visible. These results were robust to the addition of a variety of controls including time of day, day of the week, state traffic volume, department level fixed effects, and department volume controls. The results from the post-stop analysis confirm that the disparity carries through to post-stop behavior for Hispanics.

Although we find results at the state level, it is important to note that it is specific officers and departments that are driving these statewide trends. In an effort to better identify the source of these racial and ethnic disparities, each analysis was repeated at the department level.[15] The departments that were identified as having a statistically significant disparity are presumed to be driving the statewide results. Although it is possible that specific officers within departments that were not identified may be engaged in racial profiling, these behaviors were not substantial enough to influence the department level results. It is also possible that a small number of individual officers within the identified departments are driving the department level trends.

The five departments identified to exhibit a statistically significant racial or ethnic disparity that may indicate the presence of racial and ethnic bias include:

Groton Town

The Groton municipal police department was observed to have made 23.7% minority stops of which 8.3% were Hispanic and 13.6% were Black motorists.[16] The results from the *Veil of Darkness* indicated that minority motorists, across all racial and ethnic categories, were more likely to have been stopped during daylight as opposed to darkness hours. The results were robust to the inclusion of a variety of controls and sample restriction that excluded equipment violations. Although the post-stop analysis could not be conducted due to an insufficient sample of vehicular searches, the analysis using the *Veil of Darkness* produced sufficiently strong results to make a determination that these results indicate the presence of a significant racial and ethnic disparity that is occurring in Groton. The results of these analyses indicate that further investigation into the source of the observed statistical disparity is warranted.

[15] The post-stop analysis in Section V could not be conducted for many departments because of an insufficient small sample size.
[16] These results do not include stops for the police departments with jurisdiction over Groton Long Point or Groton City.

Granby

The Granby municipal police department was observed to have made 9% minority stops of which 2.8% were Hispanic and 5.7% were Black motorists. The results from the *Veil of Darkness* indicated that minority motorists, across all racial and ethnic categories, were more likely to have been stopped during daylight as opposed to darkness hours. The results were strongest in the sample that was restricted to motor vehicle violations and were potentially being masked by the inclusion of equipment violations in the combined sample. Although the post-stop analysis could not be conducted due to an insufficient sample of vehicular searches, the analysis using the *Veil of Darkness* produced sufficiently strong results to make a determination that these results indicate the presence of a significant racial and ethnic disparity that is occurring in Granby. The results of these analyses indicate that further investigation into the source of the observed statistical disparity is warranted.

Waterbury

The Waterbury municipal police department was observed to have made 64.8%[17] minority stops of which 33.2% were Hispanic and 32.3% were observed as Black motorists. The *Veil of Darkness* for the subsample of motor vehicle violations showed a marginally significant racial disparity across all racial definitions except for Hispanics alone. Minority motorists, for these demographic groups, were more likely to have been stopped during daylight as opposed to darkness hours. The results were strongest in the sample that was restricted to motor vehicle violations and were potentially being masked by the inclusion of equipment violations in the combined sample. The results of the post-stop analysis also indicated that minority motorists, as compared to their Caucasian counterparts, were being searched more frequently relative to the rate at which they were found with contraband. The results of the pre- and post-stop analyses both indicate the presence of a significant racial and ethnic disparity that is occurring in Waterbury. This results of these analyses indicate that further investigation into the source of the observed statistical disparity is warranted.

State Police Troop C

State Police Troop C was observed to have made 15.2% minority stops of which 5.6% were Hispanic and 7.2% were observed to be Black motorists. The *Veil of Darkness* for the subsample of motor vehicle violations showed a significant racial disparity across all racial definitions. Minority motorists, for these demographic groups, were more likely to have been stopped during daylight as opposed to darkness hours. The results were stronger in the sample that was restricted to motor vehicle violations. The results of the post-stop analysis also indicated that minority motorists, as compared to their Caucasian counterparts, were being searched more frequently relative to the rate at which they were found with contraband. The results of the pre and post-stop analysis both indicate the presence of a significant racial and ethnic disparity that is occurring in State Police Troop C. The results of these analyses indicate that further investigation into the source of the observed statistical disparity is warranted.

Troop C covers 10 towns, five of which are resident trooper towns, including Mansfield. The 26 resident troopers assigned to these five towns represent the largest component of the Resident Trooper Program in the state. In addition, four of the five resident trooper towns employ a total of 24 full- or part-time constables to augment the law enforcement coverage provided by the resident troopers. Shift assignments are determined by the towns, not the State Police with the majority of the resident troopers assigned to the day shift. The interrelationship of these staffing patterns with

[17] The minority stop percentage is derived from all non-Caucasian drivers stopped, which does not include drivers identified as White and Hispanic.

overall Troop C operations is one of the factors that will be considered when further investigating the Troop C data for the source of the statistical disparity.

State Police Troop H

State Police Troop H was observed to have made 37.5% minority stops of which 13.5% were Hispanic and 22.5% were observed to be Black motorists. The *Veil of Darkness* for the subsample of motor vehicle violations showed a significant racial disparity across all racial definitions. Minority motorists, for these demographic groups, were more likely to have been stopped during daylight as opposed to darkness hours. The results were stronger in the sample that was restricted to motor vehicle violations. Although the post-stop analysis could not be conducted due to an insufficient sample of vehicular searches, the analysis using the *Veil of Darkness* produced sufficiently strong results to make a determination that these results indicate the presence of a significant racial and ethnic disparity that is occurring in State Police H. The results of these analyses indicate that further investigation into the source of the observed statistical disparity is warranted.

Departments Identified from Descriptive Analysis

In addition to the five departments identified to exhibit statistically significant racial or ethnic disparities that may indicate the presence of racial and ethnic bias, 12 departments were identified using the descriptive tests. The descriptive tests are designed as a screening tool to identify the jurisdictions where consistent disparities that exceed certain thresholds have appeared in the data. They compare stop data to four different benchmarks: (1) statewide average, (2) the estimated driving population, (3) resident-only stops, and (4) peer groups. Although it is understood that certain assumptions have been made in the design of each of the four measures, it is reasonable to believe that departments with consistent data disparities that separate them from the majority of other departments should be subject to further review and analysis with respect to the factors that may be causing these differences.

The other important factor is the relative size of the disparities. For this portion of the study, a threshold of 10 percentage points is the point at which a department's data is considered sufficient for identification. In a number of instances, the disparities were significantly above the threshold.

In seven departments the screening process shows stop data that exceeded the disparity threshold levels in at least three of the four benchmark areas as well as in a majority of the 12 possible measures. Those departments are (1) Wethersfield, (2) Hamden, (3) Manchester, (4) New Britain, (5) Stratford, (6) Waterbury, and (7) East Hartford. The project staff will continue to study the data and attempt to identify the factors that may be causing these differences. In addition, these departments should evaluate their own data to better understand any relevant patterns.

The screening process also detected an additional five departments whose stop data exceeded the disparity threshold levels in at least three of the four benchmarks, and six of the 12 possible measures. Those departments are (1) Meriden, (2) New Haven, (3) Newington, (4) Norwich and (5) Windsor. Going forward, the data for these five departments will continue to be monitored to determine whether any changes relative to the descriptive benchmarks indicate the need for further analysis.

VII.B: NEXT STEPS AND FUTURE RESEARCH

The reporting elements included in the 2012 and 2013 revisions to the Alvin W. Penn Racial Profiling Prohibition Act represent one of the largest and most comprehensive efforts to collect policing data in any state in the nation or individual jurisdiction to date. The analysis in this report represents the application of a series of well-respected statistical techniques and the development of several useful descriptive statistics that help to better contextualize those findings. The data made available through this project, however, creates an opportunity to develop increasingly sophisticated statistical tests that build on those applied in this analysis and take advantage of the unique variables available in the dataset. This analysis of racial and ethnic disparities in Connecticut policing data is not the end of the process but should be considered the foundation for an ongoing dialogue.

This report makes it clear that racial and ethnic disparities do not, by themselves, provide conclusive evidence of racial profiling. Statistical disparities do, however, provide significant evidence of the presence of idiosyncratic data trends that warrant further analysis. Such further analysis could include propensity score matching, a sophisticated analytical technique that has been used to identify racial and ethnic disparities at the officer level. These analyses typically use propensity scores to match stops based on a multitude of observable characteristics. The researcher then constructs a benchmark for each officer by gathering a collection of the most similar stops and using it to compare the proportion of minority stops.

It is highly recommended that the analysis conducted in this report at the department level serve as an initial step towards the identification of racial and ethnic disparities in policing data. The statistical disparities identified in the department level analysis could be driven by specific department-wide practices or by individual officers. An officer level analysis using propensity score matching can help distinguish between these two cases and better identify the sources of the observed disparities. That analysis would help to identify if individual officers are driving department level disparities and help to better target implicit bias training as well as other corrective measures.

As the project moves forward, this data will allow researchers to develop increasingly sophisticated statistical techniques that can help to better identify racial and ethnic disparities. Future reports will also make available multiple years of data and allow the application of many statistical techniques to departments where the sample size was too small in this analysis. Additionally, future reports will be able to illustrate the progress of the state toward eliminating disparities in police traffic stops.

It is also highly recommended that all departments make a commitment to the Department of Justice, Community Oriented Policing Services, sponsored training program on "Fair and Impartial Policing (FIP)." The FIP program was established to train police officers and supervisors on fair and impartial policing by understanding both conscious and unconscious bias. This program will be offered to police agencies throughout the state on an ongoing basis. The project staff will also work with the Police Officers Standard and Training Council to incorporate the FIP curriculum into recruit training.

Although further analysis and training are important, a major component of addressing racial profiling in Connecticut is bringing law enforcement officials and community members together in an effort to build trust by discussing relationships between police and the community. The project staff has conducted several public forums throughout the state to bring these groups together and

will continue these dialogues into the foreseeable future. They serve as an important tool to inform the public of their rights and the role of law enforcement in serving their communities.

In the coming weeks, the project staff will publish a detailed guide of steps that can be taken by all law enforcement agencies to address disparities in their communities. As a potential model, we will look to the measures enacted by the Department of Justice in East Haven to address racial profiling. Data analysis can be a useful tool to identify a potential problem, but addressing it requires a number of large and small steps to be taken. Through its ongoing work with OPM in implementing the Alvin Penn Act, the IMRP is committed to working with all law enforcement agencies to make improvements that will lead to enhanced relationships between the police and community.

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TECHNICAL APPENDIX

All tables in the technical appendix are identified by the section and table number where they can be found in the report. A complete listing is provided below.

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Appendix A

Table 1: Rate of Traffic Stops per 1,000 Residents (Sorted Alphabetically)

Town Name	2010 16 and Over Census Pop.	2013-2014 Traffic Stops	Stops per Resident	Stops per 1,000 Residents
State of CT	2,825,946	595,194	0.21	211
Ansonia	14,979	4,883	0.33	326
Avon	13,855	667	0.05	48
Berlin	16,083	6,644	0.41	413
Bethel	14,675	3,712	0.25	253
Bloomfield	16,982	5,515	0.32	325
Branford	23,532	6,891	0.29	293
Bridgeport	110,355	4,717	0.04	43
Bristol	48,439	4,653	0.10	96
Brookfield	12,847	3,223	0.25	251
Canton	7,992	1,751	0.22	219
Cheshire	23,146	4,749	0.21	205
Clinton	10,540	2,332	0.22	221
Coventry	9,779	1,343	0.14	137
Cromwell	11,357	2,330	0.21	205
Danbury	64,361	6,182	0.10	96
Darien	14,004	3,681	0.26	263
Derby	10,391	3,725	0.36	358
East Hampton	10,255	725	0.07	71
East Hartford	40,229	7,542	0.19	187
East Haven	24,114	1,555	0.06	64
East Windsor	9,164	1,035	0.11	113
Easton	5,553	427	0.08	77
Enfield	36,567	7,126	0.19	195
Fairfield	45,567	4,480	0.10	98
Farmington	20,318	4,525	0.22	223
Glastonbury	26,217	5,902	0.23	225
Granby	8,716	1,484	0.17	170
Greenwich	46,370	8,041	0.17	173
Groton	31,520	9,162	0.29	291
Guilford	17,672	2,711	0.15	153
Hamden	50,012	5,442	0.11	109
Hartford	94,801	8,254	0.09	87
Madison	14,073	2,733	0.19	194
Manchester	46,667	3,407	0.07	73
Meriden	47,445	3,209	0.07	68
Middlebury	5,843	266	0.05	46
Middletown	38,747	3,700	0.10	95
Milford	43,135	4,358	0.10	101
Monroe	14,918	4,319	0.29	290
Naugatuck	25,099	5,907	0.24	235
New Britain	57,164	5,533	0.10	97
New Canaan	14,138	4,229	0.30	299
New Haven	101,488	11,159	0.11	110
New London	21,835	1,524	0.07	70
New Milford	21,891	4,049	0.18	185
Newington	24,978	6,410	0.26	257

Table 1: Rate of Traffic Stops per 1,000 Residents (Sorted Alphabetically)

Town Name	2010 16 and Over Census Pop.	2013-2014 Traffic Stops	Stops per Resident	Stops per 1,000 Residents
Newtown	20,792	9,402	0.45	452
North Branford	11,549	1,340	0.12	116
North Haven	19,608	2,795	0.14	143
Norwalk	68,034	7,900	0.12	116
Norwich	31,638	6,919	0.22	219
Old Saybrook	8,330	2,783	0.33	334
Orange	11,017	3,129	0.28	284
Plainfield	11,918	1,240	0.10	104
Plainville	14,605	4,999	0.34	342
Plymouth	9,660	2,610	0.27	270
Portland	7,480	160	0.02	21
Putnam	7,507	2,308	0.31	307
Redding	6,955	2,537	0.36	365
Ridgefield	18,111	7,366	0.41	407
Rocky Hill	16,224	3,697	0.23	228
Seymour	13,260	3,710	0.28	280
Shelton	32,010	618	0.02	19
Simsbury	17,773	3,281	0.18	185
South Windsor	20,162	2,615	0.13	130
Southington	34,301	5,395	0.16	157
Stonington	15,078	1,894	0.13	126
Stratford	40,980	2,956	0.07	72
Suffield	12,902	556	0.04	43
Thomaston	6,224	942	0.15	151
Torrington	29,251	8,657	0.30	296
Trumbull	27,678	2,974	0.11	107
Vernon	23,800	3,762	0.16	158
Wallingford	36,530	9,178	0.25	251
Waterbury	83,964	1,742	0.02	21
Waterford	15,760	3,289	0.21	209
Watertown	18,154	1,784	0.10	98
West Hartford	49,650	8,221	0.17	166
West Haven	44,518	3,865	0.09	87
Weston	7,255	410	0.06	57
Westport	19,410	7,193	0.37	371
Wethersfield	21,607	5,547	0.26	257
Willimantic	20,176	3,942	0.20	195
Wilton	12,973	3,893	0.30	300
Winchester	9,133	717	0.08	79
Windsor	23,222	5,565	0.24	240
Windsor Locks	10,117	2,869	0.28	284
Wolcott	13,175	797	0.06	60
Woodbridge	7,119	2,465	0.35	346

Table 4: Basis for Stop (Sorted by % Speeding)

Department Name	Total	Speed Related	Cell Phone	Defective Lights	Display of Plates	Equipment Violation	Moving Violation	Registration	Seatbelt	Stop Sign	Suspended License	Traffic Control Signal	Window Tint	Other
New Milford	4,049	63.0%	4.1%	5.2%	1.0%	0.8%	4.7%	5.8%	1.3%	3.0%	0.5%	6.5%	0.1%	4.1%
Suffield	556	62.9%	5.9%	9.2%	0.4%	0.2%	9.0%	0.9%	0.0%	4.3%	0.2%	3.6%	0.0%	3.4%
Portland	160	62.5%	4.4%	1.9%	0.0%	0.0%	8.8%	1.9%	0.0%	3.8%	0.6%	7.5%	0.0%	8.8%
Southington	5,395	52.9%	14.3%	5.2%	1.0%	0.2%	2.2%	9.2%	3.7%	3.6%	0.7%	4.7%	0.5%	1.9%
Newtown	9,402	49.9%	9.6%	11.7%	3.5%	0.1%	4.8%	2.8%	1.1%	7.3%	0.2%	5.7%	0.1%	3.2%
Ridgefield	7,366	47.4%	16.6%	6.9%	0.3%	0.0%	2.2%	10.7%	1.3%	3.1%	0.3%	4.7%	0.0%	6.5%
Guilford	2,711	46.3%	11.8%	15.2%	0.4%	0.1%	3.9%	1.8%	1.6%	8.7%	0.2%	8.2%	0.1%	1.8%
Weston	410	45.4%	19.0%	4.1%	0.5%	0.2%	2.9%	0.5%	0.7%	13.7%	0.0%	3.7%	0.5%	8.8%
Wolcott	797	44.8%	21.5%	6.0%	2.0%	0.1%	3.6%	1.3%	0.4%	4.5%	1.1%	1.8%	2.1%	10.8%
Simsbury	3,281	42.7%	8.0%	10.8%	2.7%	0.2%	8.7%	2.6%	1.5%	6.3%	0.4%	7.7%	0.2%	8.1%
Easton	427	41.7%	12.4%	3.7%	1.9%	0.0%	6.8%	1.9%	1.9%	12.4%	0.9%	5.2%	0.0%	11.2%
Redding	2,537	41.5%	10.2%	7.7%	0.6%	0.0%	5.8%	12.2%	3.1%	7.5%	1.3%	0.1%	0.4%	9.5%
Avon	667	41.2%	2.4%	7.3%	0.3%	0.0%	7.2%	4.8%	1.5%	9.1%	0.3%	7.5%	0.0%	18.3%
Troop E	21,493	40.09%	4.28%	3.12%	0.99%	0.06%	8.98%	7.55%	1.76%	2.28%	0.90%	2.36%	0.16%	27.49%
East Hampton	725	40.0%	4.0%	6.6%	1.4%	0.3%	13.7%	9.7%	1.1%	3.7%	1.4%	7.6%	0.0%	10.6%
Bethel	3,712	38.7%	10.5%	7.1%	2.2%	0.3%	3.4%	6.0%	1.5%	16.7%	0.4%	8.5%	1.1%	3.9%
Thomaston	942	38.6%	3.1%	18.0%	3.1%	0.4%	8.0%	1.1%	0.4%	11.9%	0.2%	5.9%	0.1%	9.1%
Troop G	27,506	38.07%	7.15%	2.08%	1.56%	0.15%	13.47%	14.28%	3.26%	0.62%	0.85%	1.37%	0.52%	16.61%
Old Saybrook	2,783	38.1%	6.7%	14.7%	0.4%	0.4%	6.0%	9.3%	0.8%	9.5%	1.0%	6.1%	2.0%	5.0%
Putnam	2,308	37.9%	12.6%	21.2%	3.5%	0.5%	5.6%	0.5%	2.7%	1.8%	0.0%	11.0%	0.0%	2.8%
Troop Other*	15,636	37.42%	11.13%	1.57%	4.08%	0.10%	6.70%	3.50%	13.41%	1.16%	0.38%	1.20%	1.80%	17.56%
New Canaan	4,229	36.6%	12.3%	13.0%	2.4%	0.2%	4.6%	6.1%	1.8%	6.3%	0.3%	9.7%	0.9%	5.8%
Madison	2,733	36.2%	7.3%	8.7%	1.8%	0.2%	9.3%	9.6%	2.0%	6.7%	0.8%	4.6%	0.1%	12.7%
Canton	1,751	36.2%	2.5%	13.0%	0.6%	0.2%	16.5%	2.5%	2.5%	12.3%	0.3%	7.5%	0.6%	5.3%
Troop B	6,159	34.47%	2.86%	7.60%	3.47%	0.31%	6.51%	14.08%	3.02%	3.80%	1.30%	1.93%	0.45%	20.20%
Monroe	4,319	34.2%	15.9%	8.7%	2.5%	0.1%	8.5%	8.0%	3.6%	9.2%	1.6%	2.5%	1.1%	4.1%
Woodbridge	2,465	33.9%	18.8%	5.0%	6.8%	0.9%	2.8%	11.5%	3.9%	3.2%	0.9%	4.6%	0.1%	7.6%
Troop I	13,670	32.36%	4.09%	3.76%	1.37%	0.13%	13.14%	8.05%	4.17%	2.12%	0.59%	1.59%	0.45%	28.19%
Meriden	3,209	32.3%	4.1%	5.3%	1.4%	0.6%	5.0%	5.4%	4.7%	16.2%	1.4%	10.3%	1.0%	12.2%
Troop K	21,787	32.26%	9.68%	4.03%	2.42%	0.24%	6.72%	5.71%	3.76%	4.76%	0.39%	1.39%	0.74%	27.91%
Granby	1,484	32.0%	13.9%	16.6%	2.0%	1.0%	13.3%	4.0%	3.2%	2.2%	0.3%	6.1%	0.6%	4.7%
Troop H	18,790	31.83%	4.97%	2.27%	2.14%	0.10%	12.92%	7.30%	2.80%	0.79%	1.01%	1.55%	0.69%	31.64%
Cheshire	4,749	30.8%	18.7%	7.7%	3.5%	0.1%	8.9%	8.5%	5.6%	5.1%	0.9%	4.9%	2.2%	3.1%
Troop A	23,667	30.77%	10.61%	3.05%	1.95%	0.11%	9.56%	10.42%	6.84%	1.96%	0.81%	1.83%	2.04%	20.05%
Troop C	27,826	30.74%	6.78%	5.37%	1.53%	0.21%	5.60%	7.78%	4.64%	3.23%	0.78%	1.31%	0.37%	31.67%
Plainfield	1,240	30.7%	3.2%	13.3%	1.5%	0.6%	11.2%	1.2%	2.7%	19.9%	1.4%	2.7%	0.2%	11.5%
Troop F	25,617	29.96%	5.73%	3.20%	0.45%	0.16%	6.93%	8.86%	2.33%	1.78%	0.43%	1.48%	0.59%	38.09%
Brookfield	3,223	29.8%	27.5%	10.4%	1.3%	0.4%	7.8%	3.5%	2.5%	6.7%	0.7%	6.5%	0.1%	2.7%
Derby	3,725	29.3%	12.2%	3.8%	1.6%	0.2%	3.9%	9.3%	1.4%	11.1%	4.2%	10.7%	1.5%	11.0%
Seymour	3,710	28.8%	3.2%	16.5%	1.4%	0.5%	3.2%	8.1%	1.1%	20.5%	1.6%	8.4%	0.2%	6.3%
Groton Long Point	105	28.6%	11.4%	5.7%	1.0%	0.0%	1.9%	1.9%	10.5%	34.3%	1.0%	0.0%	0.0%	3.8%
Greenwich	8,041	28.2%	9.2%	7.3%	2.7%	0.2%	5.5%	19.6%	1.3%	5.7%	1.3%	6.5%	1.1%	11.5%
Enfield	7,126	28.2%	3.1%	24.7%	2.3%	0.9%	6.6%	4.9%	3.9%	5.2%	1.4%	9.9%	1.0%	8.0%

Table 4: Basis for Stop (Sorted by % Speeding)

Department Name	Total	Speed Related	Cell Phone	Defective Lights	Display of Plates	Equipment Violation	Moving Violation	Registration	Seatbelt	Stop Sign	Suspended License	Traffic Control Signal	Window Tint	Other
Westport	7,193	28.1%	14.8%	11.1%	3.4%	0.2%	5.8%	5.7%	0.8%	9.0%	0.5%	10.8%	1.3%	8.6%
Groton City	2,805	27.8%	5.7%	17.2%	1.7%	0.2%	3.7%	1.8%	6.4%	17.1%	1.2%	5.3%	0.0%	11.9%
Windsor	5,565	27.7%	7.3%	26.9%	2.2%	0.3%	3.2%	3.2%	4.0%	7.6%	0.7%	12.0%	1.5%	3.4%
Windsor Locks	2,869	27.5%	7.1%	20.0%	1.9%	0.7%	2.4%	3.7%	8.7%	6.1%	0.8%	7.7%	0.5%	12.8%
Troop L	13,790	27.06%	4.66%	6.36%	3.97%	1.02%	5.94%	17.51%	3.79%	2.61%	2.31%	0.75%	0.86%	23.15%
Central CT State Unv.	1,791	25.6%	7.8%	12.7%	10.2%	0.2%	1.8%	14.5%	5.2%	1.8%	2.5%	8.4%	0.1%	9.3%
Bloomfield	5,515	25.6%	4.5%	12.1%	5.5%	0.1%	6.3%	4.7%	3.6%	13.5%	1.5%	17.2%	1.5%	4.1%
Plymouth	2,610	25.6%	10.2%	12.8%	8.2%	0.2%	6.9%	2.9%	2.5%	11.2%	0.4%	5.9%	3.1%	10.2%
West Haven	3,865	25.3%	3.5%	15.1%	6.6%	1.7%	4.9%	10.1%	1.3%	14.5%	0.4%	7.3%	2.0%	7.4%
Milford	4,358	25.2%	6.4%	12.1%	7.9%	0.5%	10.0%	6.7%	3.9%	8.4%	1.3%	11.0%	0.6%	6.2%
Norwich	6,919	25.2%	7.9%	17.6%	2.3%	0.2%	9.5%	2.2%	4.1%	5.9%	1.3%	14.1%	0.6%	9.1%
East Hartford	7,542	24.5%	9.3%	3.1%	2.5%	0.2%	2.9%	14.4%	12.1%	9.4%	3.2%	6.3%	3.0%	9.1%
Waterford	3,289	24.4%	5.6%	17.6%	4.7%	1.0%	14.4%	4.6%	1.4%	1.2%	2.0%	12.6%	0.9%	9.6%
Berlin	6,644	23.8%	11.8%	9.3%	3.7%	0.2%	5.3%	5.5%	7.3%	4.7%	1.7%	16.5%	0.1%	10.1%
Department of Motor Vehicle	2,317	23.7%	17.5%	1.3%	1.4%	1.2%	13.9%	9.1%	3.5%	1.3%	0.4%	3.1%	1.7%	22.0%
Wilton	3,893	23.4%	6.9%	16.3%	2.1%	0.3%	8.8%	18.5%	0.8%	5.7%	1.2%	9.2%	1.6%	5.1%
Ansonia	4,883	22.4%	17.3%	10.5%	3.4%	0.4%	2.8%	7.5%	2.6%	14.0%	0.7%	11.0%	0.3%	7.0%
Hartford	8,254	22.3%	13.2%	2.6%	5.8%	0.4%	4.9%	4.9%	1.8%	9.8%	5.0%	9.6%	3.4%	16.2%
Clinton	2,332	22.3%	6.1%	25.5%	5.1%	0.6%	12.3%	3.4%	3.3%	7.4%	0.7%	4.6%	1.0%	7.7%
Stonington	1,894	22.3%	4.4%	12.2%	1.6%	0.5%	10.2%	9.7%	3.3%	6.0%	1.1%	9.8%	0.1%	18.8%
Coventry	1,343	22.3%	15.3%	9.9%	1.0%	1.0%	11.6%	7.2%	8.3%	2.7%	1.5%	4.2%	0.3%	14.6%
North Haven	2,795	22.1%	12.9%	9.8%	2.3%	0.3%	5.8%	8.2%	7.7%	3.7%	2.0%	8.8%	1.0%	15.4%
Troop D	16,662	21.95%	4.82%	5.25%	2.14%	0.41%	6.93%	16.19%	5.26%	2.79%	1.63%	1.37%	0.46%	30.80%
Fairfield	4,480	21.5%	22.2%	5.2%	2.0%	0.5%	6.2%	8.1%	6.8%	3.1%	1.9%	9.1%	0.7%	12.5%
Darien	3,681	21.4%	12.2%	12.9%	7.3%	0.1%	5.5%	8.8%	8.1%	3.8%	0.7%	6.9%	1.2%	11.1%
Bristol	4,653	21.4%	9.2%	9.8%	5.3%	0.3%	5.9%	10.6%	8.4%	10.2%	3.0%	9.2%	0.1%	6.6%
Cromwell	2,330	21.2%	5.3%	18.1%	1.3%	0.3%	8.5%	13.7%	2.5%	7.9%	3.5%	14.1%	0.0%	3.7%
Groton Town	6,252	20.7%	3.0%	18.8%	3.6%	0.3%	12.5%	15.4%	2.4%	6.2%	2.6%	7.8%	1.3%	5.5%
Glastonbury	5,902	20.4%	12.6%	14.7%	2.2%	0.3%	6.6%	16.8%	3.4%	7.7%	2.4%	4.9%	0.4%	7.5%
Danbury	6,182	20.0%	39.9%	3.2%	0.7%	0.4%	3.2%	14.1%	1.1%	2.3%	0.4%	7.6%	0.5%	6.6%
Middlebury	266	19.9%	9.4%	3.0%	1.1%	0.4%	3.0%	1.5%	4.5%	9.4%	0.0%	6.0%	0.0%	41.7%
North Branford	1,340	19.7%	3.2%	9.4%	1.9%	0.8%	17.6%	23.7%	0.6%	6.3%	3.6%	4.6%	0.5%	8.1%
Watertown	1,784	18.9%	12.1%	6.1%	6.7%	0.1%	3.8%	20.5%	6.9%	10.4%	1.3%	7.0%	0.1%	6.2%
Southern CT State Unv.	917	18.6%	4.1%	12.9%	1.2%	0.0%	5.3%	2.5%	6.2%	1.3%	0.5%	36.4%	0.0%	10.8%
Rocky Hill	3,697	18.6%	8.0%	10.9%	1.7%	0.4%	9.2%	13.1%	8.2%	8.1%	2.2%	10.0%	0.7%	8.8%
East Windsor	1,035	18.4%	18.8%	12.9%	5.1%	0.6%	6.9%	5.5%	7.6%	5.6%	3.1%	5.6%	0.3%	9.7%
Torrington	8,657	18.3%	7.1%	25.3%	5.1%	1.0%	4.0%	3.7%	1.4%	11.4%	1.1%	12.1%	0.4%	9.0%
Orange	3,129	17.8%	15.3%	14.6%	6.3%	0.3%	4.0%	7.9%	2.0%	4.1%	2.1%	18.2%	0.6%	6.9%
Naugatuck	5,907	17.6%	4.8%	15.7%	5.3%	0.7%	7.2%	7.9%	5.4%	12.4%	0.2%	12.1%	0.5%	10.4%
Vernon	3,762	17.3%	7.0%	15.6%	3.1%	0.5%	16.1%	6.7%	3.4%	7.4%	1.9%	11.2%	0.4%	9.6%
Farmington	4,525	16.2%	18.6%	9.1%	1.2%	0.2%	13.4%	15.3%	4.1%	4.8%	1.7%	10.9%	0.0%	4.6%
Wethersfield	5,547	16.2%	3.6%	14.6%	14.4%	0.2%	10.2%	8.6%	2.9%	3.6%	4.3%	5.8%	4.1%	11.4%
Plainville	4,999	16.2%	9.5%	18.9%	5.6%	0.4%	7.8%	6.8%	1.3%	7.1%	1.8%	8.0%	4.9%	11.7%

Table 4: Basis for Stop (Sorted by % Speeding)

Department Name	Total	Speed Related	Cell Phone	Defective Lights	Display of Plates	Equipment Violation	Moving Violation	Registration	Seatbelt	Stop Sign	Suspended License	Traffic Control Signal	Window Tint	Other
Shelton	618	15.4%	1.5%	9.5%	8.7%	0.0%	13.1%	3.6%	0.8%	5.2%	0.8%	11.0%	0.2%	30.3%
University of Connecticut	1,769	15.1%	7.3%	21.1%	1.8%	0.6%	14.4%	2.2%	2.0%	18.8%	0.2%	4.6%	0.7%	11.1%
South Windsor	2,615	14.5%	8.2%	19.5%	11.4%	0.6%	5.5%	7.4%	7.8%	10.8%	1.5%	7.8%	0.8%	4.1%
Trumbull	2,974	13.4%	17.0%	6.1%	5.2%	0.4%	3.2%	23.1%	10.1%	4.1%	2.7%	5.4%	1.3%	8.0%
Manchester	3,407	13.3%	6.4%	18.7%	3.6%	0.5%	8.7%	10.5%	2.8%	7.8%	3.9%	15.6%	1.5%	6.7%
Winchester	717	13.2%	3.3%	13.9%	3.5%	0.7%	7.5%	11.0%	1.0%	3.8%	3.5%	17.0%	0.0%	21.5%
Western CT State Unv.	38	13.2%	7.9%	2.6%	0.0%	0.0%	5.3%	0.0%	0.0%	7.9%	0.0%	23.7%	0.0%	39.5%
Willimantic	3,942	11.6%	5.4%	21.6%	1.1%	0.4%	9.2%	7.0%	5.9%	9.1%	2.1%	9.9%	0.4%	16.2%
Hamden	5,442	11.5%	3.9%	18.7%	2.0%	0.4%	5.1%	17.6%	1.5%	7.6%	1.4%	13.9%	0.5%	16.0%
Norwalk	7,900	11.1%	10.5%	11.9%	4.2%	0.5%	4.4%	11.2%	4.9%	7.3%	1.3%	9.5%	2.1%	21.2%
Newington	6,410	11.1%	7.0%	22.6%	4.2%	1.1%	7.7%	14.7%	1.4%	6.8%	2.5%	9.8%	4.1%	7.0%
Middletown	3,700	10.9%	4.1%	17.8%	6.5%	0.6%	7.8%	6.2%	15.6%	11.8%	2.2%	8.2%	0.9%	7.4%
Wallingford	9,178	10.1%	14.6%	17.2%	5.0%	1.1%	6.5%	10.1%	6.8%	11.3%	1.8%	9.4%	0.8%	5.3%
New Haven	11,159	9.5%	5.5%	9.3%	6.2%	0.4%	4.9%	6.6%	4.5%	8.2%	1.3%	27.6%	2.4%	13.5%
East Haven	1,555	8.3%	9.8%	7.5%	4.1%	1.3%	4.8%	13.5%	1.5%	23.3%	2.1%	7.7%	0.8%	15.2%
Branford	6,891	8.0%	17.8%	4.6%	0.9%	0.1%	4.5%	24.6%	2.4%	5.1%	1.7%	20.0%	0.4%	9.8%
New Britain	5,533	8.0%	3.6%	13.1%	3.5%	0.6%	5.0%	7.0%	2.5%	22.1%	3.2%	14.2%	3.1%	14.0%
Stratford	2,956	7.6%	8.6%	9.8%	4.4%	0.3%	8.6%	19.6%	3.9%	8.7%	3.8%	8.7%	1.3%	14.9%
Waterbury	1,742	7.5%	1.5%	4.5%	4.5%	0.3%	8.6%	11.3%	9.5%	6.5%	8.2%	15.9%	2.2%	19.5%
West Hartford	8,221	5.1%	16.0%	6.7%	3.8%	0.4%	17.8%	19.2%	3.9%	3.4%	2.6%	9.5%	0.5%	11.1%
Bridgeport	4,717	5.0%	16.5%	4.8%	4.2%	0.7%	6.8%	1.6%	8.4%	12.1%	1.0%	16.6%	1.5%	20.7%
New London	1,524	3.4%	11.5%	11.9%	1.4%	0.8%	8.5%	3.1%	15.5%	8.7%	1.2%	16.9%	0.0%	16.9%
Eastern CT State Unv.	173	1.7%	5.8%	15.6%	2.9%	0.0%	8.1%	1.2%	6.4%	52.0%	0.6%	0.0%	0.0%	5.8%
Yale Unv.	1,050	1.0%	9.1%	8.7%	2.3%	0.4%	5.5%	8.7%	1.5%	1.2%	2.2%	45.5%	0.4%	13.4%
State Capitol Police	275	0.7%	1.1%	17.8%	2.5%	0.0%	21.1%	0.4%	0.4%	2.5%	0.4%	42.9%	0.0%	10.2%

Table 5: Basis for Stop (Sorted by % Registration Violation)

Department Name	Total	Registration	Speed Related	Cell Phone	Defective Lights	Display of Plates	Equipment Violation	Moving Violation	Seatbelt	Stop Sign	Suspended License	Traffic Control Signal	Window Tint	Other
Branford	6,891	24.6%	8.0%	17.8%	4.6%	0.9%	0.1%	4.5%	2.4%	5.1%	1.7%	20.0%	0.4%	9.8%
North Branford	1,340	23.7%	19.7%	3.2%	9.4%	1.9%	0.8%	17.6%	0.6%	6.3%	3.6%	4.6%	0.5%	8.1%
Trumbull	2,974	23.1%	13.4%	17.0%	6.1%	5.2%	0.4%	3.2%	10.1%	4.1%	2.7%	5.4%	1.3%	8.0%
Watertown	1,784	20.5%	18.9%	12.1%	6.1%	6.7%	0.1%	3.8%	6.9%	10.4%	1.3%	7.0%	0.1%	6.2%
Stratford	2,956	19.6%	7.6%	8.6%	9.8%	4.4%	0.3%	8.6%	3.9%	8.7%	3.8%	8.7%	1.3%	14.9%
Greenwich	8,041	19.6%	28.2%	9.2%	7.3%	2.7%	0.2%	5.5%	1.3%	5.7%	1.3%	6.5%	1.1%	11.5%
West Hartford	8,221	19.2%	5.1%	16.0%	6.7%	3.8%	0.4%	17.8%	3.9%	3.4%	2.6%	9.5%	0.5%	11.1%
Wilton	3,893	18.5%	23.4%	6.9%	16.3%	2.1%	0.3%	8.8%	0.8%	5.7%	1.2%	9.2%	1.6%	5.1%
Hamden	5,442	17.6%	11.5%	3.9%	18.7%	2.0%	0.4%	5.1%	1.5%	7.6%	1.4%	13.9%	0.5%	16.0%
Troop L	13,790	17.51%	27.06%	4.66%	6.36%	3.97%	1.02%	5.94%	3.79%	2.61%	2.31%	0.75%	0.86%	23.15%
Glastonbury	5,902	16.8%	20.4%	12.6%	14.7%	2.2%	0.3%	6.6%	3.4%	7.7%	2.4%	4.9%	0.4%	7.5%
Troop D	16,662	16.19%	21.95%	4.82%	5.25%	2.14%	0.41%	6.93%	5.26%	2.79%	1.63%	1.37%	0.46%	30.80%
Groton Town	6,252	15.4%	20.7%	3.0%	18.8%	3.6%	0.3%	12.5%	2.4%	6.2%	2.6%	7.8%	1.3%	5.5%
Farmington	4,525	15.3%	16.2%	18.6%	9.1%	1.2%	0.2%	13.4%	4.1%	4.8%	1.7%	10.9%	0.0%	4.6%
Newington	6,410	14.7%	11.1%	7.0%	22.6%	4.2%	1.1%	7.7%	1.4%	6.8%	2.5%	9.8%	4.1%	7.0%
Central CT State Unv.	1,791	14.5%	25.6%	7.8%	12.7%	10.2%	0.2%	1.8%	5.2%	1.8%	2.5%	8.4%	0.1%	9.3%
East Hartford	7,542	14.4%	24.5%	9.3%	3.1%	2.5%	0.2%	2.9%	12.1%	9.4%	3.2%	6.3%	3.0%	9.1%
Troop G	27,506	14.28%	38.07%	7.15%	2.08%	1.56%	0.15%	13.47%	3.26%	0.62%	0.85%	1.37%	0.52%	16.61%
Danbury	6,182	14.1%	20.0%	39.9%	3.2%	0.7%	0.4%	3.2%	1.1%	2.3%	0.4%	7.6%	0.5%	6.6%
Troop B	6,159	14.08%	34.47%	2.86%	7.60%	3.47%	0.31%	6.51%	3.02%	3.80%	1.30%	1.93%	0.45%	20.20%
Cromwell	2,330	13.7%	21.2%	5.3%	18.1%	1.3%	0.3%	8.5%	2.5%	7.9%	3.5%	14.1%	0.0%	3.7%
East Haven	1,555	13.5%	8.3%	9.8%	7.5%	4.1%	1.3%	4.8%	1.5%	23.3%	2.1%	7.7%	0.8%	15.2%
Rocky Hill	3,697	13.1%	18.6%	8.0%	10.9%	1.7%	0.4%	9.2%	8.2%	8.1%	2.2%	10.0%	0.7%	8.8%
Redding	2,537	12.2%	41.5%	10.2%	7.7%	0.6%	0.0%	5.8%	3.1%	7.5%	1.3%	0.1%	0.4%	9.5%
Woodbridge	2,465	11.5%	33.9%	18.8%	5.0%	6.8%	0.9%	2.8%	3.9%	3.2%	0.9%	4.6%	0.1%	7.6%
Waterbury	1,742	11.3%	7.5%	1.5%	4.5%	4.5%	0.3%	8.6%	9.5%	6.5%	8.2%	15.9%	2.2%	19.5%
Norwalk	7,900	11.2%	11.1%	10.5%	11.9%	4.2%	0.5%	4.4%	4.9%	7.3%	1.3%	9.5%	2.1%	21.2%
Winchester	717	11.0%	13.2%	3.3%	13.9%	3.5%	0.7%	7.5%	1.0%	3.8%	3.5%	17.0%	0.0%	21.5%
Ridgefield	7,366	10.7%	47.4%	16.6%	6.9%	0.3%	0.0%	2.2%	1.3%	3.1%	0.3%	4.7%	0.0%	6.5%
Bristol	4,653	10.6%	21.4%	9.2%	9.8%	5.3%	0.3%	5.9%	8.4%	10.2%	3.0%	9.2%	0.1%	6.6%
Manchester	3,407	10.5%	13.3%	6.4%	18.7%	3.6%	0.5%	8.7%	2.8%	7.8%	3.9%	15.6%	1.5%	6.7%
Troop A	23,667	10.42%	30.77%	10.61%	3.05%	1.95%	0.11%	9.56%	6.84%	1.96%	0.81%	1.83%	2.04%	20.05%
Wallingford	9,178	10.1%	10.1%	14.6%	17.2%	5.0%	1.1%	6.5%	6.8%	11.3%	1.8%	9.4%	0.8%	5.3%
West Haven	3,865	10.1%	25.3%	3.5%	15.1%	6.6%	1.7%	4.9%	1.3%	14.5%	0.4%	7.3%	2.0%	7.4%
Stonington	1,894	9.7%	22.3%	4.4%	12.2%	1.6%	0.5%	10.2%	3.3%	6.0%	1.1%	9.8%	0.1%	18.8%
East Hampton	725	9.7%	40.0%	4.0%	6.6%	1.4%	0.3%	13.7%	1.1%	3.7%	1.4%	7.6%	0.0%	10.6%
Madison	2,733	9.6%	36.2%	7.3%	8.7%	1.8%	0.2%	9.3%	2.0%	6.7%	0.8%	4.6%	0.1%	12.7%
Old Saybrook	2,783	9.3%	38.1%	6.7%	14.7%	0.4%	0.4%	6.0%	0.8%	9.5%	1.0%	6.1%	2.0%	5.0%
Derby	3,725	9.3%	29.3%	12.2%	3.8%	1.6%	0.2%	3.9%	1.4%	11.1%	4.2%	10.7%	1.5%	11.0%
Southington	5,395	9.2%	52.9%	14.3%	5.2%	1.0%	0.2%	2.2%	3.7%	3.6%	0.7%	4.7%	0.5%	1.9%
Department of Motor Vehicle	2,317	9.1%	23.7%	17.5%	1.3%	1.4%	1.2%	13.9%	3.5%	1.3%	0.4%	3.1%	1.7%	22.0%
Troop F	25,617	8.86%	29.96%	5.73%	3.20%	0.45%	0.16%	6.93%	2.33%	1.78%	0.43%	1.48%	0.59%	38.09%
Darien	3,681	8.8%	21.4%	12.2%	12.9%	7.3%	0.1%	5.5%	8.1%	3.8%	0.7%	6.9%	1.2%	11.1%

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Department Name	Total	Registration	Speed Related	Cell Phone	Defective Lights	Display of Plates	Equipment Violation	Moving Violation	Seatbelt	Stop Sign	Suspended License	Traffic Control Signal	Window Tint	Other
Yale Unv.	1,050	8.7%	1.0%	9.1%	8.7%	2.3%	0.4%	5.5%	1.5%	1.2%	2.2%	45.5%	0.4%	13.4%
Wethersfield	5,547	8.6%	16.2%	3.6%	14.6%	14.4%	0.2%	10.2%	2.9%	3.6%	4.3%	5.8%	4.1%	11.4%
Cheshire	4,749	8.5%	30.8%	18.7%	7.7%	3.5%	0.1%	8.9%	5.6%	5.1%	0.9%	4.9%	2.2%	3.1%
North Haven	2,795	8.2%	22.1%	12.9%	9.8%	2.3%	0.3%	5.8%	7.7%	3.7%	2.0%	8.8%	1.0%	15.4%
Fairfield	4,480	8.1%	21.5%	22.2%	5.2%	2.0%	0.5%	6.2%	6.8%	3.1%	1.9%	9.1%	0.7%	12.5%
Seymour	3,710	8.1%	28.8%	3.2%	16.5%	1.4%	0.5%	3.2%	1.1%	20.5%	1.6%	8.4%	0.2%	6.3%
Troop I	13,670	8.05%	32.36%	4.09%	3.76%	1.37%	0.13%	13.14%	4.17%	2.12%	0.59%	1.59%	0.45%	28.19%
Monroe	4,319	8.0%	34.2%	15.9%	8.7%	2.5%	0.1%	8.5%	3.6%	9.2%	1.6%	2.5%	1.1%	4.1%
Orange	3,129	7.9%	17.8%	15.3%	14.6%	6.3%	0.3%	4.0%	2.0%	4.1%	2.1%	18.2%	0.6%	6.9%
Naugatuck	5,907	7.9%	17.6%	4.8%	15.7%	5.3%	0.7%	7.2%	5.4%	12.4%	0.2%	12.1%	0.5%	10.4%
Troop C	27,826	7.78%	30.74%	6.78%	5.37%	1.53%	0.21%	5.60%	4.64%	3.23%	0.78%	1.31%	0.37%	31.67%
Troop E	21,493	7.55%	40.09%	4.28%	3.12%	0.99%	0.06%	8.98%	1.76%	2.28%	0.90%	2.36%	0.16%	27.49%
Ansonia	4,883	7.5%	22.4%	17.3%	10.5%	3.4%	0.4%	2.8%	2.6%	14.0%	0.7%	11.0%	0.3%	7.0%
South Windsor	2,615	7.4%	14.5%	8.2%	19.5%	11.4%	0.6%	5.5%	7.8%	10.8%	1.5%	7.8%	0.8%	4.1%
Troop H	18,790	7.30%	31.83%	4.97%	2.27%	2.14%	0.10%	12.92%	2.80%	0.79%	1.01%	1.55%	0.69%	31.64%
Coventry	1,343	7.2%	22.3%	15.3%	9.9%	1.0%	1.0%	11.6%	8.3%	2.7%	1.5%	4.2%	0.3%	14.6%
New Britain	5,533	7.0%	8.0%	3.6%	13.1%	3.5%	0.6%	5.0%	2.5%	22.1%	3.2%	14.2%	3.1%	14.0%
Willimantic	3,942	7.0%	11.6%	5.4%	21.6%	1.1%	0.4%	9.2%	5.9%	9.1%	2.1%	9.9%	0.4%	16.2%
Plainville	4,999	6.8%	16.2%	9.5%	18.9%	5.6%	0.4%	7.8%	1.3%	7.1%	1.8%	8.0%	4.9%	11.7%
Milford	4,358	6.7%	25.2%	6.4%	12.1%	7.9%	0.5%	10.0%	3.9%	8.4%	1.3%	11.0%	0.6%	6.2%
Vernon	3,762	6.7%	17.3%	7.0%	15.6%	3.1%	0.5%	16.1%	3.4%	7.4%	1.9%	11.2%	0.4%	9.6%
New Haven	11,159	6.6%	9.5%	5.5%	9.3%	6.2%	0.4%	4.9%	4.5%	8.2%	1.3%	27.6%	2.4%	13.5%
Middletown	3,700	6.2%	10.9%	4.1%	17.8%	6.5%	0.6%	7.8%	15.6%	11.8%	2.2%	8.2%	0.9%	7.4%
New Canaan	4,229	6.1%	36.6%	12.3%	13.0%	2.4%	0.2%	4.6%	1.8%	6.3%	0.3%	9.7%	0.9%	5.8%
Bethel	3,712	6.0%	38.7%	10.5%	7.1%	2.2%	0.3%	3.4%	1.5%	16.7%	0.4%	8.5%	1.1%	3.9%
New Milford	4,049	5.8%	63.0%	4.1%	5.2%	1.0%	0.8%	4.7%	1.3%	3.0%	0.5%	6.5%	0.1%	4.1%
Troop K	21,787	5.71%	32.26%	9.68%	4.03%	2.42%	0.24%	6.72%	3.76%	4.76%	0.39%	1.39%	0.74%	27.91%
Westport	7,193	5.7%	28.1%	14.8%	11.1%	3.4%	0.2%	5.8%	0.8%	9.0%	0.5%	10.8%	1.3%	8.6%
Berlin	6,644	5.5%	23.8%	11.8%	9.3%	3.7%	0.2%	5.3%	7.3%	4.7%	1.7%	16.5%	0.1%	10.1%
East Windsor	1,035	5.5%	18.4%	18.8%	12.9%	5.1%	0.6%	6.9%	7.6%	5.6%	3.1%	5.6%	0.3%	9.7%
Meriden	3,209	5.4%	32.3%	4.1%	5.3%	1.4%	0.6%	5.0%	4.7%	16.2%	1.4%	10.3%	1.0%	12.2%
Hartford	8,254	4.9%	22.3%	13.2%	2.6%	5.8%	0.4%	4.9%	1.8%	9.8%	5.0%	9.6%	3.4%	16.2%
Enfield	7,126	4.9%	28.2%	3.1%	24.7%	2.3%	0.9%	6.6%	3.9%	5.2%	1.4%	9.9%	1.0%	8.0%
Avon	667	4.8%	41.2%	2.4%	7.3%	0.3%	0.0%	7.2%	1.5%	9.1%	0.3%	7.5%	0.0%	18.3%
Bloomfield	5,515	4.7%	25.6%	4.5%	12.1%	5.5%	0.1%	6.3%	3.6%	13.5%	1.5%	17.2%	1.5%	4.1%
Waterford	3,289	4.6%	24.4%	5.6%	17.6%	4.7%	1.0%	14.4%	1.4%	1.2%	2.0%	12.6%	0.9%	9.6%
Granby	1,484	4.0%	32.0%	13.9%	16.6%	2.0%	1.0%	13.3%	3.2%	2.2%	0.3%	6.1%	0.6%	4.7%
Torrington	8,657	3.7%	18.3%	7.1%	25.3%	5.1%	1.0%	4.0%	1.4%	11.4%	1.1%	12.1%	0.4%	9.0%
Windsor Locks	2,869	3.7%	27.5%	7.1%	20.0%	1.9%	0.7%	2.4%	8.7%	6.1%	0.8%	7.7%	0.5%	12.8%
Shelton	618	3.6%	15.4%	1.5%	9.5%	8.7%	0.0%	13.1%	0.8%	5.2%	0.8%	11.0%	0.2%	30.3%
Brookfield	3,223	3.5%	29.8%	27.5%	10.4%	1.3%	0.4%	7.8%	2.5%	6.7%	0.7%	6.5%	0.1%	2.7%
Troop Other*	15,636	3.50%	37.42%	11.13%	1.57%	4.08%	0.10%	6.70%	13.41%	1.16%	0.38%	1.20%	1.80%	17.56%
Clinton	2,332	3.4%	22.3%	6.1%	25.5%	5.1%	0.6%	12.3%	3.3%	7.4%	0.7%	4.6%	1.0%	7.7%

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Department Name	Total	Registration	Speed Related	Cell Phone	Defective Lights	Display of Plates	Equipment Violation	Moving Violation	Seatbelt	Stop Sign	Suspended License	Traffic Control Signal	Window Tint	Other
Windsor	5,565	3.2%	27.7%	7.3%	26.9%	2.2%	0.3%	3.2%	4.0%	7.6%	0.7%	12.0%	1.5%	3.4%
New London	1,524	3.1%	3.4%	11.5%	11.9%	1.4%	0.8%	8.5%	15.5%	8.7%	1.2%	16.9%	0.0%	16.9%
Plymouth	2,610	2.9%	25.6%	10.2%	12.8%	8.2%	0.2%	6.9%	2.5%	11.2%	0.4%	5.9%	3.1%	10.2%
Newtown	9,402	2.8%	49.9%	9.6%	11.7%	3.5%	0.1%	4.8%	1.1%	7.3%	0.2%	5.7%	0.1%	3.2%
Simsbury	3,281	2.6%	42.7%	8.0%	10.8%	2.7%	0.2%	8.7%	1.5%	6.3%	0.4%	7.7%	0.2%	8.1%
Southern CT State Unv.	917	2.5%	18.6%	4.1%	12.9%	1.2%	0.0%	5.3%	6.2%	1.3%	0.5%	36.4%	0.0%	10.8%
Canton	1,751	2.5%	36.2%	2.5%	13.0%	0.6%	0.2%	16.5%	2.5%	12.3%	0.3%	7.5%	0.6%	5.3%
Norwich	6,919	2.2%	25.2%	7.9%	17.6%	2.3%	0.2%	9.5%	4.1%	5.9%	1.3%	14.1%	0.6%	9.1%
University of Connecticut	1,769	2.2%	15.1%	7.3%	21.1%	1.8%	0.6%	14.4%	2.0%	18.8%	0.2%	4.6%	0.7%	11.1%
Groton Long Point	105	1.9%	28.6%	11.4%	5.7%	1.0%	0.0%	1.9%	10.5%	34.3%	1.0%	0.0%	0.0%	3.8%
Portland	160	1.9%	62.5%	4.4%	1.9%	0.0%	0.0%	8.8%	0.0%	3.8%	0.6%	7.5%	0.0%	8.8%
Easton	427	1.9%	41.7%	12.4%	3.7%	1.9%	0.0%	6.8%	1.9%	12.4%	0.9%	5.2%	0.0%	11.2%
Guilford	2,711	1.8%	46.3%	11.8%	15.2%	0.4%	0.1%	3.9%	1.6%	8.7%	0.2%	8.2%	0.1%	1.8%
Groton City	2,805	1.8%	27.8%	5.7%	17.2%	1.7%	0.2%	3.7%	6.4%	17.1%	1.2%	5.3%	0.0%	11.9%
Bridgeport	4,717	1.6%	5.0%	16.5%	4.8%	4.2%	0.7%	6.8%	8.4%	12.1%	1.0%	16.6%	1.5%	20.7%
Middlebury	266	1.5%	19.9%	9.4%	3.0%	1.1%	0.4%	3.0%	4.5%	9.4%	0.0%	6.0%	0.0%	41.7%
Wolcott	797	1.3%	44.8%	21.5%	6.0%	2.0%	0.1%	3.6%	0.4%	4.5%	1.1%	1.8%	2.1%	10.8%
Plainfield	1,240	1.2%	30.7%	3.2%	13.3%	1.5%	0.6%	11.2%	2.7%	19.9%	1.4%	2.7%	0.2%	11.5%
Eastern CT State Unv.	173	1.2%	1.7%	5.8%	15.6%	2.9%	0.0%	8.1%	6.4%	52.0%	0.6%	0.0%	0.0%	5.8%
Thomaston	942	1.1%	38.6%	3.1%	18.0%	3.1%	0.4%	8.0%	0.4%	11.9%	0.2%	5.9%	0.1%	9.1%
Suffield	556	0.9%	62.9%	5.9%	9.2%	0.4%	0.2%	9.0%	0.0%	4.3%	0.2%	3.6%	0.0%	3.4%
Putnam	2,308	0.5%	37.9%	12.6%	21.2%	3.5%	0.5%	5.6%	2.7%	1.8%	0.0%	11.0%	0.0%	2.8%
Weston	410	0.5%	45.4%	19.0%	4.1%	0.5%	0.2%	2.9%	0.7%	13.7%	0.0%	3.7%	0.5%	8.8%
State Capitol Police	275	0.4%	0.7%	1.1%	17.8%	2.5%	0.0%	21.1%	0.4%	2.5%	0.4%	42.9%	0.0%	10.2%
Western CT State Unv.	38	0.0%	13.2%	7.9%	2.6%	0.0%	0.0%	5.3%	0.0%	7.9%	0.0%	23.7%	0.0%	39.5%

Table 6: Outcome of Stop (Sorted by % Infraction Ticket)

Department Name	N	Infraction	UAR	Mis. Sum.	Written Warning	Verbal Warning	No Disposition
Troop Other*	15,636	85.94%	0.59%	2.31%	2.73%	7.18%	1.25%
Danbury	6,182	82.34%	1.15%	2.28%	0.34%	13.10%	0.79%
Troop F	25,617	77.71%	0.32%	3.07%	8.06%	9.51%	1.34%
Troop G	27,506	77.13%	0.55%	6.08%	2.79%	11.44%	2.01%
Troop H	18,790	73.24%	0.76%	5.90%	5.88%	11.77%	2.45%
Troop C	27,826	70.73%	0.16%	4.01%	12.92%	11.14%	1.04%
Troop E	21,493	70.23%	0.60%	5.46%	7.83%	14.12%	1.77%
Meriden	3,209	70.15%	1.90%	10.31%	3.68%	13.31%	0.65%
Troop I	13,670	69.42%	0.86%	5.38%	7.87%	15.10%	1.38%
Derby	3,725	68.62%	0.16%	10.09%	0.13%	20.75%	0.24%
Troop K	21,787	66.55%	0.45%	4.20%	10.18%	17.19%	1.43%
Department of Motor Vehicle	2,317	66.47%	0.04%	5.91%	6.82%	18.64%	2.11%
Trumbull	2,974	64.22%	0.27%	10.26%	12.24%	11.87%	1.14%
Troop A	23,667	63.97%	0.54%	5.17%	8.01%	20.64%	1.68%
Hartford	8,254	61.91%	3.42%	15.98%	4.82%	12.96%	0.91%
Branford	6,891	59.08%	0.30%	6.02%	0.10%	30.55%	3.95%
Bridgeport	4,717	59.06%	1.08%	5.79%	7.74%	25.31%	1.02%
Greenwich	8,041	58.44%	0.90%	4.24%	12.05%	22.27%	2.10%
Troop D	16,662	57.55%	0.54%	7.41%	12.75%	20.22%	1.52%
Norwalk	7,900	56.38%	1.43%	6.42%	0.57%	34.28%	0.92%
New Haven	11,159	52.24%	2.37%	9.97%	17.12%	17.21%	1.10%
Troop L	13,790	49.33%	0.88%	7.31%	11.75%	28.23%	2.51%
East Hartford	7,542	49.30%	0.61%	12.04%	14.96%	20.58%	2.52%
Troop B	6,159	47.93%	0.54%	7.16%	34.47%	7.83%	2.08%
Farmington	4,525	46.76%	2.06%	5.59%	3.31%	38.96%	3.31%
Darien	3,681	46.62%	0.81%	3.21%	12.03%	35.97%	1.36%
Wolcott	797	45.80%	0.25%	5.14%	26.35%	21.83%	0.63%
Groton Long Point	105	45.71%	0.00%	1.90%	41.90%	10.48%	0.00%
Woodbridge	2,465	45.40%	0.08%	9.01%	9.70%	34.24%	1.58%
North Haven	2,795	44.26%	0.97%	8.12%	4.04%	40.18%	2.43%
Southern CT State Unv.	917	41.88%	0.55%	7.31%	34.79%	15.27%	0.22%
Ridgefield	7,366	41.35%	0.16%	2.78%	44.03%	10.47%	1.21%
Groton City	2,805	41.03%	1.21%	3.46%	27.52%	23.92%	2.85%
New Milford	4,049	40.70%	0.40%	6.03%	33.17%	17.14%	2.57%
Orange	3,129	39.60%	0.32%	8.12%	3.48%	46.92%	1.57%
West Hartford	8,221	39.11%	5.85%	5.62%	7.40%	40.36%	1.67%
Granby	1,484	38.01%	0.47%	7.88%	19.81%	32.75%	1.08%
New London	1,524	37.80%	7.28%	4.92%	3.94%	42.19%	3.87%
Fairfield	4,480	36.16%	0.69%	6.03%	1.65%	53.04%	2.43%
Westport	7,193	35.95%	0.89%	3.63%	32.39%	26.05%	1.08%
Glastonbury	5,902	35.62%	0.44%	5.57%	32.63%	24.04%	1.69%
Berlin	6,644	35.60%	0.17%	5.22%	37.96%	19.30%	1.76%
East Windsor	1,035	35.27%	0.48%	7.63%	15.94%	39.03%	1.64%
Rocky Hill	3,697	35.03%	1.16%	4.95%	14.93%	43.03%	0.89%
Ansonia	4,883	33.75%	0.59%	4.08%	0.33%	59.94%	1.31%
Wallingford	9,178	33.36%	3.67%	6.28%	5.39%	49.34%	1.96%
Newington	6,410	32.84%	0.25%	5.74%	56.83%	3.67%	0.67%
Yale Unv.	1,050	32.48%	3.71%	8.00%	39.24%	16.10%	0.48%
South Windsor	2,615	32.08%	0.38%	5.12%	4.82%	55.49%	2.10%
New Britain	5,533	31.86%	1.81%	9.87%	0.89%	54.65%	0.92%
Watertown	1,784	31.56%	0.56%	7.85%	50.28%	8.58%	1.18%
Weston	410	31.46%	0.00%	6.59%	39.51%	20.49%	1.95%
Waterbury	1,742	31.40%	5.34%	29.45%	1.55%	30.60%	1.66%
Milford	4,358	29.83%	1.17%	6.65%	28.41%	33.23%	0.71%
Bristol	4,653	29.77%	2.02%	9.22%	45.67%	7.97%	5.35%
Coventry	1,343	29.64%	0.00%	8.27%	22.64%	34.85%	4.62%

Table 6: Outcome of Stop (Sorted by % Infraction Ticket)

Department Name	N	Infraction	UAR	Mis. Sum.	Written Warning	Verbal Warning	No Disposition
Norwich	6,919	29.56%	0.88%	5.77%	52.48%	10.91%	0.40%
North Branford	1,340	29.10%	0.37%	9.25%	17.99%	34.70%	8.58%
East Haven	1,555	28.87%	0.90%	9.65%	2.25%	55.37%	2.96%
Stratford	2,956	28.52%	1.52%	9.27%	0.85%	57.51%	2.33%
Manchester	3,407	28.09%	0.79%	9.74%	13.53%	45.20%	2.64%
Bethel	3,712	27.42%	0.30%	1.86%	55.74%	13.31%	1.37%
Middletown	3,700	27.05%	1.14%	7.46%	14.62%	48.59%	1.14%
Bloomfield	5,515	26.96%	1.63%	5.89%	56.30%	7.58%	1.63%
East Hampton	725	26.76%	0.28%	10.62%	55.72%	6.07%	0.55%
New Canaan	4,229	26.51%	0.19%	2.32%	1.77%	68.31%	0.90%
Windsor Locks	2,869	26.49%	0.21%	3.52%	34.58%	34.51%	0.70%
Easton	427	26.00%	0.00%	4.22%	63.00%	6.09%	0.70%
Southington	5,395	25.99%	0.09%	2.54%	64.00%	7.15%	0.22%
Newtown	9,402	25.10%	0.20%	1.98%	46.38%	26.27%	0.06%
Central CT State Unv.	1,791	24.62%	0.11%	4.19%	13.57%	55.56%	1.95%
Monroe	4,319	24.15%	0.32%	3.68%	52.37%	18.62%	0.86%
Cromwell	2,330	23.86%	0.43%	8.15%	19.66%	46.01%	1.89%
Cheshire	4,749	23.50%	0.78%	3.90%	64.52%	6.82%	0.48%
Brookfield	3,223	22.99%	0.56%	2.45%	33.79%	38.50%	1.71%
Naugatuck	5,907	22.99%	0.19%	0.32%	25.44%	50.75%	0.30%
Stonington	1,894	22.49%	1.21%	2.43%	1.69%	68.80%	3.38%
Wilton	3,893	22.48%	0.10%	5.16%	33.32%	37.37%	1.57%
Winchester	717	21.34%	0.84%	5.72%	27.62%	41.00%	3.49%
Madison	2,733	20.64%	1.24%	3.22%	35.75%	38.16%	0.99%
Enfield	7,126	20.25%	0.67%	2.86%	71.67%	4.06%	0.49%
Groton Town	6,252	20.17%	2.48%	5.60%	36.87%	34.29%	0.59%
Vernon	3,762	20.15%	1.91%	7.04%	35.38%	33.49%	2.02%
Seymour	3,710	19.35%	0.27%	3.83%	12.05%	64.04%	0.46%
Shelton	618	19.09%	0.65%	10.52%	9.39%	58.25%	2.10%
Hamden	5,442	19.09%	0.17%	7.13%	5.92%	66.96%	0.74%
Waterford	3,289	18.91%	0.33%	5.05%	30.98%	42.41%	2.31%
Windsor	5,565	18.58%	0.04%	2.12%	6.31%	72.61%	0.34%
Western CT State Unv.	38	18.42%	0.00%	5.26%	5.26%	71.05%	0.00%
Plainville	4,999	18.26%	0.80%	3.60%	1.30%	74.35%	1.68%
Avon	667	17.54%	0.75%	2.25%	31.78%	37.93%	9.75%
Simsbury	3,281	16.73%	0.34%	2.96%	31.70%	47.39%	0.88%
University of Connecticut	1,769	15.77%	0.45%	2.94%	22.22%	58.06%	0.45%
Guilford	2,711	15.27%	0.18%	2.07%	77.17%	4.68%	0.63%
Wethersfield	5,547	15.25%	1.46%	11.07%	0.97%	68.85%	2.40%
Canton	1,751	14.96%	4.34%	4.45%	21.42%	54.08%	0.74%
Old Saybrook	2,783	14.59%	0.50%	5.89%	65.86%	12.29%	0.86%
Redding	2,537	14.43%	0.16%	2.68%	31.49%	49.47%	1.77%
State Capitol Police	275	13.82%	0.73%	5.45%	4.00%	75.27%	0.73%
Thomaston	942	13.16%	0.21%	2.65%	17.20%	64.76%	2.02%
West Haven	3,865	13.12%	0.49%	2.20%	5.02%	77.62%	1.60%
Torrington	8,657	12.31%	0.58%	3.40%	27.49%	53.18%	3.04%
Clinton	2,332	12.18%	1.54%	5.92%	63.64%	16.08%	0.64%
Willimantic	3,942	11.64%	1.27%	7.48%	8.19%	69.36%	2.05%
Plymouth	2,610	11.46%	0.57%	1.95%	14.18%	68.05%	3.79%
Portland	160	11.25%	0.00%	1.88%	38.13%	48.75%	0.00%
Suffield	556	7.91%	0.00%	4.86%	74.64%	12.59%	0.00%
Plainfield	1,240	6.37%	2.58%	5.73%	4.92%	79.03%	1.37%
Eastern CT State Unv.	173	5.78%	0.00%	1.16%	13.29%	79.77%	0.00%
Putnam	2,308	3.60%	1.73%	1.73%	45.19%	47.70%	0.04%
Middlebury	266	1.13%	0.00%	5.26%	7.52%	85.34%	0.75%

Table 7: Outcome of Stop (Sorted by % Warnings)

Department Name	N	Warning	Infraction	UAR	Mis. Sum.	No Disposition
Eastern CT State Unv.	173	93.06%	5.78%	0.00%	1.16%	0.00%
Putnam	2,308	92.89%	3.60%	1.73%	1.73%	0.04%
Middlebury	266	92.86%	1.13%	0.00%	5.26%	0.75%
Suffield	556	87.23%	7.91%	0.00%	4.86%	0.00%
Portland	160	86.88%	11.25%	0.00%	1.88%	0.00%
Plainfield	1,240	83.95%	6.37%	2.58%	5.73%	1.37%
West Haven	3,865	82.64%	13.12%	0.49%	2.20%	1.60%
Plymouth	2,610	82.22%	11.46%	0.57%	1.95%	3.79%
Thomaston	942	81.95%	13.16%	0.21%	2.65%	2.02%
Guilford	2,711	81.85%	15.27%	0.18%	2.07%	0.63%
Redding	2,537	80.96%	14.43%	0.16%	2.68%	1.77%
Torrington	8,657	80.67%	12.31%	0.58%	3.40%	3.04%
University of Connecticut	1,769	80.27%	15.77%	0.45%	2.94%	0.45%
Clinton	2,332	79.72%	12.18%	1.54%	5.92%	0.64%
State Capitol Police	275	79.27%	13.82%	0.73%	5.45%	0.73%
Simsbury	3,281	79.09%	16.73%	0.34%	2.96%	0.88%
Windsor	5,565	78.92%	18.58%	0.04%	2.12%	0.34%
Old Saybrook	2,783	78.15%	14.59%	0.50%	5.89%	0.86%
Willimantic	3,942	77.55%	11.64%	1.27%	7.48%	2.05%
Western CT State Unv.	38	76.32%	18.42%	0.00%	5.26%	0.00%
Naugatuck	5,907	76.20%	22.99%	0.19%	0.32%	0.30%
Seymour	3,710	76.09%	19.35%	0.27%	3.83%	0.46%
Enfield	7,126	75.72%	20.25%	0.67%	2.86%	0.49%
Plainville	4,999	75.66%	18.26%	0.80%	3.60%	1.68%
Canton	1,751	75.50%	14.96%	4.34%	4.45%	0.74%
Madison	2,733	73.91%	20.64%	1.24%	3.22%	0.99%
Waterford	3,289	73.40%	18.91%	0.33%	5.05%	2.31%
Hamden	5,442	72.88%	19.09%	0.17%	7.13%	0.74%
Newtown	9,402	72.65%	25.10%	0.20%	1.98%	0.06%
Brookfield	3,223	72.29%	22.99%	0.56%	2.45%	1.71%
Cheshire	4,749	71.34%	23.50%	0.78%	3.90%	0.48%
Groton Town	6,252	71.16%	20.17%	2.48%	5.60%	0.59%
Southington	5,395	71.16%	25.99%	0.09%	2.54%	0.22%
Monroe	4,319	70.99%	24.15%	0.32%	3.68%	0.86%
Wilton	3,893	70.69%	22.48%	0.10%	5.16%	1.57%
Stonington	1,894	70.49%	22.49%	1.21%	2.43%	3.38%
New Canaan	4,229	70.09%	26.51%	0.19%	2.32%	0.90%
Wethersfield	5,547	69.82%	15.25%	1.46%	11.07%	2.40%
Avon	667	69.72%	17.54%	0.75%	2.25%	9.75%
Central CT State Unv.	1,791	69.12%	24.62%	0.11%	4.19%	1.95%
Easton	427	69.09%	26.00%	0.00%	4.22%	0.70%
Windsor Locks	2,869	69.08%	26.49%	0.21%	3.52%	0.70%
Bethel	3,712	69.05%	27.42%	0.30%	1.86%	1.37%
Vernon	3,762	68.87%	20.15%	1.91%	7.04%	2.02%
Winchester	717	68.62%	21.34%	0.84%	5.72%	3.49%
Shelton	618	67.64%	19.09%	0.65%	10.52%	2.10%
Cromwell	2,330	65.67%	23.86%	0.43%	8.15%	1.89%
Bloomfield	5,515	63.88%	26.96%	1.63%	5.89%	1.63%
Norwich	6,919	63.39%	29.56%	0.88%	5.77%	0.40%
Middletown	3,700	63.22%	27.05%	1.14%	7.46%	1.14%
East Hampton	725	61.79%	26.76%	0.28%	10.62%	0.55%
Milford	4,358	61.63%	29.83%	1.17%	6.65%	0.71%
Newington	6,410	60.50%	32.84%	0.25%	5.74%	0.67%
South Windsor	2,615	60.31%	32.08%	0.38%	5.12%	2.10%
Ansonia	4,883	60.27%	33.75%	0.59%	4.08%	1.31%
Weston	410	60.00%	31.46%	0.00%	6.59%	1.95%

Table 7: Outcome of Stop (Sorted by % Warnings)

Department Name	N	Warning	Infraction	UAR	Mis. Sum.	No Disposition
Watertown	1,784	58.86%	31.56%	0.56%	7.85%	1.18%
Manchester	3,407	58.73%	28.09%	0.79%	9.74%	2.64%
Westport	7,193	58.45%	35.95%	0.89%	3.63%	1.08%
Stratford	2,956	58.36%	28.52%	1.52%	9.27%	2.33%
Rocky Hill	3,697	57.97%	35.03%	1.16%	4.95%	0.89%
East Haven	1,555	57.62%	28.87%	0.90%	9.65%	2.96%
Coventry	1,343	57.48%	29.64%	0.00%	8.27%	4.62%
Berlin	6,644	57.25%	35.60%	0.17%	5.22%	1.76%
Glastonbury	5,902	56.68%	35.62%	0.44%	5.57%	1.69%
New Britain	5,533	55.54%	31.86%	1.81%	9.87%	0.92%
Yale Unv.	1,050	55.33%	32.48%	3.71%	8.00%	0.48%
East Windsor	1,035	54.98%	35.27%	0.48%	7.63%	1.64%
Wallingford	9,178	54.73%	33.36%	3.67%	6.28%	1.96%
Fairfield	4,480	54.69%	36.16%	0.69%	6.03%	2.43%
Ridgefield	7,366	54.49%	41.35%	0.16%	2.78%	1.21%
Bristol	4,653	53.64%	29.77%	2.02%	9.22%	5.35%
North Branford	1,340	52.69%	29.10%	0.37%	9.25%	8.58%
Granby	1,484	52.56%	38.01%	0.47%	7.88%	1.08%
Groton Long Point	105	52.38%	45.71%	0.00%	1.90%	0.00%
Groton City	2,805	51.44%	41.03%	1.21%	3.46%	2.85%
Orange	3,129	50.40%	39.60%	0.32%	8.12%	1.57%
New Milford	4,049	50.31%	40.70%	0.40%	6.03%	2.57%
Southern CT State Unv.	917	50.05%	41.88%	0.55%	7.31%	0.22%
Wolcott	797	48.18%	45.80%	0.25%	5.14%	0.63%
Darien	3,681	48.00%	46.62%	0.81%	3.21%	1.36%
West Hartford	8,221	47.76%	39.11%	5.85%	5.62%	1.67%
New London	1,524	46.13%	37.80%	7.28%	4.92%	3.87%
North Haven	2,795	44.22%	44.26%	0.97%	8.12%	2.43%
Woodbridge	2,465	43.94%	45.40%	0.08%	9.01%	1.58%
Troop B	6,159	42.30%	47.93%	0.54%	7.16%	2.08%
Farmington	4,525	42.28%	46.76%	2.06%	5.59%	3.31%
Troop L	13,790	39.98%	49.33%	0.88%	7.31%	2.51%
East Hartford	7,542	35.53%	49.30%	0.61%	12.04%	2.52%
Norwalk	7,900	34.85%	56.38%	1.43%	6.42%	0.92%
Greenwich	8,041	34.32%	58.44%	0.90%	4.24%	2.10%
New Haven	11,159	34.32%	52.24%	2.37%	9.97%	1.10%
Bridgeport	4,717	33.05%	59.06%	1.08%	5.79%	1.02%
Troop D	16,662	32.97%	57.55%	0.54%	7.41%	1.52%
Waterbury	1,742	32.15%	31.40%	5.34%	29.45%	1.66%
Branford	6,891	30.65%	59.08%	0.30%	6.02%	3.95%
Troop A	23,667	28.64%	63.97%	0.54%	5.17%	1.68%
Troop K	21,787	27.38%	66.55%	0.45%	4.20%	1.43%
Department of Motor Vehicle	2,317	25.46%	66.47%	0.04%	5.91%	2.11%
Trumbull	2,974	24.11%	64.22%	0.27%	10.26%	1.14%
Troop C	27,826	24.06%	70.73%	0.16%	4.01%	1.04%
Troop I	13,670	22.97%	69.42%	0.86%	5.38%	1.38%
Troop E	21,493	21.95%	70.23%	0.60%	5.46%	1.77%
Derby	3,725	20.89%	68.62%	0.16%	10.09%	0.24%
Hartford	8,254	17.79%	61.91%	3.42%	15.98%	0.91%
Troop H	18,790	17.65%	73.24%	0.76%	5.90%	2.45%
Troop F	25,617	17.57%	77.71%	0.32%	3.07%	1.34%
Meriden	3,209	16.98%	70.15%	1.90%	10.31%	0.65%
Troop G	27,506	14.23%	77.13%	0.55%	6.08%	2.01%
Danbury	6,182	13.44%	82.34%	1.15%	2.28%	0.79%
Troop Other*	15,636	9.91%	85.94%	0.59%	2.31%	1.25%

Table 8: Outcome of Stop (Sorted by % Arrest)

Department Name	N	UAR	Mis. Sum.	Infraction	Written Warning	Verbal Warning	No Disposition
New London	1,524	7.28%	4.92%	37.80%	3.94%	42.19%	3.87%
West Hartford	8,221	5.85%	5.62%	39.11%	7.40%	40.36%	1.67%
Waterbury	1,742	5.34%	29.45%	31.40%	1.55%	30.60%	1.66%
Canton	1,751	4.34%	4.45%	14.96%	21.42%	54.08%	0.74%
Yale Unv.	1,050	3.71%	8.00%	32.48%	39.24%	16.10%	0.48%
Wallingford	9,178	3.67%	6.28%	33.36%	5.39%	49.34%	1.96%
Hartford	8,254	3.42%	15.98%	61.91%	4.82%	12.96%	0.91%
Plainfield	1,240	2.58%	5.73%	6.37%	4.92%	79.03%	1.37%
Groton Town	6,252	2.48%	5.60%	20.17%	36.87%	34.29%	0.59%
New Haven	11,159	2.37%	9.97%	52.24%	17.12%	17.21%	1.10%
Farmington	4,525	2.06%	5.59%	46.76%	3.31%	38.96%	3.31%
Bristol	4,653	2.02%	9.22%	29.77%	45.67%	7.97%	5.35%
Vernon	3,762	1.91%	7.04%	20.15%	35.38%	33.49%	2.02%
Meriden	3,209	1.90%	10.31%	70.15%	3.68%	13.31%	0.65%
New Britain	5,533	1.81%	9.87%	31.86%	0.89%	54.65%	0.92%
Putnam	2,308	1.73%	1.73%	3.60%	45.19%	47.70%	0.04%
Bloomfield	5,515	1.63%	5.89%	26.96%	56.30%	7.58%	1.63%
Clinton	2,332	1.54%	5.92%	12.18%	63.64%	16.08%	0.64%
Stratford	2,956	1.52%	9.27%	28.52%	0.85%	57.51%	2.33%
Wethersfield	5,547	1.46%	11.07%	15.25%	0.97%	68.85%	2.40%
Norwalk	7,900	1.43%	6.42%	56.38%	0.57%	34.28%	0.92%
Willimantic	3,942	1.27%	7.48%	11.64%	8.19%	69.36%	2.05%
Madison	2,733	1.24%	3.22%	20.64%	35.75%	38.16%	0.99%
Stonington	1,894	1.21%	2.43%	22.49%	1.69%	68.80%	3.38%
Groton City	2,805	1.21%	3.46%	41.03%	27.52%	23.92%	2.85%
Milford	4,358	1.17%	6.65%	29.83%	28.41%	33.23%	0.71%
Rocky Hill	3,697	1.16%	4.95%	35.03%	14.93%	43.03%	0.89%
Danbury	6,182	1.15%	2.28%	82.34%	0.34%	13.10%	0.79%
Middletown	3,700	1.14%	7.46%	27.05%	14.62%	48.59%	1.14%
Bridgeport	4,717	1.08%	5.79%	59.06%	7.74%	25.31%	1.02%
North Haven	2,795	0.97%	8.12%	44.26%	4.04%	40.18%	2.43%
East Haven	1,555	0.90%	9.65%	28.87%	2.25%	55.37%	2.96%
Greenwich	8,041	0.90%	4.24%	58.44%	12.05%	22.27%	2.10%
Westport	7,193	0.89%	3.63%	35.95%	32.39%	26.05%	1.08%
Norwich	6,919	0.88%	5.77%	29.56%	52.48%	10.91%	0.40%
Winchester	717	0.84%	5.72%	21.34%	27.62%	41.00%	3.49%
Darien	3,681	0.81%	3.21%	46.62%	12.03%	35.97%	1.36%
Plainville	4,999	0.80%	3.60%	18.26%	1.30%	74.35%	1.68%
Manchester	3,407	0.79%	9.74%	28.09%	13.53%	45.20%	2.64%
Cheshire	4,749	0.78%	3.90%	23.50%	64.52%	6.82%	0.48%
Avon	667	0.75%	2.25%	17.54%	31.78%	37.93%	9.75%
State Capitol Police	275	0.73%	5.45%	13.82%	4.00%	75.27%	0.73%
Fairfield	4,480	0.69%	6.03%	36.16%	1.65%	53.04%	2.43%
Enfield	7,126	0.67%	2.86%	20.25%	71.67%	4.06%	0.49%
Shelton	618	0.65%	10.52%	19.09%	9.39%	58.25%	2.10%
East Hartford	7,542	0.61%	12.04%	49.30%	14.96%	20.58%	2.52%
Ansonia	4,883	0.59%	4.08%	33.75%	0.33%	59.94%	1.31%
Torrington	8,657	0.58%	3.40%	12.31%	27.49%	53.18%	3.04%
Plymouth	2,610	0.57%	1.95%	11.46%	14.18%	68.05%	3.79%
Watertown	1,784	0.56%	7.85%	31.56%	50.28%	8.58%	1.18%
Brookfield	3,223	0.56%	2.45%	22.99%	33.79%	38.50%	1.71%
Southern CT State Unv.	917	0.55%	7.31%	41.88%	34.79%	15.27%	0.22%
Old Saybrook	2,783	0.50%	5.89%	14.59%	65.86%	12.29%	0.86%
West Haven	3,865	0.49%	2.20%	13.12%	5.02%	77.62%	1.60%
East Windsor	1,035	0.48%	7.63%	35.27%	15.94%	39.03%	1.64%

Table 8: Outcome of Stop (Sorted by % Arrest)

Department Name	N	UAR	Mis. Sum.	Infraction	Written Warning	Verbal Warning	No Disposition
Granby	1,484	0.47%	7.88%	38.01%	19.81%	32.75%	1.08%
University of Connecticut	1,769	0.45%	2.94%	15.77%	22.22%	58.06%	0.45%
Glastonbury	5,902	0.44%	5.57%	35.62%	32.63%	24.04%	1.69%
Cromwell	2,330	0.43%	8.15%	23.86%	19.66%	46.01%	1.89%
New Milford	4,049	0.40%	6.03%	40.70%	33.17%	17.14%	2.57%
South Windsor	2,615	0.38%	5.12%	32.08%	4.82%	55.49%	2.10%
North Branford	1,340	0.37%	9.25%	29.10%	17.99%	34.70%	8.58%
Simsbury	3,281	0.34%	2.96%	16.73%	31.70%	47.39%	0.88%
Waterford	3,289	0.33%	5.05%	18.91%	30.98%	42.41%	2.31%
Monroe	4,319	0.32%	3.68%	24.15%	52.37%	18.62%	0.86%
Orange	3,129	0.32%	8.12%	39.60%	3.48%	46.92%	1.57%
Branford	6,891	0.30%	6.02%	59.08%	0.10%	30.55%	3.95%
Bethel	3,712	0.30%	1.86%	27.42%	55.74%	13.31%	1.37%
East Hampton	725	0.28%	10.62%	26.76%	55.72%	6.07%	0.55%
Seymour	3,710	0.27%	3.83%	19.35%	12.05%	64.04%	0.46%
Trumbull	2,974	0.27%	10.26%	64.22%	12.24%	11.87%	1.14%
Wolcott	797	0.25%	5.14%	45.80%	26.35%	21.83%	0.63%
Newington	6,410	0.25%	5.74%	32.84%	56.83%	3.67%	0.67%
Thomaston	942	0.21%	2.65%	13.16%	17.20%	64.76%	2.02%
Windsor Locks	2,869	0.21%	3.52%	26.49%	34.58%	34.51%	0.70%
Newtown	9,402	0.20%	1.98%	25.10%	46.38%	26.27%	0.06%
New Canaan	4,229	0.19%	2.32%	26.51%	1.77%	68.31%	0.90%
Naugatuck	5,907	0.19%	0.32%	22.99%	25.44%	50.75%	0.30%
Guilford	2,711	0.18%	2.07%	15.27%	77.17%	4.68%	0.63%
Berlin	6,644	0.17%	5.22%	35.60%	37.96%	19.30%	1.76%
Hamden	5,442	0.17%	7.13%	19.09%	5.92%	66.96%	0.74%
Ridgefield	7,366	0.16%	2.78%	41.35%	44.03%	10.47%	1.21%
Derby	3,725	0.16%	10.09%	68.62%	0.13%	20.75%	0.24%
Redding	2,537	0.16%	2.68%	14.43%	31.49%	49.47%	1.77%
Central CT State Unv.	1,791	0.11%	4.19%	24.62%	13.57%	55.56%	1.95%
Wilton	3,893	0.10%	5.16%	22.48%	33.32%	37.37%	1.57%
Southington	5,395	0.09%	2.54%	25.99%	64.00%	7.15%	0.22%
Woodbridge	2,465	0.08%	9.01%	45.40%	9.70%	34.24%	1.58%
Department of Motor Vehicle	2,317	0.04%	5.91%	66.47%	6.82%	18.64%	2.11%
Windsor	5,565	0.04%	2.12%	18.58%	6.31%	72.61%	0.34%
Eastern CT State Unv.	173	0.00%	1.16%	5.78%	13.29%	79.77%	0.00%
Middlebury	266	0.00%	5.26%	1.13%	7.52%	85.34%	0.75%
Suffield	556	0.00%	4.86%	7.91%	74.64%	12.59%	0.00%
Portland	160	0.00%	1.88%	11.25%	38.13%	48.75%	0.00%
Western CT State Unv.	38	0.00%	5.26%	18.42%	5.26%	71.05%	0.00%
Easton	427	0.00%	4.22%	26.00%	63.00%	6.09%	0.70%
Weston	410	0.00%	6.59%	31.46%	39.51%	20.49%	1.95%
Coventry	1,343	0.00%	8.27%	29.64%	22.64%	34.85%	4.62%
Groton Long Point	105	0.00%	1.90%	45.71%	41.90%	10.48%	0.00%

TABLE 9: Number of Searches(Sorted by % Search)

Department Name	N	Searches	
		N	%
Waterbury	1,742	501	28.76%
Bridgeport	4,717	523	11.09%
Milford	4,358	422	9.68%
New London	1,524	130	8.53%
West Hartford	8,221	675	8.21%
Derby	3,725	305	8.19%
Middletown	3,700	301	8.14%
Norwalk	7,900	634	8.03%
Yale Unv.	1,050	79	7.52%
New Haven	11,159	836	7.49%
Wilton	3,893	281	7.22%
North Haven	2,795	183	6.55%
Glastonbury	5,902	372	6.30%
Wethersfield	5,547	346	6.24%
Clinton	2,332	145	6.22%
Norwich	6,919	426	6.16%
Meriden	3,209	196	6.11%
Danbury	6,182	363	5.87%
Plainville	4,999	293	5.86%
Stratford	2,956	173	5.85%
Vernon	3,762	214	5.69%
Wolcott	797	43	5.40%
Willimantic	3,942	212	5.38%
South Windsor	2,615	140	5.35%
Naugatuck	5,907	285	4.82%
Berlin	6,644	308	4.64%
New Britain	5,533	248	4.48%
East Hampton	725	32	4.41%
Waterford	3,289	134	4.07%
Wallingford	9,178	370	4.03%
Manchester	3,407	136	3.99%
Newington	6,410	246	3.84%
Plymouth	2,610	94	3.60%
East Haven	1,555	55	3.54%
Trumbull	2,974	104	3.50%
West Haven	3,865	135	3.49%
Canton	1,751	60	3.43%
Branford	6,891	236	3.42%
University of Connecticut	1,769	60	3.39%
East Hartford	7,542	254	3.37%
Shelton	618	20	3.24%
Watertown	1,784	57	3.20%
Windsor Locks	2,869	90	3.14%
Darien	3,681	114	3.10%
Old Saybrook	2,783	86	3.09%
Westport	7,193	220	3.06%
East Windsor	1,035	31	3.00%
Enfield	7,126	199	2.79%
Western CT State Unv.	38	1	2.63%
Bristol	4,653	121	2.60%
State Capitol Police	275	7	2.55%
Groton City	2,805	71	2.53%
Granby	1,484	37	2.49%
Farmington	4,525	107	2.36%
Troop A	23,667	535	2.26%
Fairfield	4,480	101	2.25%
Troop H	18,790	415	2.21%

TABLE 9: Number of Searches(Sorted by % Search)

Department Name	N	Searches	
		N	%
Troop L	13,790	289	2.10%
Bloomfield	5,515	115	2.09%
New Milford	4,049	84	2.07%
Orange	3,129	64	2.05%
Hamden	5,442	110	2.02%
Rocky Hill	3,697	73	1.97%
Seymour	3,710	73	1.97%
Southern CT State Unv.	917	18	1.96%
Torrington	8,657	169	1.95%
Greenwich	8,041	147	1.83%
Cheshire	4,749	84	1.77%
Groton Town	6,252	110	1.76%
Troop I	13,670	233	1.70%
Plainfield	1,240	21	1.69%
Ansonia	4,883	82	1.68%
Redding	2,537	42	1.66%
Troop G	27,506	428	1.56%
Hartford	8,254	127	1.54%
Troop E	21,493	321	1.49%
Troop D	16,662	238	1.43%
Monroe	4,319	61	1.41%
Winchester	717	10	1.39%
Troop K	21,787	298	1.37%
Troop B	6,159	83	1.35%
Suffield	556	7	1.26%
Portland	160	2	1.25%
Troop C	27,826	337	1.21%
Coventry	1,343	16	1.19%
Easton	427	5	1.17%
New Canaan	4,229	46	1.09%
Cromwell	2,330	25	1.07%
Thomaston	942	10	1.06%
Windsor	5,565	59	1.06%
Avon	667	7	1.05%
Newtown	9,402	95	1.01%
North Branford	1,340	13	0.97%
Bethel	3,712	35	0.94%
Madison	2,733	25	0.91%
Guilford	2,711	24	0.89%
Troop F	25,617	203	0.79%
Simsbury	3,281	25	0.76%
Woodbridge	2,465	17	0.69%
Troop Other*	15,636	99	0.63%
Brookfield	3,223	20	0.62%
Southington	5,395	24	0.44%
Stonington	1,894	8	0.42%
Middlebury	266	1	0.38%
Ridgefield	7,366	27	0.37%
Putnam	2,308	6	0.26%
Department of Motor Vehicle	2,317	6	0.26%
Weston	410	1	0.24%
Central CT State Unv.	1,791	4	0.22%
Groton Long Point	105	0	0.00%
Eastern CT State Unv.	173	0	0.00%

Appendix B

Table 10: Statewide Average Comparisons for Black Drivers (Sorted Alphabetically)

Department Name	Black Stops	Difference Between Town and State Average	Black Residents Age 16+	Difference Between Town and State Average	Difference Between Net Differences	Non-Resident Black Stops
Ansonia	15.15%	1.65%	9.74%	0.62%	1.03%	55.68%
Avon	9.00%	-4.50%	1.41%	-7.71%	3.20%	93.33%
Berlin	8.29%	-5.21%	0.65%	-8.47%	3.26%	94.37%
Bethel	4.69%	-8.81%	1.74%	-7.38%	-1.43%	75.86%
Bloomfield	54.56%	41.06%	54.76%	45.64%	-4.58%	53.84%
Branford	4.16%	-9.34%	1.76%	-7.36%	-1.98%	79.09%
Bridgeport	37.82%	24.32%	31.92%	22.80%	1.53%	20.12%
Bristol	9.00%	-4.50%	3.24%	-5.88%	1.39%	47.73%
Brookfield	3.07%	-10.43%	1.05%	-8.07%	-2.36%	75.76%
Canton	4.23%	-9.27%	0.00%	-9.12%	-0.15%	91.89%
Central CT State University*	16.75%	3.25%	10.67%	1.57%	1.68%	NA
Cheshire	6.93%	-6.57%	5.59%	-3.53%	-3.05%	88.15%
Clinton	3.56%	-9.94%	0.00%	-9.12%	-0.82%	81.93%
Coventry	3.13%	-10.37%	0.79%	-8.33%	-2.04%	85.71%
Cromwell	11.46%	-2.04%	3.69%	-5.43%	3.39%	21.35%
Danbury	6.84%	-6.66%	6.42%	-2.70%	-3.96%	54.37%
Darien	11.03%	-2.47%	0.00%	-9.12%	6.65%	97.54%
Department of Motor Vehicles*	15.32%	1.82%	NA	NA	NA	NA
Derby	13.53%	0.03%	6.03%	-3.09%	3.12%	85.52%
East Hampton	2.62%	-10.88%	1.10%	-8.02%	-2.86%	63.16%
East Hartford	35.84%	22.34%	22.52%	13.40%	8.94%	46.54%
East Haven	6.30%	-7.20%	2.47%	-6.65%	-0.55%	74.49%
East Windsor	11.50%	-2.00%	5.96%	-3.16%	1.16%	78.15%
Eastern CT State University*	10.92%	-2.58%	4.08%	-5.02%	2.44%	NA
Easton	4.22%	-9.28%	0.00%	-9.12%	-0.16%	94.44%
Enfield	9.11%	-4.39%	6.19%	-2.93%	-1.46%	66.56%
Fairfield	11.99%	-1.51%	1.73%	-7.39%	5.87%	94.97%
Farmington	7.25%	-6.25%	2.20%	-6.92%	0.66%	89.94%
Glastonbury	8.23%	-5.27%	1.80%	-7.32%	2.05%	79.42%
Granby	5.66%	-7.84%	0.92%	-8.20%	0.36%	90.48%
Greenwich	7.23%	-6.27%	2.03%	-7.09%	0.81%	79.69%
Groton City	15.33%	1.83%	6.07%	-3.03%	4.86%	56.51%
Groton Long Point	1.90%	-11.60%	6.07%	-3.03%	-8.57%	100.00%
Groton Town	13.07%	-0.43%	6.07%	-3.03%	2.60%	60.22%
Guilford	1.92%	-11.58%	0.70%	-8.42%	-3.16%	71.15%
Hamden	38.00%	24.50%	18.28%	9.16%	15.34%	55.27%
Hartford	37.27%	23.77%	35.82%	26.70%	-2.93%	43.34%
Madison	2.89%	-10.61%	0.49%	-8.63%	-1.98%	86.08%
Manchester	24.57%	11.07%	10.15%	1.03%	10.03%	52.57%
Meriden	16.08%	2.58%	7.80%	-1.32%	3.90%	28.29%
Middlebury	3.38%	-10.12%	0.00%	-9.12%	-1.00%	88.89%
Middletown	19.14%	5.64%	11.68%	2.56%	3.08%	40.11%
Milford	12.25%	-1.25%	2.23%	-6.89%	5.64%	86.52%
Monroe	5.74%	-7.76%	1.32%	-7.80%	0.04%	83.06%
Naugatuck	11.31%	-2.19%	4.11%	-5.01%	2.82%	59.73%
New Britain	17.08%	3.58%	10.67%	1.55%	2.03%	31.22%
New Canaan	4.66%	-8.84%	1.06%	-8.06%	-0.78%	86.29%
New Haven	45.41%	31.91%	32.26%	23.14%	8.77%	29.25%
New London	15.81%	2.31%	15.18%	6.06%	-3.74%	37.34%
New Milford	3.63%	-9.87%	1.69%	-7.43%	-2.44%	52.38%
Newington	13.96%	0.46%	2.99%	-6.13%	6.59%	87.04%
Newtown	5.01%	-8.49%	1.82%	-7.30%	-1.19%	93.63%
North Branford	4.25%	-9.25%	1.33%	-7.79%	-1.46%	77.19%
North Haven	11.34%	-2.16%	2.91%	-6.21%	4.05%	90.54%

* No benchmark has been developed for Special Police Departments. For this analysis, the demographics for the host town were used as a proxy benchmark and should be viewed with caution. See report text for additional information.

Table 10: Statewide Average Comparisons for Black Drivers (Sorted Alphabetically)

Department Name	Black Stops	Difference Between Town and State Average	Black Residents Age 16+	Difference Between Town and State Average	Difference Between Net Differences	Non-Resident Black Stops
Norwalk	22.96%	9.46%	13.13%	4.01%	5.45%	39.20%
Norwich	19.76%	6.26%	8.96%	-0.16%	6.42%	33.72%
Old Saybrook	3.20%	-10.30%	0.00%	-9.12%	-1.18%	73.03%
Orange	17.29%	3.79%	1.31%	-7.81%	11.60%	97.41%
Plainfield	2.18%	-11.32%	0.96%	-8.16%	-3.17%	55.56%
Plainville	8.42%	-5.08%	2.73%	-6.39%	1.31%	77.43%
Plymouth	4.56%	-8.94%	0.00%	-9.12%	0.18%	91.60%
Portland	6.88%	-6.63%	1.87%	-7.25%	0.62%	72.73%
Putnam	2.04%	-11.46%	1.17%	-7.95%	-3.52%	78.72%
Redding	3.23%	-10.27%	0.00%	-9.12%	-1.15%	93.90%
Ridgefield	3.61%	-9.89%	0.77%	-8.35%	-1.54%	90.60%
Rocky Hill	10.14%	-3.36%	3.77%	-5.35%	2.00%	74.67%
Seymour	6.25%	-7.25%	2.25%	-6.87%	-0.37%	78.88%
Shelton	6.47%	-7.03%	2.07%	-7.05%	0.02%	77.50%
Simsbury	5.43%	-8.07%	1.46%	-7.66%	-0.42%	75.28%
South Windsor	16.44%	2.94%	3.68%	-5.44%	8.39%	84.88%
Southern CT State University*	52.24%	38.74%	32.26%	23.16%	15.57%	NA
Southington	2.61%	-10.89%	1.34%	-7.78%	-3.10%	73.05%
State Capitol Police*	25.09%	11.59%	35.82%	26.72%	-15.13%	NA
Stonington	3.33%	-10.17%	0.82%	-8.30%	-1.87%	66.67%
Stratford	28.89%	15.39%	12.76%	3.64%	11.76%	61.59%
Suffield	4.14%	-9.36%	8.78%	-0.34%	-9.02%	82.61%
Thomaston	2.12%	-11.38%	0.00%	-9.12%	-2.26%	95.00%
Torrington	5.05%	-8.45%	2.12%	-7.00%	-1.45%	40.50%
Trumbull	16.81%	3.31%	2.90%	-6.22%	9.53%	91.20%
University of Connecticut*	9.38%	-4.12%	5.40%	-3.70%	-0.42%	NA
Vernon	14.27%	0.77%	4.70%	-4.42%	5.20%	61.08%
Wallingford	7.78%	-5.72%	1.34%	-7.78%	2.06%	85.71%
Waterbury	31.06%	17.56%	17.37%	8.25%	9.30%	10.91%
Waterford	11.22%	-2.28%	2.29%	-6.83%	4.55%	89.43%
Watertown	6.56%	-6.94%	1.24%	-7.88%	0.94%	89.74%
West Hartford	14.65%	1.15%	5.65%	-3.47%	4.61%	85.55%
West Haven	24.84%	11.34%	17.70%	8.58%	2.76%	52.50%
Western CT State University*	13.16%	-0.34%	6.42%	-2.68%	2.33%	NA
Weston	3.41%	-10.09%	1.25%	-7.87%	-2.22%	78.57%
Westport	9.33%	-4.17%	1.22%	-7.90%	3.73%	95.08%
Wethersfield	18.57%	5.07%	2.75%	-6.37%	11.44%	90.10%
Willimantic	7.36%	-6.14%	4.08%	-5.04%	-1.11%	55.17%
Wilton	7.96%	-5.54%	1.01%	-8.11%	2.57%	94.84%
Windsor	42.77%	29.27%	32.20%	23.08%	6.19%	55.38%
Windsor Locks	14.19%	0.69%	4.27%	-4.85%	5.54%	81.57%
Winsted	3.35%	-10.15%	1.04%	-8.08%	-2.07%	66.67%
Wolcott	8.53%	-4.97%	1.53%	-7.59%	2.62%	82.35%
Woodbridge	18.70%	5.20%	1.94%	-7.18%	12.38%	95.66%
Yale University*	37.90%	24.40%	32.26%	23.16%	1.24%	NA

* No benchmark has been developed for Special Police Departments. For this analysis, the demographics for the host town were used as a proxy benchmark and should be viewed with caution. See report text for additional information.

Table 11: Statewide Average Comparisons for Hispanic Drivers (Sorted Alphabetically)

Department Name	Hispanic Stops	Difference Between Town and State Average	Hispanic Residents Age 16+	Difference Between Town and State Average	Difference Between Net Differences	Non-Resident Hispanic Stops
Ansonia	12.12%	0.42%	14.03%	2.13%	-1.70%	56.08%
Avon	5.55%	-6.15%	2.76%	-9.14%	2.99%	86.49%
Berlin	12.99%	1.29%	2.67%	-9.23%	10.52%	94.44%
Bethel	11.66%	-0.04%	6.65%	-5.25%	5.21%	75.52%
Bloomfield	7.45%	-4.25%	4.78%	-7.12%	2.87%	81.27%
Branford	6.60%	-5.10%	3.45%	-8.45%	3.36%	81.10%
Bridgeport	29.21%	17.51%	36.13%	24.23%	-6.72%	18.72%
Bristol	14.27%	2.57%	7.65%	-4.25%	6.82%	44.58%
Brookfield	8.72%	-2.98%	3.79%	-8.11%	5.13%	83.63%
Canton	2.97%	-8.73%	1.94%	-9.96%	1.23%	86.54%
Central CT State University*	14.74%	3.04%	31.75%	19.85%	-16.81%	NA
Cheshire	6.72%	-4.98%	4.62%	-7.28%	2.29%	90.28%
Clinton	7.72%	-3.98%	4.41%	-7.49%	3.51%	47.78%
Coventry	5.73%	-5.97%	2.21%	-9.69%	3.72%	77.92%
Cromwell	3.65%	-8.05%	3.90%	-8.00%	-0.05%	28.24%
Danbury	24.04%	12.34%	23.25%	11.35%	0.99%	38.36%
Darien	15.78%	4.08%	3.49%	-8.41%	12.49%	92.77%
Department of Motor Vehicles*	9.88%	-1.82%	NA	NA	NA	NA
Derby	11.81%	0.11%	12.37%	0.47%	-0.35%	76.82%
East Hampton	2.76%	-8.94%	2.02%	-9.88%	0.94%	60.00%
East Hartford	25.55%	13.85%	22.91%	11.01%	2.84%	45.04%
East Haven	11.51%	-0.19%	8.43%	-3.47%	3.28%	63.69%
East Windsor	6.76%	-4.94%	4.34%	-7.56%	2.62%	67.14%
Eastern CT State University*	9.20%	-2.50%	28.88%	16.98%	-19.49%	NA
Easton	8.20%	-3.50%	2.56%	-9.34%	5.84%	91.43%
Enfield	6.76%	-4.94%	6.19%	-5.71%	0.77%	66.60%
Fairfield	12.54%	0.84%	4.51%	-7.39%	8.23%	89.15%
Farmington	7.49%	-4.21%	3.20%	-8.70%	4.49%	90.86%
Glastonbury	7.69%	-4.01%	3.60%	-8.30%	4.29%	73.79%
Granby	2.83%	-8.87%	1.39%	-10.51%	1.64%	95.24%
Greenwich	18.95%	7.25%	9.15%	-2.75%	10.00%	75.26%
Groton City	13.16%	1.46%	7.40%	-4.50%	5.96%	56.64%
Groton Long Point	2.86%	-8.84%	7.40%	-4.50%	-4.34%	100.00%
Groton Town	8.30%	-3.40%	7.40%	-4.50%	1.10%	60.69%
Guilford	3.17%	-8.53%	2.90%	-9.00%	0.47%	60.47%
Hamden	8.36%	-3.34%	7.58%	-4.32%	0.98%	65.05%
Hartford	28.82%	17.12%	40.92%	29.02%	-11.90%	32.11%
Madison	3.29%	-8.41%	1.73%	-10.17%	1.77%	84.44%
Manchester	15.97%	4.27%	9.89%	-2.01%	6.27%	51.47%
Meriden	30.76%	19.06%	24.86%	12.96%	6.10%	16.82%
Middlebury	4.89%	-6.81%	2.22%	-9.68%	2.86%	100.00%
Middletown	8.24%	-3.46%	6.77%	-5.13%	1.68%	53.44%
Milford	10.39%	-1.31%	4.45%	-7.45%	6.15%	78.81%
Monroe	5.86%	-5.84%	4.30%	-7.60%	1.75%	81.42%
Naugatuck	10.92%	-0.78%	7.77%	-4.13%	3.35%	53.18%
New Britain	45.02%	33.32%	31.75%	19.85%	13.47%	17.38%
New Canaan	9.17%	-2.53%	2.69%	-9.21%	6.69%	91.75%
New Haven	20.10%	8.40%	24.78%	12.88%	-4.48%	28.00%
New London	18.64%	6.94%	25.08%	13.18%	-6.24%	29.58%
New Milford	6.79%	-4.91%	5.46%	-6.44%	1.53%	57.09%
Newington	20.84%	9.14%	6.39%	-5.51%	14.66%	86.38%
Newtown	4.72%	-6.98%	3.49%	-8.41%	1.44%	86.26%
North Branford	4.55%	-7.15%	2.31%	-9.59%	2.44%	81.97%
North Haven	9.95%	-1.75%	3.26%	-8.64%	6.88%	90.65%
Norwalk	21.27%	9.57%	22.67%	10.77%	-1.21%	31.90%

* No benchmark has been developed for Special Police Departments. For this analysis, the demographics for the host town were used as a proxy benchmark and should be viewed with caution. See report text for additional information.

Table 11: Statewide Average Comparisons for Hispanic Drivers (Sorted Alphabetically)

Department Name	Hispanic Stops	Difference Between Town and State Average	Hispanic Residents Age 16+	Difference Between Town and State Average	Difference Between Net Differences	Non-Resident Hispanic Stops
Norwich	13.05%	1.35%	10.59%	-1.31%	2.66%	35.11%
Old Saybrook	4.67%	-7.03%	2.93%	-8.97%	1.94%	70.00%
Orange	12.08%	0.38%	2.54%	-9.36%	9.74%	95.77%
Plainfield	2.18%	-9.52%	3.33%	-8.57%	-0.95%	66.67%
Plainville	11.90%	0.20%	5.18%	-6.72%	6.92%	78.32%
Plymouth	5.48%	-6.22%	2.47%	-9.43%	3.20%	95.10%
Portland	3.75%	-7.95%	2.75%	-9.15%	1.20%	83.33%
Putnam	0.87%	-10.83%	2.20%	-9.70%	-1.13%	75.00%
Redding	8.71%	-2.99%	2.37%	-9.53%	6.54%	97.29%
Ridgefield	9.83%	-1.87%	3.46%	-8.44%	6.57%	91.71%
Rocky Hill	8.33%	-3.37%	4.65%	-7.25%	3.88%	80.52%
Seymour	5.71%	-5.99%	5.53%	-6.37%	0.39%	66.51%
Shelton	7.12%	-4.58%	5.17%	-6.73%	2.15%	61.36%
Simsbury	2.50%	-9.20%	2.61%	-9.29%	0.09%	65.85%
South Windsor	10.48%	-1.22%	3.62%	-8.28%	7.06%	85.04%
Southern CT State University*	8.83%	-2.87%	24.78%	12.88%	-15.75%	NA
Southington	4.86%	-6.84%	2.80%	-9.10%	2.25%	70.23%
State Capitol Police*	23.64%	11.94%	40.92%	29.02%	-17.09%	NA
Stonington	3.22%	-8.48%	1.91%	-9.99%	1.51%	78.69%
Stratford	17.66%	5.96%	11.92%	0.02%	5.94%	67.62%
Suffield	3.42%	-8.28%	5.97%	-5.93%	-2.35%	100.00%
Thomaston	4.25%	-7.45%	2.09%	-9.81%	2.36%	95.00%
Torrington	7.43%	-4.27%	6.92%	-4.98%	0.71%	29.86%
Trumbull	16.17%	4.47%	5.06%	-6.84%	11.32%	92.10%
University of Connecticut	5.26%	-6.44%	5.89%	-6.01%	-0.43%	NA
Vernon	8.56%	-3.14%	5.21%	-6.69%	3.54%	55.59%
Wallingford	12.73%	1.03%	6.71%	-5.19%	6.21%	69.61%
Waterbury	33.18%	21.48%	27.54%	15.64%	5.84%	10.38%
Waterford	11.83%	0.13%	4.07%	-7.83%	7.95%	89.20%
Watertown	6.22%	-5.48%	2.99%	-8.91%	3.44%	90.09%
West Hartford	16.99%	5.29%	8.78%	-3.12%	8.41%	83.54%
West Haven	18.34%	6.64%	15.96%	4.06%	2.58%	49.65%
Western CT State University*	23.68%	11.98%	23.25%	11.35%	0.63%	NA
Weston	6.59%	-5.11%	3.06%	-8.84%	3.73%	92.59%
Westport	8.69%	-3.01%	3.19%	-8.71%	5.70%	95.20%
Wethersfield	30.74%	19.04%	7.10%	-4.80%	23.83%	90.85%
Willimantic	26.10%	14.40%	28.88%	16.98%	-2.58%	20.80%
Wilton	12.36%	0.66%	2.74%	-9.16%	9.82%	95.43%
Windsor	9.83%	-1.87%	7.33%	-4.57%	2.70%	68.19%
Windsor Locks	7.22%	-4.48%	3.46%	-8.44%	3.96%	81.64%
Winsted	3.77%	-7.93%	4.28%	-7.62%	-0.32%	40.74%
Wolcott	9.28%	-2.42%	2.83%	-9.07%	6.65%	83.78%
Woodbridge	8.03%	-3.67%	2.68%	-9.22%	5.55%	94.95%
Yale University*	11.90%	0.20%	24.78%	12.88%	-12.68%	NA

* No benchmark has been developed for Special Police Departments. For this analysis, the demographics for the host town were used as a proxy benchmark and should be viewed with caution. See report text for additional information.

Table 12: Statewide Average Comparisons for Minority Drivers (Sorted Alphabetically)

Department Name	Minority Stops	Difference Between Town and State Average	Minority Residents Age 16+	Difference Between Town and State Average	Difference Between Net Differences	Non-Resident Minority Stops
Ansonia	27.97%	1.07%	25.62%	0.42%	0.65%	56.08%
Avon	15.74%	-11.16%	9.82%	-15.38%	4.23%	87.62%
Berlin	22.85%	-4.05%	5.76%	-19.44%	15.38%	93.41%
Bethel	18.16%	-8.74%	13.49%	-11.71%	2.96%	74.33%
Bloomfield	63.59%	36.69%	61.51%	36.31%	0.38%	57.94%
Branford	11.07%	-15.83%	8.49%	-16.71%	0.89%	79.29%
Bridgeport	69.49%	42.59%	73.24%	48.04%	-5.45%	19.86%
Bristol	24.29%	-2.61%	12.71%	-12.49%	9.88%	46.11%
Brookfield	13.84%	-13.06%	8.11%	-17.09%	4.03%	80.49%
Canton	8.62%	-18.28%	3.25%	-21.95%	3.67%	89.40%
Central CT State University*	32.89%	5.99%	45.00%	19.80%	-13.81%	NA
Cheshire	14.74%	-12.16%	14.80%	-10.40%	-1.76%	85.43%
Clinton	13.34%	-13.56%	6.12%	-19.08%	5.52%	59.16%
Coventry	10.28%	-16.62%	3.79%	-21.41%	4.78%	83.33%
Cromwell	16.91%	-9.99%	10.57%	-14.63%	4.64%	23.35%
Danbury	33.02%	6.12%	38.64%	13.44%	-7.32%	43.51%
Darien	29.64%	2.74%	7.17%	-18.03%	20.77%	93.68%
Department of Motor Vehicles	27.02%	0.12%	NA	NA	NA	NA
Derby	26.68%	-0.22%	20.56%	-4.64%	4.43%	81.79%
East Hampton	6.34%	-20.56%	4.60%	-20.60%	0.04%	63.04%
East Hartford	63.03%	36.13%	51.63%	26.43%	9.71%	45.96%
East Haven	18.91%	-7.99%	13.98%	-11.22%	3.23%	68.03%
East Windsor	19.52%	-7.38%	14.58%	-10.62%	3.24%	74.26%
Eastern CT State University*	20.69%	-6.21%	34.55%	9.35%	-15.56%	NA
Easton	13.58%	-13.32%	5.56%	-19.64%	6.32%	89.66%
Enfield	17.40%	-9.50%	14.24%	-10.96%	1.46%	65.16%
Fairfield	25.36%	-1.54%	10.00%	-15.20%	13.66%	91.11%
Farmington	17.17%	-9.73%	12.59%	-12.61%	2.88%	88.55%
Glastonbury	19.65%	-7.25%	11.81%	-13.39%	6.15%	69.74%
Granby	8.96%	-17.94%	3.19%	-22.01%	4.07%	90.98%
Greenwich	28.50%	1.60%	17.95%	-7.25%	8.85%	74.48%
Groton City	32.44%	5.54%	20.39%	-4.81%	10.35%	58.46%
Groton Long Point	5.71%	-21.19%	20.39%	-4.81%	-16.38%	100.00%
Groton Town	23.70%	-3.20%	20.39%	-4.81%	1.61%	59.45%
Guilford	6.86%	-20.04%	5.67%	-19.53%	-0.51%	59.14%
Hamden	47.30%	20.40%	30.92%	5.72%	14.68%	56.64%
Hartford	67.30%	40.40%	80.64%	55.44%	-15.04%	39.06%
Madison	7.50%	-19.40%	4.26%	-20.94%	1.54%	80.49%
Manchester	43.41%	16.51%	27.95%	2.75%	13.76%	51.39%
Meriden	48.11%	21.21%	34.86%	9.66%	11.56%	21.24%
Middlebury	9.02%	-17.88%	5.58%	-19.62%	1.74%	91.67%
Middletown	28.84%	1.94%	23.49%	-1.71%	3.65%	44.42%
Milford	24.87%	-2.03%	11.62%	-13.58%	11.55%	80.07%
Monroe	12.69%	-14.21%	7.56%	-17.64%	3.43%	81.02%
Naugatuck	23.55%	-3.35%	15.18%	-10.02%	6.67%	55.86%
New Britain	63.38%	36.48%	45.00%	19.80%	16.68%	21.56%
New Canaan	15.72%	-11.18%	7.15%	-18.05%	6.87%	87.22%
New Haven	67.34%	40.44%	62.87%	37.67%	2.77%	29.70%
New London	35.89%	8.99%	43.57%	18.37%	-9.38%	34.00%
New Milford	12.40%	-14.50%	9.69%	-15.51%	1.00%	55.18%
Newington	37.64%	10.74%	14.51%	-10.69%	21.43%	84.83%
Newtown	11.38%	-15.52%	7.47%	-17.73%	2.21%	87.20%
North Branford	9.40%	-17.50%	5.02%	-20.18%	2.68%	79.37%
North Haven	22.29%	-4.61%	10.51%	-14.69%	10.08%	88.92%

* No benchmark has been developed for Special Police Departments. For this analysis, the demographics for the host town were used as a proxy benchmark and should be viewed with caution. See report text for additional information.

Table 12: Statewide Average Comparisons for Minority Drivers (Sorted Alphabetically)

Department Name	Minority Stops	Difference Between Town and State Average	Minority Residents Age 16+	Difference Between Town and State Average	Difference Between Net Differences	Non-Resident Minority Stops
Norwalk	45.19%	18.29%	40.80%	15.60%	2.69%	36.05%
Norwich	37.46%	10.56%	29.09%	3.89%	6.67%	35.11%
Old Saybrook	9.70%	-17.20%	5.15%	-20.05%	2.85%	70.74%
Orange	32.05%	5.15%	10.75%	-14.45%	19.61%	95.21%
Plainfield	4.76%	-22.14%	5.32%	-19.88%	-2.26%	62.71%
Plainville	21.70%	-5.20%	10.00%	-15.20%	10.00%	77.14%
Plymouth	10.84%	-16.06%	2.47%	-22.73%	6.67%	93.29%
Portland	11.25%	-15.65%	4.63%	-20.57%	4.92%	77.78%
Putnam	3.60%	-23.30%	3.37%	-21.83%	-1.47%	79.52%
Redding	13.24%	-13.66%	4.37%	-20.83%	7.17%	94.64%
Ridgefield	15.64%	-11.26%	7.29%	-17.91%	6.65%	87.85%
Rocky Hill	21.64%	-5.26%	17.20%	-8.00%	2.74%	72.25%
Seymour	13.53%	-13.37%	9.77%	-15.43%	2.06%	73.31%
Shelton	15.21%	-11.69%	10.83%	-14.37%	2.68%	69.15%
Simsbury	9.11%	-17.79%	7.65%	-17.55%	-0.23%	68.23%
South Windsor	29.83%	2.93%	14.60%	-10.60%	13.53%	82.31%
Southern CT State University*	61.94%	35.04%	62.87%	37.67%	-2.63%	NA
Southington	8.17%	-18.73%	6.17%	-19.03%	0.30%	70.52%
State Capitol Police*	50.55%	23.65%	80.64%	55.44%	-31.80%	NA
Stonington	8.50%	-18.40%	4.35%	-20.85%	2.45%	71.43%
Stratford	47.09%	20.19%	27.20%	2.00%	18.19%	63.86%
Suffield	8.63%	-18.27%	15.95%	-9.25%	-9.02%	91.67%
Thomaston	7.01%	-19.89%	2.09%	-23.11%	3.22%	93.94%
Torrington	13.32%	-13.58%	11.02%	-14.18%	0.60%	34.69%
Trumbull	34.87%	7.97%	11.91%	-13.29%	21.26%	89.97%
University of Connecticut*	25.44%	-1.46%	19.74%	-5.46%	4.00%	NA
Vernon	23.82%	-3.08%	14.05%	-11.15%	8.06%	58.93%
Wallingford	21.99%	-4.91%	11.14%	-14.06%	9.15%	74.28%
Waterbury	64.81%	37.91%	48.10%	22.90%	15.01%	10.98%
Waterford	25.21%	-1.69%	9.85%	-15.35%	13.66%	88.18%
Watertown	14.18%	-12.72%	5.82%	-19.38%	6.66%	84.58%
West Hartford	34.36%	7.46%	21.79%	-3.41%	10.88%	83.08%
West Haven	44.63%	17.73%	37.60%	12.40%	5.34%	51.19%
Western CT State University*	42.11%	15.21%	38.64%	13.44%	1.77%	NA
Weston	11.46%	-15.44%	7.26%	-17.94%	2.50%	85.11%
Westport	20.10%	-6.80%	8.28%	-16.92%	10.12%	92.67%
Wethersfield	50.86%	23.96%	12.47%	-12.73%	36.69%	90.11%
Willimantic	34.30%	7.40%	34.55%	9.35%	-1.95%	29.07%
Wilton	22.48%	-4.42%	8.09%	-17.11%	12.68%	94.74%
Windsor	54.47%	27.57%	43.92%	18.72%	8.84%	58.20%
Windsor Locks	23.00%	-3.90%	12.73%	-12.47%	8.57%	81.21%
Winsted	7.11%	-19.79%	6.12%	-19.08%	-0.71%	52.94%
Wolcott	18.32%	-8.58%	5.43%	-19.77%	11.19%	82.88%
Woodbridge	28.44%	1.54%	12.82%	-12.38%	13.91%	94.01%
Yale University*	53.05%	26.15%	62.87%	37.67%	-11.52%	NA

* No benchmark has been developed for Special Police Departments. For this analysis, the demographics for the host town were used as a proxy benchmark and should be viewed with caution. See report text for additional information.

Table 15a: Ratio of Minority EDP to Minority Stops (Sorted Alphabetically)

Department Name	Number of Stops	% Minority Stops	% Minority EDP	Absolute Difference	Ratio
Ansonia	1994	25.83%	24.63%	1.20%	1.05
Avon	222	16.22%	13.04%	3.18%	1.24
Berlin	2327	20.37%	11.43%	8.94%	1.78
Bethel	1021	16.75%	16.53%	0.22%	1.01
Bloomfield	1992	53.71%	43.78%	9.94%	1.23
Branford	2088	11.02%	11.04%	-0.02%	1.00
Bridgeport	1496	67.51%	61.91%	5.60%	1.09
Bristol	1606	20.73%	13.60%	7.14%	1.53
Brookfield	988	12.75%	12.70%	0.06%	1.00
Canton	495	3.03%	6.83%	-3.80%	0.44
Cheshire	2025	13.73%	17.16%	-3.43%	0.80
Clinton	523	10.52%	7.99%	2.53%	1.32
Coventry	381	8.66%	4.91%	3.75%	1.76
Cromwell	482	13.49%	14.30%	-0.81%	0.94
Danbury	1707	30.52%	33.64%	-3.12%	0.91
Darien	1232	29.22%	15.16%	14.06%	1.93
Derby	1016	25.10%	20.74%	4.35%	1.21
East Hampton	289	4.84%	5.42%	-0.58%	0.89
East Hartford	3015	62.59%	40.08%	22.51%	1.56
East Haven	434	15.90%	14.86%	1.04%	1.07
East Windsor	386	18.13%	18.89%	-0.75%	0.96
Easton	172	13.95%	7.82%	6.13%	1.78
Enfield	1336	14.75%	16.52%	-1.77%	0.89
Fairfield	1702	25.68%	16.75%	8.92%	1.53
Farmington	1312	15.02%	17.66%	-2.65%	0.85
Glastonbury	2128	16.82%	15.51%	1.31%	1.08
Granby	471	9.13%	6.28%	2.85%	1.45
Greenwich	2575	28.39%	25.09%	3.30%	1.13
Groton (City)	736	25.82%	17.32%	8.49%	1.49
Groton (Long Point)	25	8.00%	17.32%	-9.32%	0.46
Groton (Town)	1189	20.10%	17.32%	2.78%	1.16
Guilford	804	4.73%	7.41%	-2.68%	0.64
Hamden	1430	41.12%	27.62%	13.50%	1.49
Hartford	3216	63.50%	48.79%	14.70%	1.30
Madison	806	6.45%	6.01%	0.44%	1.07
Manchester	804	40.30%	26.15%	14.15%	1.54
Meriden	903	43.63%	30.42%	13.21%	1.43
Middlebury	97	9.28%	10.82%	-1.55%	0.86
Middletown	997	27.08%	21.38%	5.70%	1.27
Milford	1069	18.05%	16.68%	1.37%	1.08
Monroe	1417	13.62%	11.13%	2.49%	1.22
Naugatuck	1610	19.81%	16.26%	3.55%	1.22
New Britain	1390	62.09%	38.95%	23.14%	1.59
New Canaan	1746	15.75%	13.16%	2.59%	1.20
New Haven	2454	63.28%	46.62%	16.67%	1.36
New London	468	27.56%	33.91%	-6.34%	0.81
New Milford	1389	11.59%	11.26%	0.34%	1.03

Table 15a: Ratio of Minority EDP to Minority Stops (Sorted Alphabetically)

Department Name	Number of Stops	% Minority Stops	% Minority EDP	Absolute Difference	Ratio
Newington	1728	32.18%	17.10%	15.08%	1.88
Newtown	3704	9.48%	10.00%	-0.53%	0.95
North Branford	409	7.58%	7.67%	-0.09%	0.99
North Haven	1065	19.62%	15.08%	4.55%	1.30
Norwalk	2567	37.67%	36.79%	0.88%	1.02
Norwich	2184	35.39%	24.27%	11.12%	1.46
Old Saybrook	597	6.87%	7.99%	-1.12%	0.86
Orange	1025	28.98%	16.64%	12.33%	1.74
Plainfield	243	7.00%	6.63%	0.36%	1.05
Plainville	1434	18.55%	12.76%	5.79%	1.45
Plymouth	654	7.80%	4.18%	3.62%	1.86
Portland	17	5.88%	6.44%	-0.56%	0.91
Putnam	530	3.77%	6.07%	-2.29%	0.62
Redding	1078	13.36%	6.99%	6.37%	1.91
Ridgefield	2686	15.52%	15.86%	-0.34%	0.98
Rocky Hill	1209	19.44%	19.55%	-0.11%	0.99
Seymour	1048	10.21%	11.92%	-1.71%	0.86
Shelton	225	12.00%	16.20%	-4.20%	0.74
Simsbury	1282	7.72%	11.54%	-3.82%	0.67
South Windsor	828	26.09%	17.69%	8.40%	1.47
Southington	2230	6.01%	9.35%	-3.34%	0.64
Stonington	477	7.13%	6.74%	0.39%	1.06
Stratford	611	44.35%	27.16%	17.19%	1.63
Suffield	201	5.97%	17.13%	-11.16%	0.35
Thomaston	227	6.61%	6.33%	0.27%	1.04
Torrington	2542	12.35%	12.30%	0.06%	1.00
Trumbull	1203	34.91%	18.24%	16.67%	1.91
Vernon	1068	19.38%	15.40%	3.98%	1.26
Wallingford	2383	21.07%	14.63%	6.44%	1.44
Waterbury	491	55.60%	39.83%	15.77%	1.40
Waterford	787	19.82%	12.86%	6.96%	1.54
Watertown	876	15.30%	10.46%	4.84%	1.46
West Hartford	2508	35.17%	24.04%	11.13%	1.46
West Haven	805	43.98%	33.79%	10.19%	1.30
Weston	212	12.26%	9.44%	2.82%	1.30
Westport	2487	19.70%	17.52%	2.18%	1.12
Wethersfield	1521	47.47%	16.36%	31.10%	2.90
Willimantic	695	36.55%	28.99%	7.55%	1.26
Wilton	1171	20.15%	16.35%	3.81%	1.23
Windsor	2156	46.34%	33.63%	12.70%	1.38
Windsor Locks	877	22.35%	19.17%	3.18%	1.17
Winsted	230	8.26%	7.57%	0.69%	1.09
Wolcott	336	15.48%	7.87%	7.60%	1.97
Woodbridge	969	25.39%	15.50%	9.88%	1.64

Table 15b: Ratio of Black EDP to Black Stops (Sorted Alphabetically)

Department Name	Number of Stops	% Black Stops	% Black EDP	Absolute Difference	Ratio
Ansonia	1994	13.04%	9.22%	3.81%	1.41
Avon	222	8.56%	3.35%	5.20%	2.55
Berlin	2327	7.00%	3.10%	3.90%	2.26
Bethel	1021	4.31%	3.02%	1.29%	1.43
Bloomfield	1992	44.88%	32.53%	12.35%	1.38
Branford	2088	3.98%	2.90%	1.07%	1.37
Bridgeport	1496	35.49%	26.59%	8.91%	1.33
Bristol	1606	7.97%	3.73%	4.24%	2.14
Brookfield	988	3.04%	2.70%	0.34%	1.13
Canton	495	1.01%	1.44%	-0.43%	0.70
Cheshire	2025	6.91%	6.14%	0.77%	1.13
Clinton	523	1.91%	0.96%	0.95%	1.99
Coventry	381	2.62%	1.17%	1.46%	2.25
Cromwell	482	9.54%	5.13%	4.41%	1.86
Danbury	1707	6.50%	6.52%	-0.01%	1.00
Darien	1232	10.96%	3.26%	7.70%	3.37
Derby	1016	12.99%	6.41%	6.58%	2.03
East Hampton	289	1.73%	1.42%	0.31%	1.22
East Hartford	3015	35.46%	17.04%	18.42%	2.08
East Haven	434	5.76%	3.24%	2.52%	1.78
East Windsor	386	9.84%	7.83%	2.01%	1.26
Easton	172	3.49%	1.05%	2.43%	3.31
Enfield	1336	8.23%	6.71%	1.52%	1.23
Fairfield	1702	11.40%	4.95%	6.45%	2.30
Farmington	1312	5.64%	5.53%	0.11%	1.02
Glastonbury	2128	6.20%	4.11%	2.09%	1.51
Granby	471	5.10%	2.27%	2.83%	2.25
Greenwich	2575	6.17%	5.75%	0.43%	1.07
Groton (City)	736	10.33%	5.05%	5.28%	2.05
Groton (Long Point)	25	8.00%	5.05%	2.95%	1.59
Groton (Town)	1189	9.67%	5.05%	4.63%	1.92
Guilford	804	0.87%	1.44%	-0.57%	0.60
Hamden	1430	30.00%	15.10%	14.90%	1.99
Hartford	3216	35.76%	21.07%	14.69%	1.70
Madison	806	1.61%	1.16%	0.46%	1.39
Manchester	804	22.26%	9.69%	12.57%	2.30
Meriden	903	14.84%	7.43%	7.41%	2.00
Middlebury	97	3.09%	2.41%	0.68%	1.28
Middletown	997	17.15%	9.54%	7.61%	1.80
Milford	1069	8.23%	4.88%	3.35%	1.69
Monroe	1417	6.35%	2.86%	3.49%	2.22
Naugatuck	1610	9.32%	4.63%	4.69%	2.01
New Britain	1390	14.82%	9.90%	4.92%	1.50
New Canaan	1746	4.24%	3.26%	0.98%	1.30
New Haven	2454	45.48%	22.88%	22.60%	1.99
New London	468	10.90%	11.58%	-0.68%	0.94
New Milford	1389	2.45%	2.32%	0.13%	1.05

Table 15b: Ratio of Black EDP to Black Stops (Sorted Alphabetically)

Department Name	Number of Stops	% Black Stops	% Black EDP	Absolute Difference	Ratio
Newington	1728	11.40%	4.85%	6.55%	2.35
Newtown	3704	3.46%	2.65%	0.80%	1.30
North Branford	409	1.96%	2.29%	-0.33%	0.86
North Haven	1065	9.77%	4.91%	4.85%	1.99
Norwalk	2567	18.39%	12.02%	6.36%	1.53
Norwich	2184	18.82%	7.38%	11.44%	2.55
Old Saybrook	597	2.01%	1.39%	0.62%	1.45
Orange	1025	15.12%	4.63%	10.49%	3.27
Plainfield	243	2.06%	1.49%	0.56%	1.38
Plainville	1434	7.04%	3.82%	3.22%	1.84
Plymouth	654	3.67%	0.64%	3.03%	5.73
Portland	17	5.88%	2.48%	3.40%	2.37
Putnam	530	1.70%	1.88%	-0.18%	0.91
Redding	1078	2.69%	0.94%	1.75%	2.87
Ridgefield	2686	3.16%	3.84%	-0.68%	0.82
Rocky Hill	1209	8.44%	5.75%	2.68%	1.47
Seymour	1048	3.82%	3.19%	0.62%	1.20
Shelton	225	4.44%	4.74%	-0.30%	0.94
Simsbury	1282	3.98%	3.46%	0.52%	1.15
South Windsor	828	14.01%	5.64%	8.37%	2.48
Southington	2230	1.88%	2.50%	-0.61%	0.75
Stonington	477	3.35%	1.58%	1.78%	2.13
Stratford	611	23.73%	11.76%	11.97%	2.02
Suffield	201	2.49%	8.76%	-6.27%	0.28
Thomaston	227	1.76%	1.57%	0.20%	1.13
Torrington	2542	4.92%	2.95%	1.97%	1.67
Trumbull	1203	15.38%	5.88%	9.50%	2.62
Vernon	1068	11.42%	5.32%	6.10%	2.15
Wallingford	2383	6.67%	3.27%	3.40%	2.04
Waterbury	491	24.85%	14.23%	10.62%	1.75
Waterford	787	8.77%	3.56%	5.21%	2.47
Watertown	876	6.85%	3.00%	3.85%	2.29
West Hartford	2508	15.03%	7.73%	7.31%	1.95
West Haven	805	23.23%	15.39%	7.84%	1.51
Weston	212	4.72%	2.11%	2.61%	2.24
Westport	2487	8.24%	5.12%	3.13%	1.61
Wethersfield	1521	16.57%	4.82%	11.75%	3.44
Willimantic	695	5.76%	4.18%	1.58%	1.38
Wilton	1171	6.40%	4.30%	2.10%	1.49
Windsor	2156	34.65%	20.66%	13.99%	1.68
Windsor Locks	877	13.34%	7.40%	5.94%	1.80
Winsted	230	3.48%	1.60%	1.88%	2.17
Wolcott	336	7.44%	2.41%	5.03%	3.09
Woodbridge	969	16.62%	3.72%	12.89%	4.46

Table 15c: Ratio of Hispanic EDP to Hispanic Stops (Sorted Alphabetically)

Department Name	Number of Stops	% Hispanic Stops	% Hispanic EDP	Absolute Difference	Ratio
Ansonia	1994	12.09%	13.29%	-1.21%	0.91
Avon	222	6.76%	4.59%	2.17%	1.47
Berlin	2327	11.90%	5.55%	6.36%	2.15
Bethel	1021	10.58%	8.40%	2.18%	1.26
Bloomfield	1992	6.83%	8.32%	-1.49%	0.82
Branford	2088	6.90%	4.86%	2.03%	1.42
Bridgeport	1496	29.75%	30.41%	-0.66%	0.98
Bristol	1606	12.33%	7.72%	4.61%	1.60
Brookfield	988	6.98%	6.32%	0.66%	1.10
Canton	495	1.41%	3.52%	-2.11%	0.40
Cheshire	2025	5.83%	6.97%	-1.14%	0.84
Clinton	523	6.88%	5.02%	1.87%	1.37
Coventry	381	5.25%	2.71%	2.54%	1.94
Cromwell	482	1.87%	5.98%	-4.11%	0.31
Danbury	1707	21.91%	19.57%	2.34%	1.12
Darien	1232	15.67%	7.60%	8.07%	2.06
Derby	1016	11.12%	11.86%	-0.73%	0.94
East Hampton	289	2.08%	2.40%	-0.33%	0.86
East Hartford	3015	25.51%	17.73%	7.78%	1.44
East Haven	434	9.68%	8.46%	1.22%	1.14
East Windsor	386	7.77%	7.11%	0.67%	1.09
Easton	172	9.88%	3.64%	6.24%	2.71
Enfield	1336	4.94%	7.55%	-2.61%	0.65
Fairfield	1702	13.22%	7.83%	5.39%	1.69
Farmington	1312	6.78%	7.26%	-0.48%	0.93
Glastonbury	2128	6.86%	5.88%	0.98%	1.17
Granby	471	3.82%	2.72%	1.10%	1.40
Greenwich	2575	19.65%	12.66%	6.99%	1.55
Groton (City)	736	10.73%	6.69%	4.04%	1.60
Groton (Long Point)	25	0.00%	6.69%	-6.69%	0.00
Groton (Town)	1189	8.83%	6.69%	2.14%	1.32
Guilford	804	2.36%	3.69%	-1.32%	0.64
Hamden	1430	9.72%	7.84%	1.88%	1.24
Hartford	3216	26.59%	23.75%	2.84%	1.12
Madison	806	2.98%	2.66%	0.32%	1.12
Manchester	804	15.05%	9.96%	5.09%	1.51
Meriden	903	27.69%	20.45%	7.23%	1.35
Middlebury	97	4.12%	5.25%	-1.13%	0.79
Middletown	997	8.53%	7.43%	1.10%	1.15
Milford	1069	7.39%	7.21%	0.18%	1.02
Monroe	1417	6.00%	5.88%	0.11%	1.02
Naugatuck	1610	9.63%	8.42%	1.21%	1.14
New Britain	1390	45.83%	26.22%	19.60%	1.75
New Canaan	1746	9.45%	5.97%	3.48%	1.58
New Haven	2454	16.50%	18.65%	-2.15%	0.88
New London	468	15.60%	18.71%	-3.12%	0.83
New Milford	1389	6.77%	6.19%	0.58%	1.09

Table 15c: Ratio of Hispanic EDP to Hispanic Stops (Sorted Alphabetically)

Department Name	Number of Stops	% Hispanic Stops	% Hispanic EDP	Absolute Difference	Ratio
Newington	1728	18.40%	7.69%	10.72%	2.39
Newtown	3704	4.54%	4.83%	-0.29%	0.94
North Branford	409	5.13%	3.57%	1.57%	1.44
North Haven	1065	8.73%	6.26%	2.48%	1.40
Norwalk	2567	18.15%	19.78%	-1.63%	0.92
Norwich	2184	12.41%	9.25%	3.16%	1.34
Old Saybrook	597	3.18%	4.10%	-0.92%	0.78
Orange	1025	12.20%	6.40%	5.79%	1.91
Plainfield	243	4.94%	3.77%	1.17%	1.31
Plainville	1434	10.60%	6.44%	4.16%	1.65
Plymouth	654	3.67%	3.25%	0.42%	1.13
Portland	17	0.00%	3.41%	-3.41%	0.00
Putnam	530	1.13%	3.41%	-2.27%	0.33
Redding	1078	9.55%	3.67%	5.88%	2.60
Ridgefield	2686	10.13%	8.03%	2.10%	1.26
Rocky Hill	1209	7.28%	7.30%	-0.02%	1.00
Seymour	1048	5.44%	6.52%	-1.08%	0.83
Shelton	225	5.33%	7.77%	-2.44%	0.69
Simsbury	1282	3.12%	4.53%	-1.41%	0.69
South Windsor	828	9.30%	5.90%	3.40%	1.58
Southington	2230	3.63%	4.58%	-0.94%	0.79
Stonington	477	2.73%	2.99%	-0.27%	0.91
Stratford	611	20.46%	12.36%	8.10%	1.66
Suffield	201	2.49%	6.82%	-4.33%	0.36
Thomaston	227	4.41%	4.20%	0.20%	1.05
Torrington	2542	6.81%	7.25%	-0.44%	0.94
Trumbull	1203	17.54%	8.38%	9.16%	2.09
Vernon	1068	7.30%	5.97%	1.33%	1.22
Wallingford	2383	12.80%	8.22%	4.58%	1.56
Waterbury	491	30.35%	22.49%	7.85%	1.35
Waterford	787	9.53%	5.55%	3.98%	1.72
Watertown	876	7.19%	5.54%	1.65%	1.30
West Hartford	2508	16.95%	10.10%	6.85%	1.68
West Haven	805	19.25%	14.49%	4.76%	1.33
Weston	212	5.19%	4.18%	1.00%	1.24
Westport	2487	9.01%	8.09%	0.92%	1.11
Wethersfield	1521	29.26%	8.55%	20.71%	3.42
Willimantic	695	30.36%	22.80%	7.56%	1.33
Wilton	1171	12.04%	7.46%	4.58%	1.61
Windsor	2156	9.42%	8.98%	0.44%	1.05
Windsor Locks	877	7.07%	7.51%	-0.44%	0.94
Winsted	230	4.78%	4.90%	-0.12%	0.98
Wolcott	336	7.74%	4.18%	3.56%	1.85
Woodbridge	969	7.53%	4.86%	2.68%	1.55

Table 16a: Ratio of Minority Resident Population to Minority Resident Stops (Sorted Alphabetically)

Department Name	Number of Residents	Minority Residents	Resident Stops	Minority Resident Stops	Difference
Ansonia	14,979	25.62%	1,902	31.55%	5.92%
Avon	13,855	9.82%	166	7.83%	-1.98%
Berlin	16,083	5.76%	1,705	5.87%	0.10%
Bethel	14,675	13.49%	1,371	12.62%	-0.87%
Bloomfield	16,982	61.51%	1,829	80.65%	19.13%
Branford	23,532	8.49%	2,555	6.18%	-2.30%
Bridgeport	110,355	73.24%	3,419	76.84%	3.59%
Bristol	48,439	12.71%	2,467	24.69%	11.98%
Brookfield	12,847	8.11%	1,164	7.47%	-0.64%
Canton	7,992	3.25%	421	3.80%	0.55%
Cheshire	23,146	14.80%	1,607	6.35%	-8.45%
Clinton	10,540	6.12%	1,156	10.99%	4.87%
Coventry	9,779	3.79%	521	4.41%	0.62%
Cromwell	11,357	10.57%	1,879	16.07%	5.51%
Danbury	64,361	38.64%	2,479	46.51%	7.87%
Darien	14,004	7.17%	804	8.58%	1.41%
Derby	10,391	20.56%	563	32.15%	11.59%
East Hampton	10,255	4.60%	402	4.23%	-0.37%
East Hartford	40,229	51.63%	3,581	71.74%	20.11%
East Haven	24,114	13.98%	695	13.53%	-0.45%
East Windsor	9,164	14.58%	324	16.05%	1.47%
Easton	5,553	5.56%	107	5.61%	0.04%
Enfield	36,567	14.24%	3,356	12.87%	-1.36%
Fairfield	45,567	10.00%	1,292	7.82%	-2.18%
Farmington	20,318	12.59%	629	14.15%	1.55%
Glastonbury	26,217	11.81%	2,566	13.68%	1.87%
Granby	8,716	3.19%	548	2.19%	-1.00%
Greenwich	46,370	17.95%	3,441	17.00%	-0.95%
Groton*	31,520	20.39%	3,614	27.09%	6.70%
Guilford	17,672	5.67%	1,521	5.00%	-0.67%
Hamden	50,012	30.92%	2,453	45.50%	14.58%
Hartford	94,801	80.64%	3,823	88.54%	7.90%
Madison	14,073	4.26%	1,200	3.33%	-0.92%
Manchester	46,667	27.95%	1,638	43.89%	15.95%
Meriden	47,445	34.86%	2,326	52.28%	17.42%
Middlebury	5,843	5.58%	53	3.77%	-1.81%
Middletown	38,747	23.49%	1,721	34.46%	10.97%
Milford	43,135	11.62%	1,998	10.76%	-0.86%
Monroe	14,918	7.56%	1,542	6.74%	-0.82%
Naugatuck	25,099	15.18%	3,033	20.24%	5.07%
New Britain	57,164	45.00%	3,968	69.33%	24.33%
New Canaan	14,138	7.15%	1,602	5.31%	-1.85%
New Haven	101,488	62.87%	6,543	80.73%	17.86%
New London	21,835	43.57%	801	45.07%	1.50%
New Milford	21,891	9.69%	2,251	10.00%	0.30%

Table 16a: Ratio of Minority Resident Population to Minority Resident Stops
(Sorted Alphabetically)

Department Name	Number of Residents	Minority Residents	Resident Stops	Minority Resident Stops	Difference
Newington	24,978	14.51%	1,775	20.62%	6.11%
Newtown	20,792	7.47%	3,763	3.64%	-3.83%
North Branford	11,549	5.02%	457	5.69%	0.67%
North Haven	19,608	10.51%	650	10.62%	0.10%
Norwalk	68,034	40.80%	4,522	50.49%	9.69%
Norwich	31,638	29.09%	3,743	44.94%	15.85%
Old Saybrook	8,330	5.15%	899	8.79%	3.64%
Orange	11,017	10.75%	402	11.94%	1.19%
Plainfield	11,918	5.32%	635	3.46%	-1.86%
Plainville	14,605	10.00%	1,590	15.60%	5.59%
Plymouth	9,660	2.47%	418	4.55%	2.07%
Portland	7,480	4.63%	40	10.00%	5.37%
Putnam	7,507	3.37%	519	3.28%	-0.09%
Redding	6,955	4.37%	404	4.46%	0.08%
Ridgefield	18,111	7.29%	2,522	5.55%	-1.74%
Rocky Hill	16,224	17.20%	1,333	16.65%	-0.54%
Seymour	13,260	9.77%	1,348	9.94%	0.17%
Shelton	32,010	10.83%	342	8.48%	-2.35%
Simsbury	17,773	7.65%	1,533	6.20%	-1.45%
South Windsor	20,162	14.60%	892	15.47%	0.87%
Southington	34,301	6.17%	2,784	4.67%	-1.51%
Stonington	15,078	4.35%	732	6.28%	1.93%
Stratford	40,980	27.20%	1,216	41.37%	14.17%
Suffield	12,902	15.95%	64	6.25%	-9.70%
Thomaston	6,224	2.09%	256	1.56%	-0.53%
Torrington	29,251	11.02%	5,125	14.69%	3.67%
Trumbull	27,678	11.91%	661	15.73%	3.82%
Vernon	23,800	14.05%	1,524	24.15%	10.09%
Wallingford	36,530	11.14%	3,849	13.48%	2.35%
Waterbury	83,964	48.10%	1,381	72.77%	24.68%
Waterford	15,760	9.85%	792	12.37%	2.53%
Watertown	18,154	5.82%	676	5.77%	-0.05%
West Hartford	49,650	21.79%	1,772	26.98%	5.19%
West Haven	44,518	37.60%	2,080	40.48%	2.88%
Weston	7,255	7.26%	185	3.78%	-3.48%
Westport	19,410	8.28%	2,102	5.04%	-3.24%
Wethersfield	21,607	12.47%	1,072	26.03%	13.56%
Willimantic	20,176	34.55%	1,886	50.85%	16.30%
Wilton	12,973	8.09%	836	5.50%	-2.59%
Windsor	23,222	43.92%	2,015	62.88%	18.95%
Windsor Locks	10,117	12.73%	826	15.01%	2.28%
Winsted	9,133	6.12%	270	8.89%	2.77%
Wolcott	13,175	5.43%	317	7.89%	2.46%
Woodbridge	7,119	12.82%	386	10.88%	-1.94%

Table 16b: Ratio of Black Resident Population to Black Resident Stops
(Sorted Alphabetically)

Department Name	Number of Residents	Black Residents	Resident Stops	Black Resident Stops	Difference
Ansonia	14,979	9.74%	1,902	17.25%	7.50%
Avon	13,855	1.41%	166	2.41%	0.99%
Berlin	16,083	0.65%	1,705	1.82%	1.17%
Bethel	14,675	1.74%	1,371	3.06%	1.33%
Bloomfield	16,982	54.76%	1,829	75.94%	21.18%
Branford	23,532	1.76%	2,555	2.35%	0.58%
Bridgeport	110,355	31.92%	3,419	41.68%	9.76%
Bristol	48,439	3.24%	2,467	8.88%	5.64%
Brookfield	12,847	1.05%	1,164	2.06%	1.01%
Canton	7,992	0.00%	421	1.43%	1.43%
Cheshire	23,146	5.59%	1,607	2.43%	-3.17%
Clinton	10,540	0.00%	1,156	1.30%	1.30%
Coventry	9,779	0.79%	521	1.15%	0.36%
Cromwell	11,357	3.69%	1,879	11.18%	7.49%
Danbury	64,361	6.42%	2,479	7.79%	1.36%
Darien	14,004	0.00%	804	1.24%	1.24%
Derby	10,391	6.03%	563	12.97%	6.93%
East Hampton	10,255	1.10%	402	1.74%	0.64%
East Hartford	40,229	22.52%	3,581	40.35%	17.84%
East Haven	24,114	2.47%	695	3.60%	1.13%
East Windsor	9,164	5.96%	324	8.02%	2.07%
Easton	5,553	0.00%	107	0.93%	0.93%
Enfield	36,567	6.19%	3,356	6.47%	0.27%
Fairfield	45,567	1.73%	1,292	2.09%	0.36%
Farmington	20,318	2.20%	629	5.25%	3.04%
Glastonbury	26,217	1.80%	2,566	3.90%	2.09%
Granby	8,716	0.92%	548	1.46%	0.54%
Greenwich	46,370	2.03%	3,441	3.43%	1.40%
Groton*	31,520	6.07%	3,614	14.16%	8.09%
Guilford	17,672	0.70%	1,521	0.99%	0.28%
Hamden	50,012	18.28%	2,453	37.71%	19.43%
Hartford	94,801	35.82%	3,823	45.59%	9.78%
Madison	14,073	0.49%	1,200	0.92%	0.43%
Manchester	46,667	10.15%	1,638	24.24%	14.08%
Meriden	47,445	7.80%	2,326	15.91%	8.11%
Middlebury	5,843	0.00%	53	1.89%	1.89%
Middletown	38,747	11.68%	1,721	24.64%	12.96%
Milford	43,135	2.23%	1,998	3.55%	1.32%
Monroe	14,918	1.32%	1,542	2.72%	1.40%
Naugatuck	25,099	4.11%	3,033	8.87%	4.76%
New Britain	57,164	10.67%	3,968	16.38%	5.71%
New Canaan	14,138	1.06%	1,602	1.69%	0.62%
New Haven	101,488	32.26%	6,543	54.79%	22.53%
New London	21,835	15.18%	801	18.85%	3.67%
New Milford	21,891	1.69%	2,251	3.11%	1.42%

Table 16b: Ratio of Black Resident Population to Black Resident Stops
(Sorted Alphabetically)

Department Name	Number of Residents	Black Residents	Resident Stops	Black Resident Stops	Difference
Newington	24,978	2.99%	1,775	6.54%	3.54%
Newtown	20,792	1.82%	3,763	0.80%	-1.02%
North Branford	11,549	1.33%	457	2.84%	1.51%
North Haven	19,608	2.91%	650	4.62%	1.70%
Norwalk	68,034	13.13%	4,522	24.39%	11.26%
Norwich	31,638	8.96%	3,743	24.21%	15.24%
Old Saybrook	8,330	0.00%	899	2.67%	2.67%
Orange	11,017	1.31%	402	3.48%	2.18%
Plainfield	11,918	0.96%	635	1.89%	0.92%
Plainville	14,605	2.73%	1,590	5.97%	3.24%
Plymouth	9,660	0.00%	418	2.39%	2.39%
Portland	7,480	1.87%	40	7.50%	5.63%
Putnam	7,507	1.17%	519	1.93%	0.75%
Redding	6,955	0.00%	404	1.24%	1.24%
Ridgefield	18,111	0.77%	2,522	0.99%	0.22%
Rocky Hill	16,224	3.77%	1,333	7.13%	3.36%
Seymour	13,260	2.25%	1,348	3.64%	1.39%
Shelton	32,010	2.07%	342	2.63%	0.56%
Simsbury	17,773	1.46%	1,533	2.87%	1.41%
South Windsor	20,162	3.68%	892	7.29%	3.61%
Southington	34,301	1.34%	2,784	1.36%	0.03%
Stonington	15,078	0.82%	732	2.87%	2.05%
Stratford	40,980	12.76%	1,216	26.97%	14.22%
Suffield	12,902	8.78%	64	6.25%	-2.53%
Thomaston	6,224	0.00%	256	0.39%	0.39%
Torrington	29,251	2.12%	5,125	5.07%	2.96%
Trumbull	27,678	2.90%	661	6.66%	3.76%
Vernon	23,800	4.70%	1,524	13.71%	9.02%
Wallingford	36,530	1.34%	3,849	2.65%	1.31%
Waterbury	83,964	17.37%	1,381	34.90%	17.53%
Waterford	15,760	2.29%	792	4.92%	2.63%
Watertown	18,154	1.24%	676	1.78%	0.54%
West Hartford	49,650	5.65%	1,772	9.82%	4.17%
West Haven	44,518	17.70%	2,080	21.92%	4.22%
Weston	7,255	1.25%	185	1.62%	0.37%
Westport	19,410	1.22%	2,102	1.57%	0.35%
Wethersfield	21,607	2.75%	1,072	9.51%	6.77%
Willimantic	20,176	4.08%	1,886	6.89%	2.81%
Wilton	12,973	1.01%	836	1.91%	0.90%
Windsor	23,222	32.20%	2,015	52.70%	20.51%
Windsor Locks	10,117	4.27%	826	9.08%	4.81%
Winsted	9,133	1.04%	270	2.96%	1.92%
Wolcott	13,175	1.53%	317	3.79%	2.25%
Woodbridge	7,119	1.94%	386	5.18%	3.24%

Table 16c: Ratio of Hispanic Resident Population to Hispanic Resident Stops
(Sorted Alphabetically)

Department Name	Number of Residents	Hispanic Residents	Hispanic Stops	Hispanic Resident Stops	Difference
Ansonia	14,979	14.03%	1,902	13.67%	-0.36%
Avon	13,855	2.76%	166	3.01%	0.25%
Berlin	16,083	2.67%	1,705	2.82%	0.14%
Bethel	14,675	6.65%	1,371	7.73%	1.08%
Bloomfield	16,982	4.78%	1,829	4.21%	-0.57%
Branford	23,532	3.45%	2,555	3.37%	-0.08%
Bridgeport	110,355	36.13%	3,419	32.76%	-3.37%
Bristol	48,439	7.65%	2,467	14.92%	7.27%
Brookfield	12,847	3.79%	1,164	3.95%	0.16%
Canton	7,992	1.94%	421	1.66%	-0.28%
Cheshire	23,146	4.62%	1,607	1.93%	-2.69%
Clinton	10,540	4.41%	1,156	8.13%	3.72%
Coventry	9,779	2.21%	521	3.26%	1.05%
Cromwell	11,357	3.90%	1,879	3.25%	-0.65%
Danbury	64,361	23.25%	2,479	36.95%	13.70%
Darien	14,004	3.49%	804	5.22%	1.73%
Derby	10,391	12.37%	563	18.12%	5.75%
East Hampton	10,255	2.02%	402	1.99%	-0.03%
East Hartford	40,229	22.91%	3,581	29.57%	6.66%
East Haven	24,114	8.43%	695	9.35%	0.92%
East Windsor	9,164	4.34%	324	7.10%	2.76%
Easton	5,553	2.56%	107	2.80%	0.25%
Enfield	36,567	6.19%	3,356	4.80%	-1.39%
Fairfield	45,567	4.51%	1,292	4.72%	0.21%
Farmington	20,318	3.20%	629	4.93%	1.72%
Glastonbury	26,217	3.60%	2,566	4.64%	1.04%
Granby	8,716	1.39%	548	0.36%	-1.02%
Greenwich	46,370	9.15%	3,441	10.96%	1.81%
Groton*	31,520	7.40%	3,614	10.07%	2.67%
Guilford	17,672	2.90%	1,521	2.24%	-0.67%
Hamden	50,012	7.58%	2,453	6.48%	-1.10%
Hartford	94,801	40.92%	3,823	42.24%	1.32%
Madison	14,073	1.73%	1,200	1.17%	-0.56%
Manchester	46,667	9.89%	1,638	16.12%	6.22%
Meriden	47,445	24.86%	2,326	35.30%	10.44%
Middlebury	5,843	2.22%	53	0.00%	-2.22%
Middletown	38,747	6.77%	1,721	8.25%	1.48%
Milford	43,135	4.45%	1,998	4.80%	0.36%
Monroe	14,918	4.30%	1,542	3.05%	-1.26%
Naugatuck	25,099	7.77%	3,033	9.96%	2.19%
New Britain	57,164	31.75%	3,968	51.86%	20.11%
New Canaan	14,138	2.69%	1,602	2.00%	-0.69%
New Haven	101,488	24.78%	6,543	24.68%	-0.10%
New London	21,835	25.08%	801	24.97%	-0.11%
New Milford	21,891	5.46%	2,251	5.24%	-0.22%

Table 16c: Ratio of Hispanic Resident Population to Hispanic Resident Stops
(Sorted Alphabetically)

Department Name	Number of Residents	Hispanic Residents	Hispanic Stops	Hispanic Resident Stops	Difference
Newington	24,978	6.39%	1,775	10.25%	3.87%
Newtown	20,792	3.49%	3,763	1.62%	-1.87%
North Branford	11,549	2.31%	457	2.41%	0.10%
North Haven	19,608	3.26%	650	4.00%	0.74%
Norwalk	68,034	22.67%	4,522	25.30%	2.63%
Norwich	31,638	10.59%	3,743	15.66%	5.06%
Old Saybrook	8,330	2.93%	899	4.34%	1.41%
Orange	11,017	2.54%	402	3.98%	1.44%
Plainfield	11,918	3.33%	635	1.42%	-1.91%
Plainville	14,605	5.18%	1,590	8.11%	2.93%
Plymouth	9,660	2.47%	418	1.67%	-0.80%
Portland	7,480	2.75%	40	2.50%	-0.25%
Putnam	7,507	2.20%	519	0.96%	-1.23%
Redding	6,955	2.37%	404	1.49%	-0.89%
Ridgefield	18,111	3.46%	2,522	2.38%	-1.08%
Rocky Hill	16,224	4.65%	1,333	4.50%	-0.15%
Seymour	13,260	5.53%	1,348	5.27%	-0.26%
Shelton	32,010	5.17%	342	4.97%	-0.20%
Simsbury	17,773	2.61%	1,533	1.83%	-0.78%
South Windsor	20,162	3.62%	892	4.60%	0.98%
Southington	34,301	2.80%	2,784	2.80%	0.00%
Stonington	15,078	1.91%	732	1.78%	-0.13%
Stratford	40,980	11.92%	1,216	13.90%	1.98%
Suffield	12,902	5.97%	64	0.00%	-5.97%
Thomaston	6,224	2.09%	256	0.78%	-1.31%
Torrington	29,251	6.92%	5,125	8.80%	1.88%
Trumbull	27,678	5.06%	661	5.75%	0.69%
Vernon	23,800	5.21%	1,524	9.38%	4.17%
Wallingford	36,530	6.71%	3,849	9.22%	2.51%
Waterbury	83,964	27.54%	1,381	37.51%	9.97%
Waterford	15,760	4.07%	792	5.30%	1.23%
Watertown	18,154	2.99%	676	1.63%	-1.36%
West Hartford	49,650	8.78%	1,772	12.98%	4.20%
West Haven	44,518	15.96%	2,080	17.16%	1.20%
Weston	7,255	3.06%	185	1.08%	-1.98%
Westport	19,410	3.19%	2,102	1.43%	-1.76%
Wethersfield	21,607	7.10%	1,072	14.55%	7.45%
Willimantic	20,176	28.88%	1,886	43.21%	14.33%
Wilton	12,973	2.74%	836	2.63%	-0.10%
Windsor	23,222	7.33%	2,015	8.64%	1.30%
Windsor Locks	10,117	3.46%	826	4.60%	1.14%
Winsted	9,133	4.28%	270	5.93%	1.64%
Wolcott	13,175	2.83%	317	3.79%	0.95%
Woodbridge	7,119	2.68%	386	2.59%	-0.09%

Table 17: Comparison of Minority Stops by Department and Departmental Peer-Group

Department	Department Relative Frequencies					Peer Group Relative Frequencies				
	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
Ansonia	16%	28%	16%	12%	27%	15%	27%	14%	13%	26%
Avon	10%	16%	9%	6%	15%	12%	20%	10%	8%	18%
Berlin	10%	23%	9%	13%	21%	11%	21%	9%	10%	19%
Bethel	7%	18%	5%	12%	16%	7%	17%	6%	10%	16%
Bloomfield	57%	64%	55%	7%	62%	27%	35%	26%	8%	33%
Branford	5%	11%	4%	7%	11%	9%	17%	7%	8%	15%
Bridgeport	42%	69%	39%	29%	67%	14%	25%	12%	12%	24%
Bristol	10%	24%	9%	14%	23%	6%	13%	5%	8%	12%
Brookfield	5%	14%	3%	9%	12%	9%	19%	8%	10%	17%
Canton	6%	9%	4%	3%	7%	10%	18%	8%	8%	16%
State Capitol Police	27%	51%	25%	24%	49%	N/A	N/A	N/A	N/A	N/A
Central CT State University	19%	33%	17%	15%	31%	N/A	N/A	N/A	N/A	N/A
Cheshire	8%	15%	7%	7%	14%	12%	22%	10%	10%	20%
Clinton	6%	13%	4%	8%	11%	8%	17%	7%	9%	16%
Coventry	5%	10%	3%	6%	9%	8%	17%	7%	9%	15%
Cromwell	13%	17%	12%	4%	15%	12%	22%	10%	11%	21%
Danbury	9%	33%	7%	24%	31%	12%	24%	10%	13%	22%
Darien	14%	30%	11%	16%	27%	10%	20%	8%	10%	18%
Derby	15%	27%	14%	12%	25%	14%	26%	12%	13%	24%
Department of Motor Vehicle	18%	27%	16%	10%	25%	N/A	N/A	N/A	N/A	N/A
East Hampton	4%	6%	3%	3%	5%	7%	15%	6%	8%	13%
East Hartford	38%	63%	36%	26%	61%	15%	23%	12%	9%	21%
East Haven	8%	19%	6%	12%	18%	14%	31%	12%	17%	29%
East Windsor	13%	20%	12%	7%	18%	6%	14%	5%	7%	12%
Easton	5%	14%	4%	8%	12%	8%	17%	7%	9%	16%
Eastern CT State University	12%	21%	11%	9%	20%	N/A	N/A	N/A	N/A	N/A
Enfield	11%	17%	9%	7%	16%	10%	18%	8%	8%	16%
Fairfield	13%	25%	12%	13%	25%	14%	25%	12%	12%	23%
Farmington	10%	17%	8%	7%	15%	14%	24%	13%	10%	22%
Glastonbury	12%	20%	8%	8%	16%	14%	25%	12%	11%	23%
Granby	6%	9%	6%	3%	8%	11%	21%	10%	10%	19%
Greenwich	10%	29%	7%	19%	26%	10%	18%	7%	8%	16%
Groton City	20%	32%	16%	13%	28%	10%	17%	9%	7%	16%
Groton Long Point	3%	6%	2%	3%	5%	10%	17%	9%	7%	16%
Groton Town	16%	24%	14%	8%	21%	10%	17%	9%	7%	16%
Guilford	4%	7%	2%	3%	5%	7%	17%	6%	9%	16%
Hamden	39%	47%	38%	8%	46%	12%	22%	10%	11%	21%
Hartford	39%	67%	38%	29%	66%	21%	41%	20%	20%	39%
Ledyard	30%	30%	10%	0%	10%	10%	23%	8%	13%	21%
Madison	4%	8%	3%	3%	6%	4%	10%	4%	5%	9%
Manchester	28%	43%	26%	16%	41%	15%	28%	13%	13%	25%
Meriden	18%	48%	17%	31%	47%	11%	22%	10%	11%	20%
Met. Dist. Water Authority	11%	22%	0%	11%	11%	N/A	N/A	N/A	N/A	N/A
Middlebury	4%	9%	3%	5%	8%	10%	20%	8%	10%	18%
Middletown	21%	29%	19%	8%	27%	8%	16%	7%	8%	15%
Milford	15%	25%	13%	10%	23%	16%	30%	14%	15%	28%
Monroe	7%	13%	6%	6%	12%	10%	21%	8%	11%	20%
Naugatuck	13%	24%	12%	11%	22%	10%	20%	8%	10%	18%
New Britain	20%	63%	18%	45%	62%	12%	24%	11%	13%	23%
New Canaan	7%	16%	5%	9%	14%	8%	17%	6%	9%	15%
New Haven	48%	67%	47%	20%	66%	11%	21%	10%	11%	20%
New London	18%	36%	16%	19%	34%	13%	22%	11%	10%	21%
New Milford	6%	12%	4%	7%	10%	6%	13%	5%	6%	11%
Newington	17%	38%	14%	21%	35%	13%	24%	12%	11%	23%
Newtown	7%	11%	5%	5%	10%	6%	14%	5%	8%	13%
North Branford	5%	9%	4%	5%	9%	8%	18%	7%	10%	17%
North Haven	13%	22%	12%	10%	21%	13%	29%	11%	16%	27%
Norwalk	24%	45%	23%	21%	44%	13%	25%	12%	12%	24%
Norwich	25%	37%	21%	13%	33%	7%	16%	6%	9%	14%
Old Saybrook	5%	10%	3%	5%	8%	8%	13%	6%	5%	11%
Orange	20%	32%	18%	12%	29%	14%	27%	12%	13%	24%
Plainfield	3%	5%	2%	2%	4%	8%	13%	6%	5%	11%
Plainville	10%	22%	9%	12%	20%	11%	22%	9%	12%	20%
Plymouth	6%	11%	5%	5%	10%	10%	21%	9%	11%	19%
Portland	8%	11%	7%	4%	11%	12%	21%	11%	10%	20%

Table 17: Comparison of Minority Stops by Department and Departmental Peer-Group

Department	Department Relative Frequencies					Peer Group Relative Frequencies				
	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
Putnam	3%	4%	2%	1%	3%	8%	17%	7%	9%	15%
Redding	5%	13%	3%	9%	12%	6%	15%	5%	8%	13%
Ridgefield	6%	16%	4%	10%	13%	9%	18%	7%	9%	16%
Rocky Hill	14%	22%	10%	8%	18%	7%	15%	6%	7%	13%
Southern CT State University	54%	62%	53%	9%	61%	N/A	N/A	N/A	N/A	N/A
Seymour	8%	14%	6%	6%	12%	12%	26%	10%	15%	24%
Shelton	8%	15%	6%	7%	14%	11%	23%	9%	12%	21%
Simsbury	7%	9%	6%	2%	8%	15%	24%	13%	10%	22%
South Windsor	20%	30%	17%	10%	27%	11%	23%	10%	13%	22%
Southington	3%	8%	3%	5%	7%	13%	23%	10%	10%	20%
State Police	14%	23%	12%	10%	21%	N/A	N/A	N/A	N/A	N/A
Stonington	6%	8%	4%	3%	6%	6%	14%	5%	8%	12%
Stratford	30%	47%	29%	18%	47%	12%	24%	11%	12%	23%
Suffield	5%	9%	4%	3%	8%	9%	15%	7%	7%	14%
Thomaston	3%	7%	2%	4%	6%	13%	23%	12%	11%	22%
Torrington	7%	13%	6%	7%	12%	6%	11%	5%	6%	10%
Trumbull	19%	35%	17%	16%	33%	12%	21%	11%	10%	20%
University of Connecticut	20%	26%	11%	6%	17%	N/A	N/A	N/A	N/A	N/A
Vernon	15%	24%	14%	9%	23%	10%	14%	8%	4%	12%
Wallingford	9%	22%	8%	13%	21%	14%	25%	13%	12%	24%
Waterbury	33%	65%	32%	33%	64%	11%	29%	10%	18%	27%
Waterford	14%	25%	12%	12%	23%	10%	21%	8%	11%	19%
Watertown	9%	14%	7%	6%	13%	12%	24%	10%	12%	22%
Western CT State University	18%	42%	13%	24%	37%	N/A	N/A	N/A	N/A	N/A
West Hartford	18%	34%	15%	17%	32%	14%	28%	12%	15%	27%
West Haven	26%	45%	25%	18%	43%	16%	31%	14%	15%	29%
Weston	5%	11%	3%	7%	10%	10%	21%	8%	10%	19%
Westport	12%	20%	10%	9%	18%	7%	15%	6%	8%	14%
Wethersfield	20%	51%	19%	31%	49%	20%	34%	18%	15%	33%
Willimantic	9%	34%	8%	26%	33%	23%	31%	22%	8%	30%
Wilton	10%	22%	8%	12%	20%	8%	16%	7%	7%	14%
Windsor	45%	54%	43%	10%	53%	24%	35%	22%	11%	33%
Windsor Locks	16%	23%	14%	7%	21%	12%	24%	11%	12%	22%
Winsted	5%	7%	5%	4%	7%	N/A	N/A	N/A	N/A	N/A
Wolcott	10%	18%	9%	9%	18%	11%	24%	10%	13%	22%
Woodbridge	21%	28%	19%	8%	27%	14%	25%	11%	11%	22%
Yale University	42%	53%	38%	12%	50%	N/A	N/A	N/A	N/A	N/A

Table 17a: Variables used in the Mahalanobis Distance Measure for Peer-Groups

Department		Metadata	
Variable	Geography	Source 1	Source 2
Median Household Income	County Subdivision	U.S. Census Bureau American Community Survey. 2008-12.	N/A
African American or Black as a Share of Population	County Subdivision	U.S. Census Bureau American Community Survey. 2008-12.	N/A
American Indian as a Share of Population	County Subdivision	U.S. Census Bureau American Community Survey. 2008-12.	N/A
Asian as a Share of Population	County Subdivision	U.S. Census Bureau American Community Survey. 2008-12.	N/A
Pacific Islander as a Share of Population	County Subdivision	U.S. Census Bureau American Community Survey. 2008-12.	N/A
Other or Multi-racial as a Share of Population	County Subdivision	U.S. Census Bureau American Community Survey. 2008-12.	N/A
Hispanic as a Share of Population	County Subdivision	U.S. Census Bureau American Community Survey. 2008-12.	N/A
Individuals Aged 18 to 25 as a Share of Population	County Subdivision	U.S. Census Bureau American Community Survey. 2008-12.	N/A
Means of Transportation: Car Truck or Van as a Percent of 18+ Population	County Subdivision	U.S. Census Bureau American Community Survey. 2008-12.	N/A
Population Density of Population Aged 18+	County Subdivision	U.S. Census Bureau American Community Survey. 2008-12.	N/A
Population Aged 18+	County Subdivision	U.S. Census Bureau American Community Survey. 2008-12.	N/A
Murder and Manslaughter per Population Aged 18+	County Subdivision	Connecticut Department of Public Safety. 2012.	U.S. Census Bureau American Community Survey. 2008-12.
Robbery Burglary and Larceny per Population Aged 18+	County Subdivision	Connecticut Department of Public Safety. 2012.	U.S. Census Bureau American Community Survey. 2008-12.
Motor Vehicle Theft per Population Aged 18+	County Subdivision	Connecticut Department of Public Safety. 2012.	U.S. Census Bureau American Community Survey. 2008-12.
Employment in Dining, Retail, and Entertainment as a Share of CT Employment	County Subdivision	Economic Modeling Specialists International. 2012.	N/A
African American or Black as a Share of Population	Contiguous County Subdivisions	U.S. Census Bureau American Community Survey. 2008-12.	N/A
American Indian as a Share of Population	Contiguous County Subdivisions	U.S. Census Bureau American Community Survey. 2008-12.	N/A
Asian as a Share of Population	Contiguous County Subdivisions	U.S. Census Bureau American Community Survey. 2008-12.	N/A
Pacific Islander as a Share of Population	Contiguous County Subdivisions	U.S. Census Bureau American Community Survey. 2008-12.	N/A
Other or Multi-racial as a Share of Population	Contiguous County Subdivisions	U.S. Census Bureau American Community Survey. 2008-12.	N/A
Hispanic as a Share of Population	Contiguous County Subdivisions	U.S. Census Bureau American Community Survey. 2008-12.	N/A

Table 17b: Peer-Group Towns

Department	Peer Group Towns				
Ansonia	Derby	Naugatuck	Stratford	Shelton	Berlin
Avon	Windsor Locks	Trumbull	Canton	Monroe	Glastonbury
Berlin	Shelton	Glastonbury	Naugatuck	Bristol	Plymouth
Bethel	Monroe	Redding	Wallingford	Avon	Ridgefield
Bloomfield	Windsor	Suffield	Cromwell	Enfield	Hamden
Branford	Madison	Bristol	Guilford	Shelton	Westport
Bridgeport	Bristol	West Haven	Monroe	Naugatuck	Shelton
Bristol	Shelton	Berlin	Branford	Guilford	Southington
Brookfield	Easton	Cheshire	South Windsor	Ridgefield	Berlin
Canton	Monroe	Avon	Shelton	Madison	Trumbull
Cheshire	South Windsor	Brookfield	Easton	Naugatuck	Middlebury
Clinton	Granby	Naugatuck	Madison	Branford	Berlin
Coventry	Berlin	Granby	Seymour	Ridgefield	Cromwell
Cromwell	Portland	Vernon	Berlin	Shelton	Avon
Danbury	Enfield	Wallingford	Trumbull	Monroe	Meriden
Darien	Westport	Weston	Ridgefield	New Canaan	Trumbull
Derby	Farmington	Berlin	Newington	Cromwell	Orange
East Hampton	North Branford	Guilford	Wilton	Avon	Portland
East Hartford	Glastonbury	Woodbridge	South Windsor	North Haven	Middlebury
East Haven	Plymouth	North Haven	Trumbull	Wethersfield	Bethel
East Windsor	Avon	Orange	Bethel	Clinton	Branford
Easton	Brookfield	Cheshire	Monroe	Ridgefield	Guilford
Enfield	Madison	Trumbull	Canton	Suffield	Shelton
Fairfield	Trumbull	West Hartford	Enfield	North Haven	Westport
Farmington	Milford	Orange	Middlebury	Branford	Manchester
Glastonbury	Berlin	Avon	Shelton	Woodbridge	South Windsor
Granby	Berlin	Naugatuck	Monroe	Windsor Locks	Avon
Greenwich	Shelton	New Canaan	Glastonbury	Redding	Westport
Groton	Enfield	Cheshire	Madison	Suffield	Naugatuck
Guilford	Madison	Berlin	Plymouth	Bristol	Branford
Hamden	Middletown	Plymouth	Wallingford	Shelton	Fairfield
Hartford	Meriden	East Hartford	New Canaan	North Haven	Newington
Ledyard	Thomaston	North Haven	Redding	Ridgefield	Newington
Madison	Middlebury	Branford	Guilford	Shelton	Plainfield
Manchester	Milford	Farmington	Cromwell	Newington	Trumbull
Meriden	Portland	Trumbull	Wallingford	North Haven	Simsbury
Middlebury	Plymouth	Madison	Trumbull	Thomaston	Berlin
Middletown	Branford	Madison	Shelton	Glastonbury	Berlin
Milford	Farmington	Newington	Manchester	Trumbull	Plainville
Monroe	Canton	Wallingford	Avon	Trumbull	Redding
Naugatuck	Trumbull	Berlin	Thomaston	Madison	Plymouth
New Britain	Waterbury	Plainville	Plymouth	Naugatuck	Bethel
New Canaan	Westport	Wilton	Redding	Ridgefield	Madison
New Haven	Bristol	Branford	Berlin	Fairfield	Middletown
New London	Windsor Locks	Stonington	Berlin	Vernon	Derby
New Milford	Newtown	Redding	Granby	Bethel	Monroe
Newington	North Haven	Trumbull	Thomaston	Milford	Plainville
Newtown	Monroe	Bethel	Redding	Avon	Canton
North Branford	East Hampton	Guilford	Bristol	Watertown	Wilton
North Haven	Trumbull	Thomaston	Newington	East Haven	Redding
Norwalk	Wallingford	Stratford	Monroe	Trumbull	Shelton
Norwich	Brookfield	Bethel	Old Saybrook	Plainfield	Waterford

Table 17b: Peer-Group Towns

Department	Peer Group Towns				
Old Saybrook	Madison	Enfield	Plainfield	Clinton	Canton
Orange	Farmington	North Haven	Trumbull	Newington	Glastonbury
Plainfield	Madison	Old Saybrook	Enfield	Thomaston	Granby
Plainville	Newington	Bethel	Farmington	Branford	Milford
Plymouth	Middlebury	Berlin	Thomaston	Guilford	Trumbull
Portland	Cromwell	Shelton	Vernon	Berlin	Avon
Putnam	Easton	Cheshire	Bristol	Canton	Brookfield
Redding	Monroe	Canton	Bethel	Shelton	Ridgefield
Ridgefield	Shelton	Berlin	Redding	Guilford	Glastonbury
Rocky Hill	Avon	Glastonbury	Branford	Bethel	Madison
Seymour	Coventry	Berlin	Shelton	Newington	Thomaston
Shelton	Berlin	Bristol	Trumbull	Portland	Madison
Simsbury	Trumbull	Granby	Watertown	South Windsor	Avon
South Windsor	Woodbridge	Glastonbury	Cheshire	Trumbull	Berlin
Southington	Shelton	Berlin	Trumbull	Bristol	Plymouth
Stamford	Glastonbury	Berlin	Shelton	Guilford	Bristol
Stonington	Ridgefield	Southington	Guilford	Waterford	Plymouth
Stratford	Wallingford	Naugatuck	Trumbull	North Haven	Shelton
Suffield	Madison	Enfield	Westport	Branford	Avon
Thomaston	North Haven	Trumbull	Plymouth	Middlebury	Naugatuck
Torrington	Branford	Seymour	Suffield	Shelton	Madison
Trumbull	North Haven	Avon	Shelton	Naugatuck	Thomaston
Vernon	Avon	Portland	Shelton	Cromwell	Canton
Wallingford	Monroe	Stratford	Trumbull	Bethel	Naugatuck
Waterbury	New Britain	Plymouth	Plainville	Guilford	Farmington
Waterford	Stonington	Newington	Bethel	Enfield	Ridgefield
Watertown	Thomaston	North Branford	Newington	Simsbury	Wolcott
West Hartford	Trumbull	Naugatuck	Newington	Berlin	Fairfield
West Haven	Newington	East Haven	Vernon	West Hartford	North Haven
Weston	Darien	Ridgefield	Monroe	Westport	Trumbull
Westport	New Canaan	Madison	Branford	Darien	Suffield
Wethersfield	East Haven	Portland	Shelton	Stratford	Trumbull
Willington	Hamden	Brookfield	East Hampton	Middletown	Portland
Wilton	New Canaan	Madison	Middlebury	North Branford	Westport
Winchester	Wallingford	Stratford	Guilford	Torrington	Branford
Windsor	Naugatuck	Suffield	Bloomfield	Berlin	Trumbull
Windsor Locks	Avon	Naugatuck	Trumbull	Berlin	Granby
Wolcott	Thomaston	Wallingford	Newington	Monroe	North Haven
Woodbridge	South Windsor	Glastonbury	Berlin	Trumbull	Middlebury

Table 18a: Departments with Disparities Relative to Descriptive Benchmarks

Department Name	Statewide Average			Estimated Driving			Resident Only Stops			Peer-Group			Total
	M	B	H	M	B	H	M	B	H	M	B	H	
Wethersfield	X	X	X	X	X	X	X			X		X	9
Hamden	X	X		X	X		X	X		X	X		8
Manchester	X	X		X	X		X	X		X	X		8
New Britain	X		X	X		X	X		X	X		X	8
Stratford	X	X		X	X		X	X		X	X		8
Waterbury	X			X	X		X	X		X	X	X	8
East Hartford				X	X		X	X		X	X	X	7
Meriden	X			X			X		X	X		X	6
New Haven				X	X		X	X		X	X		6
Newington	X		X	X		X				X		X	6
Norwich				X	X		X	X		X	X		6
Windsor				X	X		X	X		X	X		6
Bloomfield					X		X	X		X	X		5
Darien	X		X	X						X			4
Hartford				X	X					X	X		4
Middletown							X	X		X	X		4
Orange	X	X		X	X								4
Trumbull	X		X	X						X			4
Bridgeport										X	X	X	3
Greenwich			X							X		X	3
Norwalk								X		X	X		3
West Haven				X						X	X		3
Willimantic							X		X			X	3
Woodbridge	X	X			X								3
Bristol							X			X			2
Danbury									X			X	2
Groton City	X									X			2
Vernon							X			X			2
West Hartford	X			X									2
Berlin			X										1
Derby							X						1
New London										X			1
South Windsor	X												1

Table 18b: Departments with Disparities Relative to Descriptive Benchmarks

Department Name	Statewide Average			Estimated Driving			Resident Only Stops			Peer-Group			Total
	M	B	H	M	B	H	M	B	H	M	B	H	
Wethersfield	36.7	11.5	23.9	31.1	11.8	20.7	13.6			17		16	9
Hamden	14.7	15.4		13.5	14.9		14.6	19.4		25	28		8
Manchester	13.7	10.1		14.2	12.6		16	14.1		15	13		8
New Britain	16.7		13.5	23.1		19.6	24.3		20.1	39		32	8
Stratford	18.2	11.8		17.2	12		14.2	14.2		23	17		8
Waterbury	15			15.8	10.6		24.7	17.5		36	22	15	8
East Hartford				22.5	18.4		20.1	17.8		40	24	17	7
Meriden	11.5			13.2			17.4		10.4	26		20	6
New Haven				16.7	22.6		17.9	22.5		46	37		6
Newington	21.4		14.7	15.1		10.7				14		10	6
Norwich				11.1	11.4		15.9	15.2		21	15		6
Windsor				12.7	14		19	20.5		19	21		6
Bloomfield					12.4		19.1	21.2		29	29		5
Darien	20.8		12.6	14.1						10			4
Hartford				14.7	14.7					26	18		4
Middletown							11	13		13	12		4
Orange	19.6	11.6		12.3	10.5								4
Trumbull	21.2		11.4	16.7						14			4
Bridgeport										44	27	17	3
Greenwich			10.1							11		11	3
Norwalk								11.3		20	11		3
West Haven				10.2						14	11		3
Willimantic							16.3		14.3			18	3
Woodbridge	13.9	12.4			12.9								3
Bristol							12			11			2
Danbury									13.7			11	2
Groton City	10.3									15			2
Vernon							10.1			10			2
West Hartford	10.9			11.1									2
Berlin			10.6										1
Derby							11.6						1
New London										14			1
South Windsor	13.5												1

* The values in this chart indicate the actual amount that the stop data exceeds the benchmark.

**In the case of the peer groups, the value represents the amount the department's percentage exceeds the peer group average.

Appendix C

Table 23a: Department Veil of Darkness Analysis at the Dawn Intertwilight Period

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Ansonia	Coefficient	-0.201	-0.116	-0.170	0.015	-0.096	447
	SE	(0.38)	(0.3)	(0.38)	(0.411)	(0.301)	
Avon	Coefficient		1.349				15
	SE		(2.907)				
Berlin	Coefficient	-0.315	-0.470	-0.087	-0.615	-0.347	145
	SE	(0.666)	(0.505)	(0.7)	(0.592)	(0.518)	
Bethel	Coefficient	0.203	-1.151	4.062	-1.466	-0.641	103
	SE	(1.515)	(0.974)	(2.519)	(1.089)	(0.963)	
Bloomfield	Coefficient	0.031	0.015	0.036	0.021	0.015	241
	SE	(0.448)	(0.464)	(0.447)	(0.706)	(0.456)	
Branford	Coefficient	-0.462	0.445		0.828	0.335	321
	SE	(1.322)	(0.758)		(0.89)	(0.813)	
Bridgeport	Coefficient	-1.166	-1.166				19
	SE	(2.572)	(2.572)				
Bristol	Coefficient	0.150	-0.522	0.150		-0.522	69
	SE	(1.616)	(1.509)	(1.616)		(1.509)	
Brookfield	Coefficient	1.219	-16.310				13
	SE	(2.041)	(2589.4)				
Canton	Coefficient						
	SE						
Capitol Police	Coefficient	1.208	1.216	-16.860	0.248	0.785	39
	SE	(2.547)	(1.238)	(22.1)	(1.59)	(1.242)	
CCSU	Coefficient						
	SE						
Cheshire	Coefficient						
	SE						
Clinton	Coefficient						
	SE						
Coventry	Coefficient	-1.575	-2.463*	-13.450		-1.768	72
	SE	(2.214)	(1.497)	(5257)		(1.475)	
Cromwell	Coefficient	0.835		1.195			37
	SE	(2.078)		(2.133)			
Danbury	Coefficient	0.424	0.231		0.206	-0.123	88
	SE	(2.025)	(1.495)		(1.533)	(1.469)	
Darien	Coefficient	1.187	0.046	1.085	-1.505*	-0.018	128
	SE	(0.872)	(0.615)	(0.87)	(0.882)	(0.616)	
Derby	Coefficient	-0.197	0.166	0.036	0.570	0.293	233
	SE	(0.75)	(0.557)	(0.769)	(0.751)	(0.563)	
DMV	Coefficient	-0.241	0.000	-0.293	0.257	-0.015	334
	SE	(0.594)	(0.493)	(0.63)	(0.679)	(0.504)	
East Hampton	Coefficient	33.140	33.140	34.220			49
	SE	(4706)	(4706)	(6353.4)			
East Hartford	Coefficient	0.909	0.640	0.831	-0.055	0.592	103
	SE	(1.06)	(0.845)	(1.095)	(0.921)	(0.847)	
East Haven	Coefficient						
	SE						
East Windsor	Coefficient						
	SE						
Easton	Coefficient						
	SE						
ECSU	Coefficient	0.293					233
	SE	(0.563)					
Enfield	Coefficient	0.303	0.972*	0.292	2.490**	1.054*	327
	SE	(0.636)	(0.54)	(0.665)	(1.081)	(0.555)	
Fairfield	Coefficient	31.940	4.341	31.940	2.269	4.341	36
	SE	(4089.8)	(2.661)	(4089.8)	(2.723)	(2.661)	
Farmington	Coefficient	0.480	-0.075	-0.052	-0.789	-0.355	140
	SE	(1.074)	(0.725)	(1.166)	(1.029)	(0.752)	
Glastonbury	Coefficient	14.180	15.820	15.310	17.130	15.930	102
	SE	(1576.2)	(1792.9)	(1791.2)	(3096.9)	(1027.2)	
Granby	Coefficient	-1.443	-0.834	-1.443	0.572	-0.834	165
	SE	(1.086)	(0.816)	(1.086)	(1.649)	(0.816)	

Table 23a: Department Veil of Darkness Analysis at the Dawn Intertwilight Period

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Greenwich	Coefficient	-0.433	-1.204	-0.541	-1.751	-1.200	123
	SE	(1.127)	(0.832)	(1.141)	(1.091)	(0.834)	
Groton City	Coefficient	0.056	1.048	-0.830	2.530*	0.861	181
	SE	(0.896)	(0.739)	(1.12)	(1.374)	(0.805)	
Groton Long Point	Coefficient	0.861					181
	SE	(0.805)					
Groton Town	Coefficient	0.161	0.036	-0.029	-0.325	-0.093	184
	SE	(0.844)	(0.705)	(0.873)	(1.079)	(0.722)	
Guilford	Coefficient	0.315	-1.595	1.849			78
	SE	(1.289)	(1.194)	(1.844)			
Hamden	Coefficient	-0.422	0.121	-0.312	2.880*	0.248	190
	SE	(0.782)	(0.69)	(0.788)	(1.614)	(0.695)	
Hartford	Coefficient	-0.651	-0.745	-1.304	-0.249	-1.265	71
	SE	(1.554)	(1.435)	(1.643)	(1.938)	(1.396)	
Ledyard	Coefficient	-1.265					71
	SE	(1.396)					
Madison	Coefficient	1.819	0.735	1.949	-15.620	0.329	204
	SE	(1.348)	(1.052)	(1.576)	(4435.3)	(1.229)	
Manchester	Coefficient	15.670	49.550	15.670	4.809*	49.550	29
	SE	(2872.6)	(8168.3)	(2872.6)	(2.711)	(8168.3)	
Meriden	Coefficient	1.002	-0.509	1.002	-1.849	-0.509	30
	SE	(1.716)	(1.519)	(1.716)	(2.495)	(1.519)	
Met. Dist. Water Authority	Coefficient	-1.265					71
	SE	(1.396)					
Middlebury	Coefficient						
	SE						
Middletown	Coefficient	0.655	0.538	0.720	0.274	0.586	212
	SE	(0.766)	(0.652)	(0.776)	(0.949)	(0.661)	
Milford	Coefficient	-17.700	-2.363	-34.210	-0.019	-2.441	134
	SE	(1508.4)	(1.69)	(6264.6)	(1.899)	(1.826)	
Monroe	Coefficient	-0.705	-0.919	-0.544		-0.782	302
	SE	(0.887)	(0.85)	(0.915)		(0.864)	
Naugatuck	Coefficient	22.010	22.010	40.14***			31
	SE	(3270)	(3270)	(2.454)			
New Britain	Coefficient	-0.307	-1.213*	0.023	-0.878	-1.047	104
	SE	(0.768)	(0.667)	(0.862)	(0.701)	(0.682)	
New Canaan	Coefficient	-2.212	-2.212	-2.212			42
	SE	(1.578)	(1.578)	(1.578)			
New Haven	Coefficient	20.750	37.160	20.750	-0.892	37.160	38
	SE	(6866.8)	(6510.3)	(6866.8)	(2.782)	(6510.3)	
New London	Coefficient		0.056		-1.313	0.056	29
	SE		(2.15)		(2.522)	(2.15)	
New Milford	Coefficient	0.357	0.186	0.447	-0.146	0.201	423
	SE	(0.524)	(0.421)	(0.619)	(0.666)	(0.46)	
Newington	Coefficient	-0.169	-0.015	0.330	0.129	0.248	320
	SE	(0.541)	(0.395)	(0.572)	(0.451)	(0.4)	
Newtown	Coefficient	-0.258	0.007	0.019	0.277	0.175	1,119
	SE	(0.566)	(0.419)	(0.587)	(0.568)	(0.426)	
North Branford	Coefficient	-4.981*	-2.092	-5.675	-2.136		48
	SE	(2.84)	(1.772)	(3.478)	(1.959)		
North Haven	Coefficient	-0.150	0.065	-0.138	0.640	0.063	261
	SE	(0.737)	(0.592)	(0.752)	(0.84)	(0.599)	
Norwalk	Coefficient	-0.995	0.592	-0.791	2.061	0.743	114
	SE	(1.146)	(0.953)	(1.176)	(1.33)	(0.95)	
Norwich	Coefficient						
	SE						
Old Saybrook	Coefficient	-2.022	-0.761				30
	SE	(3.668)	(2.029)				
Orange	Coefficient	0.294	-0.052	0.441	-0.576	0.045	278
	SE	(0.589)	(0.494)	(0.592)	(0.705)	(0.495)	

Table 23a: Department Veil of Darkness Analysis at the Dawn Intertwilight Period

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Plainfield	Coefficient						
	SE						
Plainville	Coefficient	1.062	1.629*	1.104	1.553	1.670*	255
	SE	(1.019)	(0.858)	(1.206)	(1.295)	(0.932)	
Plymouth	Coefficient		18.47***		17.210	18.47***	25
	SE		(1.989)		(3657.4)	(1.989)	
Portland	Coefficient						
	SE						
Putnam	Coefficient	-1.037	-1.363	-1.037		-1.363	64
	SE	(1.647)	(1.515)	(1.647)		(1.515)	
Redding	Coefficient	-41.410	-3.744**	-22.230	0.000	-2.025	55
	SE	(7559.6)	(1.908)	(3150.3)		(1.75)	
Ridgefield	Coefficient	15.290	1.031*	15.500	0.722	0.988*	250
	SE	(1815.2)	(0.594)	(2835.1)	(0.632)	(0.598)	
Rocky Hill	Coefficient	1.382*	0.740	1.241	0.346	0.634	271
	SE	(0.752)	(0.504)	(0.768)	(0.685)	(0.509)	
SCSU	Coefficient	-2.755	-0.810	-2.755		(1)	33
	SE	(3.749)	(1.895)	(3.749)		(1.895)	
Seymour	Coefficient	-0.584	-0.714	-0.199	-0.862	(0)	268
	SE	(0.666)	(0.498)	(0.69)	(0.688)	(0.504)	
Shelton	Coefficient						
	SE						
Simsbury	Coefficient	0.271	0.354	0.194		0.193	31
	SE	(1.796)	(1.677)	(1.77)		(1.663)	
South Windsor	Coefficient	0.369	0.052	0.339	-0.429	0.041	114
	SE	(1.028)	(0.787)	(1.012)	(1.155)	(0.785)	
Southington	Coefficient						
	SE						
Stonington	Coefficient	-21.150	1.605				28
	SE	(2435.5)	(2.949)				
Stratford	Coefficient						
	SE						
Suffield	Coefficient						
	SE						
Thomaston	Coefficient		-1.178		-1.834	-1.178	42
	SE		(1.559)		(1.846)	(1.559)	
Torrington	Coefficient	-0.551	-0.534	-0.560	-0.494	-0.527	749
	SE	(0.52)	(0.375)	(0.558)	(0.498)	(0.386)	
Trumbull	Coefficient						
	SE						
UCONN	Coefficient						
	SE						
Vernon	Coefficient						
	SE						
Wallingford	Coefficient	-1.106	0.068	-1.303	0.442	-0.010	265
	SE	(1.067)	(0.515)	(1.236)	(0.612)	(0.542)	
Waterbury	Coefficient						
	SE						
Waterford	Coefficient						
	SE						
Watertown	Coefficient						
	SE						
WCSU	Coefficient						
	SE						
West Hartford	Coefficient		0.849		18.930	0.877	49
	SE		(1.952)		(3648.3)	(2.047)	
West Haven	Coefficient						
	SE						
Weston	Coefficient						
	SE						
Westport	Coefficient	-0.213	-1.172*	0.073	-3.020**	-0.977	214
	SE	(0.764)	(0.679)	(0.791)	(1.433)	(0.686)	

Table 23a: Department Veil of Darkness Analysis at the Dawn Intertwilight Period

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Wethersfield	Coefficient	-2.159	-0.653	-1.842	0.362	-0.540	96
	SE	(1.366)	(0.86)	(1.358)	(1.189)	(0.883)	
Willimantic	Coefficient						56
	SE						
Wilton	Coefficient	0.362	-0.062	0.425	-0.376	-0.030	318
	SE	(0.488)	(0.346)	(0.5)	(0.419)	(0.348)	
Windsor	Coefficient	-0.516	-0.532*	-0.577*	-0.197	-0.578*	405
	SE	(0.318)	(0.309)	(0.322)	(0.44)	(0.311)	
Windsor Locks	Coefficient	-2.786	-1.522	-3.866**	0.322	-1.973	70
	SE	(1.695)	(1.272)	(1.893)	(1.543)	(1.278)	
Winsted	Coefficient	0.120	0.205	0.120		0.205	64
	SE	(1.551)	(1.525)	(1.551)		(1.525)	
Wolcott	Coefficient						
	SE						
Woodbridge	Coefficient	15.350	2.883	15.350	1.251	2.883	56
	SE	(1639.2)	(2.007)	(1639.2)	(2.232)	(2.007)	
Yale	Coefficient						
	SE						
State Police- All Other	Coefficient	-0.048	-0.164	0.188	-0.223	-0.011	1,130
	SE	(0.317)	(0.271)	(0.322)	(0.411)	(0.272)	
State Police- Troop A	Coefficient	0.720**	0.480*	0.731**	0.165	0.476*	961
	SE	(0.364)	(0.261)	(0.372)	(0.313)	(0.262)	
State Police- Troop B	Coefficient	-0.354	-0.689	-0.332	-1.800	-0.663	573
	SE	(0.64)	(0.542)	(0.655)	(1.182)	(0.547)	
State Police- Troop C	Coefficient	-0.628**	-0.503**	-0.398	-0.219	-0.320	1,383
	SE	(0.288)	(0.245)	(0.303)	(0.387)	(0.253)	
State Police- Troop D	Coefficient	-1.005*	-0.865**	-0.832	-0.829	-0.756*	986
	SE	(0.531)	(0.378)	(0.596)	(0.507)	(0.398)	
State Police- Troop E	Coefficient	-0.080	0.272	-0.064	0.531	0.304	1,371
	SE	(0.353)	(0.276)	(0.37)	(0.39)	(0.283)	
State Police- Troop F	Coefficient	-0.307	-0.240	-0.130	-0.046	-0.121	1,355
	SE	(0.288)	(0.228)	(0.3)	(0.314)	(0.232)	
State Police- Troop G	Coefficient	-0.450**	-0.232	-0.375*	0.104	-0.165	1,818
	SE	(0.211)	(0.18)	(0.215)	(0.219)	(0.18)	
State Police- Troop H	Coefficient	-0.407	-0.530	-0.356	-0.568	-0.485	942
	SE	(0.385)	(0.334)	(0.405)	(0.461)	(0.342)	
State Police- Troop I	Coefficient	-0.288	-0.268	-0.114	0.035	-0.106	647
	SE	(0.382)	(0.319)	(0.403)	(0.429)	(0.324)	
State Police- Troop K	Coefficient	-0.118	-0.321	-0.078	-0.539*	-0.303	1,327
	SE	(0.329)	(0.243)	(0.339)	(0.32)	(0.246)	
State Police- Troop L	Coefficient	-0.495	-0.213	-0.568	-0.012	-0.230	923
	SE	(0.548)	(0.378)	(0.583)	(0.481)	(0.386)	
State Police- Troop W	Coefficient	-0.230					920
	SE	(0.386)					

Table 23b: Department Veil of Darkness Analysis at the Dusk Intertwilight Period

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Ansonia	Coefficient	-0.219	-0.162	-0.144	-0.048	-0.127	1,646
	SE	(0.205)	(0.164)	(0.212)	(0.213)	(0.166)	
Avon	Coefficient	0.180	-1.132	0.178	-17.450	-1.106	164
	SE	(1.366)	(1.114)	(1.425)	(2263.8)	(1.128)	
Berlin	Coefficient	0.466	0.165	0.652**	-0.103	0.241	1,636
	SE	(0.285)	(0.2)	(0.294)	(0.252)	(0.202)	
Bethel	Coefficient	0.077	-0.506	0.815	-0.736	-0.311	584
	SE	(0.651)	(0.434)	(0.775)	(0.542)	(0.457)	
Bloomfield	Coefficient	-0.219	-0.139	-0.195	0.233	-0.114	1,568
	SE	(0.144)	(0.148)	(0.144)	(0.274)	(0.147)	
Branford	Coefficient	-0.394	-0.315	-0.524	-0.306	-0.372	1,295
	SE	(0.35)	(0.243)	(0.36)	(0.315)	(0.245)	
Bridgeport	Coefficient	0.017	0.200	0.051	0.075	0.231	1,429
	SE	(0.153)	(0.189)	(0.154)	(0.159)	(0.184)	
Bristol	Coefficient	-0.302	-0.154	-0.345	-0.022	-0.167	1,854
	SE	(0.236)	(0.159)	(0.247)	(0.191)	(0.161)	
Brookfield	Coefficient	0.503	0.465	-0.489	0.469	0.322	900
	SE	(0.52)	(0.312)	(0.789)	(0.361)	(0.336)	
Canton	Coefficient	0.321	0.565	13.920	1.731	0.481	139
	SE	(2.33)	(1.206)	(2020.7)	(2.612)	(1.253)	
Capitol Police	Coefficient						
	SE						
CCSU	Coefficient	0.070	-0.066	0.042	-0.296	-0.088	779
	SE	(0.347)	(0.283)	(0.351)	(0.369)	(0.284)	
Cheshire	Coefficient	0.082	0.058	-0.079	0.018	-0.035	1,162
	SE	(0.354)	(0.265)	(0.383)	(0.371)	(0.275)	
Clinton	Coefficient	0.669	0.499	-0.042	0.336	0.222	710
	SE	(0.51)	(0.38)	(0.715)	(0.551)	(0.434)	
Coventry	Coefficient	-15.840	-0.322	-16.780	-0.197	-0.388	142
	SE	(3330.1)	(0.826)	(4502.9)	(0.888)	(0.848)	
Cromwell	Coefficient	0.434	-0.208	0.188	-1.806**	-0.526	536
	SE	(0.472)	(0.392)	(0.555)	(0.765)	(0.432)	
Danbury	Coefficient	-0.339	-0.430*	-0.528	-0.355	-0.480**	797
	SE	(0.388)	(0.24)	(0.426)	(0.262)	(0.244)	
Darien	Coefficient	0.003	0.176	0.171	0.229	0.276	673
	SE	(0.314)	(0.25)	(0.346)	(0.317)	(0.258)	
Derby	Coefficient	0.105	-0.023	-0.185	-0.137	-0.154	664
	SE	(0.341)	(0.247)	(0.384)	(0.306)	(0.256)	
DMV	Coefficient	-0.382	-0.995	-0.070		-0.861	99
	SE	(1.54)	(1.314)	(1.737)		(1.333)	
East Hampton	Coefficient	240.600	13.290	240.600	13.290		11
	SE	(7857.4)	(10287.6)	(7857.4)	(10287.6)		
East Hartford	Coefficient	-0.013	0.011	-0.007	-0.005	0.017	1,041
	SE	(0.197)	(0.205)	(0.198)	(0.218)	(0.203)	
East Haven	Coefficient	0.271	0.724*	0.498	0.881*	0.820**	361
	SE	(0.627)	(0.414)	(0.644)	(0.509)	(0.417)	
East Windsor	Coefficient	-0.253	-0.394	-0.102	-0.769	-0.269	432
	SE	(0.506)	(0.454)	(0.514)	(0.967)	(0.456)	
Easton	Coefficient	0.244	1.622*	0.761	3.662**	1.640*	86
	SE	(1.497)	(0.977)	(1.886)	(1.656)	(0.976)	
ECSU	Coefficient	2.949*	1.409	2.949*		1.409	45
	SE	(1.652)	(1.2)	(1.652)		(1.2)	
Enfield	Coefficient	-0.267	-0.121	-0.127	0.094	-0.010	2,092
	SE	(0.18)	(0.146)	(0.198)	(0.212)	(0.153)	
Fairfield	Coefficient	0.206	0.102	0.355*	-0.052	0.184	1,447
	SE	(0.193)	(0.154)	(0.205)	(0.209)	(0.158)	
Farmington	Coefficient	-0.102	-0.301	0.266	-0.510	-0.136	962
	SE	(0.394)	(0.299)	(0.442)	(0.419)	(0.315)	
Glastonbury	Coefficient	-0.500**	-0.197	-0.288	0.168	-0.033	1,910
	SE	(0.231)	(0.173)	(0.262)	(0.233)	(0.183)	

Table 23b: Department Veil of Darkness Analysis at the Dusk Intertwilight Period

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Granby	Coefficient	-1.514	-1.885*	-1.514		-1.885*	221
	SE	(1.385)	(1.145)	(1.385)		(1.145)	
Greenwich	Coefficient	-0.040	-0.127	0.447*	-0.153	0.085	1,909
	SE	(0.202)	(0.147)	(0.232)	(0.181)	(0.152)	
Groton City	Coefficient	0.515	0.404	0.650*	0.117	0.446	626
	SE	(0.32)	(0.272)	(0.365)	(0.367)	(0.286)	
Groton Long Point	Coefficient						
	SE						
Groton Town	Coefficient	-0.653***	-0.472***	-0.668***	-0.116	-0.439**	1,424
	SE	(0.222)	(0.179)	(0.238)	(0.249)	(0.185)	
Guilford	Coefficient	-0.129	-0.055	0.057	0.214	0.008	790
	SE	(0.689)	(0.468)	(0.857)	(0.602)	(0.51)	
Hamden	Coefficient	-0.132	-0.237	-0.146	-0.248	-0.239	1,108
	SE	(0.169)	(0.166)	(0.169)	(0.287)	(0.166)	
Hartford	Coefficient	-0.002	0.007	-0.013	-0.046	0.002	1,503
	SE	(0.155)	(0.178)	(0.157)	(0.16)	(0.173)	
Ledyard	Coefficient						
	SE						
Madison	Coefficient	-0.747	-0.911	-1.855*	-1.073	-1.528**	430
	SE	(0.739)	(0.603)	(0.984)	(1.016)	(0.712)	
Manchester	Coefficient	-0.367*	-0.254	-0.411*	-0.045	-0.257	897
	SE	(0.223)	(0.2)	(0.238)	(0.271)	(0.204)	
Meriden	Coefficient	-0.145	0.119	-0.241	0.255	0.072	741
	SE	(0.276)	(0.208)	(0.285)	(0.224)	(0.209)	
Met. Dist. Water Authority	Coefficient						
	SE						
Middlebury	Coefficient						
	SE						
Middletown	Coefficient	0.072	-0.137	-0.142	-0.488	-0.317	915
	SE	(0.224)	(0.203)	(0.238)	(0.348)	(0.21)	
Milford	Coefficient	0.203	0.182	0.173	0.051	0.133	916
	SE	(0.23)	(0.197)	(0.255)	(0.292)	(0.207)	
Monroe	Coefficient	-0.005	-0.127	-0.012	-0.349	-0.146	1,108
	SE	(0.373)	(0.289)	(0.429)	(0.419)	(0.309)	
Naugatuck	Coefficient	-0.230	-0.303	-0.249	-0.366	-0.311	1,398
	SE	(0.251)	(0.193)	(0.261)	(0.257)	(0.196)	
New Britain	Coefficient	0.029	0.006	0.012	-0.073	-0.006	1,926
	SE	(0.156)	(0.126)	(0.161)	(0.121)	(0.125)	
New Canaan	Coefficient	0.527	0.149	0.838**	-0.278	0.210	1,475
	SE	(0.324)	(0.242)	(0.372)	(0.329)	(0.256)	
New Haven	Coefficient	0.554**	0.429	0.540**	-0.351	0.371	3,246
	SE	(0.241)	(0.278)	(0.239)	(0.309)	(0.269)	
New London	Coefficient	0.541	-0.582	0.308	-1.314	-0.800	273
	SE	(0.902)	(0.753)	(0.987)	(1.014)	(0.768)	
New Milford	Coefficient	0.677	-0.276	1.113	-1.614*	-0.309	523
	SE	(0.642)	(0.471)	(0.791)	(0.849)	(0.505)	
Newington	Coefficient	-0.100	-0.081	0.007	-0.026	-0.028	1,821
	SE	(0.177)	(0.135)	(0.191)	(0.159)	(0.137)	
Newtown	Coefficient	0.148	0.269	0.157	0.396	0.290	2,219
	SE	(0.238)	(0.184)	(0.278)	(0.27)	(0.199)	
North Branford	Coefficient	-1.444	-0.349	-1.963	-0.173	-0.447	328
	SE	(1.67)	(0.676)	(1.727)	(0.729)	(0.684)	
North Haven	Coefficient	-0.082	0.009	-0.056	0.009	0.028	725
	SE	(0.282)	(0.229)	(0.287)	(0.322)	(0.231)	
Norwalk	Coefficient	0.003	0.132	0.041	0.175	0.161	2,036
	SE	(0.144)	(0.127)	(0.146)	(0.156)	(0.127)	
Norwich	Coefficient	0.408	0.367	0.162	0.221	0.159	957
	SE	(0.327)	(0.296)	(0.342)	(0.45)	(0.303)	
Old Saybrook	Coefficient	0.124	-0.016	-0.172	-0.291	-0.200	594
	SE	(0.49)	(0.425)	(0.765)	(0.918)	(0.571)	

Table 23b: Department Veil of Darkness Analysis at the Dusk Intertwilight Period

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Orange	Coefficient	0.245	0.053	0.355	-0.250	0.110	712
	SE	(0.28)	(0.246)	(0.298)	(0.347)	(0.25)	
Plainfield	Coefficient	-77.900	-32.180	-87.690	-33.320	-32.750	112
	SE	(6759.1)	(2400.3)	(70014031.5)	(4369.6)	(2838.2)	
Plainville	Coefficient	0.058	-0.090	0.084	-0.139	-0.082	1,471
	SE	(0.249)	(0.18)	(0.257)	(0.226)	(0.183)	
Plymouth	Coefficient	-0.607	-0.385	-0.489	-0.284	-0.338	429
	SE	(0.84)	(0.609)	(0.842)	(0.912)	(0.607)	
Portland	Coefficient						
	SE						
Putnam	Coefficient	-1.165	-0.830	-2.041*	2.410	-1.351	291
	SE	(0.921)	(0.815)	(1.096)	(2.254)	(0.91)	
Redding	Coefficient	-0.242	-0.576	0.886	-0.758	-0.353	629
	SE	(0.618)	(0.396)	(0.879)	(0.498)	(0.428)	
Ridgefield	Coefficient	-0.380	-0.222	-0.292	-0.087	-0.148	1,756
	SE	(0.386)	(0.249)	(0.526)	(0.313)	(0.274)	
Rocky Hill	Coefficient	0.132	0.161	0.173	0.203	0.178	885
	SE	(0.27)	(0.232)	(0.331)	(0.359)	(0.258)	
SCSU	Coefficient	0.470	0.189	0.286	-2.922*	0.004	204
	SE	(0.464)	(0.469)	(0.461)	(1.669)	(0.466)	
Seymour	Coefficient	0.076	0.199	-0.190	0.316	0.104	655
	SE	(0.506)	(0.363)	(0.564)	(0.492)	(0.382)	
Shelton	Coefficient	-1.710	-0.362	-1.712	0.431	-0.180	131
	SE	(1.51)	(0.974)	(1.709)	(1.693)	(0.991)	
Simsbury	Coefficient	-0.374	-0.206	0.018	0.251	0.070	820
	SE	(0.497)	(0.42)	(0.538)	(0.735)	(0.443)	
South Windsor	Coefficient	-0.203	-0.676*	-0.215	-0.968	-0.715*	564
	SE	(0.435)	(0.391)	(0.466)	(0.659)	(0.41)	
Southington	Coefficient	0.438	0.265	-0.220	0.302	0.028	1,551
	SE	(0.485)	(0.321)	(0.617)	(0.412)	(0.349)	
Stonington	Coefficient	0.709	0.664	0.885	0.697	0.706	407
	SE	(0.653)	(0.534)	(0.823)	(0.905)	(0.596)	
Stratford	Coefficient	-0.293	-0.259	-0.216	0.010	-0.187	660
	SE	(0.223)	(0.214)	(0.224)	(0.265)	(0.213)	
Suffield	Coefficient		-52.970			-2.908	63
	SE		(80101916.7)			(2.626)	
Thomaston	Coefficient	-0.009	1.124	-1.450	0.702	0.666	113
	SE	(2.373)	(0.951)	(2.326)	(1.169)	(0.982)	
Torrington	Coefficient	0.569**	0.454**	0.548**	0.257	0.434**	1,820
	SE	(0.25)	(0.181)	(0.264)	(0.232)	(0.185)	
Trumbull	Coefficient	-0.318	-0.053	-0.340	0.187	-0.045	1,239
	SE	(0.243)	(0.183)	(0.258)	(0.215)	(0.185)	
UCONN	Coefficient	-0.793	-0.215	-0.374	1.400	0.654	202
	SE	(0.71)	(0.624)	(1.23)	(1.25)	(0.867)	
Vernon	Coefficient	-0.039	0.195	-0.030	0.513	0.204	1,248
	SE	(0.247)	(0.204)	(0.252)	(0.312)	(0.206)	
Wallingford	Coefficient	-0.162	-0.019	-0.253	0.058	-0.043	2,115
	SE	(0.2)	(0.138)	(0.222)	(0.168)	(0.142)	
Waterbury	Coefficient	-0.548	-0.451	-0.516	0.131	-0.412	381
	SE	(0.389)	(0.369)	(0.389)	(0.375)	(0.365)	
Waterford	Coefficient	-0.025	-0.187	0.173	-0.264	-0.105	800
	SE	(0.364)	(0.261)	(0.388)	(0.325)	(0.266)	
Watertown	Coefficient	-0.133	0.013	-0.618	0.015	-0.268	426
	SE	(0.578)	(0.476)	(0.685)	(0.751)	(0.52)	
WCSU	Coefficient						
	SE						
West Hartford	Coefficient	-0.066	-0.071	-0.095	-0.054	-0.073	2,338
	SE	(0.15)	(0.125)	(0.163)	(0.158)	(0.128)	
West Haven	Coefficient	-0.460	-0.385	-0.442	-0.010	-0.364	870
	SE	(0.51)	(0.458)	(0.515)	(0.588)	(0.459)	

Table 23b: Department Veil of Darkness Analysis at the Dusk Intertwilight Period

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Weston	Coefficient		1.291		17.91***	1.415	54
	SE		(2.231)		(2.012)	(2.187)	
Westport	Coefficient	-0.202	-0.198	-0.192	-0.114	-0.174	1,992
	SE	(0.175)	(0.143)	(0.193)	(0.208)	(0.15)	
Wethersfield	Coefficient	0.128	-0.195	0.175	-0.312**	-0.170	1,703
	SE	(0.165)	(0.133)	(0.169)	(0.144)	(0.133)	
Willimantic	Coefficient	-0.563	-0.393**	-0.388	-0.288	-0.335*	1,020
	SE	(0.379)	(0.199)	(0.4)	(0.208)	(0.2)	
Wilton	Coefficient	-0.571	-0.497*	0.161	-0.236	-0.163	820
	SE	(0.417)	(0.298)	(0.47)	(0.371)	(0.307)	
Windsor	Coefficient	0.165	0.096	0.235	-0.145	0.165	1,162
	SE	(0.178)	(0.18)	(0.179)	(0.307)	(0.179)	
Windsor Locks	Coefficient	0.377	0.268	0.406	0.068	0.277	796
	SE	(0.301)	(0.259)	(0.312)	(0.405)	(0.263)	
Winsted	Coefficient	-17.320	-16.890	-17.320			19
	SE	(3858.9)	(2582.6)	(3858.9)			
Wolcott	Coefficient	-1.067*	-0.628	-1.200*	0.068	-0.713	314
	SE	(0.634)	(0.533)	(0.665)	(0.882)	(0.545)	
Woodbridge	Coefficient	-0.573	-0.316	-0.668*	0.506	-0.372	538
	SE	(0.373)	(0.315)	(0.383)	(0.45)	(0.317)	
Yale	Coefficient	-0.338	-0.376	-0.295	-0.141	-0.331	318
	SE	(0.327)	(0.317)	(0.327)	(0.502)	(0.315)	
State Police- All Other	Coefficient	-0.089	-0.095	-0.084	-0.017	-0.095	3,889
	SE	(0.156)	(0.13)	(0.168)	(0.184)	(0.136)	
State Police- Troop A	Coefficient	-0.198	-0.200**	-0.164	-0.127	-0.184*	5,293
	SE	(0.139)	(0.1)	(0.143)	(0.123)	(0.101)	
State Police- Troop B	Coefficient	-1.002**	-0.688*	-0.690	-0.463	-0.481	1,128
	SE	(0.455)	(0.362)	(0.462)	(0.562)	(0.363)	
State Police- Troop C	Coefficient	-0.605***	-0.552***	-0.369**	-0.388**	-0.393***	7,578
	SE	(0.134)	(0.108)	(0.154)	(0.167)	(0.117)	
State Police- Troop D	Coefficient	-0.243	-0.074	0.014	0.216	0.097	4,035
	SE	(0.198)	(0.155)	(0.213)	(0.229)	(0.161)	
State Police- Troop E	Coefficient	-0.255**	-0.267***	-0.172	-0.210	-0.217**	5,424
	SE	(0.123)	(0.103)	(0.134)	(0.159)	(0.108)	
State Police- Troop F	Coefficient	-0.096	-0.068	0.111	0.012	0.061	5,955
	SE	(0.136)	(0.11)	(0.146)	(0.165)	(0.113)	
State Police- Troop G	Coefficient	-0.075	-0.220**	0.049	-0.243*	-0.136	4,063
	SE	(0.115)	(0.0971)	(0.118)	(0.124)	(0.0976)	
State Police- Troop H	Coefficient	-0.507***	-0.396***	-0.417***	-0.015	-0.319***	3,537
	SE	(0.141)	(0.12)	(0.145)	(0.166)	(0.121)	
State Police- Troop I	Coefficient	-0.033	-0.075	0.049	-0.109	-0.021	2,320
	SE	(0.166)	(0.14)	(0.172)	(0.202)	(0.142)	
State Police- Troop K	Coefficient	0.076	-0.105	0.252	-0.257	-0.028	4,360
	SE	(0.169)	(0.125)	(0.18)	(0.168)	(0.128)	
State Police- Troop L	Coefficient	0.025	-0.380*	0.070	-0.771***	-0.371*	2,719
	SE	(0.287)	(0.208)	(0.304)	(0.296)	(0.213)	
State Police- Troop W	Coefficient	-0.371*					2,719
	SE	(0.213)					

Table 23c: Department Veil of Darkness Analysis at the Combined Dusk and Dawn Intertwilight Period

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Ansonia	Coefficient	-0.224	-0.180	-0.155	-0.074	-0.144	2093
	SE	(0.18)	(0.144)	(0.184)	(0.189)	(0.145)	
Avon	Coefficient						
	SE						
Berlin	Coefficient	0.321	0.086	0.509*	-0.164	0.167	1,781
	SE	(0.265)	(0.19)	(0.274)	(0.235)	(0.191)	
Bethel	Coefficient	0.158	-0.582	1.010	-0.901*	-0.368	687
	SE	(0.587)	(0.389)	(0.697)	(0.478)	(0.404)	
Bloomfield	Coefficient	-0.133	-0.041	-0.133	0.214	-0.039	1,818
	SE	(0.138)	(0.143)	(0.138)	(0.26)	(0.142)	
Branford	Coefficient	-0.432	-0.329	-0.545	-0.298	-0.374	1,616
	SE	(0.343)	(0.234)	(0.359)	(0.301)	(0.238)	
Bridgeport	Coefficient	0.028	0.185	0.060	0.043	0.214	1,454
	SE	(0.157)	(0.194)	(0.157)	(0.164)	(0.188)	
Bristol	Coefficient	-0.292	-0.138	-0.348	-0.006	-0.156	1,928
	SE	(0.239)	(0.162)	(0.25)	(0.195)	(0.164)	
Brookfield	Coefficient	0.433	0.355	-0.438	0.357	0.240	925
	SE	(0.525)	(0.317)	(0.802)	(0.369)	(0.343)	
Canton	Coefficient	-1.062	-0.382	-1.778	-0.370	-0.671	47
	SE	(1.84)	(0.974)	(2.304)	(1.081)	(1.015)	
Capitol Police	Coefficient	0.148	-0.055	0.127	-0.371	-0.073	791
	SE	(0.342)	(0.279)	(0.346)	(0.367)	(0.28)	
CCSU	Coefficient	0.723	-0.618	14.510	-1.530	-0.539	150
	SE	(2.236)	(1.217)	(1753.2)	(2.024)	(1.216)	
Cheshire	Coefficient	0.025	0.062	-0.121	0.078	-0.021	1,175
	SE	(0.361)	(0.271)	(0.391)	(0.379)	(0.281)	
Clinton	Coefficient	0.631	0.448	-0.123	0.293	0.161	723
	SE	(0.516)	(0.387)	(0.719)	(0.562)	(0.441)	
Coventry	Coefficient	0.390	-0.364	1.516	-0.736	-0.305	277
	SE	(1.246)	(0.641)	(1.564)	(0.774)	(0.685)	
Cromwell	Coefficient	0.423	-0.225	0.295	-1.865**	-0.499	584
	SE	(0.47)	(0.393)	(0.555)	(0.765)	(0.438)	
Danbury	Coefficient	-0.307	-0.427*	-0.536	-0.363	-0.491**	885
	SE	(0.396)	(0.241)	(0.435)	(0.262)	(0.245)	
Darien	Coefficient	0.039	0.157	0.189	0.167	0.240	814
	SE	(0.295)	(0.232)	(0.322)	(0.293)	(0.239)	
Derby	Coefficient	0.012	-0.027	-0.176	-0.038	-0.109	897
	SE	(0.31)	(0.227)	(0.343)	(0.285)	(0.234)	
DMV	Coefficient	-0.328	-0.141	-0.335	0.195	-0.124	434
	SE	(0.53)	(0.443)	(0.565)	(0.616)	(0.454)	
East Hampton	Coefficient	-39.340	-1.274	-19.39***		-1.061	61
	SE	(8516.8)	(1.645)	(2.428)		(1.663)	
East Hartford	Coefficient	-0.006	0.023	0.010	0.020	0.040	1,144
	SE	(0.201)	(0.206)	(0.202)	(0.219)	(0.204)	
East Haven	Coefficient	0.200	0.695*	0.540	0.916*	0.877**	381
	SE	(0.631)	(0.413)	(0.653)	(0.5)	(0.415)	
East Windsor	Coefficient	-0.230	-0.389	-0.090	-0.860	-0.275	439
	SE	(0.511)	(0.458)	(0.52)	(0.976)	(0.46)	
Easton	Coefficient	0.267	1.056	0.686	2.242*	1.153	103
	SE	(1.468)	(0.85)	(1.804)	(1.224)	(0.877)	
ECSU	Coefficient	3.236*	1.422	3.236*		1.422	45
	SE	(1.724)	(1.213)	(1.724)		(1.213)	
Enfield	Coefficient	-0.207	-0.029	-0.096	0.233	0.075	2,419
	SE	(0.176)	(0.143)	(0.193)	(0.21)	(0.15)	
Fairfield	Coefficient	0.215	0.109	0.371*	-0.047	0.196	1,489
	SE	(0.194)	(0.155)	(0.205)	(0.21)	(0.158)	
Farmington	Coefficient	-0.085	-0.243	0.161	-0.403	-0.131	1,110
	SE	(0.362)	(0.269)	(0.401)	(0.366)	(0.282)	

Table 23c: Department Veil of Darkness Analysis at the Combined Dusk and Dawn Intertwilight Period

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Glastonbury	Coefficient	-0.433*	-0.165	-0.205	0.166	0.004	2,012
	SE	(0.231)	(0.175)	(0.263)	(0.238)	(0.186)	
Granby	Coefficient	-1.352*	-1.088*	-1.352*	-0.514	-1.088*	386
	SE	(0.754)	(0.58)	(0.754)	(0.874)	(0.58)	
Greenwich	Coefficient	-0.115	-0.225	0.295	-0.256	-0.039	2,032
	SE	(0.203)	(0.147)	(0.231)	(0.181)	(0.152)	
Groton City	Coefficient	0.494	0.494*	0.566	0.302	0.506*	807
	SE	(0.303)	(0.256)	(0.346)	(0.352)	(0.271)	
Groton Long Point	Coefficient						
	SE						
Groton Town	Coefficient	-0.665***	-0.516***	-0.706***	-0.179	-0.504***	1,608
	SE	(0.218)	(0.178)	(0.234)	(0.25)	(0.183)	
Guilford	Coefficient	-0.372	0.026	-0.126	0.453	0.156	885
	SE	(0.677)	(0.434)	(0.871)	(0.55)	(0.474)	
Hamden	Coefficient	-0.134	-0.202	-0.139	-0.157	-0.196	1,298
	SE	(0.167)	(0.164)	(0.168)	(0.283)	(0.164)	
Hartford	Coefficient	0.045	-0.003	0.036	-0.118	-0.010	1,581
	SE	(0.158)	(0.18)	(0.159)	(0.164)	(0.175)	
Madison	Coefficient	-0.046	-0.465	-0.940	-1.191	-1.029*	634
	SE	(0.63)	(0.524)	(0.828)	(1.014)	(0.617)	
Manchester	Coefficient	-0.385*	-0.282	-0.427*	-0.054	-0.283	930
	SE	(0.227)	(0.205)	(0.242)	(0.272)	(0.209)	
Meriden	Coefficient	-0.172	0.049	-0.267	0.188	0.001	777
	SE	(0.278)	(0.21)	(0.286)	(0.228)	(0.211)	
Met. Dist. Water Authority	Coefficient						
	SE						
Middlebury	Coefficient						
	SE						
Middletown	Coefficient	0.048	-0.168	-0.137	-0.471	-0.322	1,127
	SE	(0.221)	(0.198)	(0.233)	(0.332)	(0.205)	
Milford	Coefficient	0.153	0.124	0.097	0.022	0.063	1,050
	SE	(0.236)	(0.202)	(0.261)	(0.3)	(0.212)	
Monroe	Coefficient	-0.221	-0.274	-0.226	-0.438	-0.281	1,410
	SE	(0.342)	(0.274)	(0.386)	(0.423)	(0.292)	
Naugatuck	Coefficient	-0.221	-0.274	-0.214	-0.311	-0.263	1,436
	SE	(0.254)	(0.194)	(0.264)	(0.257)	(0.197)	
New Britain	Coefficient	0.036	-0.013	0.032	-0.086	-0.016	2,032
	SE	(0.157)	(0.127)	(0.162)	(0.122)	(0.126)	
New Canaan	Coefficient	0.445	0.088	0.707*	-0.271	0.133	1,539
	SE	(0.33)	(0.241)	(0.379)	(0.319)	(0.254)	
New Haven	Coefficient	0.551**	0.442	0.536**	-0.330	0.383	3,289
	SE	(0.24)	(0.277)	(0.238)	(0.309)	(0.268)	
New London	Coefficient	0.774	-0.432	0.659	-1.367	-0.576	303
	SE	(0.829)	(0.66)	(0.869)	(0.908)	(0.667)	
New Milford	Coefficient	0.341	-0.143	0.531	-0.796*	-0.128	946
	SE	(0.379)	(0.289)	(0.45)	(0.447)	(0.311)	
Newington	Coefficient	-0.134	-0.066	0.004	0.024	0.007	2,141
	SE	(0.17)	(0.129)	(0.182)	(0.151)	(0.131)	
Newtown	Coefficient	0.097	0.207	0.153	0.329	0.251	3,338
	SE	(0.22)	(0.17)	(0.253)	(0.248)	(0.182)	
North Branford	Coefficient	-1.598	-0.472	-1.536	0.119	-0.402	381
	SE	(1.04)	(0.587)	(1.138)	(0.696)	(0.596)	
North Haven	Coefficient	-0.218	-0.097	-0.187	0.027	-0.076	988
	SE	(0.262)	(0.212)	(0.267)	(0.298)	(0.214)	
Norwalk	Coefficient	-0.008	0.150	0.032	0.215	0.182	2,151
	SE	(0.146)	(0.128)	(0.148)	(0.158)	(0.129)	
Norwich	Coefficient	0.419	0.385	0.185	0.245	0.187	977
	SE	(0.326)	(0.295)	(0.341)	(0.446)	(0.302)	

Table 23c: Department Veil of Darkness Analysis at the Combined Dusk and Dawn Intertwilight Period

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Old Saybrook	Coefficient	-0.003	-0.040	-0.560	-0.405	-0.375	626
	SE	(0.47)	(0.412)	(0.703)	(0.832)	(0.55)	
Orange	Coefficient	0.317	0.048	0.415	-0.340	0.095	990
	SE	(0.256)	(0.222)	(0.268)	(0.313)	(0.225)	
Plainfield	Coefficient					-32.810	112
	SE					(2865.8)	
Plainville	Coefficient	0.107	-0.078		-0.162	-0.085	1,726
	SE	(0.249)	(0.18)		(0.228)	(0.184)	
Plymouth	Coefficient	-0.721	-0.184	-0.650	0.180	-0.145	484
	SE	(0.851)	(0.584)	(0.862)	(0.829)	(0.582)	
Portland	Coefficient						
	SE						
Putnam	Coefficient	-1.131	-0.960	-1.678*	0.630	-1.334*	383
	SE	(0.792)	(0.704)	(0.875)	(1.628)	(0.762)	
Redding	Coefficient	-0.765	-0.595	0.055	-0.398	-0.301	694
	SE	(0.597)	(0.376)	(0.775)	(0.458)	(0.397)	
Ridgefield	Coefficient	0.009	0.107	0.238	0.166	0.194	2,006
	SE	(0.343)	(0.219)	(0.445)	(0.27)	(0.237)	
Rocky Hill	Coefficient	0.346	0.251	0.442	0.144	0.271	1,156
	SE	(0.249)	(0.21)	(0.295)	(0.317)	(0.228)	
SCSU	Coefficient	0.366	0.141	0.215	-1.450	-0.003	240
	SE	(0.442)	(0.438)	(0.441)	(1.051)	(0.436)	
Seymour	Coefficient	-0.451	-0.302	-0.445	-0.163	-0.273	923
	SE	(0.379)	(0.278)	(0.413)	(0.376)	(0.289)	
Shelton	Coefficient	-2.034	-0.604	-2.176	0.081	-0.458	131
	SE	(1.539)	(0.992)	(1.756)	(1.682)	(1.015)	
Simsbury	Coefficient	-0.257	-0.064	0.054	0.474	0.168	867
	SE	(0.479)	(0.408)	(0.518)	(0.719)	(0.428)	
South Windsor	Coefficient	-0.104	-0.486	-0.096	-0.739	-0.498	682
	SE	(0.385)	(0.337)	(0.405)	(0.543)	(0.348)	
Southington	Coefficient	0.380	0.268	-0.285	0.348	0.035	1,564
	SE	(0.497)	(0.33)	(0.631)	(0.423)	(0.357)	
Stonington	Coefficient	0.288	0.424	0.685	0.829	0.656	438
	SE	(0.636)	(0.515)	(0.832)	(0.867)	(0.591)	
Stratford	Coefficient	-0.245	-0.258	-0.165	-0.067	-0.182	667
	SE	(0.229)	(0.22)	(0.23)	(0.272)	(0.219)	
Suffield	Coefficient	-54.18***	-55.26***	0.538		0.019	72
	SE	(1.817)	(1.963)	(2.552)		(1.977)	
Thomaston	Coefficient	-0.928	-0.333	-1.824	-0.304	-0.731	174
	SE	(1.616)	(0.751)	(1.649)	(0.89)	(0.773)	
Torrington	Coefficient	0.297	0.229	0.268	0.127	0.210	2,569
	SE	(0.229)	(0.165)	(0.242)	(0.213)	(0.169)	
Trumbull	Coefficient	-0.302	-0.036	-0.321	0.193	-0.025	1,340
	SE	(0.246)	(0.186)	(0.261)	(0.22)	(0.188)	
UCONN	Coefficient	-0.774	-0.237	-0.380	1.286	0.586	208
	SE	(0.708)	(0.622)	(1.227)	(1.215)	(0.86)	
Vernon	Coefficient	-0.073	0.148	-0.059	0.453	0.160	1,265
	SE	(0.254)	(0.208)	(0.26)	(0.316)	(0.211)	
Wallingford	Coefficient	-0.197	-0.046	-0.268	0.039	-0.059	2,380
	SE	(0.201)	(0.137)	(0.223)	(0.165)	(0.141)	
Waterbury	Coefficient	-0.588	-0.532	-0.561	0.094	-0.497	393
	SE	(0.392)	(0.372)	(0.392)	(0.373)	(0.368)	
Waterford	Coefficient	0.021	-0.212	0.233	-0.322	-0.127	825
	SE	(0.373)	(0.267)	(0.398)	(0.331)	(0.271)	
Watertown	Coefficient	-0.254	-0.034	-0.725	0.017	-0.294	530
	SE	(0.585)	(0.483)	(0.691)	(0.751)	(0.527)	
WCSU	Coefficient						
	SE						

Table 23c: Department Veil of Darkness Analysis at the Combined Dusk and Dawn Intertwilight Period

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
West Hartford	Coefficient	-0.074	-0.077	-0.111	-0.054	-0.084	2,388
	SE	(0.153)	(0.127)	(0.166)	(0.16)	(0.13)	
West Haven	Coefficient	-0.460	-0.393	-0.440	-0.025	-0.370	890
	SE	(0.509)	(0.458)	(0.514)	(0.587)	(0.459)	
Weston	Coefficient		1.157		16.640	1.260	56
	SE		(2.284)		(5911.6)	(2.247)	
Westport	Coefficient	-0.244	-0.277*	-0.238	-0.219	-0.259*	2,206
	SE	(0.174)	(0.143)	(0.192)	(0.21)	(0.151)	
Wethersfield	Coefficient	0.052	-0.210	0.095	-0.271*	-0.186	1,799
	SE	(0.166)	(0.134)	(0.17)	(0.145)	(0.134)	
Willimantic	Coefficient	-0.554	-0.438**	-0.379	-0.345	-0.381*	1,077
	SE	(0.383)	(0.202)	(0.404)	(0.211)	(0.202)	
Wilton	Coefficient	-0.147	-0.217	0.293	-0.163	-0.027	1,138
	SE	(0.312)	(0.22)	(0.342)	(0.27)	(0.226)	
Windsor	Coefficient	0.044	-0.012	0.090	-0.139	0.032	1,567
	SE	(0.156)	(0.154)	(0.156)	(0.248)	(0.154)	
Windsor Locks	Coefficient	0.263	0.198	0.261	0.095	0.191	895
	SE	(0.296)	(0.255)	(0.305)	(0.393)	(0.259)	
Winsted	Coefficient	-1.544	-1.511	-1.544	-15.860	-1.511	115
	SE	(1.381)	(1.19)	(1.381)	(1881.7)	(1.19)	
Wolcott	Coefficient	-1.176*	-0.773	-1.297*	-0.004	-0.844	323
	SE	(0.656)	(0.548)	(0.686)	(0.913)	(0.559)	
Woodbridge	Coefficient	-0.616*	-0.401	-0.715*	0.375	-0.456	594
	SE	(0.37)	(0.307)	(0.379)	(0.433)	(0.309)	
Yale	Coefficient	-0.417	-0.493	-0.365	-0.248	-0.435	322
	SE	(0.34)	(0.332)	(0.34)	(0.531)	(0.329)	
State Police- All Other	Coefficient	-0.069	-0.084	-0.053	-0.027	-0.078	5,019
	SE	(0.139)	(0.117)	(0.149)	(0.167)	(0.121)	
State Police- Troop A	Coefficient	-0.028	-0.089	-0.012	-0.101	-0.085	6,254
	SE	(0.129)	(0.0939)	(0.133)	(0.115)	(0.0947)	
State Police- Troop B	Coefficient	-0.614*	-0.506*	-0.426	-0.634	-0.374	1,701
	SE	(0.359)	(0.294)	(0.366)	(0.505)	(0.296)	
State Police- Troop C	Coefficient	-0.624***	-0.569***	-0.408***	-0.395**	-0.418***	8,961
	SE	(0.122)	(0.0995)	(0.137)	(0.154)	(0.106)	
State Police- Troop D	Coefficient	-0.319*	-0.148	-0.079	0.098	0.006	5,021
	SE	(0.188)	(0.145)	(0.203)	(0.21)	(0.151)	
State Police- Troop E	Coefficient	-0.229*	-0.203**	-0.165	-0.123	-0.162	6,795
	SE	(0.118)	(0.0973)	(0.127)	(0.148)	(0.102)	
State Police- Troop F	Coefficient	-0.138	-0.108	0.040	-0.013	0.006	7,310
	SE	(0.125)	(0.0999)	(0.133)	(0.148)	(0.103)	
State Police- Troop G	Coefficient	-0.166	-0.232***	-0.061	-0.170	-0.156*	5,881
	SE	(0.101)	(0.0859)	(0.104)	(0.108)	(0.0864)	
State Police- Troop H	Coefficient	-0.495***	-0.406***	-0.420***	-0.065	-0.340***	4,479
	SE	(0.134)	(0.115)	(0.138)	(0.158)	(0.116)	
State Police- Troop I	Coefficient	-0.069	-0.094	0.011	-0.058	-0.030	2,967
	SE	(0.154)	(0.13)	(0.16)	(0.183)	(0.132)	
State Police- Troop K	Coefficient	0.028	-0.143	0.150	-0.305**	-0.090	5,687
	SE	(0.152)	(0.112)	(0.161)	(0.149)	(0.114)	
State Police- Troop L	Coefficient	-0.092	-0.326*	-0.103	-0.556**	-0.334*	3,642
	SE	(0.253)	(0.183)	(0.267)	(0.252)	(0.187)	
State Police- Troop W	Coefficient	-0.334*					3,639
	SE	(0.187)					

Table 24: Department Veil of Darkness Analysis at the Combined Dusk and Dawn Intertwilight Period for Motor Vehicle Violations

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Ansonia	Coefficient	-0.306	-0.289*	-0.252	-0.160	-0.262	1863
	SE	(0.196)	(0.158)	(0.202)	(0.212)	(0.159)	
Avon	Coefficient	1.098	-1.072	1.102	-32.83	-1.021	141
	SE	(1.560)	(1.250)	(1.626)	(6491.8)	(1.277)	
Berlin	Coefficient	0.378	0.0636	0.587**	-0.241	0.155	1632
	SE	(0.283)	(0.206)	(0.294)	(0.262)	(0.209)	
Bethel	Coefficient	-0.0418	-0.612	0.725	-0.820*	-0.409	653
	SE	(0.637)	(0.404)	(0.768)	(0.485)	(0.420)	
Bloomfield	Coefficient	-0.0798	-0.0183	-0.0885	0.109	-0.0235	1613
	SE	(0.151)	(0.155)	(0.151)	(0.291)	(0.154)	
Branford	Coefficient	-0.326	-0.473*	-0.446	-0.601*	-0.532**	1488
	SE	(0.361)	(0.249)	(0.379)	(0.325)	(0.254)	
Bridgeport	Coefficient	0.209	0.335	0.258	-0.0503	0.372*	1247
	SE	(0.170)	(0.207)	(0.171)	(0.177)	(0.201)	
Bristol	Coefficient	-0.351	-0.308*	-0.404	-0.219	-0.327*	1652
	SE	(0.270)	(0.180)	(0.283)	(0.217)	(0.183)	
Brookfield	Coefficient	0.505	0.350	-0.670	0.265	0.177	822
	SE	(0.570)	(0.348)	(0.915)	(0.410)	(0.377)	
Canton	Coefficient	0.774	-0.613	16.12	-1.530	-0.542	148
	SE	(2.283)	(1.222)	(5208.3)	(2.024)	(1.215)	
Capitol Police	Coefficient		-0.420		-0.355	-0.420	34
	SE		(1.065)		(1.105)	(1.065)	
CCSU	Coefficient	0.0921	-0.0369	0.0722	-0.285	-0.0538	763
	SE	(0.354)	(0.286)	(0.358)	(0.372)	(0.287)	
Cheshire	Coefficient	0.161	0.0892	0.0121	-0.0126	-0.00432	997
	SE	(0.412)	(0.308)	(0.449)	(0.435)	(0.322)	
Clinton	Coefficient	1.339*	0.666	-1.284	0.274	-0.00598	487
	SE	(0.784)	(0.515)	(1.349)	(0.675)	(0.592)	
Coventry	Coefficient	1.456	-0.0509	2.369	-0.713	-0.168	236
	SE	(1.337)	(0.679)	(1.681)	(0.845)	(0.727)	
Cromwell	Coefficient	0.330	-0.411	0.0999	-2.989***	-0.863*	492
	SE	(0.512)	(0.442)	(0.634)	(1.086)	(0.517)	
Danbury	Coefficient	-0.217	-0.369	-0.443	-0.335	-0.431*	858
	SE	(0.417)	(0.246)	(0.465)	(0.265)	(0.250)	
Darien	Coefficient	-0.222	-0.151	-0.105	-0.110	-0.0819	635
	SE	(0.361)	(0.277)	(0.397)	(0.354)	(0.287)	
Derby	Coefficient	-0.0775	-0.0758	-0.299	-0.0450	-0.166	874
	SE	(0.317)	(0.231)	(0.355)	(0.291)	(0.239)	
DMV	Coefficient	-0.379	-0.173	-0.389	0.260	-0.150	388
	SE	(0.571)	(0.475)	(0.616)	(0.669)	(0.491)	
East Hampton	Coefficient		-0.567	1.833		-0.0297	57
	SE		(1.818)	(3.841)		(1.914)	
East Hartford	Coefficient	0.0906	-0.00116	0.105	-0.100	0.0116	1024
	SE	(0.214)	(0.218)	(0.216)	(0.234)	(0.216)	
East Haven	Coefficient	0.109	0.750*	0.469	1.089*	0.970**	332
	SE	(0.635)	(0.447)	(0.657)	(0.561)	(0.450)	
East Windsor	Coefficient	-0.400	-0.216	-0.139	0.206	0.00532	332
	SE	(0.660)	(0.586)	(0.667)	(1.056)	(0.589)	
Easton	Coefficient	0.296	0.941	0.686	2.134*	1.032	101
	SE	(1.453)	(0.884)	(1.804)	(1.284)	(0.922)	
ECSU	Coefficient	72.27	2.727*	72.27		2.727*	43
	SE	(13745.7)	(1.576)	(13745.7)		(1.576)	
Enfield	Coefficient	-0.152	-0.0657	0.0402	0.112	0.0823	1787
	SE	(0.202)	(0.166)	(0.219)	(0.247)	(0.173)	
Fairfield	Coefficient	0.182	0.0476	0.344	-0.145	0.138	1370
	SE	(0.203)	(0.162)	(0.215)	(0.225)	(0.166)	
Farmington	Coefficient	-0.180	-0.251	0.0610	-0.323	-0.140	1019
	SE	(0.386)	(0.283)	(0.434)	(0.381)	(0.298)	

Table 24: Department Veil of Darkness Analysis at the Combined Dusk and Dawn Intertwilight Period for Motor Vehicle Violations

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Glastonbury	Coefficient	-0.516**	-0.198	-0.229	0.181	0.00433	1795
	SE	(0.259)	(0.192)	(0.294)	(0.259)	(0.204)	
Granby	Coefficient	-2.031**	-1.307*	-2.031**	-0.283	-1.307*	287
	SE	(0.934)	(0.688)	(0.934)	(1.035)	(0.688)	
Greenwich	Coefficient	-0.0154	-0.161	0.447*	-0.240	0.0255	1803
	SE	(0.221)	(0.159)	(0.260)	(0.198)	(0.165)	
Groton City	Coefficient	0.458	0.756**	0.522	0.917**	0.802**	642
	SE	(0.346)	(0.297)	(0.400)	(0.427)	(0.317)	
Groton Long Point	Coefficient						
	SE						
Groton Town	Coefficient	-0.537**	-0.497**	-0.506*	-0.245	-0.444**	1280
	SE	(0.243)	(0.200)	(0.260)	(0.286)	(0.205)	
Guilford	Coefficient	-0.504	0.0940	-0.263	0.638	0.257	800
	SE	(0.765)	(0.456)	(0.911)	(0.561)	(0.485)	
Hamden	Coefficient	-0.0304	-0.0877	-0.0283	-0.105	-0.0738	1176
	SE	(0.176)	(0.172)	(0.177)	(0.295)	(0.172)	
Hartford	Coefficient	-0.0163	-0.0491	-0.0137	-0.100	-0.0362	1431
	SE	(0.168)	(0.188)	(0.170)	(0.176)	(0.183)	
Ledyard	Coefficient						
	SE						
Madison	Coefficient	-0.235	-0.692	-0.895	-1.323	-1.136	557
	SE	(0.722)	(0.594)	(0.951)	(1.168)	(0.707)	
Manchester	Coefficient	-0.342	-0.220	-0.280	0.0815	-0.142	681
	SE	(0.277)	(0.249)	(0.297)	(0.333)	(0.254)	
Meriden	Coefficient	-0.133	0.0602	-0.237	0.177	0.00851	747
	SE	(0.287)	(0.216)	(0.297)	(0.233)	(0.217)	
Met. Dist. Water Authority	Coefficient						
	SE						
Middlebury	Coefficient						
	SE						
Middletown	Coefficient	0.00486	-0.163	-0.260	-0.359	-0.374	970
	SE	(0.253)	(0.224)	(0.272)	(0.369)	(0.235)	
Milford	Coefficient	0.226	0.235	0.237	0.157	0.209	911
	SE	(0.277)	(0.228)	(0.319)	(0.323)	(0.243)	
Monroe	Coefficient	-0.156	-0.270	-0.197	-0.542	-0.309	1288
	SE	(0.357)	(0.292)	(0.406)	(0.470)	(0.315)	
Naugatuck	Coefficient	-0.227	-0.266	-0.237	-0.304	-0.263	1259
	SE	(0.273)	(0.211)	(0.287)	(0.285)	(0.216)	
New Britain	Coefficient	0.0375	-0.0755	0.0143	-0.135	-0.0885	1565
	SE	(0.181)	(0.146)	(0.188)	(0.142)	(0.145)	
New Canaan	Coefficient	0.407	-0.00509	0.693	-0.369	0.0487	1366
	SE	(0.390)	(0.283)	(0.446)	(0.379)	(0.300)	
New Haven	Coefficient	0.481*	0.445	0.466*	-0.186	0.383	3035
	SE	(0.246)	(0.280)	(0.244)	(0.321)	(0.272)	
New London	Coefficient	0.604	-0.526	0.392	-1.339	-0.757	270
	SE	(0.935)	(0.728)	(1.023)	(1.039)	(0.755)	
New Milford	Coefficient	0.350	-0.125	0.541	-0.757*	-0.110	880
	SE	(0.388)	(0.295)	(0.463)	(0.456)	(0.318)	
Newington	Coefficient	-0.106	-0.156	0.0256	-0.106	-0.0867	1599
	SE	(0.208)	(0.154)	(0.223)	(0.183)	(0.156)	
Newtown	Coefficient	0.238	0.329*	0.252	0.411	0.350*	2869
	SE	(0.250)	(0.193)	(0.295)	(0.281)	(0.209)	
North Branford	Coefficient	-2.261*	-1.038	-1.725	-0.308	-0.803	298
	SE	(1.219)	(0.755)	(1.186)	(0.982)	(0.750)	
North Haven	Coefficient	-0.295	-0.0812	-0.268	0.122	-0.0596	863
	SE	(0.286)	(0.230)	(0.292)	(0.324)	(0.232)	
Norwalk	Coefficient	0.162	0.298**	0.218	0.243	0.337**	1810
	SE	(0.164)	(0.143)	(0.166)	(0.178)	(0.144)	

Table 24: Department Veil of Darkness Analysis at the Combined Dusk and Dawn Intertwilight Period for Motor Vehicle Violations

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Norwich	Coefficient	0.520	0.432	0.366	0.138	0.300	788
	SE	(0.364)	(0.323)	(0.382)	(0.473)	(0.331)	
Old Saybrook	Coefficient	0.0849	0.0269	-0.465	-0.402	-0.308	595
	SE	(0.468)	(0.410)	(0.697)	(0.830)	(0.544)	
Orange	Coefficient	0.369	0.248	0.498	-0.0230	0.324	790
	SE	(0.304)	(0.261)	(0.320)	(0.376)	(0.267)	
Plainfield	Coefficient	-75.37	-32.37	-85.26	-33.26	-32.94	110
	SE	(2535.2)	(2439.3)	(72892918.4)	(4367.0)	(2894.5)	
Plainville	Coefficient	0.108	0.168	0.157	0.218	0.192	1232
	SE	(0.316)	(0.230)	(0.333)	(0.293)	(0.235)	
Plymouth	Coefficient	-0.778	-0.283	-0.813	0.213	-0.286	459
	SE	(0.901)	(0.616)	(0.910)	(0.853)	(0.616)	
Portland	Coefficient						
	SE						
Putnam	Coefficient	-1.923	-1.946*	-2.383*		-2.332*	186
	SE	(1.169)	(1.106)	(1.324)		(1.272)	
Redding	Coefficient	-0.759	-0.544	0.197	-0.311	-0.218	681
	SE	(0.608)	(0.378)	(0.809)	(0.458)	(0.399)	
Ridgefield	Coefficient	-0.0642	0.172	0.208	0.315	0.295	1854
	SE	(0.362)	(0.230)	(0.474)	(0.284)	(0.249)	
Rocky Hill	Coefficient	0.315	0.140	0.446	-0.0324	0.167	1015
	SE	(0.274)	(0.232)	(0.327)	(0.355)	(0.254)	
SCSU	Coefficient	0.312	0.0657	0.231	-1.434	-0.00240	228
	SE	(0.457)	(0.452)	(0.453)	(1.047)	(0.448)	
Seymour	Coefficient	-0.401	-0.306	-0.405	-0.231	-0.286	839
	SE	(0.407)	(0.297)	(0.447)	(0.397)	(0.310)	
Shelton	Coefficient	-16.70	-0.538	-21.11	0.803	-0.513	92
	SE	(1991.5)	(1.316)	(5917.4)	(1.912)	(1.362)	
Simsbury	Coefficient	-0.284	-0.0591	0.0399	0.600	0.193	750
	SE	(0.539)	(0.457)	(0.580)	(0.809)	(0.478)	
South Windsor	Coefficient	-0.225	-0.320	-0.215	-0.0758	-0.311	561
	SE	(0.452)	(0.386)	(0.477)	(0.606)	(0.399)	
Southington	Coefficient	0.643	0.291	0.0278	0.210	0.0174	1500
	SE	(0.511)	(0.345)	(0.664)	(0.449)	(0.380)	
Stonington	Coefficient	-0.0176	0.552	0.709	1.692*	1.044	298
	SE	(0.783)	(0.604)	(1.038)	(1.023)	(0.704)	
Stratford	Coefficient	-0.299	-0.300	-0.233	-0.0451	-0.240	528
	SE	(0.270)	(0.250)	(0.270)	(0.313)	(0.250)	
Suffield	Coefficient	-52.66	-54.42***	0.538	16.73	0.921	66
	SE	(49340457.9)	(1.898)	(2.552)	(7930.1)	(2.209)	
Thomaston	Coefficient	-2.063	-0.504	-2.063	-0.129	-0.504	83
	SE	(1.864)	(0.863)	(1.864)	(0.933)	(0.863)	
Torrington	Coefficient	0.263	0.221	0.126	0.113	0.150	1771
	SE	(0.279)	(0.199)	(0.296)	(0.253)	(0.204)	
Trumbull	Coefficient	-0.365	-0.132	-0.304	0.113	-0.0814	1245
	SE	(0.265)	(0.200)	(0.277)	(0.237)	(0.202)	
UCONN	Coefficient	-1.318	-0.752	-0.409	1.247	0.355	179
	SE	(0.844)	(0.731)	(1.290)	(1.469)	(0.977)	
Vernon	Coefficient	-0.294	0.123	-0.304	0.627*	0.124	1083
	SE	(0.306)	(0.239)	(0.311)	(0.343)	(0.241)	
Wallingford	Coefficient	-0.146	-0.147	-0.349	-0.114	-0.226	1862
	SE	(0.242)	(0.168)	(0.273)	(0.209)	(0.175)	
Waterbury	Coefficient	-0.786*	-0.747*	-0.762*	0.0677	-0.724*	354
	SE	(0.448)	(0.407)	(0.447)	(0.416)	(0.403)	
Waterford	Coefficient	-0.0618	-0.363	0.0490	-0.630	-0.326	617
	SE	(0.473)	(0.362)	(0.498)	(0.512)	(0.372)	
Watertown	Coefficient	-0.177	0.354	-0.822	0.967	0.0762	470
	SE	(0.674)	(0.540)	(0.840)	(0.831)	(0.596)	

Table 24: Department Veil of Darkness Analysis at the Combined Dusk and Dawn Intertwilight Period for Motor Vehicle Violations

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
WCSU	Coefficient						
	SE						
West Hartford	Coefficient	0.00856	-0.0194	-0.0295	-0.0519	-0.0322	2251
	SE	(0.156)	(0.131)	(0.170)	(0.167)	(0.134)	
West Haven	Coefficient	-0.787	-0.843	-0.820	-0.384	-0.858	701
	SE	(0.608)	(0.534)	(0.612)	(0.723)	(0.535)	
Weston	Coefficient		1.107		17.61	1.210	50
	SE		(2.201)		(7877.2)	(2.179)	
Westport	Coefficient	-0.257	-0.268	-0.232	-0.130	-0.233	1855
	SE	(0.201)	(0.165)	(0.226)	(0.243)	(0.175)	
Wethersfield	Coefficient	0.00444	-0.235	0.0342	-0.262	-0.217	1473
	SE	(0.185)	(0.148)	(0.189)	(0.161)	(0.148)	
Willimantic	Coefficient	-0.404	-0.297	-0.164	-0.221	-0.220	854
	SE	(0.425)	(0.230)	(0.442)	(0.240)	(0.230)	
Wilton	Coefficient	-0.101	-0.0895	0.461	0.00106	0.131	908
	SE	(0.371)	(0.255)	(0.415)	(0.309)	(0.263)	
Windsor	Coefficient	0.0626	-0.0278	0.106	-0.194	0.0130	1280
	SE	(0.174)	(0.172)	(0.175)	(0.274)	(0.171)	
Windsor Locks	Coefficient	0.308	0.197	0.299	-0.00885	0.181	704
	SE	(0.331)	(0.286)	(0.344)	(0.435)	(0.292)	
Winsted	Coefficient						
	SE						
Wolcott	Coefficient	-1.326**	-0.883	-1.471**	-0.0936	-0.958*	307
	SE	(0.673)	(0.555)	(0.707)	(0.911)	(0.567)	
Woodbridge	Coefficient	-0.729*	-0.532	-0.753*	0.266	-0.546	556
	SE	(0.433)	(0.348)	(0.433)	(0.477)	(0.348)	
Yale	Coefficient	-0.609*	-0.582*	-0.428	-0.00960	-0.403	302
	SE	(0.356)	(0.346)	(0.353)	(0.557)	(0.341)	
State Police- All Other	Coefficient	-0.0816	-0.0314	-0.0941	0.111	-0.0395	4625
	SE	(0.147)	(0.123)	(0.158)	(0.175)	(0.128)	
State Police- Troop A	Coefficient	-0.00831	-0.0893	0.00418	-0.125	-0.0884	5859
	SE	(0.135)	(0.0978)	(0.139)	(0.120)	(0.0987)	
State Police- Troop B	Coefficient	-0.780*	-0.649*	-0.679*	-0.779	-0.581*	1373
	SE	(0.407)	(0.336)	(0.412)	(0.595)	(0.338)	
State Police- Troop C	Coefficient	-0.551***	-0.497***	-0.343**	-0.330**	-0.349***	8197
	SE	(0.126)	(0.103)	(0.142)	(0.161)	(0.111)	
State Police- Troop D	Coefficient	-0.253	-0.0880	-0.00329	0.146	0.0717	4483
	SE	(0.198)	(0.153)	(0.215)	(0.223)	(0.160)	
State Police- Troop E	Coefficient	-0.190	-0.173*	-0.123	-0.115	-0.131	6508
	SE	(0.121)	(0.100)	(0.131)	(0.152)	(0.105)	
State Police- Troop F	Coefficient	-0.166	-0.149	0.0179	-0.0580	-0.0308	6810
	SE	(0.131)	(0.106)	(0.140)	(0.158)	(0.110)	
State Police- Troop G	Coefficient	-0.167	-0.227**	-0.0689	-0.164	-0.156*	5625
	SE	(0.104)	(0.0885)	(0.107)	(0.112)	(0.0890)	
State Police- Troop H	Coefficient	-0.440***	-0.326***	-0.361**	0.00921	-0.259**	4214
	SE	(0.141)	(0.119)	(0.145)	(0.164)	(0.121)	
State Police- Troop I	Coefficient	-0.0470	-0.0997	0.0246	-0.0921	-0.0399	2730
	SE	(0.164)	(0.139)	(0.171)	(0.199)	(0.142)	
State Police- Troop K	Coefficient	-0.00888	-0.254**	0.124	-0.500***	-0.196	5106
	SE	(0.163)	(0.122)	(0.173)	(0.167)	(0.125)	
State Police- Troop L	Coefficient	-0.0939	-0.468**	-0.124	-0.798***	-0.487**	3153
	SE	(0.287)	(0.207)	(0.302)	(0.287)	(0.211)	
State Police- Troop W	Coefficient	-0.487**					3153
	SE	(0.211)					

Appendix D

Table 26: Department KPT Hit Rate Analysis

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
Ansonia	Chi2 P-Value					
	N					
	Hit Rate					
Avon	Chi2 P-Value					
	N					
	Hit Rate					
Berlin	Chi2 P-Value					
	N					
	Hit Rate					
Bethel	Chi2 P-Value					
	N					
	Hit Rate					
Bloomfield	Chi2 P-Value					
	N					
	Hit Rate					
Branford	Chi2 P-Value	0.184	0.077*	0.184	0.233	0.077*
	N	65	69	65	64	69
	Hit Rate	0.055	-0.021	0.055	-0.084	-0.021
Bridgeport	Chi2 P-Value	0.184	0.057*	0.206	0.071*	0.063*
	N	127	184	122	104	179
	Hit Rate	-0.004	0.023	-0.008	0.022	0.013
Bristol	Chi2 P-Value		0.355		0.138	0.355
	N		44		40	44
	Hit Rate		0.024		-0.057	-0.019
Brookfield	Chi2 P-Value					
	N					
	Hit Rate					
Canton	Chi2 P-Value					
	N					
	Hit Rate					
Capitol Police	Chi2 P-Value					
	N					
	Hit Rate					
CCSU	Chi2 P-Value					
	N					
	Hit Rate					
Cheshire	Chi2 P-Value	0.148	0.064*	0.148	0.181	0.064*
	N	39	41	39	35	41
	Hit Rate	0.3	0.52	0.3	0	0.52
Clinton	Chi2 P-Value		0.953		0.953	0.953
	N		62		62	62
	Hit Rate		0.021		0.049	0.017
Coventry	Chi2 P-Value					
	N					
	Hit Rate					
Cromwell	Chi2 P-Value					
	N					
	Hit Rate					
Danbury	Chi2 P-Value					
	N					
	Hit Rate					
Darien	Chi2 P-Value		0.404			0.404
	N		35			35
	Hit Rate		-0.075			-0.09
Derby	Chi2 P-Value	0.361	0.294	0.361		0.294
	N	30	32	30		32
	Hit Rate	0.022	0.031	0.021		0.03
DMV	Chi2 P-Value					
	N					
	Hit Rate					
East Hampton	Chi2 P-Value					
	N					
	Hit Rate					
East Hartford	Chi2 P-Value	0.96	0.68	0.919	0.378	0.704
	N	104	143	103	75	142
	Hit Rate	-0.246	-0.443	-0.236	-0.107	-0.425

Table 26: Department KPT Hit Rate Analysis

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
East Haven	Chi2 P-Value					
	N					
	Hit Rate					
East Windsor	Chi2 P-Value					
	N					
	Hit Rate					
Easton	Chi2 P-Value					
	N					
	Hit Rate					
ECSU	Chi2 P-Value					
	N					
	Hit Rate					
Enfield	Chi2 P-Value					
	N					
	Hit Rate					
Fairfield	Chi2 P-Value					
	N					
	Hit Rate					
Farmington	Chi2 P-Value					
	N					
	Hit Rate					
Glastonbury	Chi2 P-Value	0.902	0.797	0.771	0.658	0.887
	N	77	88	76	72	87
	Hit Rate	-0.04	-0.029	-0.066	-0.01	-0.044
Granby	Chi2 P-Value					
	N					
	Hit Rate					
Greenwich	Chi2 P-Value		0.298			0.298
	N		32			32
	Hit Rate		0.077			0.073
Groton City	Chi2 P-Value	0.604	0.519	0.604		0.519
	N	33	39	33		39
	Hit Rate	0.039	0.115	0.039		0.115
Groton Long Point	Chi2 P-Value					
	N					
	Hit Rate					
Groton Town	Chi2 P-Value					
	N					
	Hit Rate					
Guilford	Chi2 P-Value					
	N					
	Hit Rate					
Hamden	Chi2 P-Value	0.036**	0.024**	0.036**		0.024**
	N	55	59	55		59
	Hit Rate	0.098	0.139	0.098		0.139
Hartford	Chi2 P-Value	0.208	0.372	0.208	0.935	0.372
	N	48	69	48	36	69
	Hit Rate	-0.121	-0.292	-0.121	-0.1	-0.292
Ledyard	Chi2 P-Value					
	N					
Madison	Chi2 P-Value					
	N					
	Hit Rate					
Manchester	Chi2 P-Value	0.709	0.896	0.709	0.415	0.896
	N	48	61	48	38	61
	Hit Rate	-0.21	-0.357	-0.132	-0.245	-0.282
Meriden	Chi2 P-Value	0.002***	0.013**	0.002***	0.136	0.013**
	N	69	109	69	79	109
	Hit Rate	-0.1	-0.097	-0.1	0.005	-0.097
Met. Dist. Water Authority	N					
	Hit Rate					
	Chi2 P-Value					
Middlebury	Chi2 P-Value					
	N					
	Hit Rate					

Table 26: Department KPT Hit Rate Analysis

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
Middletown	Chi2 P-Value	0.04**	0.019**	0.04**	0.148	0.019**
	N	175	195	175	146	195
	Hit Rate	0.041	0.1	0.041	0.167	0.1
Milford	Chi2 P-Value	0.083*	0.198	0.09*	0.857	0.21
	N	206	249	205	182	248
	Hit Rate	0.13	0.143	0.127	0.068	0.14
Monroe	Chi2 P-Value					
	N					
	Hit Rate					
Naugatuck	Chi2 P-Value	0.056*	0.126	0.045**	0.616	0.111
	N	132	150	131	123	149
	Hit Rate	0.027	0.006	0.006	-0.049	-0.01
New Britain	Chi2 P-Value	0.122	0.209	0.122	0.452	0.209
	N	56	117	56	92	117
	Hit Rate	-0.15	0	-0.139	-0.336	0
New Canaan	Chi2 P-Value					
	N					
	Hit Rate					
New Haven	Chi2 P-Value	0.01***	0.019**	0.01***	0.216	0.019**
	N	359	443	358	152	442
	Hit Rate	0	0	0	-0.867	0
New London	Chi2 P-Value					
	N					
	Hit Rate					
New Milford	Chi2 P-Value					
	N					
	Hit Rate					
Newington	Chi2 P-Value	0.322	0.711	0.257	0.791	0.673
	N	31	46	30	37	45
	Hit Rate	0.034	-0.02	0.024	-0.046	-0.027
Newtown	Chi2 P-Value					
	N					
	Hit Rate					
North Branford	Chi2 P-Value					
	N					
	Hit Rate					
North Haven	Chi2 P-Value	0.088*	0.106	0.088*	0.426	0.106
	N	40	47	40	39	47
	Hit Rate	0.068	0.126	0.063	0.125	0.122
Norwalk	Chi2 P-Value	0.526	0.319	0.513	0.212	0.313
	N	211	280	210	146	279
	Hit Rate	0.031	0.017	0.035	-0.019	0.021
Norwich	Chi2 P-Value	0.548	0.13	0.627	0.08*	0.152
	N	169	197	167	137	195
	Hit Rate	-0.035	0.087	-0.037	0.172	0.086
Old Saybrook	Chi2 P-Value					
	N					
	Hit Rate					
Orange	Chi2 P-Value					
	N					
	Hit Rate					
Plainfield	Chi2 P-Value					
	N					
	Hit Rate					
Plainville	Chi2 P-Value	0.369	0.126	0.435	0.005***	0.101
	N	105	124	104	110	123
	Hit Rate	0.15	-0.036	0.141	-0.187	-0.043
Plymouth	Chi2 P-Value	0.417	0.498	0.417	0.253	0.498
	N	49	59	49	54	59
	Hit Rate	-0.122	0.042	-0.122	0.081	0.042
Portland	Chi2 P-Value					
	N					
	Hit Rate					

Table 26: Department KPT Hit Rate Analysis

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
Putnam	Chi2 P-Value					
	N					
	Hit Rate					
Redding	Chi2 P-Value					
	N					
	Hit Rate					
Ridgefield	Chi2 P-Value					
	N					
	Hit Rate					
Rocky Hill	Chi2 P-Value		0.505			0.505
	N		34			34
	Hit Rate		-0.132			-0.095
SCSU	Chi2 P-Value					
	N					
	Hit Rate					
Seymour	Chi2 P-Value					
	N					
	Hit Rate					
Shelton	Chi2 P-Value					
	N					
	Hit Rate					
Simsbury	Chi2 P-Value					
	N					
	Hit Rate					
South Windsor	Chi2 P-Value	0.753	0.505	0.753		0.505
	N	32	34	32		34
	Hit Rate	-0.082	-0.016	-0.098		-0.03
Southington	Chi2 P-Value					
	N					
	Hit Rate					
Stonington	Chi2 P-Value					
	N					
	Hit Rate					
Stratford	Chi2 P-Value	0.812	0.587	0.709	0.486	0.518
	N	52	64	50	41	62
	Hit Rate	-0.029	-0.02	-0.04	0.027	-0.031
Suffield	Chi2 P-Value					
	N					
	Hit Rate					
Thomaston	Chi2 P-Value					
	N					
	Hit Rate					
Torrington	Chi2 P-Value	0.869	0.726	0.869	0.624	0.726
	N	97	106	97	86	106
	Hit Rate	-0.037	-0.102	0.003	-0.066	-0.073
Trumbull	Chi2 P-Value					
	N					
	Hit Rate					
UCONN	Chi2 P-Value					
	N					
	Hit Rate					
Vernon	Chi2 P-Value	0.551	0.304	0.832	0.286	0.443
	N	76	88	73	68	85
	Hit Rate	0.222	0.205	0.176	0.099	0.169
Wallingford	Chi2 P-Value	0.983	0.227	0.665	0.148	0.308
	N	83	104	81	90	102
	Hit Rate	-0.097	0.098	-0.083	0.186	0.109
Waterbury	Chi2 P-Value	0.004***	0.004***	0.004***	0.007***	0***
	N	42	65	42	45	65
	Hit Rate	0.018	0.112	0.014	0.114	0.146
Waterford	Chi2 P-Value	0.148	0.551	0.148	0.722	0.551
	N	58	64	58	55	64
	Hit Rate	-0.308	-0.217	-0.346	-0.064	-0.236
Watertown	Chi2 P-Value					
	N					
	Hit Rate					

Table 26: Department KPT Hit Rate Analysis

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
WCSU	Chi2 P-Value					
	N					
	Hit Rate					
West Hartford	Chi2 P-Value	0.379	0.002***	0.379	0.001***	0.002***
	N	234	286	234	261	286
	Hit Rate	0.12	0.202	0.12	0.208	0.202
West Haven	Chi2 P-Value	0.434	0.137	0.434	0.092*	0.137
	N	36	46	36	31	46
	Hit Rate	-0.059	0.073	-0.059	0.128	0.073
Weston	Chi2 P-Value					
	N					
	Hit Rate					
Westport	Chi2 P-Value	0.935	0.446	0.829	0.149	0.367
	N	106	122	103	89	119
	Hit Rate	0.046	0.052	0.04	-0.001	0.045
Wethersfield	Chi2 P-Value	0.887	0.691	0.839	0.645	0.668
	N	129	190	128	153	189
	Hit Rate	-0.02	-0.163	-0.042	-0.156	-0.176
Willimantic	Chi2 P-Value	0.453	0.055*	0.536	0.038**	0.061*
	N	75	129	74	111	128
	Hit Rate	0.007	0.19	-0.02	0.235	0.178
Wilton	Chi2 P-Value					
	N					
	Hit Rate					
Windsor	Chi2 P-Value					
	N					
	Hit Rate					
Windsor Locks	Chi2 P-Value					
	N					
	Hit Rate					
Winsted	Chi2 P-Value					
	N					
	Hit Rate					
Wolcott	Chi2 P-Value					
	N					
	Hit Rate					
Woodbridge	Chi2 P-Value					
	N					
	Hit Rate					
Yale	Chi2 P-Value					
	N					
	Hit Rate					
State Police- All Other	Chi2 P-Value	0.635	0.655	0.512	0.976	0.655
	N	41	41	40	32	41
	Hit Rate	-0.12	-0.056	-0.134	0.104	-0.056
State Police- Troop A	Chi2 P-Value	0.927	0.012**	0.927	0.001***	0.012**
	N	212	212	212	150	212
	Hit Rate	0.041	0.105	0.041	0.085	0.104
State Police- Troop B	Chi2 P-Value	0.027**	0.305	0.027**	0.492	0.305
	N	53	53	53	47	53
	Hit Rate	-0.312	-0.044	-0.312	0.062	-0.044
State Police- Troop C	Chi2 P-Value	0.013**	0.002***	0.017**	0.042**	0.003***
	N	174	174	173	147	173
	Hit Rate	0.206	0.201	0.199	0.104	0.194
State Police- Troop D	Chi2 P-Value	0.168	0.034**	0.168	0.057*	0.034**
	N	121	121	121	106	121
	Hit Rate	-0.14	-0.079	-0.117	-0.027	-0.065
State Police- Troop E	Chi2 P-Value	0.089*	0.043**	0.089*	0.253	0.043**
	N	140	140	140	119	140
	Hit Rate	-0.071	-0.001	-0.056	0.107	0.011
State Police- Troop F	Chi2 P-Value	0.012**	0.002***	0.012**	0.033**	0.002***
	N	88	88	88	69	88
	Hit Rate	0.199	0.238	0.199	0.208	0.238
State Police- Troop G	Chi2 P-Value	0.872	0.959	0.904	0.978	0.979
	N	145	145	144	82	144
	Hit Rate	0.012	0.071	0.006	0.099	0.064

Table 26: Department KPT Hit Rate Analysis

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic
State Police- Troop H	Chi2 P-Value					
	N					
	Hit Rate					
State Police- Troop I	Chi2 P-Value	0.034387371	0.036843713	0.031624707	-0.009210854	0.033734389
	N	105	105	103	74	103
	Hit Rate	0.033	0.068	0.029	0.064	0.065
State Police- Troop K	Chi2 P-Value	0.182	0.866	0.182	0.512	0.866
	N	119	119	119	101	119
	Hit Rate	-0.037	0.057	-0.054	0.128	0.048
State Police- Troop L	Chi2 P-Value	0.074*	0.072*	0.085*	0.302	0.081*
	N	127	127	126	115	126
	Hit Rate	0.245	0.187	0.233	0.082	0.177
State Police- Troop W	Chi2 P-Value					
	N					
	Hit Rate					

Table 28: Department Solar Powered Search Analysis at the Combined Dusk and Dawn Intertwilight Period for Consensual Searches

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Ansonia	Coefficient		1.095		1.777	1.002	107
	SE		(1.706)		(2.109)	(1.715)	
Avon	Coefficient						
	SE						
Berlin	Coefficient						
	SE						
Bethel	Coefficient						
	SE						
Bloomfield	Coefficient		0.644			0.651	98
	SE		(1.281)			(1.270)	
Branford	Coefficient		0.135			0.135	61
	SE		(1.911)			(1.911)	
Bridgeport	Coefficient	-0.479	-0.181	-0.816	0.234	-0.345	958
	SE	(0.569)	(0.398)	(0.615)	(0.579)	(0.412)	
Bristol	Coefficient		0.926		0.985	0.931	379
	SE		(1.202)		(1.352)	(1.199)	
Brookfield	Coefficient						
	SE						
Canton	Coefficient						
	SE						
Capitol Police	Coefficient						
	SE						
CCSU	Coefficient						
	SE						
Cheshire	Coefficient						
	SE						
Clinton	Coefficient						
	SE						
Coventry	Coefficient						
	SE						
Cromwell	Coefficient						
	SE						
Danbury	Coefficient						
	SE						
Darien	Coefficient		0.604			0.359	40
	SE		(1.922)			(1.980)	
Derby	Coefficient						
	SE						
DMV	Coefficient						
	SE						
East Hampton	Coefficient						
	SE						
East Hartford	Coefficient	-0.943	-1.132	-1.076	-3.926	-1.154	329
	SE	(1.374)	(0.928)	(1.404)	(2.543)	(0.932)	
East Haven	Coefficient						
	SE						
East Windsor	Coefficient						
	SE						
Easton	Coefficient						
	SE						
ECSU	Coefficient						
	SE						
Enfield	Coefficient						
	SE						
Fairfield	Coefficient	14.57	11.61	14.57		11.61	56
	SE	(5814.9)	(2816.7)	(5814.9)		(2816.7)	
Farmington	Coefficient						
	SE						
Glastonbury	Coefficient	-33.29	1.965		4.511*	2.342	113
	SE	(6212.0)	(1.296)		(2.624)	(1.465)	
Granby	Coefficient						
	SE						
Greenwich	Coefficient		2.228	15.10		1.998	341
	SE		(1.464)	(4232.6)		(1.427)	
Groton City	Coefficient						
	SE						

Table 28: Department Solar Powered Search Analysis at the Combined Dusk and Dawn Intertwilight Period for Consensual Searches

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Groton Long Point	Coefficient						
	SE						
Groton Town	Coefficient						
	SE						
Guilford	Coefficient						
	SE						
Hamden	Coefficient	-1.653*	-1.553*	-1.634*		-1.547*	451
	SE	(0.986)	(0.942)	(0.981)		(0.941)	
Hartford	Coefficient	1.418	0.383	1.408	-2.390	0.356	542
	SE	(0.965)	(0.648)	(0.973)	(1.677)	(0.653)	
Ledyard	Coefficient						
	SE						
Madison	Coefficient						
	SE						
Manchester	Coefficient	15.27	1.220			0.809	48
	SE	(5583.1)	(1.646)			(1.678)	
Meriden	Coefficient	-1.155	-0.944	-1.155	-0.700	-0.865	293
	SE	(1.589)	(0.698)	(1.589)	(0.910)	(0.703)	
Met. Dist. Water Authority	Coefficient						
	SE						
Middlebury	Coefficient						
	SE						
Middletown	Coefficient	-0.805	-0.359	-0.825	-17.87	-0.367	160
	SE	(1.886)	(0.875)	(1.859)	(3144.7)	(0.886)	
Milford	Coefficient	-2.232	-0.761	-2.689*		-1.010	154
	SE	(1.462)	(0.840)	(1.555)		(0.883)	
Monroe	Coefficient						
	SE						
Naugatuck	Coefficient	-0.513	-1.101	-0.571	-34.44	-1.179	217
	SE	(1.315)	(1.109)	(1.317)	(4508.9)	(1.119)	
New Britain	Coefficient	1.328	-1.331**	2.132	-1.414**	-1.318**	984
	SE	(2.178)	(0.653)	(2.554)	(0.715)	(0.652)	
New Canaan	Coefficient						
	SE						
New Haven	Coefficient	0.229	0.427	0.212	0.229	0.421	2,188
	SE	(0.652)	(0.588)	(0.650)	(1.456)	(0.586)	
New London	Coefficient						
	SE						
New Milford	Coefficient						
	SE						
Newington	Coefficient		0.776			1.025	67
	SE		(1.562)			(1.942)	
Newtown	Coefficient						
	SE						
North Branford	Coefficient						6
	SE						
North Haven	Coefficient		-3.366*			-3.538*	31
	SE		(1.773)			(1.847)	
Norwalk	Coefficient	-1.482***	-1.396***	-1.580***	-1.226	-1.429***	1,287
	SE	(0.530)	(0.435)	(0.540)	(0.807)	(0.436)	
Norwich	Coefficient	15.34	0.0368	15.57		0.0622	231
	SE	(1648.0)	(1.120)	(1872.3)		(1.132)	
Old Saybrook	Coefficient						
	SE						
Orange	Coefficient						
	SE						
Plainfield	Coefficient						
	SE						
Plainville	Coefficient	16.95	-2.114*	16.95	-36.37	-2.268**	163
	SE	(6974.5)	(1.096)	(6974.5)	(3567.1)	(1.154)	
Plymouth	Coefficient						
	SE						
Portland	Coefficient						
	SE						
Putnam	Coefficient						
	SE						

Table 28: Department Solar Powered Search Analysis at the Combined Dusk and Dawn Intertwilight Period for Consensual Searches

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Redding	Coefficient						
	SE						
Ridgefield	Coefficient						
	SE						
Rocky Hill	Coefficient						
	SE						
SCSU	Coefficient						
	SE						
Seymour	Coefficient						
	SE						
Shelton	Coefficient						
	SE						
Simsbury	Coefficient						
	SE						
South Windsor	Coefficient						
	SE						
Southington	Coefficient						
	SE						
Stonington	Coefficient						
	SE						
Stratford	Coefficient						
	SE						
Suffield	Coefficient						
	SE						
Thomaston	Coefficient						
	SE						
Torrington	Coefficient	-0.570	0.677	-0.548	18.88	0.630	51
	SE	(2.467)	(1.707)	(2.467)	(5777.7)	(1.718)	
Trumbull	Coefficient		0.637			0.637	49
	SE		(1.898)			(1.898)	
UCONN	Coefficient						
	SE						
Vernon	Coefficient		-17.30			-17.04	54
	SE		(3127.4)			(4980.7)	
Wallingford	Coefficient	2.135	0.0853	12.01	-0.640	0.219	280
	SE	(1.811)	(0.654)	(9.325)	(0.871)	(0.657)	
Waterbury	Coefficient		2.177*		2.858*	2.151*	120
	SE		(1.202)		(1.602)	(1.199)	
Waterford	Coefficient						
	SE						
Watertown	Coefficient						
	SE						
WCSU	Coefficient						
	SE						
West Hartford	Coefficient	-0.779	-0.744	-0.977	-0.750	-0.802	681
	SE	(1.126)	(0.692)	(1.165)	(0.970)	(0.697)	
West Haven	Coefficient						
	SE						
Weston	Coefficient						
	SE						
Westport	Coefficient	2.330	0.924	1.120		0.582	184
	SE	(1.491)	(1.008)	(1.618)		(1.044)	
Wethersfield	Coefficient	0.209	-0.426	0.196	-0.407	-0.419	766
	SE	(0.775)	(0.498)	(0.764)	(0.727)	(0.496)	
Willimantic	Coefficient		-0.556		-1.465	-0.586	638
	SE		(0.854)		(1.003)	(0.862)	
Wilton	Coefficient						
	SE						
Windsor	Coefficient						
	SE						
Windsor Locks	Coefficient						
	SE						
Winsted	Coefficient						
	SE						
Wolcott	Coefficient						
	SE						

Table 28: Department Solar Powered Search Analysis at the Combined Dusk and Dawn Intertwilight Period for Consensual Searches

Department	Variable	Non-Caucasian	Non-Caucasian or Hispanic	Black	Hispanic	Black or Hispanic	Max N
Woodbridge	Coefficient						
	SE						
Yale	Coefficient		-0.0350			-0.0350	41
	SE		(2.346)			(2.346)	
State Police- All Other	Coefficient	2.814	17.82			17.92	127
	SE	(2.424)	(4393.0)			(4600.9)	
State Police- Troop A	Coefficient	1.307*	1.037*	1.348*	0.758	1.048*	1,278
	SE	(0.694)	(0.537)	(0.708)	(1.007)	(0.537)	
State Police- Troop B	Coefficient		19.48			18.84	37
	SE		(4736.2)			(3427.7)	
State Police- Troop C	Coefficient	3.047**	1.024	2.692**	-0.512	0.948	1,128
	SE	(1.340)	(0.729)	(1.274)	(1.295)	(0.716)	
State Police- Troop D	Coefficient		-0.908			-0.908	61
	SE		(2.879)			(2.879)	
State Police- Troop E	Coefficient	-16.63	0.361	-16.62		0.405	345
	SE	(5219.7)	(1.345)	(3570.7)		(1.333)	
State Police- Troop F	Coefficient						
	SE						
State Police- Troop G	Coefficient	-15.60	-1.742		-0.429		1,076
	SE	(3110.6)	(1.301)		(1.473)		
State Police- Troop H	Coefficient	-0.384	-0.323	-0.441	-0.0889	-0.347	1,186
	SE	(0.721)	(0.520)	(0.725)	(0.801)	(0.517)	
State Police- Troop I	Coefficient	-1.101	1.389	-15.64		-1.852	951
	SE	(3.403)	(1.739)	(2749.6)		(1.337)	
State Police- Troop K	Coefficient		1.512		0.0347	1.481	284
	SE		(1.289)		(1.361)	(1.310)	
State Police- Troop L	Coefficient	16.67	-0.408				109
	SE	(6129.0)	(2.182)				