

# Exhibit A

United States District Court  
Southern District of New York

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David Floyd et al.,

Plaintiffs,

-against-

08 Civ. 01034 (SAS)

Report of

Dennis C. Smith, Ph.D.

City of New York et al.,

Defendants.

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**Qualifications**

I am an Associate Professor of Public Administration at the Robert F. Wagner Graduate School of Public Service at New York University. I have served as the Director of the Program in Public Policy and Management and Associate Dean.

I joined the faculty of NYU in 1973. I have studied urban police policy and management since undertaking studies of police management in the Indianapolis, Indiana, Chicago, Illinois and St. Louis, Missouri metropolitan areas with Professor Elinor Ostrom of Indiana University, recent recipient of the Nobel Prize in Economics. My dissertation was on the subject of police professionalization and performance based on a study of twenty-nine police departments in the St. Louis metropolitan area. I have done police studies with National Science Foundation and National Institute of Justice funding in the Tampa/St.Petersburg, Florida, Rochester, New York, and additional work in the St. Metropolitan areas since coming to NYU. I have been studying the New York City since the late 1970s when I began an analysis of the organizational and performance effects of a twenty-five reduction in the size of the department in the wake of the fiscal crisis, and have studied how well the Police Academy was preparing recruits for community policing, evaluated the effects of command structure reform at the borough level on police performance, the introduction and impact of the Compstat (alone and with William Bratton), assessed the performance effects of Operation Impact, evaluated the management crime integrity efforts of NYPD, analyzed the relationship between crime and economic conditions at the neighborhood level, evaluated the reform of the Internal Affairs Bureau, and assessed the efficacy of stop and frisk practices as crime prevention strategy. I also recently completed an organizational assessment of the

Department of Environmental Protection Police that in charged with protecting the New York City water system. I am currently studying the effects of the adoption of a CompStat approach to policing big cities in New York. I have also studied the adoption of evidence based, outcome oriented management practices in social services, non profit organizations, the Departments of Corrections and Parks. I have been a consultant to the NYC Office of Operations on the Mayor's Management Report, and to United Way of New York and numerous nonprofit organization of the use of performance measurement and management.

My research on police has been published in six books and articles in peer reviewed journals, including the **Public Administration Review**, **Urban Affairs Quarterly**, **Journal of Criminal Justice**, **The Journal of Social Issues**, **Public Administration and Development**, and most recently my case for evidence based, outcome driven performance managed was an invited article in the **Journal of Public Policy Analysis and Management**. I am on the editorial board of the **Journal of Comparative Policy Analysis and of Policy, Organization and Society**. I have a Ph.D. in Political Science from Indiana University. My curriculum vitae are presented in Appendix A.

## **Response to the report by Jeffrey Fagan in the case of Floyd v. the City of New York.**

Dennis C. Smith

This report will address of the specific allegations, evidence and analysis presented in the report by Professor Jeffrey Fagan on the Stop, Question and Frisk practices of the New York City Police Department (NYPD).

### Summary of Issues Addressed

This is a response to two reports, one by Professor Jeffrey Fagan and one by Lou Reiter. The Fagan report addresses two claims of plaintiffs under the Fourth Amendment which alleges that the stop, question and frisk (SQF) behavior of the New

York City Police Department (NYPD) shows a pattern of unconstitutional stops by officers, and a second, Fourteenth Amendment claim that alleges that "the City, through NYPD, has 'often' used race and/or national origin in lieu of reasonable suspicion, as the factors that determine whether officers decide to stop and frisk persons. Plaintiffs claim that this practice violates the Equal Protection Clause of the Fourteenth Amendment. Plaintiffs also claim that Black and Latino males are the population group most affected by the alleged violation." I also respond to Professor Fagan critique of a study done by the Rand Corporation that challenged early work on stop, question and frisk done by Professor Fagan and colleagues that claimed to find evidence of racial and ethnic bias in the pattern of stops. The response presented here also addresses the report of Lou Reiter that criticizes the management practices of the New York City Police Department in its management and supervision of stop, questions, and frisk practices. In this response underlying assumption are identified and the quality of evidence and analysis used to support them are subjected to critical scrutiny.

#### **Additional Evidence Presented**

In addition to a direct response to the reports of Professor Fagan and Mr. Reiter I present two empirical studies, one of the Department's Operation Impact strategy of hot spot policing and the other of the effect on crime of police stops based on suspicion, which are directly relevant to one of the claims presented in my response to their critique of NYPD practices, namely that both reports are predicated on models of police practice no longer used by NYPD and that this failure to align their analyses to take into account current police practices disable their efforts to fairly assess the motivation behind and effects on the Black and Hispanic communities of all ages in the City.

#### **Summary of the Response to the Fagan Report**

The Fagan Report acknowledges the complexity of the circumstances facing police officers on the street in complying with legal issues when take action upon

observing behavior arousing suspicion that a crime has been committed, is being planned or is about to be committed. Professor Fagan says the actual complexity is too great to fully represent it in the coding scheme he uses to code thousands of stops reported by NYPD. Using his simplified coding scheme he find the 70% by his criteria are "justified" and that 6.7% are not. The remaining 23.3% are found to be of "indeterminate legality." I argue that those which are indeterminate cannot be used as evidence of police misconduct, that if those cases are treated as missing data, or if they are distributed in the same proportion as the ones he is able to code, at least 90% of the stops are "justified." I further argue that the "unjustified" stops cannot be automatically accepted as evidence of racial or ethnic bias without further investigation. This leads me to conclude that this analysis offers no support for a claim that the NYPD is using race or ethnicity, rather than for example, a commitment to protecting the community from crime, in the decision to stop or question pedestrians,

The Fagan analysis does not explicitly confront the historic shift at NYPD away from a primary mission of responding to crime to a mission of preventing crime through proactive and crime targeted police vigilance. The management innovation brought to NYPD in 1994 includes increased targeting of police vigilance in places where, and at times when violent crime is high. Police managers at the precinct level were challenged to convey to the officers under their commands the expectation that police will intervene in response to suspicious behavior, rather than wait until a crime has occurred to take action.<sup>1</sup>

The Fagan analysis does not ask, and therefore cannot answer, the question of whether police practices are consistent with a pattern of policing by NYPD aimed at crime reduction and increasing public safety. Nor, therefore, does the Fagan Report ask whether the benefits of these efforts are equally distributed or disproportionately

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concentrated in Black and Hispanic communities in the City, which is in fact the case. Any credible analysis of the determinants of stop and frisk activity must first control for the impact of evidence-based management practices before trying to parse out any other factors that may or may not have contributed to stop and frisk patterns.

The reactive (fight crime by responding to calls, making arrests) model of policing and the statistical measures implicitly built into the Fagan Report to test his models' assumptions are not the model used by NYPD to effect the most dramatic crime decline achieved by any large city in America.

Another critical flaw found in the model used in the statistical analyses in the Fagan Report is the assumption, repeatedly stated, that police crime pattern analysis and resource deployment are based at the precinct level rather than small areas within precincts. The report misses the major shift in the approach to producing public safety introduced in 2003, Operation Impact, or "hot spot policing." Operation Impact was introduced in 2003, the year before the period analyzed in the Fagan Report. All of Professor Fagan's analyses are based on precinct level of analysis when small areas of violent crime within selected precincts have been the locus of crime fighting efforts during the entire period included in the Fagan statistical tests.

The Fagan Report relies heavily on elaborate statistical analyses to find evidence that police stop Black and Hispanic New Yorkers out of proportion to their share of the population. This is somewhat strange because the fact that police stops do not mirror the characteristics of the general population is regularly conceded by the NYPD in terms not only of race and ethnicity, but also age or genders. The NYPD claims that it, as a problem solving police agency focused on crime reduction, cannot randomly distribute its scarce resources but must concentrate its vigilance and enforcement activities in areas where the preponderance of crime, particularly violent crime occurs, which is in community where a disproportionate share of the Black and Hispanic population reside.

It has to target is scarce patrol resources on current crime patterns, which are created disproportionately by young Black and Hispanic males. Thus, it does not remotely approximate in its stops females or children or senior citizens in proportion to their share of the population. The crime and arrest statistics and victims identification of suspect characteristics would not warrant such a pattern of policing aimed at crime prevention. We examine and find evidence to support the NYPD claim that violent crime is not randomly distributed, and that its stops are concentrated in high crimes areas and that police stops approximate the share of suspects identified by victims across all areas of the City, not just high crime areas or in communities of color. We also find that the approach used by NYPD has produced record levels crime reduction, and that the benefits of this greater public safety are, in human rather than percentage terms, greatest in the Black and Hispanic communities of New York City.

Professor Fagan claims that by introducing control variables in equations used in his analysis he is able to adjust for the factors related to crime and economic conditions as an alternative to directly controlling for patterns of suspect identification, but we question on a variety of grounds the variables he includes and ignores in his analysis. We find problems in his operationalization of key variables, a lack of transparency in some of his statistical decisions, and question some the interpretations of findings based on limits in the methods he employs.

Professor Fagan's review of the Rand Analysis is essentially a debate over the use of suspect identification data as a benchmark in assessing the claim of racial bias, which largely eliminates any sign of such bias, and Fagan's claim that the general population distribution provides a more appropriate benchmark. We conclude that the Rand Study is on firmer ground, given the reasonableness of the best use of "best evidence" in making deployment decision and managing police vigilance, especially in the absence

of any provision by Professor of reasons or evidence to believe that the race or ethnic pattern of victimizations where suspect identify is unknown differs in the direction of higher level of crime by whites than is found in the known suspect distribution. After devoting most of the report that addresses the Rand Study to criticizing its methods, Professor Fagan concludes that section of his report identifying and claiming as supportive selected findings from the matched pairs analysis. It appears that the Fagan report cannot have it both ways, either the methods used by Rand in its effort to draw lessons from the behavior from officers who make exceptionally high or low number of stops are flawed and are not reliable, or they are sound and the Rand main findings of no consistent pattern of bias in stops stands. The internal benchmarking study could be viewed as an effort to develop a tool for use by NYPD in managing stops and frisks rather than a test of the general practices of police stops which Rand addressed in it external benchmarking analysis that found no pattern of racial bias.

The response to the Reiter report is that his analysis also is out of date and does not appear to understand the shift in the NYPD to an outcome orientation in which the outcome of crime reduction is the focus, not activities. With respect to his inquiry into management and supervisory practices the Reiter report does not present systemic evidence to support his harsh indictment of the police management and supervisory practices of NYPD. It relies instead on ex cathedra pronouncements about what he claims are standard management practices in properly run departments without citing a single example of another department in the nation that exemplifies his preferred practices and does not provide any operational detail regarding the practices he finds wanting in NYPD. It does not appear to me that the Reiter Report offers any evidence that bears directly on the claims of the plaintiffs of racial bias in its police practices.



We present two rigorous empirical studies that test the proposition that NYPD strategies and practices are contributing significantly to crime reduction and public safety in New York City, and find evidence that both Operation Impact and stop, question and frisk practices are having a positive impact in achieving crime reduction.

Consequently, we conclude that there is no compelling evidence that NYPD officers are making stops based on race or ethnicity but instead are pursuing a strategy and using tactics that prevent crime and benefit the City as a whole, and communities of color in particular. Young Black and Hispanic males especially are being murdered, robbed and assaulted at far lower rates, and are being deterred from committing crime that victimize their communities disproportionately. As a result, far fewer young Black and Hispanic males are committing crimes, being arrested and sent to prison than was the pattern just two decades ago.

### **The Fagan Report**

The Fagan Report addresses three claims regarding police practices and reviews a study that challenges the his approach to assessing police practices:

1. "The Fourth Amendment claim alleges that the City has engaged in a pattern of unconstitutional stops of City residents that are done without requisite reasonable and articulable suspicion required under the Fourth Amendment."
2. "The Fourteenth Amendment claim alleges that the City, through NYPD, has 'often' used race and/or national origin in lieu of reasonable suspicion, as the factors that determine whether officers decide to stop and frisk persons. Plaintiffs claim that this practice violates the Equal Protection Clause of the Fourteenth Amendment. Plaintiffs also claim that Black and Latino males are the population group most affected by the alleged violation."

- o Suspect Is Associating With Persons Known For Their Criminal Activity
- o Proximity To Crime Location
- o Evasive, False Or Inconsistent Response to Officer's Questions
- o Changing Direction At Sight Of Officer/Flight
- o Ongoing Investigation, e.g. Robbery/Pattern
- o Sights And Sounds Of Criminal Activity, e.g., Bloodstains, Ringing Alarms
- o Other (Describe)

For anyone familiar with Operation Impact, the "hot spot policing" crime prevention strategy used by NYPD over the past eight years the reason for some of the items on the "Additional Circumstances" list is quite clear: a team of officers is assigned to a hot spot, an Impact Zone, in precisely those blocks where a violent crime pattern has been found, at the hours of the day and days of the week when the crime pattern occurs, fully briefed on the crimes in the pattern and the information available about known suspects related to those crimes.

Given the salience of Operation Impact in the work of NYPD to maintain the downward trend in violent crime, recognition of factors such as Area Has High Incidence of Reported Offense of Type under Investigation or Time Of Day, Day Of Week, Seasons Corresponding to Reports of Criminal Activity is needed to understand the decisions made by officers on patrol.

By Fagan's count there are, based on the items to be checked on the UF250, 1,024 possible combinations before growing exponentially if the option of providing "additional circumstances" is taken by the officer. Professor Fagan concludes that "The enormous number of combinations of circumstance made an analysis of the legal sufficiency of

individual cases extremely difficult, unwieldy and uninformative. " Difficult and wieldy is clear, but why "uninformative"? He describes his response to the complexity encountered in attempting to crystallize the officers stop decisions as follows:

Instead, using the analyses of prima facie sufficiency or conditional sufficiency of each stop circumstance discussed in appendix D, stops are classified as justified, unjustified, or indeterminate, according to the following criteria:

1. Stops are justified if the circumstances provided are considered sufficient as the sole rationale for the stop and need no additional information or qualification (i.e., Casing, Drug Transactions, or Violent Crime)
2. Stops are justified if the circumstances listed are conditionally justified e.g., carrying a suspicious object, fitting a suspect description, acting as a lookout, wearing clothing indicative of a violent crime, furtive movements, or a suspicious bulge in one's clothing), and an "additional circumstance" is also indicated.
3. Stops are unjustified if no primary stop circumstances are provided. For example, stops are unjustified if the only listed circumstances is that the suspect was present in a high crime area. Stops that list "Other Stop Factors" only are unjustified.
4. Stops are of indeterminate legality if the circumstance or circumstances listed are (all) conditionally justified, and no additional circumstances are indicated.
5. Stops are of indeterminate legality if the only circumstances listed are "other circumstances" or if no additional circumstances are indicated.

In a report that goes to great lengths to analyze potential bias in measures used by others (NYPD, the Rand Study) the only caveat attached to the method used here is to suggest that it may be too generous in justifying stops and says nothing about how the coding used might miss factors that legitimate officer suspicion.

Using this very significant simplification of the complex world of the officer, where the exponentially large combination of circumstances are potentially present, the author classifies all stops. The form, in addition to all the boxes to check, includes a number of open ended questions where the instruction is to "specify." How these further specifications are coded by NYPD or interpreted by Professor Fagan in his own coding

is not described. Imbedded in the simplified coding scheme developed by Professor

Fagan is a compound criterion for one of the "justified "categories:

2. Stops are justified if the circumstances listed are conditionally e.g., carrying a suspicious object, fitting a suspect description, acting as a lookout, wearing clothing indicative of a violent crime, furtive movement, or a suspicious bulge in one's clothing), **and** an additional circumstance is also indicated.( emphasis added)

Professor Fagan does not tell us how a U250 that lacks the additional circumstance called for was coded in his tabulation, or even why the second condition is required. In effect, Professor Fagan is substituting his own judgment for that of an informed police officer with substantive knowledge of the circumstances surrounding the stop decision, which may in fact be presented on the form but in a combination too complicated for the coding scheme developed for the Fagan Report, and may be imposing conditions on the validity of a stop that neither the court nor the plaintiffs anticipated when the revised UF250 form was reviewed and approved.

Based on a coding of the records produced by NYPD officers Professor Fagan finds that 70% of the hundreds of thousands of stops made by NYPD are "justified," and 6.7% are "unjustified." The key question is: Are those that are coded "unjustified" by Professor Fagan unconstitutional, even though they have not been subjected to all the legal distinctions elaborated in his review of case law in Appendix D? Does checking "Other Stop Factors" in a situation that Professor Fagan acknowledges is too complicated for him to fully code automatically equal "unjustified" or unconstitutional? Does it matter what the "other stop factors" are? Further, Professor Fagan has chosen in his analysis to combine unjustified and indeterminate stops together, and to analyze the combined category as if they were all unjustified.

Timing plays a crucial role in efforts to draw causal inference from an analysis of data. If, for example, one wants to test a hypothesis that gentrification caused crime decline in New York City, a finding that the temporal sequence is the opposite of that hypothesis, ie , neighborhood residence patterns changed after crime declined, one can use chronology to help draw conclusions about the logic of an argument. Similarly, for processes that occur over a period of months or even years, the modeling of time is a crucial factor in attempting to know where to look for effects. Statistical analyses often address this by specifying theoretically justifiable "lag times" that are consistent with stated management practices to examine patterns. Are events in the real world simultaneous or are they sequential with some predicted lag between cause and effect? Setting the appropriate lag, and correctly estimating when to expect effects, are crucial aspects of proper modeling. The importance of setting the time dial correctly reveals another critical flaw in the Fagan analyses: the use of crime data from the previous quarter as a means to "control for crime" in analyzing police stop behavior. Three month old crime patterns are virtually ancient history in the tactical management of crime fighting in New York City (or combating the threat of terrorism, for that matter) by NYPD.

Throughout this response to the Fagan Report, I will contend that the central motivating factor in police policy and practice at the street level is crime reduction, not harassment of Black and Hispanics, and that police actions are based on the use of the most recent information available and that actions focus on small response areas. Instead, the statistical models presented in the Fagan Report that include crime, only use it as a control variable, never as a dependent variable as does NYPD-- and as we do in two studies I will present in this report.

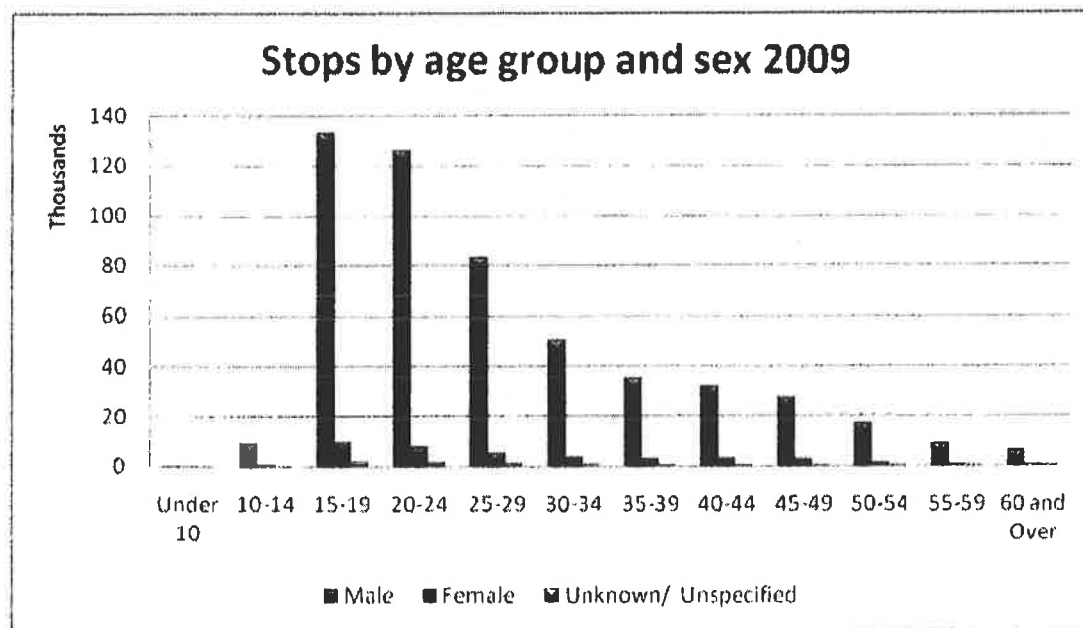
NYPD does what it does because it works. In empirical studies of crime and policing in New York done during the past five years my co-author and I tested the

theory that violent crime plateaus would lead to selection of "hot spots," that the introduction of an "impact zone" in a precinct would produce a lagged decline in crime. Therefore, in our study a time lag was used in searching for evidence of crime reduction effects. In a separate but related study, entitled "Does Stop and Frisk Stop Crime" we similarly expected that a spike in violent crime in one month would be followed by a surge in stops by police, followed by a decline in reported crime the next month. In our study of the efficacy of stop and frisk practices, finding significant positive effects on the rate of decline in crime depended on setting the time dial correctly. Our study demonstrated that the impact of stop activity on crime dissipated with time and that with lags of more than two months, there was no statistically-significant impact on crime. We observed that this phenomenon would lead police managers to constantly adapt and innovate. For Professor Fagan's analysis to have been valid, he would have had to conduct a similar sensitivity analysis using lags shorter than three months. The entire sequence of crime increases, stops increase, followed by crime declines included in our empirical study of the crime reduction effects of stop and frisk, would be indistinguishably embedded in the quarterly lags used in the Fagan multiple regression models.

The Compstat based critical shift in NYPD management to using "timely and accurate" intelligence about crime, and searching for and disseminating effective tactics, combined with the rapid deployment of resources is also missing in the models Professor Fagan used to analyze NYPD practices from 2004 to 2009. In the real time world of NYPD today and for the past fifteen years, data from three month ago would appear in the trend analyses used to track long-term progress, not in rapid deployment decisions.

A key factor in the quality of any statistical analysis is the validity and reliability of measures of variable used in the analysis. The validity question is: Does the measure

Figure 12



The omission of gender and age in Fagan's analysis, which otherwise argues for using population characteristics to benchmark police stop patterns, biases results. It would have been informative to replicate Professor Fagan's analysis and then include the gender variable in the multiple-regression to test this plausible hypothesis. Similarly, although the Fagan Report estimates the population available to encounter the police, the analysis does not adjust for unemployment patterns, which are notably higher among young, Black, and Hispanic males, who are also often identified as suspects, stopped on suspicion, and arrested by the police. Those who are unemployed have potentially forty additional hours a week to be on the street and to encounter the police on patrol. I will return to the issue of problem of choosing which variables to include in the analysis, but first a review of the problem of a mismatch between the model of policing that informs the statistical analyses in the Fagan Report and model used by NYPD to police the City.

When the Bloomberg administration came into office in 2002, the problem of crime city-wide was dramatically less than under previous administrations. However, because the 1990 peak in violent crime in New York City was so high, even with reductions of two third in some categories, murders down by hundreds, rapes reduced by several thousand, and tens of thousands fewer robberies and assaults, grand larcenies and burglaries, crime still plagued the City. The evidence-based targeting of resources and police vigilance approach that was used in the 1990s was used to refine the crime fighting effort by focusing on local "hot spots" within precincts where plateaus of violent crime remained relatively high. During the entire time studied by Professor Fagan, a major feature of NYPD practice was a focus on very small local area hot spots (some Impact Zones were only several blocks square), which led to disproportionate police presence and vigilance, and thus stops, in specific Impact Zones.

In addition, at the start of the new administration the 9-11 attack had significantly increased pressure on NYPD to guard the City against terrorist attacks. More than a thousand NYPD officers are now deployed in either the Counterterrorism or Intelligence divisions of the Department, but the entire department has been put on a heightened sense of alert. The public has been repeatedly admonished to say something if they see something, but the command to police is they see something, do something.<sup>28</sup>

The analyses conducted and reported by Professor Fagan do not address these realities of the effectiveness of police practice, and do not consider the evidence that shows that Operation Impact significantly accelerated the existing downward trend in reported violent crime in the City. Additionally, Professor Fagan's analysis, which aggregates data to the police precinct level, ignores variation within precincts, such as the existence of one or more Impact Zones. Like the first phases of crime reduction

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<sup>28</sup> Christopher Dickey, *Securing the City: Inside America Best Counterterror Force—NYPD*, 2009



under the community policing approach in the early 1990s when the upward trend in violent was finally stopped and the Compstat period introduced in 1994 after which crime trends plummeted, to the current Operation Impact strategy (2003 to the present), the parts of the City that have experienced the greatest relief from crime victimization are the low-income neighborhoods with high Black and Hispanic populations. Robbery rates (a high volume violent crime compared to murder and rape victimizations) in the ten precincts with the highest concentrations of poverty are lower today than they were in the wealthiest precincts in 1990 (in the precincts with the highest mean income).<sup>29</sup> There has been a positive, disproportionate impact in the form of dramatically reduced victimization on Black and Hispanic residents, men, women and children, of the proactive, data driven approach to police during the past decade and a half. As a by product of reduced crime commission fewer young Black and Hispanic males are being arrested for felony offenses, being convicted and imprisoned. The Fagan Report does not address nor test the hypothesis that the pattern of police stops can be explained the crime prevention strategies employed by the NYPD, epitomized by Operation Impact, the City's hot spot policing initiative.

Statistical analysis is a powerful tool and it can be persuasive if properly and carefully used. In addition to the larger issue of the failure to address the rival hypothesis that patterns of violent crime, not race or ethnicity, explains variations in police practice across the City and the people who reside, work and visit here, I will now consider some of the ways Professor Fagan's use and interpretation of statistics are problematic.

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<sup>29</sup> Dennis C. Smith and Robert Purtell, "Crime Reduction and Economic Development in New York City: The Re-distributional Effects of Improving Public Safety " A paper presented at the 27th Annual Research Conference of the Association for Public Policy Analysis and Management (APPAM) in Madison, Wisconsin, November 3-5, 2006.

The categories Black and White used in tables and charts presented in this report therefore represent Black Non-Hispanic and White Non-Hispanic.

The definition of race described and presumably used in this analysis by Professor Fagan, and the definition used by NYPD are clearly different. If this is the case such differences pose problems for assessing competing claims about the role of race and ethnicity in policing New York.

A major issue is the likelihood that there are omitted variables in Fagan's analysis. As noted, Fagan does not control for unemployment and known suspect patterns, gender or age. We know that stop question and frisk patterns vary along these dimensions, and are also correlated with crime. Omitting these variables from the model leads to omitted variable bias. An alternative way to describe this is that there is potential "confounding" by known suspect patterns, age and gender. Omitted variable bias (confounding) can distort the observed relationship between the likelihood of observing suspicious behavior by a particular population subgroup and the likelihood of being stopped by an NYPD officer. The estimated relationship between race and SQF activity may diminish after including these important control variables. Since they are not included in the analysis we can only hypothesize how the results would be altered.

Professor Fagan discusses of the need to include all important explanatory variables in regression analysis. He observes, for example (p.13) that "The goal of specifying these models is to identify the effects of race on outcomes after simultaneously considering factors that may be relevant to race. Failure to do so raises the risk of 'omitted variable bias' which could lead to erroneous conclusions about effects of variables that do appear in a regression test."

Professor Fagan uses an inaccurate technical definition of "omitted variable bias." Two conditions must hold true for omitted-variable bias to exist in linear regression: the omitted variable must be a determinant of the dependent variable (i.e.,

its true regression coefficient is not zero); and the omitted variable must be correlated with one or more of the included independent variables. Omitting variables that meet these two conditions from the model leads to omitted variable bias, which would result in substantive changes to the estimated relationship between the independent and dependent variables.

The Fagan Report addresses the issue of potential exposure to police encounters as an important consideration and includes some control variables that relate to this factor; yet these analyses omit unemployment rates for young Black and Hispanic males, which is likely correlated with both the outcome and the main effect (race). This is another instance where there is reasonable concern about an "omitted variable bias." I have previously noted that Professor Fagan states in his report (p.7)

Analyses were conducted using police precincts as the principal (sic) unit of analysis. Precincts were used instead of smaller geographical areas (beats sectors, census block groups, census tracts) because precincts are the unit where police patrol resources are aggregated, allocated supervised and monitored. Precinct crime rates are the metric for managing and evaluating police performance and are sensitive to tactical decisions in patrol and enforcement.

The concern with this statement noted earlier is that the characterization of police management appears to be based on two cited books published in 1998 and 1999. This characterization has been out of date at least since the 2003 launch and subsequent success of Operation Impact (hot spot policing). Since 2003, hot spot policing within precincts has been solidly established as a central police strategy.

The statistical problems are further compounded by the use of precincts as the unit of analysis. This is a problem because precincts are not homogenous with respect to either population or crime patterns. Within precincts, there may be a large difference in racial and socioeconomic characteristics by block or police beat. Fagan acknowledges this in his sensitivity analysis which takes into account public housing

complexes. He also acknowledges it on pg. 30: "Precinct commanders are accountable for precinct-level statistics on crime trends, though they have discretion to allocate officers tactically within precincts to specific beats or sectors." (emphasis added) The use of data aggregated at the precinct level, when the object of a study is to focus on localized effects within a larger unit, is known as "ecological fallacy" and "Simpson's paradox." RAND explains issues with Simpson's paradox when looking at data aggregated across NYC (see RAND pg.41) but there is no consideration of the potential ecological fallacy in Professor Fagan's analysis.<sup>31</sup> Large units of analysis which do not include appropriate controls can distort the observed relationship between patterns of stops and population characteristics, given the evidence of different criminal activity across sub groups, especially when one variable is aggregated at a higher level (precinct) and another variable is at the individual officer behavior level (stop decisions). It is hard to anticipate what the distortion may be.

The sensitivity analysis reported by Professor Fagan combines racially mixed and predominately white precincts (p. 43). These are not homogenous groups with respect to the factor he is trying to isolate for analysis. Lumping these groups likely distorts the effect between the likelihood that the police will encounter different population mixes on the street and the frequency of observing suspicious behavior. There is no conceptual basis for thinking these precincts are similar. When a step such as this appears in statistical analyses, it is typical characterized as a "data fishing exercise," in which the analyst manipulates the data to generate desired results. At a minimum, it suffers from inadequate explanation.

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<sup>31</sup> This point was raised specifically in the criticism above of the explanation provided by Professor Fagan of his use of log transformed precinct level crime statistics.

without statistically-insignificant variables calls into question both the validity of the results that professor Fagan presents in his report as well as his interpretation of those results. For example, the presentation of the SES Factor variable in Table 5 (pg. 33) should describe how the variable should be interpreted, whether theory would predict a positive or negative sign, and how the regression results compare to what is expected. Professor Fagan, by dropping variables from the analysis, is introducing omitted variable bias, then reporting surprise when his coefficient on race changes, but that is what is expected to happen.

Commentary on the tables (e.g. Table 6, pp. 36-38) should describe whether the coefficients have consistent interpretations across the model specifications. If they don't (which they do not), the commentary would provide text to clarify unexpected results.

The idea that the distribution of police action across subgroups should be compared to their share of the population implicitly assumes that crime is randomly distributed when all evidence is to the contrary. This is exactly the issue that Professor Fagan uses to criticize the Rand study when he faults them for using incomplete data on suspect descriptions. Professor Fagan's failure to control for race as reported in the available data, dismisses the claim that stop and frisk activities are justified by the available evidence without disproving it.

Challenging rival hypothesis is the norm in scientific inquiry. Professor Fagan has expressed his doubts about the distribution of known suspects as an explanation of the pattern of police stops. Controlling for suspect description, at least for violent crime where the proportion is known is appreciable and is the focal point of police strategy, would have been an appropriate way to examine the claim of the NYPD that he contests--- but does not directly test.

The use of crime lagged by past quarter in analyzing the work of a police department that is committed to rapid response to crime surges, further discredits his

analysis. A study in 2008<sup>32</sup> showed that stop and frisk had a statistically-significant impact on the rate of decline in crime but that the effect dissipated within one month at the longest. This is consistent with my discussions with the police, who reported that they immediately adapt their police deployment based on the prior week's crime data. Further, Professor Fagan erroneously assumes that precinct-level analysis reflects police practice when the focus on small areas within precincts ("hot spot" policing) has been the NYPD's widely noted and effective approach for the past eight years. Finally, the interpretation of a decreasing number of weapons found in stops made by police based on suspicion as a failure when the prevention goal of the police is to remove guns and other weapons used in violent crime from the street reflects the success of stop and frisk activities not its failure.

.All of the statistical issues encountered in the analyses in the Fagan Report and noted above contribute additional weight to the conclusion that neither the Fourth Amendment nor the Fourteenth amendment claims are supported by the evidence presented.

#### **The Fagan Report's analysis of the Rand Report**

In the face of charges of racial profiling by NYPD based on a claim that the pattern of stops of Black and Hispanic pedestrians by the police were not proportionate to their share in the population of New York, the NYPD engaged the Rand Corporation, a distinguished public policy research institute, to study and report on the claim that police stopping practices reflect bias. The extensive study, whose primary author is a leading police practice scholar, countered that using population characteristics to benchmark

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<sup>32</sup> Dennis C. Smith and Robert Purtell, "Does Stop and Frisk Stop Crime?—A draft paper prepared for presentation at the Annual Research Conference of the Association of Public Policy and Management, Los Angeles, Ca., November, 2008

## APPENDIX A. CURRICULUM VITAE

DENNIS CHARLES SMITH  
Associate Professor of Public Administration

NEW YORK UNIVERSITY  
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BORN: August 12, 1945 - Chicago, IL

DEGREES: B.A. University of New Mexico - Political Science 1967  
M.A. Indiana University - Political Science 1969  
Ph.D. Indiana University - Political Science 1976

### AWARDS AND HONORS:

B.A. *magna cum laude* in Political Science  
*magna cum laude* in General Honors

Phi Beta Kappa  
Woodrow Wilson fellowship

National Defense Education Act Fellowship, Title IV, Department of Political Science,  
Indiana University

TEACHING: Associate Professor (Fall 1978 - present)  
Professor in Residence New York State Assembly(Spring,2006-present)  
Assistant Professor (1973 - 78)  
Robert F. Wagner Graduate School of Public Service  
New York University  
Lecturer in Political Science, Indiana University Southeast, Jefferson, Division of Social  
Sciences (1969-71)  
Visiting Professor Bocconi University, Milan, Italy, Fall, 2005.

ADMINISTRATION at Robert F. Wagner Graduate School of Public Service  
New York University:

Program Manager, Wagner/Accenture Leading Large Scale Change Executive Briefings,  
July 2007- present.  
Director, Wagner International Initiative, 1998-2002.  
Director, Public Policy Specialization, 1992-1997  
Director, Public Administration Program, 1982-90  
Associate Dean, 1986-88

RESEARCH/CONSULTANT:

Evaluation consultant, Assessment of Public Involvement Strategies of the NY Metropolitan Transportation Authority, Federal Transportation Administration funded project., Rudin Center for Transportation Policy and Management.

Consultant: Office of the Commissioner, NYC Department of Environmental Protection, Study of the organization and management of the DEP Police, May, 2007 to April, 2008.

Consultant., Office of the Commissioner, New York City Police Department, Assessment of Operation Impact: Strategies to reduce crime hotspots in New York City, November, 2005- June 2007.

Consultant, Office of the Commissioner, New York City Police Department, Assessment of the process of maintaining the integrity of crime reports, 2005.

Consultant, NYC Human Resources Administration, Assessing the implementation of the WeCare Initiative, 2005-present.

Consultant, Office of the Commissioner, New York City Police Department, Assessment of Borough Command Structure, 2003-2004.

Consultant, Office of the NYC Deputy Mayor for Operations, Project on Performance Based Contracting 2002-2004.

Consultant, Charles Hayden Foundation, Evaluation of General Support Initiative, 1996-1998

Consultant, Dewitt-Wallace-Reader's Digest Fund, Evaluation of the "Management Initiative" A Program to Develop the Management Capacity of Youth Serving Organization (1995).

Consultant, New York City Police Foundation, Study of the Recruit Training Program of the New York Police Department Academy (1994)

Co-Director, study of ambulance service in New York City, with James R. Knickman, Health Research Program, with support from the Commonwealth Fund (1989 - 1991)

Director, study of the New York City Mayor's Management Planning and Reporting System, in collaboration with Barbara Gunn, Director of the Mayor's Office of Operations, with support from the Fund for the City of New York (1988-90).



Co-Director, study of the impact of retrenchment on the New York City Police Department (1980-81), under the auspices of the NYPD Research Advisory Committee.

Principal Investigator of "A Two-Wave Panel Study of the Impact of Education on Police Attitudes and Performance," a study funded by the Office of Criminal Justice Education and Training, Law Enforcement Assistance Administration (1977-80).

Director of Survey of Police Officials in the Police Services Study, Phase II, a study of police performance in three metropolitan areas under a grant from the National Science Foundation, Research Applied to National Needs Division (full time, Summers 1976 and 1977).

Design and execution of a study, "Institutional Arrangements and the Police: St. Louis Metropolitan Area," 1971-73, a grant to Dr. Elinor Ostrom, Associate Professor of Political Science, Indiana University, from the Center for Studies of Metropolitan Problems, National Institute of Mental Health.

Research Consultant, studies on citizen evaluations of the police in Indianapolis and Chicago metropolitan areas, 1969-71, under a grant to Dr. Elinor Ostrom from the National Science Foundation.

Research Associate, "The Organization of Government Response to Civil Disorders in Indiana," under a grant to Dr. Philip S. Kronenberg, Assistant Professor of Political Science, Indiana University, from the Law Enforcement Assistance Administration, Summer 1969.

#### PROFESSIONAL ACTIVITIES:

Keynote speaker, New York State Leadership and Accountability Conference, Albany, May, 2008.

Senior Consultant on Performance Management, SEDCO/N-PAC, 1996 to present.

Member of Board, Institute of Public Administration, 1998-present.

Member, New Progressive Scholars Network of the Progressive Policy Institute, 1996-present.

Consultant, Innovation in Government Award Program, Harvard University, 1990 – 1998.

#### UNIVERSITY AND COMMUNITY SERVICE:

Faculty Advisory Committee, King Juan Carlos I Center at NYU, 1998- present.

Member, Faculty Advisory Committee, European Union Center at New York University, 1998-present.

Member, NYU Graduate Commission, 1996-present.

Chairman, Subcommittee on Graduate and Professional Education, New York University, Chancellor's Task Force on Internal and External Communication., 1983

Chairman, New York University Faculty Council, 1982-83

Vice-Chairman, New York University Faculty Council, 1980-82

Member, Editorial Board, NYU Press, 1980-83.

Member, Presidential Search Internal Advisory Commission, 1980-81

RESEARCH AND TEACHING INTERESTS:

Management of international public service organizations

Performance measurement in the public and nonprofit sector

Program evaluation and public policy impact analysis

Urban public service delivery systems

EDITORIAL BOARD MEMBERSHIP:

The Journal of Comparative Policy Analysis  
Policy, Organization, and Society

ARTICLES AND PUBLICATIONS:

"A Multi-Strata, Similar Design for Measuring Police Performance," with Elinor Ostrom and Roger B. Parks; paper presented at the Annual Meeting of the Midwest Political Science Association (Chicago, 1973).

"The Effects of Training and Education on Police Attitudes and Performance: A Preliminary Analysis," with Elinor Ostrom, in Herbert Jacob, ed., **The Potential for Reform of Criminal Justice** (Volume III, **Sage Criminal Justice Systems Annuals**, 1974).

"On the Fate of Lilliputs in Metropolitan Policing," with Elinor Ostrom, **Public Administration Review** (March-April, 1976). Earlier version presented at the American Society for Public Administration meetings in Chicago, April 2-5, 1975. Excerpts from this paper comprised the main article in the **Criminal Justice Newsletter: A Bi-Weekly Report on Significant Developments for Leaders in Criminal Justice Administration**, Vol. 6, No. 11, May 26, 1975. Edited version in D. Hagman, **Public Planning and Control of Urban and Land Development** (West, 1980).

**Police Professionalization and Performance: An Analysis of Public Policy from the - Perspective of Police as Producers and Citizens as Consumers of a Public Service** (unpublished Ph.D. dissertation, Indiana University, 1976).

"Dangers of Police Professionalization: An Empirical Analysis." **Journal of Criminal Justice**, Vol. 6, Fall 1978. Earlier version presented to the American Society for Public Administration, Annual Meetings, Washington DC, 1976).

"Police Attitudes and Performance: The Impact of Residency." **Urban Affairs Quarterly**, Vol. 15, No. 3 (March, 1980).

**The Effects of Higher Education on Police Performance: A Critical Review of Findings**, a consultant report for the National Advisory Commission on Higher Education for Police Officers, Washington DC: The Police Foundation, 1978.

"Racial Context as a Factor in Changing Police Organizations," with Diane Baillargeon, presented at the Annual Meeting of the American Society for Public Administration, Phoenix AZ, 1978.

"Value Biases in Performance Assessment." presented at the Annual Meeting of the American Political Science Association. New York, 1978. Accepted for publication in **Evaluation Review**.

"Reforming the Police: Organizational Strategies for the Urban Crisis." in Joseph Hawes, ed. **Law and Order in American History**: Port Washington NY: Kennikat Press, 1979.

**Educating the Police: An Interim Assessment**, with Diane Baillargeon, the final report of "A Two-Wave Panel Study on Police Attitudes and Performance" to the Office of Criminal Justice Education and Training (LEAA Grant 78-CJ-AX-00027, August 1979).

**Booking the Police: Police Education Re-examined**, with Diane Baillargeon, the final report of "A Two-Wave Panel Study..." (LEAA *op. cit.*) An earlier version was presented at the annual meeting of the American Society for Criminology, 1979.

"In Pursuit of Safety: Alternative Patterns of Police Production in Three Metropolitan Areas," with Diane Baillargeon, in **Journal of Social Issues**. Vol. 30, No. 4 (1980).

"Police," in **Setting Municipal Priorities, 1982**. Charles Brecher and Raymond D. Horton, eds., New York: Russell Sage Foundation, 1982. Reprinted in **Setting Municipal Priorities: American Cities and the New York Experience**. C. Brecher and R.D. Horton, eds., NYU Press, 1984.

John Mathiason and Dennis Smith, "The Diagnostic of Reform: The Evolving Tasks and Functions of the United Nations," **Public Administration and Development** (Vol. 7, No.2, 1987).

**Performance Management in New York City: A Review of the Mayor's Management Plan and Reporting System** (Preliminary Report, October 1990).

**Improving Ambulance Use in New York City: A Final Report** (with James R. Knickman and Carolyn Berry) New York University Health Research Program report to the Commonwealth Fund, March 1991.

"Managing the Demand for Emergency Service: The New York City EMS" (with James R. Knickman and Carolyn Berry); a paper presented at the 13<sup>th</sup> Annual Research Conference of the Association of Public Policy and Management, Denver, Colorado, October 1992.

"HRA Adrift: Social Spending without Direction" (with William Grinker) in **City Journal**, September 1993.

"Performance Management in New York City: The Mayor's Management Plan and Report System in the Koch Administration, a paper presented at the 15<sup>th</sup> Annual Research Conference of the Association of Public Policy and Management, Washington, D.C., October, 1993.

"Managing Organizational Transformations: The Case of Problem-solving Community Policing in New York City," a paper presented at the 16<sup>th</sup> Annual Research Conference of the Association of Public Policy and Management, October, 1994.

"Implementing UN CIVPOL: The Challenges of International Public Management, presented at the International Studies Association Toronto Convention, March 19, 1997

"What can public managers learn from police reform in New York? COMSTAT and the promise of performance management," presented at the 19th Annual Research Conference of the Association of Public Policy and Management (APPAM) in Washington, D.C., Nov. 6-8, 1997.

"Using Technology to Create International Educational Partnerships," a paper presented at parallel plenary sessions at the 50th Anniversary Conference of the Council on International Education Exchange in Barcelona, Spain, November 18-20, 1997.

"Making Management Count: Toward Theory-Based Performance Management," (with R. Barnes) 20th Annual Research Conference of the Association of Public Policy and Management (APPAM) in New York, NY., November 2-4, 1998. Revised version submitted for final review to **Nonprofit Leadership and Management**.

"Performance Management in New York City: COMPSTAT and the Revolution in Police Management,"(with William Bratton) in **Quicker, Better, Cheaper?: Managing Performance in American Government**, edited Dall Forsythe, SUNY Press Albany, 2001.

"Electronic government, transparency, and performance management in the governance of cities," a paper presented at the United Nations/Metropolitan Seoul Conference on E-Governance, Seoul, Korea, August, 2001.

"Old Wine, New Bottles? The Distinctive Challenges of Managing International Public Service Organizations," A paper presented at the 23rd Annual Research Conference of the Association for Public Policy Analysis and Management (APPAM) in Washington DC, November 1-3, 2001.

"Managing UNCIVPOL: The potential of performance management in international public services," in Dijkzeul, D., Beigbeder, Y (eds.) **Rethinking International Organizations: Pathologies and Promise**, Berghahn Books, Oxford/New York, 2003.

"The Promise and Pitfalls of Performance Base Contracting," A paper presented at the 25<sup>th</sup> Annual Research Conference of the Association for Public Policy Analysis and Management (APPAM) in Washington DC, November 6-7, 2004.

" An Empirical Assessment of Seven Years of SATCOM: The NYPD Command Structure in Brooklyn North" ( with Joseph Benning) A paper presented at the 26<sup>th</sup>

Annual Research Conference of the Association for Public Policy Analysis and Management (APPAM) in Atlanta, Georgia November 3-5, 2005.

"The Transformation of Social Services Management in New York City: "CompStating" Welfare" (with William Grinker) A paper presented at the 26<sup>th</sup> Annual Research Conference of the Association for Public Policy Analysis and Management (APPAM) in Atlanta, Georgia November 3-5, 2005.

"Partners in Performance: Effectiveness and integrity in the public sector," with Frank Anechiarico, paper presented at the ASPA conference "Ethics and Integrity in Governance: A Trans-Atlantic Dialogue, in Leuven, Belgium, June 1-3, 2005.

"Practice, practice, practice: The education and training of policy analysts at NYU/ Wagner" in Iris Geva-May ed., **Thinking Like a Policy Analyst: A Clinical Approach to Policy Analysis**, Palgrave, 2005.

"Putting it all together: E-government, Transparency and Performance Management." Presented at the APEC/Korean Independent Commission Against Corruption Seminar on E-government, Transparency and Governance. Seoul, Korea, September 1-2, 2005.

"Managing for Performance and Integrity: Administrative Reform in New York City Government" (with Frank Anechiarico). Presented at the Annual Meetings of the American Society for Public Administration, April 4, 2006, Denver, Colorado.

"Performance as Integrity, Integrity as Performance: A New Paradigm for Public Administration" (with Frank Anechiarico). Presented at the ASPA conference "Public Sector Performance: A Trans-Atlantic Dialogue, in Leuven, Belgium, June 1-3, 2006. Also presented at City University of Hong Kong, June 9, 2006.

"Crime Reduction and Economic Development in New York City: The Redistributive Effects of Improving Public Safety" (with Robert Purtell) A paper presented at the 27<sup>th</sup> Annual Research Conference of the Association for Public Policy Analysis and Management (APPAM) in Madison, Wisconsin, November 3-5, 2006.

"An Empirical Assessment of NYPD's 'Operation Impact': A Targeted Zone Crime-Reduction Strategy" (with Robert Purtell), a paper presented at the APPAM Annual Research Conference, Washington DC, November, 2007.

"Can New York CompStat State Government Performance?" an invited paper presented in Workshop on Performance Measurement in Multi-level Governments at the 4<sup>th</sup> TransAtlantic Public Administration Dialogue in Milan, Italy, June, 2008.

"Does Stop and Frisk Stop Crime" (with Robert Purtell) A paper presented at the 29<sup>th</sup> Annual Research Conference of the Association for Public Policy Analysis and Management (APPAM) in Los Angeles, California, November 6-9, 2008.

"Evaluation of the New York Integrity System" in Local Integrity Systems: World Cities Fighting Corruption and Safeguarding Integrity, edited by Leo Huberts, et al., BJU Legal Publishers, 2008.

"Making Management Count: A case for theory and evidence based public management,"

**Journal of Policy Analysis and Management**, Summer 2009.

"Are New York State's Public Authorities Performing Well? Who knows?"

**Government, Law and Policy Journal**, forthcoming, Winter, 2010,

"Right from the Start: The Managerial Advantages of Combining Effectiveness and Integrity in Policy Design," (with Frank Anechiarico) paper presented and annual research conference of the Association of Public Policy and Management, Washington DC, November 5-7, 2009.

"Implementing Police Management Reform: the diffusion of Compstat in the cities of New York State" With Robert Purtell. paper presented and annual research conference of the Association of Public Policy and Management, Washington DC, November 5-7, 2009.

# Exhibit B

OMAP/CAPPS

**Merged unarrested suspects and arrested suspect information for 2009**

**Examining the crime complaint records and the information they contain describing unarrested suspects as well as information on arrests associated with the complaint reveals:**

All complaint reports recorded as occurring in 2009	510,222
Complaints with no unarrested suspect or arrestee records	141,451
Complaints with at least one unarrested suspect or arrestee record	368,771
% of complaints with at least one unarrested suspect or arrestee	<b>72.3%</b>
Number of unarrested suspects or arrestees associated with the 368,771 complaints	425,678

Violent felony complaints occurring in 2009	36,992
Violent felony complaints with no unarrested suspect or arrestee	405
Violent felony complaints with at least one unarrested suspect or arrestee	36,587
% of violent felony complaints with at least one unarrested suspect or arrestee	<b>98.9%</b>
Number of unarrested suspects or arrestees associated with the 36,587 complaints	53,510

*(Violent felony complaints include murder, rape, robbery and felonious assault)*

Robbery complaints occurring in 2009	18,587
Robbery complaints with no unarrested suspect or arrestee	110
Robbery complaints with at least one unarrested suspect or arrestee	18,477
% of robbery complaints with at least one unarrested suspect or arrestee	<b>99.4%</b>
Number of unarrested suspects or arrestees associated with the 18,477 complaints	31,066

Assault 3 and Related offenses complaints occurring in 2009	50,161
Assault 3 and Related offenses complaints with no unarrested suspect or arrestee	263
Assault 3 and Related offenses complaints with at least one unarrested suspect or arrestee	49,898
% of Assault 3 and Related offenses complaints with at least one unarrested suspect or arrestee	<b>99.5%</b>
Number of unarrested suspects or arrestees associated with the 50,161 complaints	57,686

Oth. Fel. Sex Crimes & Misd. Sex Crimes complaints occurring in 2009	5,175
Oth. Fel. Sex Crimes & Misd. Sex Crimes complaints with no unarrested suspect or arrestee	756
Oth. Fel. Sex Crimes & Misd. Sex Crimes complaints with at least one unarrested suspect or arrestee	4,419
% of Oth. Fel. Sex Crimes & Misd. Sex Crimes complaints with at least one unarrested suspect or arrestee	<b>85.4%</b>
Number of unarrested suspects or arrestees associated with the 5,175 complaints	5,032



OMAP/CAPPS

**An examination of the unarrested suspect and arrest records to identify those records that contain race/ethnicity on one or more unarrested suspect or arrestee records**

All complaint reports occurring in 2009 (with one or more unarrested suspect or arrestee race/ethnicity recorded)	314,657
% of complaints with one or more unarrested suspect or arrestee with race/ethnicity recorded	<b>61.7%</b>
Number of unarrested suspects or arrestees associated with the 314,657 complaints	364,596

All violent felony complaint reports occurring in 2009 (with one or more unarrested suspect or arrestee race/ethnicity recorded)	31,501
% of violent felony complaints with one or more unarrested suspect or arrestee with race/ethnicity recorded	<b>85.2%</b>
Number of unarrested suspects or arrestees associated with the 31,501 complaints	45,839

*(Violent felony complaints include murder, rape, robbery and felonious assault)*

All robbery complaint reports occurring in 2009 (with one or more unarrested suspect or arrestee race/ethnicity recorded)	16,419
% of robbery complaints with one or more unarrested suspect or arrestee with race/ethnicity recorded	<b>88.3%</b>
Number of unarrested suspects or arrestees associated with the 16,419 complaints	27,119

All Assault 3 and Related offenses complaint reports occurring in 2009 (with one or more unarrested suspect or arrestee race/ethnicity recorded)	45,080
% of Assault 3 and Related offenses complaints with one or more unarrested suspect or arrestee with race/ethnicity recorded	<b>89.9%</b>
Number of unarrested suspects or arrestees associated with the 45,080 complaints	52,586

All Oth. Fel.Sex Crimes & Misd. Sex Crimes reports occurring in 2009 (with one or more unarrested suspect or arrestee race/ethnicity recorded)	3,977
% of Oth. Fel.Sex Crimes & Misd. Sex Crimes complaints with one or more unarrested suspect or arrestee with race/ethnicity recorded	<b>76.9%</b>
Number of unarrested suspects or arrestees associated with the 3,977 complaints	4,569

OMAP/CAPPS

**Merged unarrested suspects and arrested suspect information for 2010**

**Examining the crime complaint records and the information they contain describing unarrested suspects as well as information on arrests associated with the complaint reveals:**

All complaint reports recorded as occurring in 2010	507,690
Complaints with no unarrested suspect or arrestee records	132,063
Complaints with at least one unarrested suspect or arrestee record	375,627
% of complaints with at least one unarrested suspect or arrestee	<b>74.0%</b>
Number of unarrested suspects or arrestees associated with the 375,627 complaints	434,644

Violent felony complaints occurring in 2010	38,465
Violent felony complaints with no unarrested suspect or arrestee	265
Violent felony complaints with at least one unarrested suspect or arrestee	38,200
% of violent felony complaints with at least one unarrested suspect or arrestee	<b>99.3%</b>
Number of unarrested suspects or arrestees associated with the 38,200 complaints	56,167

*(Violent felony complaints include murder, rape, robbery and felonious assault)*

Robbery complaints occurring in 2010	19,576
Robbery complaints with no unarrested suspect or arrestee	87
Robbery complaints with at least one unarrested suspect or arrestee	19,489
% of robbery complaints with at least one unarrested suspect or arrestee	<b>99.6%</b>
Number of unarrested suspects or arrestees associated with the 19,489 complaints	32,604

Assault 3 and Related offenses complaints occurring in 2010	52,627
Assault 3 and Related offenses complaints with no unarrested suspect or arrestee	70
Assault 3 and Related offenses complaints with at least one unarrested suspect or arrestee	52,557
% of Assault 3 and Related offenses complaints with at least one unarrested suspect or arrestee	<b>99.9%</b>
Number of unarrested suspects or arrestees associated with the 52,627 complaints	60,759

Oth. Fel. Sex Crimes & Misd. Sex Crimes complaints occurring in 2010	5,186
Oth. Fel. Sex Crimes & Misd. Sex Crimes complaints with no unarrested suspect or arrestee	760
Oth. Fel. Sex Crimes & Misd. Sex Crimes complaints with at least one unarrested suspect or arrestee	4,426
% of Oth. Fel. Sex Crimes & Misd. Sex Crimes complaints with at least one unarrested suspect or arrestee	<b>85.3%</b>
Number of unarrested suspects or arrestees associated with the 4,426 complaints	5,124

OMAP/CAPPS

**An examination of the unarrested suspect and arrest records to identify those records that contain race/ethnicity on one or more unarrested suspect or arrestee records**

All complaint reports occurring in 2010 (with one or more unarrested suspect or arrestee race/ethnicity recorded)	318,812
% of complaints with one or more unarrested suspect or arrestee with race/ethnicity recorded	<b>62.8%</b>
Number of unarrested suspects or arrestees associated with the 318,812 complaints	375,882

All violent felony complaint reports occurring in 2010 (with one or more unarrested suspect or arrestee race/ethnicity recorded)	32,684
% of violent felony complaints with one or more unarrested suspect or arrestee with race/ethnicity recorded	<b>85.0%</b>
Number of unarrested suspects or arrestees associated with the 32,684 complaints	49,830

*(Violent felony complaints include murder, rape, robbery and felonious assault)*

All robbery complaint reports occurring in 2010 (with one or more unarrested suspect or arrestee race/ethnicity recorded)	16,954
% of robbery complaints with one or more unarrested suspect or arrestee with race/ethnicity recorded	<b>86.6%</b>
Number of unarrested suspects or arrestees associated with the 16,954 complaints	29,433

All Assault 3 and Related offenses complaint reports occurring in 2010 (with one or more unarrested suspect or arrestee race/ethnicity recorded)	47,609
% of Assault 3 and Related offenses complaints with one or more unarrested suspect or arrestee with race/ethnicity recorded	<b>90.5%</b>
Number of unarrested suspects or arrestees associated with the 47,609 complaints	55,481

All Oth. Fel.Sex Crimes & Misd. Sex Crimes reports occurring in 2010 (with one or more unarrested suspect or arrestee race/ethnicity recorded)	3,982
% of Oth. Fel.Sex Crimes & Misd. Sex Crimes complaints with one or more unarrested suspect or arrestee with race/ethnicity recorded	<b>76.8%</b>
Number of unarrested suspects or arrestees associated with the 3,982 complaints	4,662

# Exhibit C

2009 Stop Question & Frisk Activity by Known Race Ethnicity of Subject (1)								2009 Violent Crime Known Unarrested & Arrested Suspects by Race/Ethnicity (2)								2010 Resident Population (3)									
Pct	ASIAN/P	AC.ISL	BLACK	HISPANIC	Black & Hispanic	UNK/OTH	WHITE	Total	Pct	ASIAN/P	AC.ISL	BLACK	HISPANIC	Black & Hispanic	UNK/OTH	WHITE	Total	Pct	ASIAN/P	AC.ISL	BLACK	HISPANIC	Black & Hispanic	UNK/OTH	WHITE
001	3.2%	63.2%	19.7%	82.9%	1.9%	12.0%	1	001	4.1%	57.2%	18.9%	76.1%	2.5%	17.3%	1	1	15.8%	3.0%	7.0%	10.0%	3.4%	70.8%			
005	14.0%	40.3%	29.6%	69.9%	5.2%	10.9%	1	005	16.9%	45.1%	27.0%	72.1%	4.1%	6.9%	1	5	62.2%	4.4%	11.2%	15.6%	1.7%	20.4%			
006	2.3%	56.9%	20.1%	77.0%	3.1%	17.5%	1	006	0.6%	62.3%	19.6%	81.8%	3.0%	14.6%	1	6	8.0%	2.0%	6.1%	8.0%	2.8%	81.1%			
007	3.8%	34.9%	46.6%	81.5%	3.0%	11.8%	1	007	2.7%	52.8%	30.4%	83.2%	6.7%	7.4%	1	7	34.1%	8.1%	31.9%	40.0%	2.0%	23.9%			
009	2.7%	33.2%	40.5%	73.7%	4.1%	19.5%	1	009	1.7%	51.9%	30.4%	82.3%	5.9%	10.1%	1	9	14.2%	7.2%	23.9%	31.1%	3.0%	51.8%			
010	2.8%	46.5%	28.7%	75.2%	1.9%	20.1%	1	010	3.1%	63.8%	19.3%	83.0%	4.9%	9.0%	1	10	11.2%	7.0%	17.6%	24.6%	2.8%	61.4%			
013	2.9%	44.2%	30.9%	75.1%	6.1%	15.9%	1	013	2.1%	55.8%	22.8%	78.6%	3.2%	16.2%	1	13	13.7%	4.7%	9.1%	13.8%	2.7%	69.8%			
014	2.8%	57.4%	23.7%	81.1%	3.0%	13.1%	1	014	3.3%	61.0%	23.3%	84.4%	1.1%	11.2%	1	14	23.9%	6.6%	10.6%	17.2%	2.7%	56.2%			
017	6.1%	36.9%	27.5%	64.4%	7.1%	22.3%	1	017	3.6%	55.5%	19.7%	75.2%	2.2%	19.0%	1	17	14.0%	2.0%	5.8%	7.8%	2.1%	76.1%			
018	2.9%	50.4%	23.5%	73.9%	4.1%	19.0%	1	018	3.3%	53.9%	26.0%	79.9%	2.3%	14.5%	1	18	15.6%	4.9%	16.4%	21.3%	2.7%	60.4%			
019	3.6%	35.3%	31.3%	66.6%	4.9%	24.9%	1	019	1.2%	50.5%	22.8%	73.3%	3.6%	21.9%	1	19	8.1%	2.3%	6.6%	9.0%	2.0%	81.0%			
020	3.4%	39.9%	30.1%	70.0%	4.5%	22.2%	1	020	2.3%	50.9%	27.1%	78.0%	3.2%	16.5%	1	20	8.8%	3.8%	8.4%	12.1%	2.2%	76.9%			
022	2.0%	40.8%	29.1%	69.9%	9.8%	18.3%	1	022	1.7%	68.3%	18.3%	86.7%	6.7%	5.0%	1	22	0.0%	64.0%	24.0%	88.0%	4.0%	8.0%			
023	0.8%	55.8%	36.7%	92.5%	3.9%	2.8%	1	023	0.3%	62.4%	32.0%	94.4%	4.1%	1.1%	1	23	7.5%	25.4%	50.1%	75.6%	2.1%	14.9%			
024	0.7%	59.1%	32.0%	91.1%	2.0%	6.2%	1	024	0.4%	50.1%	34.2%	84.3%	9.0%	6.3%	1	24	6.6%	11.3%	21.4%	32.6%	2.6%	58.2%			
025	0.6%	62.3%	30.0%	92.4%	3.8%	3.1%	1	025	0.5%	67.2%	24.7%	91.9%	6.1%	1.5%	1	25	2.6%	40.1%	47.7%	87.8%	2.0%	7.5%			
026	0.8%	70.8%	24.5%	95.3%	1.0%	2.9%	1	026	0.7%	65.2%	28.7%	93.9%	4.1%	1.3%	1	26	12.5%	20.5%	24.8%	45.3%	3.4%	38.8%			
028	0.7%	81.7%	13.5%	95.3%	1.8%	2.2%	1	028	0.2%	84.5%	10.4%	94.8%	3.6%	1.5%	1	28	3.6%	56.0%	21.0%	77.0%	3.3%	16.1%			
030	0.6%	45.8%	48.5%	94.4%	2.6%	2.4%	1	030		47.7%	44.7%	92.4%	6.0%	1.7%	1	30	2.3%	27.9%	57.4%	85.3%	2.2%	10.2%			
032	0.7%	89.8%	7.9%	97.7%	1.0%	0.7%	1	032		84.0%	9.4%	93.4%	5.5%	1.1%	1	32	1.7%	67.4%	23.0%	90.3%	2.5%	5.4%			
033	0.6%	24.6%	68.6%	93.2%	2.7%	3.5%	1	033	0.2%	27.7%	66.9%	94.6%	4.1%	1.0%	1	33	2.7%	11.2%	74.3%	85.5%	1.5%	10.3%			
034	0.5%	13.0%	79.2%	92.1%	4.6%	2.8%	1	034	0.2%	19.6%	73.0%	92.5%	5.6%	1.7%	1	34	2.4%	4.7%	68.8%	73.5%	1.5%	22.6%			
040	0.2%	50.4%	46.4%	96.8%	2.3%	0.7%	1	040		49.5%	47.7%	97.1%	2.0%	0.9%	1	40	0.6%	25.9%	70.9%	96.8%	1.0%	1.6%			
041	0.1%	42.9%	45.0%	87.9%	10.1%	1.8%	1	041		53.2%	42.6%	95.8%	3.2%	1.0%	1	41	0.7%	22.1%	74.8%	96.9%	1.1%	1.3%			
042	0.2%	60.8%	32.8%	93.6%	5.5%	0.7%	1	042	0.1%	64.7%	31.3%	96.0%	3.4%	0.4%	1	42	0.5%	39.4%	57.7%	97.0%	1.3%	1.2%			
043	0.8%	46.2%	46.4%	92.6%	5.2%	1.4%	1	043	1.1%	54.9%	36.8%	91.7%	5.6%	1.6%	1	43	5.8%	30.8%	57.6%	88.5%	3.0%	2.8%			
044	0.6%	43.3%	47.0%	90.3%	7.9%	1.2%	1	044	0.4%	52.0%	44.0%	96.1%	2.5%	1.0%	1	44	1.5%	32.3%	63.1%	95.4%	1.6%	1.5%			
045	1.9%	34.9%	41.4%	76.2%	1.8%	20.1%	1	045	0.6%	53.5%	31.7%	85.2%	4.4%	9.9%	1	45	4.6%	22.3%	36.6%	58.9%	2.1%	34.4%			
046	0.8%	40.4%	46.8%	87.2%	10.8%	1.3%	1	046	0.4%	51.0%	42.9%	93.8%	4.9%	0.9%	1	46	1.5%	28.7%	66.7%	95.5%	1.6%	1.4%			
047	1.0%	74.0%	20.2%	94.2%	3.1%	1.8%	1	047	1.1%	80.8%	12.9%	93.7%	4.2%	1.0%	1	47	1.9%	65.0%	22.9%	88.0%	3.0%	7.1%			
048	0.5%	44.9%	48.9%	93.8%	2.7%	3.0%	1	048	0.1%	50.2%	44.1%	94.3%	3.9%	1.7%	1	48	1.1%	25.9%	64.2%	90.1%	1.3%	7.5%			
049	1.8%	47.2%	37.7%	84.9%	2.9%	10.4%	1	049	1.5%	55.4%	34.5%	89.8%	2.6%	6.0%	1	49	7.6%	20.4%	42.5%	62.8%	2.3%	27.2%			
050	0.8%	30.5%	58.0%	88.5%	1.1%	9.6%	1	050		37.5%	51.7%	89.2%	6.3%	4.5%	1	50	5.0%	11.2%	43.4%	54.6%	1.9%	38.5%			
052	1.2%	31.7%	55.9%	87.6%	7.2%	4.0%	1	052	0.9%	40.9%	51.4%	92.3%	4.9%	1.9%	1	52	6.6%	18.8%	65.3%	84.1%	2.1%	7.2%			
060	2.0%	51.9%	25.4%	77.3%	1.7%	19.0%	1	060	2.5%	52.6%	23.5%	76.1%	2.5%	18.9%	1	60	11.8%	12.9%	16.7%	29.6%	1.7%	57.0%			
061	2.1%	33.0%	18.5%	51.4%	2.2%	44.3%	1	061	2.7%	49.4%	15.5%	64.9%	2.7%	29.7%	1	61	15.1%	3.3%	8.2%	11.5%	1.6%	71.9%			
062	5.1%	7.2%	27.5%	34.8%	3.2%	56.9%	1	062	7.9%	20.6%	37.1%	57.8%	2.8%	31.5%	1	62	34.6%	0.7%	13.3%	14.1%	1.5%	49.9%			
063	1.0%	76.1%	6.9%	83.0%	5.4%	10.5%	1	063	0.8%	78.3%	6.4%	84.7%	5.4%	9.1%	1	63	4.7%	42.8%	8.5%	51.3%	2.2%	41.8%			
066	8.3%	10.1%	52.1%	62.3%	5.9%	23.6%	1	066	10.9%	22.8%	45.7%	68.5%	4.6%	16.0%	1	66	17.7%	2.3%	13.0%	15.3%	1.7%	65.4%			
067	1.0%	94.3%	2.1%	96.4%	1.8%	0.8%	1	067	0.2%	92.7%	3.0%	95.7%	3.7%	0.4%	1	67	1.1%	88.4%	6.8%	95.2%	2.2%	1.4%			
068	4.2%	6.2%	28.6%	34.7%	1.4%	59.6%	1	068	5.7%	13.8%	41.0%	54.8%	5.4%	34.1%	1	68	20.7%	1.4%	14.4%	15.8%	2.1%	61.5%			
069	0.7%	90.7%	6.3%	97.0%	0.7%	1.6%	1	069	0.3%	89.0%	3.9%	92.9%	6.0%	0.8%	1	69	2.7%	81.0%	8.4%	89.3%	2.1%	5.9%			
070	2.8%	72.7%	20.2%	92.9%	1.6%	2.7%	1	070	2.6%	77.1%	13.2%	90.3%	2.0%	5.1%	1	70	9.5%	35.4%	15.7%	51.1%	2.4%	37.1%			
071	0.5%	92.8%	4.6%	97.4%	0.3%	1.8%	1	071	1.1%	88.6%	4.8%	93.4%	4.1%	1.5%	1	71	1.3%	68.0%	9.3%	77.3%	2.3%	19.1%			
072	2.2%	8.4%	81.9%	90.3%	1.9%	5.6%	1	072	6.1%	13.3%	68.8%	82.1%	4.3%	7.5%	1	72	26.4%	2.9%	45.4%	48.4%	1.9%	23.3%			
073	0.5%	86.8%	8.7%	95.5%	3.3%	0.7%	1	073		89.2%	7.1%	96.3%	3.3%	0.4%	1	73	0.7%	76.2%	20.1%	96.3%	2.0%	1.0%			
075	1.0%	77.6%	17.4%	95.0%	2.7%	1.3%	1	075	1.5%	74.0%	20.1%	94.2%	3.1%	1.3%	1	75	4.9%	51.6%	36.6%	88.3%	3.4%	3.4%			

076	2.3%	42.4%	34.6%	77.0%	2.1%	18.6%	1	076	1.5%	60.2%	21.4%	81.6%	8.5%	8.5%	1	76	4.7%	14.0%	21.8%	35.8%	2.8%	56.7%
077	0.8%	86.8%	6.5%	93.4%	3.9%	2.0%	1	077	0.2%	91.1%	5.5%	96.6%	2.5%	0.7%	1	77	2.8%	65.5%	11.9%	77.5%	3.0%	16.7%
078	2.0%	40.2%	34.7%	75.0%	6.1%	16.9%	1	078	1.0%	61.4%	24.1%	85.4%	6.4%	7.1%	1	78	5.8%	8.0%	15.6%	23.5%	3.6%	67.0%
079	0.6%	79.5%	12.3%	91.8%	3.7%	3.8%	1	079	0.9%	81.3%	13.7%	95.0%	3.1%	1.1%	1	79	2.7%	56.7%	22.2%	78.8%	2.4%	16.1%
081	0.4%	90.3%	7.0%	97.3%	1.7%	0.7%	1	081	0.3%	90.4%	5.6%	96.0%	3.2%	0.4%	1	81	1.7%	76.0%	16.7%	92.7%	2.2%	3.4%
083	0.8%	36.2%	56.9%	93.1%	2.3%	3.8%	1	083	0.4%	53.0%	41.2%	94.2%	4.3%	1.2%	1	83	4.3%	20.1%	65.4%	85.5%	1.7%	8.5%
084	2.1%	67.4%	18.2%	85.6%	1.8%	10.5%	1	084	1.6%	76.3%	14.9%	91.2%	2.9%	4.3%	1	84	9.3%	12.3%	12.6%	24.9%	3.4%	62.4%
088	1.7%	78.0%	13.7%	91.7%	1.5%	5.1%	1	088	0.7%	84.2%	8.6%	92.8%	3.3%	3.1%	1	88	6.5%	42.8%	15.7%	58.5%	4.1%	30.9%
090	0.9%	34.6%	53.7%	88.3%	2.2%	8.6%	1	090	0.5%	45.7%	44.3%	90.0%	4.1%	5.4%	1	90	4.7%	6.2%	32.5%	38.7%	1.4%	55.2%
094	1.4%	21.5%	38.8%	60.3%	1.2%	37.1%	1	094	1.0%	37.1%	34.0%	71.1%	8.2%	19.7%	1	94	5.8%	3.0%	16.2%	19.2%	2.4%	72.6%
100	1.1%	66.1%	15.1%	81.2%	0.6%	17.1%	1	100	1.3%	59.7%	17.3%	77.1%	3.0%	18.6%	1	100	2.8%	24.2%	14.9%	39.2%	2.1%	55.9%
101	0.4%	89.7%	7.2%	96.9%	1.8%	0.9%	1	101	0.2%	81.7%	11.5%	93.1%	5.5%	1.1%	1	101	1.9%	49.3%	25.3%	74.5%	3.2%	20.4%
102	20.7%	18.5%	44.7%	63.2%	7.0%	9.0%	1	102	13.6%	39.1%	35.5%	74.6%	5.1%	6.6%	1	102	21.8%	8.3%	40.8%	49.1%	9.2%	19.9%
103	3.2%	70.5%	18.3%	88.8%	6.1%	1.9%	1	103	4.6%	70.8%	20.5%	91.3%	2.5%	1.6%	1	103	16.7%	43.3%	27.7%	71.1%	9.6%	2.6%
104	3.0%	9.6%	53.8%	63.4%	1.8%	31.9%	1	104	2.0%	22.8%	51.1%	74.0%	4.4%	19.6%	1	104	7.7%	1.4%	34.6%	36.0%	1.4%	54.9%
105	5.2%	71.2%	12.2%	83.5%	5.8%	5.5%	1	105	3.9%	80.7%	7.2%	87.9%	6.1%	2.1%	1	105	14.7%	55.2%	11.8%	67.0%	5.2%	13.1%
106	30.8%	33.0%	20.9%	53.9%	5.4%	9.9%	1	106	20.1%	53.6%	18.5%	72.1%	3.5%	4.3%	1	106	18.3%	17.1%	23.1%	40.3%	15.6%	25.9%
107	9.0%	42.7%	24.9%	67.7%	6.3%	17.0%	1	107	5.5%	62.2%	20.0%	82.2%	6.9%	5.3%	1	107	31.2%	12.6%	17.0%	29.6%	4.2%	35.0%
108	15.5%	10.4%	53.3%	63.7%	0.6%	20.2%	1	108	7.2%	34.0%	43.6%	77.6%	5.9%	9.3%	1	108	32.0%	1.9%	34.6%	36.5%	2.8%	28.7%
109	15.0%	14.6%	52.1%	66.7%	2.4%	15.8%	1	109	25.7%	27.6%	32.8%	60.4%	2.0%	11.9%	1	109	49.4%	2.2%	16.6%	18.9%	2.0%	29.8%
110	3.7%	8.6%	82.4%	91.1%	1.7%	3.6%	1	110	5.9%	16.4%	70.0%	86.4%	4.2%	3.5%	1	110	33.2%	5.3%	52.3%	57.6%	2.1%	7.2%
111	18.0%	14.1%	27.4%	41.5%	5.9%	34.5%	1	111	9.9%	40.8%	27.4%	68.2%	7.2%	14.8%	1	111	39.3%	2.1%	10.0%	12.1%	1.6%	47.0%
112	5.9%	17.7%	27.6%	45.3%	6.0%	42.8%	1	112	2.3%	44.6%	25.2%	69.8%	2.3%	25.6%	1	112	26.1%	2.5%	13.5%	16.0%	2.7%	55.3%
113	1.3%	90.1%	4.4%	94.5%	3.3%	0.9%	1	113	1.5%	89.1%	4.2%	93.3%	3.9%	1.3%	1	113	2.2%	84.7%	8.1%	92.8%	4.1%	0.9%
114	5.2%	35.2%	36.1%	71.4%	5.5%	18.0%	1	114	1.9%	43.5%	37.7%	81.3%	2.9%	13.9%	1	114	14.3%	10.4%	26.8%	37.2%	3.3%	45.1%
115	3.0%	7.5%	84.9%	92.4%	1.6%	3.0%	1	115	2.1%	11.2%	79.9%	91.1%	3.2%	3.6%	1	115	15.8%	6.2%	64.2%	70.4%	2.0%	11.9%
120	1.1%	57.5%	25.3%	82.8%	1.2%	14.8%	1	120	0.9%	57.1%	23.4%	80.5%	7.8%	10.9%	1	120	7.5%	22.0%	28.5%	50.4%	2.5%	39.6%
122	1.9%	14.7%	16.1%	30.9%	5.4%	61.8%	1	122	2.1%	32.2%	23.5%	55.7%	2.4%	39.8%	1	122	8.8%	2.3%	11.8%	14.1%	1.5%	75.6%
123	1.4%	4.2%	7.7%	11.9%	2.9%	83.9%	1	123	1.6%	16.9%	15.3%	32.3%	3.2%	62.9%	1	123	4.6%	1.2%	8.1%	9.4%	1.0%	85.0%
TOTAL	2.9%	53.4%	31.0%	84.4%	3.5%	9.3%	1	TOTAL	2.5%	58.3%	29.1%	87.4%	4.1%	6.0%	1	TOTAL	12.6%	22.8%	28.6%	51.3%	2.7%	33.3%

1. Source NYPD UF250 report data base for 2009.

2. Source NYPD Records management system merging all unarrested suspect and arrested suspect known Race/Ethnicity information for Violent crime incidents occurring in 2009 and arrests made within 24 hours of the incident record created date.

3. Source City Planning Department 2010 Census Bureau population counts by precinct.

2010 Stop Question & Frisk Activity by Known Race Ethnicity of Subject (1)								2010 Violent Crime Known Unarrested & Arrested Suspects by Race/Ethnicity (2)								2010 Resident Population (3)						
Pct	ASIAN/P AC.ISL	BLACK	HISPANIC	Black & Hispanic	UNK/OTH	WHITE	Total	Pct	ASIAN/PA C.ISL	BLACK	HISPANIC	Black & Hispanic	UNK/OTH	WHITE	Total	Pct	ASIAN/PA C.ISL	BLACK	HISPANIC	Black & Hispanic	UNK/OTH	WHITE
001	3.8%	61.1%	20.6%	81.8%	1.1%	13.3%	1	001	2.2%	54.3%	22.8%	77.2%	3.9%	16.8%	1	1	15.8%	3.0%	7.0%	10.0%	3.4%	70.8%
005	13.1%	41.7%	28.7%	70.4%	6.4%	10.1%	1	005	17.2%	40.4%	25.0%	65.4%	5.7%	11.7%	1	5	62.2%	4.4%	11.2%	15.6%	1.7%	20.4%
006	2.2%	56.2%	19.0%	75.2%	3.7%	18.8%	1	006	3.6%	51.0%	21.5%	72.5%	2.1%	21.8%	1	6	8.0%	2.0%	6.1%	8.0%	2.8%	81.1%
007	3.7%	34.3%	44.3%	78.6%	5.9%	11.8%	1	007	4.7%	41.2%	39.6%	80.8%	8.2%	6.3%	1	7	34.1%	8.1%	31.9%	40.0%	2.0%	23.9%
009	2.1%	34.2%	37.6%	71.8%	3.7%	22.3%	1	009	1.0%	49.1%	30.6%	79.6%	6.4%	12.9%	1	9	14.2%	7.2%	23.9%	31.1%	3.0%	51.8%
010	3.6%	44.1%	26.8%	70.9%	3.4%	22.1%	1	010	3.9%	57.8%	22.5%	80.2%	5.4%	10.5%	1	10	11.2%	7.0%	17.6%	24.6%	2.8%	61.4%
013	2.5%	43.4%	27.8%	71.1%	5.9%	20.5%	1	013	.7%	54.2%	22.5%	76.7%	2.9%	19.6%	1	13	13.7%	4.7%	9.1%	13.8%	2.7%	69.8%
014	2.9%	55.6%	23.6%	79.2%	3.4%	14.5%	1	014	4.0%	59.9%	21.6%	81.5%	1.3%	13.1%	1	14	23.9%	6.6%	10.6%	17.2%	2.7%	56.2%
017	5.4%	41.3%	25.8%	67.0%	8.8%	18.7%	1	017	2.8%	41.7%	25.7%	67.4%	2.8%	27.1%	1	17	14.0%	2.0%	5.8%	7.8%	2.1%	76.1%
018	3.6%	49.8%	23.9%	73.8%	3.0%	19.7%	1	018	4.9%	47.2%	29.0%	76.2%	2.6%	16.2%	1	18	15.6%	4.9%	16.4%	21.3%	2.7%	60.4%
019	4.0%	37.4%	26.7%	64.2%	5.5%	26.3%	1	019	2.3%	56.7%	16.1%	72.8%	3.0%	22.0%	1	19	8.1%	2.3%	6.6%	9.0%	2.0%	81.0%
020	5.4%	41.4%	29.4%	70.8%	2.1%	21.7%	1	020	2.9%	65.0%	22.5%	87.5%	2.1%	7.5%	1	20	8.8%	3.8%	8.4%	12.1%	2.2%	76.9%
022	2.5%	42.8%	30.4%	73.2%	5.9%	18.5%	1	022	2.6%	50.0%	30.3%	80.3%	5.3%	11.8%	1	22	0.0%	64.0%	24.0%	88.0%	4.0%	8.0%
023	1.0%	52.4%	40.2%	92.6%	4.0%	2.4%	1	023	.3%	56.5%	38.4%	94.9%	3.0%	1.8%	1	23	7.5%	25.4%	50.1%	75.6%	2.1%	14.9%
024	1.3%	53.0%	31.3%	84.3%	5.1%	9.2%	1	024	1.1%	62.7%	26.7%	89.4%	4.1%	5.4%	1	24	6.6%	11.3%	21.4%	32.6%	2.6%	58.2%
025	0.6%	63.1%	29.4%	92.4%	3.8%	3.1%	1	025	.3%	61.6%	29.4%	91.0%	7.3%	1.4%	1	25	2.6%	40.1%	47.7%	87.8%	2.0%	7.5%
026	0.9%	67.3%	25.2%	92.5%	2.2%	4.4%	1	026	.5%	78.4%	14.6%	92.9%	5.4%	1.2%	1	26	12.5%	20.5%	24.8%	45.3%	3.4%	38.8%
028	0.5%	82.5%	12.9%	95.4%	2.4%	1.8%	1	028	.1%	84.7%	8.2%	92.9%	4.8%	2.3%	1	28	3.6%	56.0%	21.0%	77.0%	3.3%	16.1%
030	0.5%	44.2%	46.5%	90.7%	6.0%	2.8%	1	030	.2%	54.8%	36.2%	91.0%	8.0%	.8%	1	30	2.3%	27.9%	57.4%	85.3%	2.2%	10.2%
032	0.8%	88.9%	8.3%	97.2%	0.9%	1.1%	1	032	.1%	79.0%	12.7%	91.7%	7.1%	1.1%	1	32	1.7%	67.4%	23.0%	90.3%	2.5%	5.4%
033	0.4%	23.7%	70.5%	94.3%	2.0%	3.4%	1	033	.2%	33.8%	57.6%	91.4%	7.0%	1.3%	1	33	2.7%	11.2%	74.3%	85.5%	1.5%	10.3%
034	0.4%	12.3%	76.1%	88.4%	7.9%	3.3%	1	034	.1%	18.8%	72.1%	90.9%	6.6%	2.6%	1	34	2.4%	4.7%	68.8%	73.5%	1.5%	22.6%
040	0.3%	49.6%	44.9%	94.5%	4.0%	1.2%	1	040	.1%	50.1%	45.9%	96.0%	3.2%	.8%	1	40	0.6%	25.9%	70.9%	96.8%	1.0%	1.6%
041	0.3%	40.4%	49.5%	89.9%	8.4%	1.4%	1	041	.3%	56.0%	40.8%	96.8%	2.0%	.8%	1	41	0.7%	22.1%	74.8%	96.9%	1.1%	1.3%
042	0.2%	60.7%	32.1%	92.8%	6.3%	0.6%	1	042	.1%	66.2%	30.1%	96.2%	2.8%	1.0%	1	42	0.5%	39.4%	57.7%	97.0%	1.3%	1.2%
043	0.9%	47.1%	44.5%	91.6%	5.8%	1.8%	1	043	.9%	55.9%	37.9%	93.8%	4.2%	1.1%	1	43	5.8%	30.8%	57.6%	88.5%	3.0%	2.8%
044	0.3%	49.7%	43.8%	93.5%	5.3%	0.9%	1	044	.1%	55.4%	42.6%	97.9%	1.4%	.6%	1	44	1.5%	32.3%	63.1%	95.4%	1.6%	1.5%
045	1.4%	35.0%	41.2%	76.2%	6.5%	15.9%	1	045	1.9%	50.8%	31.7%	82.6%	7.5%	8.0%	1	45	4.6%	22.3%	36.6%	58.9%	2.1%	34.4%
046	0.5%	42.5%	51.4%	93.9%	4.6%	1.0%	1	046	.1%	50.4%	44.3%	94.8%	4.9%	.4%	1	46	1.5%	28.7%	66.7%	95.5%	1.6%	1.4%
047	1.0%	75.5%	16.8%	92.3%	4.9%	1.8%	1	047	.5%	80.7%	12.2%	92.8%	5.1%	1.5%	1	47	1.9%	65.0%	22.9%	88.0%	3.0%	7.1%
048	0.4%	38.8%	45.4%	84.3%	11.7%	3.6%	1	048	.1%	53.1%	40.3%	93.3%	4.6%	1.9%	1	48	1.1%	25.9%	64.2%	90.1%	1.3%	7.5%
049	1.8%	45.0%	38.6%	83.6%	4.9%	9.7%	1	049	1.3%	52.7%	33.9%	86.6%	3.9%	8.2%	1	49	7.6%	20.4%	42.5%	62.8%	2.3%	27.2%
050	1.2%	29.3%	58.1%	87.4%	0.8%	10.6%	1	050	.4%	30.2%	55.0%	85.2%	9.2%	5.1%	1	50	5.0%	11.2%	43.4%	54.6%	1.9%	38.5%
052	1.5%	32.3%	59.2%	91.4%	4.4%	2.7%	1	052	.4%	40.6%	51.2%	91.8%	5.6%	2.2%	1	52	6.6%	18.8%	65.3%	84.1%	2.1%	7.2%
060	2.0%	49.3%	26.3%	75.6%	1.2%	21.2%	1	060	2.2%	52.3%	22.1%	74.4%	3.9%	19.4%	1	60	11.8%	12.9%	16.7%	29.6%	1.7%	57.0%
061	3.7%	31.1%	18.5%	49.5%	2.3%	44.5%	1	061	5.2%	38.0%	26.4%	64.3%	3.6%	26.9%	1	61	15.1%	3.3%	8.2%	11.5%	1.6%	71.9%
062	6.6%	8.0%	30.5%	38.5%	2.9%	52.0%	1	062	7.1%	21.1%	30.5%	51.6%	2.6%	38.7%	1	62	34.6%	0.7%	13.3%	14.1%	1.5%	49.9%
063	1.0%	77.0%	7.0%	84.0%	4.3%	10.7%	1	063	.2%	81.2%	3.4%	84.6%	5.6%	9.6%	1	63	4.7%	42.8%	8.5%	51.3%	2.2%	41.8%
066	10.8%	10.3%	53.0%	63.3%	4.9%	21.1%	1	066	12.7%	23.2%	38.8%	62.0%	6.3%	19.0%	1	66	17.7%	2.3%	13.0%	15.3%	1.7%	65.4%
067	0.4%	94.5%	2.9%	97.4%	1.3%	0.9%	1	067	.3%	92.4%	3.8%	96.3%	3.2%	.3%	1	67	1.1%	88.4%	6.8%	95.2%	2.2%	1.4%
068	4.5%	7.7%	27.4%	35.1%	0.6%	59.8%	1	068	7.3%	13.8%	31.4%	45.2%	5.7%	41.8%	1	68	20.7%	1.4%	14.4%	15.8%	2.1%	61.5%
069	1.1%	90.5%	5.6%	96.1%	1.1%	1.7%	1	069	.6%	89.8%	4.9%	94.8%	3.8%	.8%	1	69	2.7%	81.0%	8.4%	89.3%	2.1%	5.9%
070	3.1%	75.1%	16.4%	91.4%	1.9%	3.6%	1	070	1.9%	73.3%	12.9%	86.2%	4.5%	7.4%	1	70	9.5%	35.4%	15.7%	51.1%	2.4%	37.1%
071	0.3%	93.9%	4.0%	97.9%	0.1%	1.8%	1	071	.3%	90.0%	5.5%	95.5%	2.6%	1.7%	1	71	1.3%	68.0%	9.3%	77.3%	2.3%	19.1%
072	5.9%	8.1%	76.9%	85.0%	2.3%	6.8%	1	072	7.9%	18.2%	62.6%	80.8%	3.7%	7.6%	1	72	26.4%	2.9%	45.4%	48.4%	1.9%	23.3%
073	0.5%	85.6%	9.5%	95.2%	3.6%	0.8%	1	073	.2%	87.2%	8.5%	95.7%	3.5%	.6%	1	73	0.7%	76.2%	20.1%	96.3%	2.0%	1.0%
075	1.4%	73.0%	20.9%	93.9%	3.4%	1.4%	1	075	1.2%	75.4%	19.3%	94.7%	3.3%	.8%	1	75	4.9%	51.6%	36.6%	88.3%	3.4%	3.4%

076	3.3%	43.5%	32.0%	75.5%	1.7%	19.5%	1	076	.4%	61.3%	27.4%	88.7%	3.2%	7.7%	1	76	4.7%	14.0%	21.8%	35.8%	2.8%	56.7%
077	1.6%	86.7%	7.3%	94.0%	2.0%	2.4%	1	077	.5%	90.3%	4.6%	95.0%	3.9%	.6%	1	77	2.8%	65.5%	11.9%	77.5%	3.0%	16.7%
078	1.9%	41.2%	33.3%	74.6%	7.2%	16.3%	1	078		68.6%	18.6%	87.1%	5.7%	7.2%	1	78	5.8%	8.0%	15.6%	23.5%	3.6%	67.0%
079	1.2%	79.1%	14.5%	93.6%	1.1%	4.1%	1	079	.7%	84.7%	10.1%	94.8%	3.0%	1.4%	1	79	2.7%	56.7%	22.2%	78.8%	2.4%	16.1%
081	0.5%	89.1%	8.0%	97.2%	1.4%	0.9%	1	081	.2%	85.6%	8.5%	94.1%	5.0%	.6%	1	81	1.7%	76.0%	16.7%	92.7%	2.2%	3.4%
083	0.8%	35.3%	58.2%	93.5%	2.1%	3.6%	1	083	.7%	45.6%	47.3%	92.9%	4.7%	1.8%	1	83	4.3%	20.1%	65.4%	85.5%	1.7%	8.5%
084	3.6%	64.7%	17.7%	82.3%	3.7%	10.3%	1	084	.5%	75.4%	16.9%	92.3%	4.0%	3.2%	1	84	9.3%	12.3%	12.6%	24.9%	3.4%	62.4%
088	1.6%	76.8%	12.8%	89.7%	2.5%	6.3%	1	088	.8%	85.5%	8.6%	94.1%	3.8%	1.3%	1	88	6.5%	42.8%	15.7%	58.5%	4.1%	30.9%
090	1.2%	32.8%	52.3%	85.2%	2.0%	11.6%	1	090	.1%	53.0%	41.0%	94.0%	2.4%	3.5%	1	90	4.7%	6.2%	32.5%	38.7%	1.4%	55.2%
094	1.3%	26.8%	38.2%	65.0%	3.5%	30.2%	1	094	.6%	44.1%	34.1%	78.2%	7.3%	13.9%	1	94	5.8%	3.0%	16.2%	19.2%	2.4%	72.6%
100	1.2%	60.9%	17.7%	78.5%	0.6%	19.6%	1	100	.4%	72.4%	14.2%	86.7%	3.6%	9.3%	1	100	2.8%	24.2%	14.9%	39.2%	2.1%	55.9%
101	0.5%	87.1%	8.1%	95.2%	2.8%	1.5%	1	101	1.1%	80.4%	13.2%	93.6%	4.3%	.9%	1	101	1.9%	49.3%	25.3%	74.5%	3.2%	20.4%
102	21.0%	19.5%	44.4%	63.9%	6.0%	9.2%	1	102	18.5%	36.8%	35.0%	71.8%	4.2%	5.5%	1	102	21.8%	8.3%	40.8%	49.1%	9.2%	19.9%
103	5.2%	71.7%	16.9%	88.5%	4.4%	1.9%	1	103	3.2%	76.8%	14.6%	91.4%	3.2%	2.2%	1	103	16.7%	43.3%	27.7%	71.1%	9.6%	2.6%
104	2.5%	9.1%	59.3%	68.4%	2.6%	26.5%	1	104	1.6%	21.4%	50.7%	72.1%	4.7%	21.6%	1	104	7.7%	1.4%	34.6%	36.0%	1.4%	54.9%
105	5.2%	74.2%	9.7%	83.9%	6.1%	4.8%	1	105	4.4%	81.6%	5.7%	87.2%	5.0%	3.4%	1	105	14.7%	55.2%	11.8%	67.0%	5.2%	13.1%
106	32.6%	30.0%	22.5%	52.5%	4.7%	10.3%	1	106	20.8%	49.4%	19.2%	68.7%	4.4%	6.1%	1	106	18.3%	17.1%	23.1%	40.3%	15.6%	25.9%
107	11.2%	46.1%	24.3%	70.4%	7.1%	11.3%	1	107	7.0%	69.9%	14.4%	84.4%	3.1%	5.6%	1	107	31.2%	12.6%	17.0%	29.6%	4.2%	35.0%
108	15.4%	12.0%	55.2%	67.2%	1.0%	16.4%	1	108	9.5%	29.7%	45.3%	75.0%	4.7%	10.8%	1	108	32.0%	1.9%	34.6%	36.5%	2.8%	28.7%
109	16.3%	16.5%	47.7%	64.2%	2.8%	16.6%	1	109	33.5%	24.1%	28.9%	53.0%	2.0%	11.6%	1	109	49.4%	2.2%	16.6%	18.9%	2.0%	29.8%
110	4.6%	6.8%	82.6%	89.4%	2.3%	3.7%	1	110	6.5%	21.6%	64.7%	86.3%	3.9%	3.3%	1	110	33.2%	5.3%	52.3%	57.6%	2.1%	7.2%
111	18.5%	15.9%	27.1%	43.0%	6.1%	32.5%	1	111	12.0%	46.1%	19.4%	65.4%	6.0%	16.6%	1	111	39.3%	2.1%	10.0%	12.1%	1.6%	47.0%
112	5.8%	17.0%	31.0%	48.0%	7.1%	39.1%	1	112	2.8%	35.5%	27.6%	63.1%	4.2%	29.9%	1	112	26.1%	2.5%	13.5%	16.0%	2.7%	55.3%
113	1.9%	88.2%	4.6%	92.8%	4.1%	1.2%	1	113	1.0%	90.9%	3.7%	94.6%	2.3%	2.2%	1	113	2.2%	84.7%	8.1%	92.8%	4.1%	0.9%
114	6.0%	35.0%	35.4%	70.5%	5.0%	18.5%	1	114	2.6%	44.9%	34.2%	79.1%	5.2%	13.1%	1	114	14.3%	10.4%	26.8%	37.2%	3.3%	45.1%
115	2.9%	9.9%	79.5%	89.4%	4.1%	3.6%	1	115	4.1%	17.0%	71.6%	88.7%	3.3%	3.9%	1	115	15.8%	6.2%	64.2%	70.4%	2.0%	11.9%
120	1.0%	55.8%	24.8%	80.7%	3.6%	14.8%	1	120	.6%	63.3%	21.1%	84.3%	4.3%	10.7%	1	120	7.5%	22.0%	28.5%	50.4%	2.5%	39.6%
122	2.2%	14.1%	16.4%	30.6%	5.3%	62.0%	1	122	1.9%	33.2%	17.8%	51.1%	2.7%	44.4%	1	122	8.8%	2.3%	11.8%	14.1%	1.5%	75.6%
123	1.1%	4.7%	8.7%	13.4%	5.4%	80.2%	1	123	2.1%	8.5%	10.6%	19.1%	5.3%	73.4%	1	123	4.6%	1.2%	8.1%	9.4%	1.0%	85.0%
TOTAL	3.3%	52.4%	31.5%	83.9%	3.7%	9.1%	1	TOTAL	2.6%	58.8%	28.2%	87.0%	4.2%	6.1%	1	TOTAL	12.6%	22.8%	28.6%	51.3%	2.7%	33.3%

1. Source NYPD UF250 report data base for 2010.

2. Source NYPD Records management system merging all unarrested suspect and arrested suspect known Race/Ethnicity information for Violent crime incidents occurring in 2010 and arrests made within 24 hours of the incident record created date.

3. Source City Planning Department 2010 Census Bureau population counts by precinct.



2009 Stop Question & Frisk Activity by Known Race Ethnicity of subject (1)

2009 All Crime Known Unarrested & Arrested suspects by Race Ethnicity (2)

2010 Resident Population (3)

Pct	ASIAN/ PAC.IS L	BLACK	HISPANIC	Black & Hispanic	UNK/OTH	WHITE	Total	Pct	ASIAN/ PAC.IS L	BLACK	HISPANIC	Black & Hispanic	UNK/OTH	WHITE	Total	Pct	ASIAN/PA C.ISL	BLACK	HISPANIC	Black & Hispanic	UNK/OTH	WHITE
1	3.2%	63.2%	19.7%	82.9%	1.9%	12.0%	1	1	12.2%	46.0%	17.6%	63.5%	1.3%	23.0%	1	1	15.8%	3.0%	7.0%	10.0%	3.4%	70.8%
5	14.0%	40.3%	29.6%	69.9%	5.2%	10.9%	1	5	29.3%	34.3%	21.7%	56.0%	1.2%	13.5%	1	5	62.2%	4.4%	11.2%	15.6%	1.7%	20.4%
6	2.3%	56.9%	20.1%	77.0%	3.1%	17.5%	1	6	4.2%	42.6%	20.7%	63.3%	1.3%	31.2%	1	6	8.0%	2.0%	6.1%	8.0%	2.8%	81.1%
7	3.8%	34.9%	46.6%	81.5%	3.0%	11.8%	1	7	5.7%	32.4%	44.6%	77.0%	2.0%	15.4%	1	7	34.1%	8.1%	31.9%	40.0%	2.0%	23.9%
9	2.7%	33.2%	40.5%	73.7%	4.1%	19.5%	1	9	3.9%	35.9%	34.3%	70.2%	1.5%	24.3%	1	9	14.2%	7.2%	23.9%	31.1%	3.0%	51.8%
10	2.8%	46.5%	28.7%	75.2%	1.9%	20.1%	1	10	3.8%	44.1%	24.9%	69.0%	1.5%	25.7%	1	10	11.2%	7.0%	17.6%	24.6%	2.8%	61.4%
13	2.9%	44.2%	30.9%	75.1%	6.1%	15.9%	1	13	4.5%	44.1%	24.2%	68.3%	1.0%	26.2%	1	13	13.7%	4.7%	9.1%	13.8%	2.7%	69.8%
14	2.8%	57.4%	23.7%	81.1%	3.0%	13.1%	1	14	4.7%	52.6%	26.5%	79.1%	0.7%	15.5%	1	14	23.9%	6.6%	10.6%	17.2%	2.7%	56.2%
17	6.1%	36.9%	27.5%	64.4%	7.1%	22.3%	1	17	6.5%	33.6%	21.2%	54.8%	1.7%	36.9%	1	17	14.0%	2.0%	5.8%	7.8%	2.1%	76.1%
18	2.9%	50.4%	23.5%	73.9%	4.1%	19.0%	1	18	4.3%	39.9%	24.0%	64.0%	1.4%	30.3%	1	18	15.6%	4.9%	16.4%	21.3%	2.7%	60.4%
19	3.6%	35.3%	31.3%	66.6%	4.9%	24.9%	1	19	4.9%	39.2%	24.4%	63.6%	1.5%	30.0%	1	19	8.1%	2.3%	6.6%	9.0%	2.0%	81.0%
20	3.4%	39.9%	30.1%	70.0%	4.5%	22.2%	1	20	3.7%	41.7%	25.5%	67.2%	1.0%	28.1%	1	20	8.8%	3.8%	8.4%	12.1%	2.2%	76.9%
22	2.0%	40.8%	29.1%	69.9%	9.8%	18.3%	1	22	3.1%	41.5%	24.6%	66.1%	1.7%	29.1%	1	22	0.0%	64.0%	24.0%	88.0%	4.0%	8.0%
23	0.8%	55.8%	36.7%	92.5%	3.9%	2.8%	1	23	.7%	50.2%	43.8%	94.0%	0.9%	4.3%	1	23	7.5%	25.4%	50.1%	75.6%	2.1%	14.9%
24	0.7%	59.1%	32.0%	91.1%	2.0%	6.2%	1	24	1.3%	47.4%	34.5%	81.9%	2.2%	14.6%	1	24	6.6%	11.3%	21.4%	32.6%	2.6%	58.2%
25	0.6%	62.3%	30.0%	92.4%	3.8%	3.1%	1	25	.6%	60.4%	33.3%	93.7%	1.2%	4.4%	1	25	2.6%	40.1%	47.7%	87.8%	2.0%	7.5%
26	0.8%	70.8%	24.5%	95.3%	1.0%	2.9%	1	26	1.2%	62.4%	28.5%	90.8%	1.7%	6.3%	1	26	12.5%	20.5%	24.8%	45.3%	3.4%	38.8%
28	0.7%	81.7%	13.5%	95.3%	1.8%	2.2%	1	28	.8%	81.2%	14.2%	95.3%	1.1%	2.8%	1	28	3.6%	56.0%	21.0%	77.0%	3.3%	16.1%
30	0.6%	45.8%	48.5%	94.4%	2.6%	2.4%	1	30	.5%	49.3%	44.9%	94.3%	1.3%	3.9%	1	30	2.3%	27.9%	57.4%	85.3%	2.2%	10.2%
32	0.7%	89.8%	7.9%	97.7%	1.0%	0.7%	1	32	.3%	83.8%	12.3%	96.2%	1.4%	2.1%	1	32	1.7%	67.4%	23.0%	90.3%	2.5%	5.4%
33	0.6%	24.6%	68.6%	93.2%	2.7%	3.5%	1	33	1.0%	23.6%	67.8%	91.4%	1.3%	6.4%	1	33	2.7%	11.2%	74.3%	85.5%	1.5%	10.3%
34	0.5%	13.0%	79.2%	92.1%	4.6%	2.8%	1	34	.7%	15.1%	77.1%	92.2%	1.7%	5.3%	1	34	2.4%	4.7%	68.8%	73.5%	1.5%	22.6%
40	0.2%	50.4%	46.4%	96.8%	2.3%	0.7%	1	40	.4%	43.6%	53.6%	97.2%	0.6%	1.8%	1	40	0.6%	25.9%	70.9%	96.8%	1.0%	1.6%
41	0.1%	42.9%	45.0%	87.9%	10.1%	1.8%	1	41	.5%	43.5%	52.2%	95.7%	1.1%	2.7%	1	41	0.7%	22.1%	74.8%	96.9%	1.1%	1.3%
42	0.2%	60.8%	32.8%	93.6%	5.5%	0.7%	1	42	.1%	60.4%	37.5%	97.9%	0.9%	1.1%	1	42	0.5%	39.4%	57.7%	97.0%	1.3%	1.2%
43	0.8%	46.2%	46.4%	92.6%	5.2%	1.4%	1	43	1.4%	43.5%	50.9%	94.3%	1.5%	2.8%	1	43	5.8%	30.8%	57.6%	88.5%	3.0%	2.8%
44	0.6%	43.3%	47.0%	90.3%	7.9%	1.2%	1	44	.3%	48.7%	48.0%	96.7%	0.8%	2.2%	1	44	1.5%	32.3%	63.1%	95.4%	1.6%	1.5%
45	1.9%	34.9%	41.4%	76.2%	1.8%	20.1%	1	45	1.5%	38.1%	38.4%	76.5%	1.9%	20.1%	1	45	4.6%	22.3%	36.6%	58.9%	2.1%	34.4%
46	0.8%	40.4%	46.8%	87.2%	10.8%	1.3%	1	46	.6%	45.5%	51.2%	96.7%	1.0%	1.7%	1	46	1.5%	28.7%	66.7%	95.5%	1.6%	1.4%
47	1.0%	74.0%	20.2%	94.2%	3.1%	1.8%	1	47	.9%	76.0%	18.0%	94.0%	1.4%	3.8%	1	47	1.9%	65.0%	22.9%	88.0%	3.0%	7.1%
48	0.5%	44.9%	48.9%	93.8%	2.7%	3.0%	1	48	.4%	43.5%	51.5%	94.9%	1.3%	3.4%	1	48	1.1%	25.9%	64.2%	90.1%	1.3%	7.5%
49	1.8%	47.2%	37.7%	84.9%	2.9%	10.4%	1	49	1.6%	42.5%	40.5%	83.0%	1.3%	14.1%	1	49	7.6%	20.4%	42.5%	62.8%	2.3%	27.2%
50	0.8%	30.5%	58.0%	88.5%	1.1%	9.6%	1	50	1.5%	27.8%	53.9%	81.8%	1.8%	15.0%	1	50	5.0%	11.2%	43.4%	54.6%	1.9%	38.5%
52	1.2%	31.7%	55.9%	87.6%	7.2%	4.0%	1	52	1.3%	34.5%	56.6%	91.1%	1.7%	5.8%	1	52	6.6%	18.8%	65.3%	84.1%	2.1%	7.2%
60	2.0%	51.9%	25.4%	77.3%	1.7%	19.0%	1	60	2.8%	43.6%	22.6%	66.3%	1.0%	30.0%	1	60	11.8%	12.9%	16.7%	29.6%	1.7%	57.0%
61	2.1%	33.0%	18.5%	51.4%	2.2%	44.3%	1	61	3.1%	25.7%	14.2%	39.9%	1.2%	55.8%	1	61	15.1%	3.3%	8.2%	11.5%	1.6%	71.9%
62	5.1%	7.2%	27.5%	34.8%	3.2%	56.9%	1	62	6.0%	11.4%	25.6%	37.0%	1.2%	55.7%	1	62	34.6%	0.7%	13.3%	14.1%	1.5%	49.9%
63	1.0%	76.1%	6.9%	83.0%	5.4%	10.5%	1	63	1.1%	69.6%	8.0%	77.6%	1.5%	19.8%	1	63	4.7%	42.8%	8.5%	51.3%	2.2%	41.8%
66	8.3%	10.1%	52.1%	62.3%	5.9%	23.6%	1	66	9.0%	13.8%	38.7%	52.5%	3.2%	35.3%	1	66	17.7%	2.3%	13.0%	15.3%	1.7%	65.4%
67	1.0%	94.3%	2.1%	96.4%	1.8%	0.8%	1	67	.3%	93.4%	4.0%	97.4%	1.4%	.9%	1	67	1.1%	88.4%	6.8%	95.2%	2.2%	1.4%
68	4.2%	6.2%	28.6%	34.7%	1.4%	59.6%	1	68	6.1%	9.9%	26.1%	36.0%	2.1%	55.8%	1	68	20.7%	1.4%	14.4%	15.8%	2.1%	61.5%
69	0.7%	90.7%	6.3%	97.0%	0.7%	1.6%	1	69	.6%	88.1%	6.4%	94.6%	1.6%	3.2%	1	69	2.7%	81.0%	8.4%	89.3%	2.1%	5.9%
70	2.8%	72.7%	20.2%	92.9%	1.6%	2.7%	1	70	3.1%	68.9%	13.9%	82.9%	1.1%	13.0%	1	70	9.5%	35.4%	15.7%	51.1%	2.4%	37.1%

71	0.5%	92.8%	4.6%	<b>97.4%</b>	0.3%	1.8%	1	71	.5%	88.2%	6.1%	<b>94.3%</b>	1.4%	3.8%	1	71	1.3%	68.0%	9.3%	<b>77.3%</b>	2.3%	19.1%
72	2.2%	8.4%	81.9%	<b>90.3%</b>	1.9%	5.6%	1	72	6.3%	11.5%	66.3%	<b>77.8%</b>	1.7%	14.2%	1	72	26.4%	2.9%	45.4%	<b>48.4%</b>	1.9%	23.3%
73	0.5%	86.8%	8.7%	<b>95.5%</b>	3.3%	0.7%	1	73	.4%	88.0%	9.3%	<b>97.4%</b>	0.9%	1.3%	1	73	0.7%	76.2%	20.1%	<b>96.3%</b>	2.0%	1.0%
75	1.0%	77.6%	17.4%	<b>95.0%</b>	2.7%	1.3%	1	75	1.8%	70.5%	24.3%	<b>94.7%</b>	1.0%	2.4%	1	75	4.9%	51.6%	36.6%	<b>88.3%</b>	3.4%	3.4%
76	2.3%	42.4%	34.6%	<b>77.0%</b>	2.1%	18.6%	1	76	1.4%	46.0%	32.6%	<b>78.7%</b>	1.8%	18.1%	1	76	4.7%	14.0%	21.8%	<b>35.8%</b>	2.8%	56.7%
77	0.8%	86.8%	6.5%	<b>93.4%</b>	3.9%	2.0%	1	77	.5%	89.7%	7.0%	<b>96.7%</b>	0.6%	2.2%	1	77	2.8%	65.5%	11.9%	<b>77.5%</b>	3.0%	16.7%
78	2.0%	40.2%	34.7%	<b>75.0%</b>	6.1%	16.9%	1	78	2.5%	49.2%	27.2%	<b>76.5%</b>	2.5%	18.6%	1	78	5.8%	8.0%	15.6%	<b>23.5%</b>	3.6%	67.0%
79	0.6%	79.5%	12.3%	<b>91.8%</b>	3.7%	3.8%	1	79	.7%	80.0%	15.4%	<b>95.4%</b>	1.0%	2.8%	1	79	2.7%	56.7%	22.2%	<b>78.8%</b>	2.4%	16.1%
81	0.4%	90.3%	7.0%	<b>97.3%</b>	1.7%	0.7%	1	81	.3%	88.6%	9.0%	<b>97.6%</b>	0.9%	1.2%	1	81	1.7%	76.0%	16.7%	<b>92.7%</b>	2.2%	3.4%
83	0.8%	36.2%	56.9%	<b>93.1%</b>	2.3%	3.8%	1	83	1.0%	40.8%	52.6%	<b>93.4%</b>	1.4%	4.3%	1	83	4.3%	20.1%	65.4%	<b>85.5%</b>	1.7%	8.5%
84	2.1%	67.4%	18.2%	<b>85.6%</b>	1.8%	10.5%	1	84	2.0%	69.1%	16.6%	<b>85.7%</b>	1.2%	11.1%	1	84	9.3%	12.3%	12.6%	<b>24.9%</b>	3.4%	62.4%
88	1.7%	78.0%	13.7%	<b>91.7%</b>	1.5%	5.1%	1	88	1.6%	76.2%	14.1%	<b>90.3%</b>	1.3%	6.8%	1	88	6.5%	42.8%	15.7%	<b>58.5%</b>	4.1%	30.9%
90	0.9%	34.6%	53.7%	<b>88.3%</b>	2.2%	8.6%	1	90	1.7%	33.4%	51.8%	<b>85.2%</b>	1.4%	11.7%	1	90	4.7%	6.2%	32.5%	<b>38.7%</b>	1.4%	55.2%
94	1.4%	21.5%	38.8%	<b>60.3%</b>	1.2%	37.1%	1	94	2.4%	23.8%	31.2%	<b>54.9%</b>	2.4%	40.2%	1	94	5.8%	3.0%	16.2%	<b>19.2%</b>	2.4%	72.6%
100	1.1%	66.1%	15.1%	<b>81.2%</b>	0.6%	17.1%	1	100	1.5%	51.6%	16.5%	<b>68.1%</b>	1.2%	29.2%	1	100	2.8%	24.2%	14.9%	<b>39.2%</b>	2.1%	55.9%
101	0.4%	89.7%	7.2%	<b>96.9%</b>	1.8%	0.9%	1	101	.9%	77.5%	16.0%	<b>93.5%</b>	1.7%	3.9%	1	101	1.9%	49.3%	25.3%	<b>74.5%</b>	3.2%	20.4%
102	20.7%	18.5%	44.7%	<b>63.2%</b>	7.0%	9.0%	1	102	20.8%	23.3%	40.2%	<b>63.5%</b>	3.5%	12.2%	1	102	21.8%	8.3%	40.8%	<b>49.1%</b>	9.2%	19.9%
103	3.2%	70.5%	18.3%	<b>88.8%</b>	6.1%	1.9%	1	103	6.7%	67.3%	20.6%	<b>87.9%</b>	2.1%	3.2%	1	103	16.7%	43.3%	27.7%	<b>71.1%</b>	9.6%	2.6%
104	3.0%	9.6%	53.8%	<b>63.4%</b>	1.8%	31.9%	1	104	3.0%	11.3%	46.7%	<b>57.9%</b>	1.7%	37.4%	1	104	7.7%	1.4%	34.6%	<b>36.0%</b>	1.4%	54.9%
105	5.2%	71.2%	12.2%	<b>83.5%</b>	5.8%	5.5%	1	105	6.6%	74.1%	9.0%	<b>83.1%</b>	3.1%	7.2%	1	105	14.7%	55.2%	11.8%	<b>67.0%</b>	5.2%	13.1%
106	30.8%	33.0%	20.9%	<b>53.9%</b>	5.4%	9.9%	1	106	31.8%	31.0%	19.9%	<b>50.8%</b>	2.0%	15.4%	1	106	18.3%	17.1%	23.1%	<b>40.3%</b>	15.6%	25.9%
107	9.0%	42.7%	24.9%	<b>67.7%</b>	6.3%	17.0%	1	107	10.2%	43.1%	23.0%	<b>66.2%</b>	3.4%	20.2%	1	107	31.2%	12.6%	17.0%	<b>29.6%</b>	4.2%	35.0%
108	15.5%	10.4%	53.3%	<b>63.7%</b>	0.6%	20.2%	1	108	11.4%	17.2%	46.6%	<b>63.8%</b>	3.0%	21.8%	1	108	32.0%	1.9%	34.6%	<b>36.5%</b>	2.8%	28.7%
109	15.0%	14.6%	52.1%	<b>66.7%</b>	2.4%	15.8%	1	109	28.9%	14.7%	31.6%	<b>46.3%</b>	1.6%	23.2%	1	109	49.4%	2.2%	16.6%	<b>18.9%</b>	2.0%	29.8%
110	3.7%	8.6%	82.4%	<b>91.1%</b>	1.7%	3.6%	1	110	8.8%	18.1%	63.1%	<b>81.2%</b>	1.3%	8.7%	1	110	33.2%	5.3%	52.3%	<b>57.6%</b>	2.1%	7.2%
111	18.0%	14.1%	27.4%	<b>41.5%</b>	5.9%	34.5%	1	111	13.8%	18.0%	20.0%	<b>38.0%</b>	2.1%	46.1%	1	111	39.3%	2.1%	10.0%	<b>12.1%</b>	1.6%	47.0%
112	5.9%	17.7%	27.6%	<b>45.3%</b>	6.0%	42.8%	1	112	6.9%	21.6%	26.6%	<b>48.2%</b>	1.7%	43.2%	1	112	26.1%	2.5%	13.5%	<b>16.0%</b>	2.7%	55.3%
113	1.3%	90.1%	4.4%	<b>94.5%</b>	3.3%	0.9%	1	113	2.5%	82.8%	8.5%	<b>91.3%</b>	1.5%	4.7%	1	113	2.2%	84.7%	8.1%	<b>92.8%</b>	4.1%	0.9%
114	5.2%	35.2%	36.1%	<b>71.4%</b>	5.5%	18.0%	1	114	6.0%	32.7%	34.2%	<b>66.8%</b>	1.7%	25.5%	1	114	14.3%	10.4%	26.8%	<b>37.2%</b>	3.3%	45.1%
115	3.0%	7.5%	84.9%	<b>92.4%</b>	1.6%	3.0%	1	115	4.9%	12.3%	74.1%	<b>86.5%</b>	1.4%	7.3%	1	115	15.8%	6.2%	64.2%	<b>70.4%</b>	2.0%	11.9%
120	1.1%	57.5%	25.3%	<b>82.8%</b>	1.2%	14.8%	1	120	.9%	50.3%	25.6%	<b>75.9%</b>	2.7%	20.5%	1	120	7.5%	22.0%	28.5%	<b>50.4%</b>	2.5%	39.6%
122	1.9%	14.7%	16.1%	<b>30.9%</b>	5.4%	61.8%	1	122	2.4%	16.4%	15.8%	<b>32.1%</b>	1.1%	64.4%	1	122	8.8%	2.3%	11.8%	<b>14.1%</b>	1.5%	75.6%
123	1.4%	4.2%	7.7%	<b>11.9%</b>	2.9%	83.9%	1	123	1.2%	7.4%	9.1%	<b>16.5%</b>	0.7%	81.6%	1	123	4.6%	1.2%	8.1%	<b>9.4%</b>	1.0%	85.0%
TOTAL	2.9%	53.4%	31.0%	<b>84.4%</b>	3.5%	9.3%	1	TOTAL	3.5%	50.1%	31.7%	<b>81.8%</b>	1.4%	13.2%	1	TOTAL	12.6%	22.8%	28.6%	<b>51.3%</b>	2.7%	33.3%

1. Source NYPD UF250 report data base for 2009.

2. Source NYPD Records management system merging all unarrested suspect and arrested suspect known Race/Ethnicity information for all crime incidents occurring in 2009 and arrests made within 24 hours of the incident record created date.

3. Source City Planning Department 2010 Census Bureau population counts by precinct.

2010 Stop Question & Frisk Activity by Known Race Ethnicity of subject (1)

2010 All Crime Known Unarrested & Arrested suspects by Race Ethnicity (2)

2010 Resident Population (3)

Pct	ASIAN/ PAC.IS L	BLACK	HISPANIC	Black & Hispanic	UNK/OTH	WHITE	Total	Pct	ASIAN/ PAC.IS L	BLACK	HISPANIC	Black & Hispanic	UNK/OTH	WHITE	Total	Pct	ASIAN/PA C.ISL	BLACK	HISPANIC	Black & Hispanic	UNK/OTH	WHITE
1	3.8%	61.1%	20.6%	81.8%	1.1%	13.3%	1	1	9.5%	49.6%	16.0%	65.6%	1.5%	23.5%	1	1	15.8%	3.0%	7.0%	10.0%	3.4%	70.8%
5	13.1%	41.7%	28.7%	70.4%	6.4%	10.1%	1	5	27.4%	37.2%	21.1%	58.2%	1.7%	12.7%	1	5	62.2%	4.4%	11.2%	15.6%	1.7%	20.4%
6	2.2%	56.2%	19.0%	75.2%	3.7%	18.8%	1	6	4.3%	41.8%	19.8%	61.6%	1.4%	32.7%	1	6	8.0%	2.0%	6.1%	8.0%	2.8%	81.1%
7	3.7%	34.3%	44.3%	78.6%	5.9%	11.8%	1	7	5.8%	32.3%	42.1%	74.4%	2.0%	17.8%	1	7	34.1%	8.1%	31.9%	40.0%	2.0%	23.9%
9	2.1%	34.2%	37.6%	71.8%	3.7%	22.3%	1	9	3.5%	36.0%	32.7%	68.7%	1.6%	26.2%	1	9	14.2%	7.2%	23.9%	31.1%	3.0%	51.8%
10	3.6%	44.1%	26.8%	70.9%	3.4%	22.1%	1	10	4.5%	43.9%	25.1%	69.0%	1.6%	25.0%	1	10	11.2%	7.0%	17.6%	24.6%	2.8%	61.4%
13	2.5%	43.4%	27.8%	71.1%	5.9%	20.5%	1	13	4.6%	44.2%	23.4%	67.6%	1.1%	26.7%	1	13	13.7%	4.7%	9.1%	13.8%	2.7%	69.8%
14	2.9%	55.6%	23.6%	79.2%	3.4%	14.5%	1	14	4.6%	51.0%	26.7%	77.7%	.5%	17.2%	1	14	23.9%	6.6%	10.6%	17.2%	2.7%	56.2%
17	5.4%	41.3%	25.8%	67.0%	8.8%	18.7%	1	17	5.5%	34.7%	21.8%	56.5%	1.9%	36.1%	1	17	14.0%	2.0%	5.8%	7.8%	2.1%	76.1%
18	3.6%	49.8%	23.9%	73.8%	3.0%	19.7%	1	18	5.1%	39.1%	23.5%	62.6%	1.1%	31.2%	1	18	15.6%	4.9%	16.4%	21.3%	2.7%	60.4%
19	4.0%	37.4%	26.7%	64.2%	5.5%	26.3%	1	19	3.7%	40.4%	22.1%	62.4%	1.1%	32.7%	1	19	8.1%	2.3%	6.6%	9.0%	2.0%	81.0%
20	5.4%	41.4%	29.4%	70.8%	2.1%	21.7%	1	20	2.8%	43.5%	24.5%	68.1%	1.5%	27.7%	1	20	8.8%	3.8%	8.4%	12.1%	2.2%	76.9%
22	2.5%	42.8%	30.4%	73.2%	5.9%	18.5%	1	22	4.6%	33.9%	29.5%	63.5%	2.0%	30.0%	1	22	0.0%	64.0%	24.0%	88.0%	4.0%	8.0%
23	1.0%	52.4%	40.2%	92.6%	4.0%	2.4%	1	23	.9%	49.5%	44.1%	93.6%	1.2%	4.3%	1	23	7.5%	25.4%	50.1%	75.6%	2.1%	14.9%
24	1.3%	53.0%	31.3%	84.3%	5.1%	9.2%	1	24	1.8%	49.7%	30.9%	80.6%	2.0%	15.6%	1	24	6.6%	11.3%	21.4%	32.6%	2.6%	58.2%
25	0.6%	63.1%	29.4%	92.4%	3.8%	3.1%	1	25	1.0%	60.0%	32.8%	92.7%	1.4%	4.9%	1	25	2.6%	40.1%	47.7%	87.8%	2.0%	7.5%
26	0.9%	67.3%	25.2%	92.5%	2.2%	4.4%	1	26	1.0%	64.5%	26.2%	90.7%	1.7%	6.5%	1	26	12.5%	20.5%	24.8%	45.3%	3.4%	38.8%
28	0.5%	82.5%	12.9%	95.4%	2.4%	1.8%	1	28	.8%	80.6%	14.6%	95.1%	1.2%	2.9%	1	28	3.6%	56.0%	21.0%	77.0%	3.3%	16.1%
30	0.5%	44.2%	46.5%	90.7%	6.0%	2.8%	1	30	.5%	46.7%	46.5%	93.2%	2.0%	4.3%	1	30	2.3%	27.9%	57.4%	85.3%	2.2%	10.2%
32	0.8%	88.9%	8.3%	97.2%	0.9%	1.1%	1	32	.5%	83.8%	12.4%	96.2%	1.4%	2.0%	1	32	1.7%	67.4%	23.0%	90.3%	2.5%	5.4%
33	0.4%	23.7%	70.5%	94.3%	2.0%	3.4%	1	33	1.2%	26.1%	65.1%	91.2%	2.0%	5.5%	1	33	2.7%	11.2%	74.3%	85.5%	1.5%	10.3%
34	0.4%	12.3%	76.1%	88.4%	7.9%	3.3%	1	34	.8%	14.5%	76.6%	91.1%	1.9%	6.1%	1	34	2.4%	4.7%	68.8%	73.5%	1.5%	22.6%
40	0.3%	49.6%	44.9%	94.5%	4.0%	1.2%	1	40	.3%	45.6%	51.1%	96.8%	.9%	2.0%	1	40	0.6%	25.9%	70.9%	96.8%	1.0%	1.6%
41	0.3%	40.4%	49.5%	89.9%	8.4%	1.4%	1	41	.5%	43.3%	52.5%	95.8%	1.3%	2.4%	1	41	0.7%	22.1%	74.8%	96.9%	1.1%	1.3%
42	0.2%	60.7%	32.1%	92.8%	6.3%	0.6%	1	42	.2%	60.1%	37.7%	97.8%	.8%	1.3%	1	42	0.5%	39.4%	57.7%	97.0%	1.3%	1.2%
43	0.9%	47.1%	44.5%	91.6%	5.8%	1.8%	1	43	1.5%	44.2%	50.0%	94.2%	1.4%	2.9%	1	43	5.8%	30.8%	57.6%	88.5%	3.0%	2.8%
44	0.3%	49.7%	43.8%	93.5%	5.3%	0.9%	1	44	.3%	49.9%	46.9%	96.7%	.8%	2.2%	1	44	1.5%	32.3%	63.1%	95.4%	1.6%	1.5%
45	1.4%	35.0%	41.2%	76.2%	6.5%	15.9%	1	45	2.0%	38.3%	38.9%	77.2%	2.4%	18.5%	1	45	4.6%	22.3%	36.6%	58.9%	2.1%	34.4%
46	0.5%	42.5%	51.4%	93.9%	4.6%	1.0%	1	46	.6%	43.7%	52.6%	96.3%	1.1%	2.0%	1	46	1.5%	28.7%	66.7%	95.5%	1.6%	1.4%
47	1.0%	75.5%	16.8%	92.3%	4.9%	1.8%	1	47	.7%	75.4%	18.4%	93.8%	1.6%	4.0%	1	47	1.9%	65.0%	22.9%	88.0%	3.0%	7.1%
48	0.4%	38.8%	45.4%	84.3%	11.7%	3.6%	1	48	.4%	42.9%	51.3%	94.2%	1.6%	3.7%	1	48	1.1%	25.9%	64.2%	90.1%	1.3%	7.5%
49	1.8%	45.0%	38.6%	83.6%	4.9%	9.7%	1	49	1.6%	42.1%	41.5%	83.6%	2.0%	12.7%	1	49	7.6%	20.4%	42.5%	62.8%	2.3%	27.2%
50	1.2%	29.3%	58.1%	87.4%	0.8%	10.6%	1	50	1.0%	26.8%	53.7%	80.4%	3.1%	15.5%	1	50	5.0%	11.2%	43.4%	54.6%	1.9%	38.5%
52	1.5%	32.3%	59.2%	91.4%	4.4%	2.7%	1	52	1.3%	34.2%	57.3%	91.5%	1.7%	5.5%	1	52	6.6%	18.8%	65.3%	84.1%	2.1%	7.2%
60	2.0%	49.3%	26.3%	75.6%	1.2%	21.2%	1	60	2.1%	45.2%	23.0%	68.2%	1.6%	28.1%	1	60	11.8%	12.9%	16.7%	29.6%	1.7%	57.0%
61	3.7%	31.1%	18.5%	49.5%	2.3%	44.5%	1	61	3.3%	24.4%	16.2%	40.6%	1.1%	55.0%	1	61	15.1%	3.3%	8.2%	11.5%	1.6%	71.9%
62	6.6%	8.0%	30.5%	38.5%	2.9%	52.0%	1	62	6.2%	10.3%	25.3%	35.6%	1.6%	56.6%	1	62	34.6%	0.7%	13.3%	14.1%	1.5%	49.9%
63	1.0%	77.0%	7.0%	84.0%	4.3%	10.7%	1	63	1.7%	69.0%	7.4%	76.3%	2.1%	19.9%	1	63	4.7%	42.8%	8.5%	51.3%	2.2%	41.8%
66	10.8%	10.3%	53.0%	63.3%	4.9%	21.1%	1	66	11.3%	15.4%	37.1%	52.5%	2.5%	33.7%	1	66	17.7%	2.3%	13.0%	15.3%	1.7%	65.4%
67	0.4%	94.5%	2.9%	97.4%	1.3%	0.9%	1	67	.3%	92.9%	4.3%	97.2%	1.2%	1.2%	1	67	1.1%	88.4%	6.8%	95.2%	2.2%	1.4%
68	4.5%	7.7%	27.4%	35.1%	0.6%	59.8%	1	68	7.2%	8.5%	24.2%	32.7%	1.7%	58.4%	1	68	20.7%	1.4%	14.4%	15.8%	2.1%	61.5%
69	1.1%	90.5%	5.6%	96.1%	1.1%	1.7%	1	69	.5%	89.1%	6.4%	95.5%	1.4%	2.5%	1	69	2.7%	81.0%	8.4%	89.3%	2.1%	5.9%
70	3.1%	75.1%	16.4%	91.4%	1.9%	3.6%	1	70	3.1%	68.8%	13.6%	82.4%	1.7%	12.9%	1	70	9.5%	35.4%	15.7%	51.1%	2.4%	37.1%

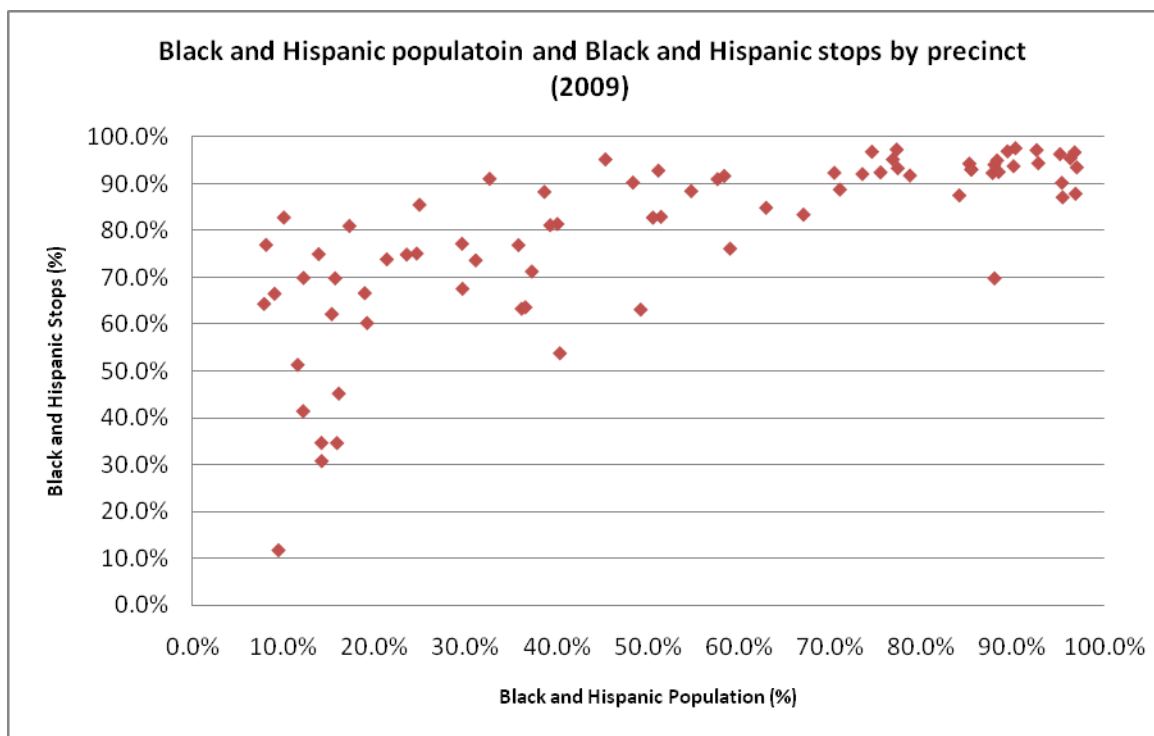
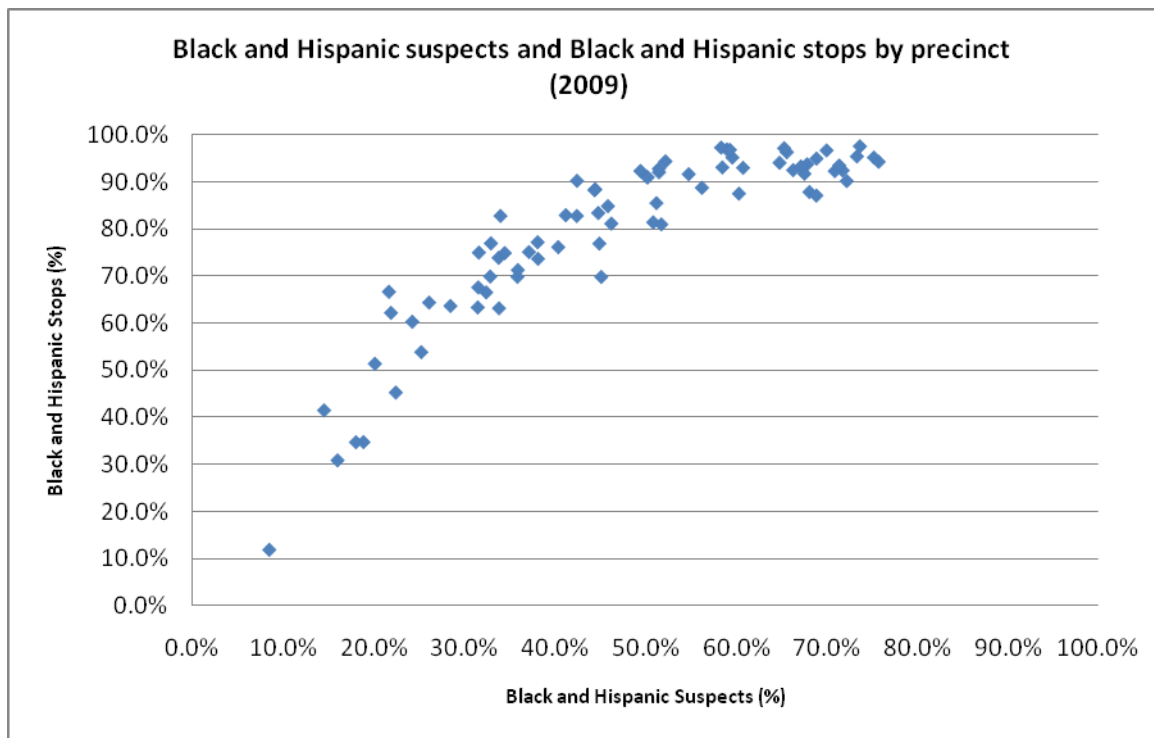
71	0.3%	93.9%	4.0%	<b>97.9%</b>	0.1%	1.8%	1	71	.6%	88.2%	6.8%	<b>95.0%</b>	.8%	3.6%	1	71	1.3%	68.0%	9.3%	<b>77.3%</b>	2.3%	19.1%
72	5.9%	8.1%	76.9%	<b>85.0%</b>	2.3%	6.8%	1	72	6.4%	12.4%	63.2%	<b>75.5%</b>	2.0%	16.0%	1	72	26.4%	2.9%	45.4%	<b>48.4%</b>	1.9%	23.3%
73	0.5%	85.6%	9.5%	<b>95.2%</b>	3.6%	0.8%	1	73	.3%	86.8%	10.5%	<b>97.3%</b>	1.2%	1.2%	1	73	0.7%	76.2%	20.1%	<b>96.3%</b>	2.0%	1.0%
75	1.4%	73.0%	20.9%	<b>93.9%</b>	3.4%	1.4%	1	75	1.5%	70.2%	24.6%	<b>94.8%</b>	1.3%	2.4%	1	75	4.9%	51.6%	36.6%	<b>88.3%</b>	3.4%	3.4%
76	3.3%	43.5%	32.0%	<b>75.5%</b>	1.7%	19.5%	1	76	1.5%	49.8%	31.1%	<b>80.9%</b>	1.4%	16.2%	1	76	4.7%	14.0%	21.8%	<b>35.8%</b>	2.8%	56.7%
77	1.6%	86.7%	7.3%	<b>94.0%</b>	2.0%	2.4%	1	77	.5%	88.0%	8.0%	<b>96.0%</b>	.8%	2.8%	1	77	2.8%	65.5%	11.9%	<b>77.5%</b>	3.0%	16.7%
78	1.9%	41.2%	33.3%	<b>74.6%</b>	7.2%	16.3%	1	78	1.5%	49.7%	25.4%	<b>75.1%</b>	2.0%	21.4%	1	78	5.8%	8.0%	15.6%	<b>23.5%</b>	3.6%	67.0%
79	1.2%	79.1%	14.5%	<b>93.6%</b>	1.1%	4.1%	1	79	.7%	80.9%	13.8%	<b>94.7%</b>	1.2%	3.3%	1	79	2.7%	56.7%	22.2%	<b>78.8%</b>	2.4%	16.1%
81	0.5%	89.1%	8.0%	<b>97.2%</b>	1.4%	0.9%	1	81	.6%	85.4%	10.9%	<b>96.3%</b>	1.5%	1.6%	1	81	1.7%	76.0%	16.7%	<b>92.7%</b>	2.2%	3.4%
83	0.8%	35.3%	58.2%	<b>93.5%</b>	2.1%	3.6%	1	83	1.0%	40.4%	52.5%	<b>92.9%</b>	1.8%	4.3%	1	83	4.3%	20.1%	65.4%	<b>85.5%</b>	1.7%	8.5%
84	3.6%	64.7%	17.7%	<b>82.3%</b>	3.7%	10.3%	1	84	2.4%	67.1%	18.2%	<b>85.2%</b>	1.5%	10.9%	1	84	9.3%	12.3%	12.6%	<b>24.9%</b>	3.4%	62.4%
88	1.6%	76.8%	12.8%	<b>89.7%</b>	2.5%	6.3%	1	88	1.2%	79.2%	13.9%	<b>93.1%</b>	.9%	4.8%	1	88	6.5%	42.8%	15.7%	<b>58.5%</b>	4.1%	30.9%
90	1.2%	32.8%	52.3%	<b>85.2%</b>	2.0%	11.6%	1	90	1.2%	37.6%	47.6%	<b>85.2%</b>	1.5%	12.1%	1	90	4.7%	6.2%	32.5%	<b>38.7%</b>	1.4%	55.2%
94	1.3%	26.8%	38.2%	<b>65.0%</b>	3.5%	30.2%	1	94	2.1%	26.6%	28.1%	<b>54.6%</b>	2.7%	40.6%	1	94	5.8%	3.0%	16.2%	<b>19.2%</b>	2.4%	72.6%
100	1.2%	60.9%	17.7%	<b>78.5%</b>	0.6%	19.6%	1	100	.9%	53.0%	18.6%	<b>71.6%</b>	1.7%	25.8%	1	100	2.8%	24.2%	14.9%	<b>39.2%</b>	2.1%	55.9%
101	0.5%	87.1%	8.1%	<b>95.2%</b>	2.8%	1.5%	1	101	1.1%	77.0%	17.0%	<b>94.0%</b>	1.2%	3.7%	1	101	1.9%	49.3%	25.3%	<b>74.5%</b>	3.2%	20.4%
102	21.0%	19.5%	44.4%	<b>63.9%</b>	6.0%	9.2%	1	102	22.6%	22.9%	39.5%	<b>62.5%</b>	2.7%	12.2%	1	102	21.8%	8.3%	40.8%	<b>49.1%</b>	9.2%	19.9%
103	5.2%	71.7%	16.9%	<b>88.5%</b>	4.4%	1.9%	1	103	6.6%	69.6%	18.3%	<b>88.0%</b>	2.2%	3.2%	1	103	16.7%	43.3%	27.7%	<b>71.1%</b>	9.6%	2.6%
104	2.5%	9.1%	59.3%	<b>68.4%</b>	2.6%	26.5%	1	104	2.7%	10.3%	46.9%	<b>57.3%</b>	1.3%	38.7%	1	104	7.7%	1.4%	34.6%	<b>36.0%</b>	1.4%	54.9%
105	5.2%	74.2%	9.7%	<b>83.9%</b>	6.1%	4.8%	1	105	6.5%	75.4%	8.7%	<b>84.1%</b>	2.2%	7.2%	1	105	14.7%	55.2%	11.8%	<b>67.0%</b>	5.2%	13.1%
106	32.6%	30.0%	22.5%	<b>52.5%</b>	4.7%	10.3%	1	106	30.7%	31.0%	20.5%	<b>51.6%</b>	2.6%	15.2%	1	106	18.3%	17.1%	23.1%	<b>40.3%</b>	15.6%	25.9%
107	11.2%	46.1%	24.3%	<b>70.4%</b>	7.1%	11.3%	1	107	9.5%	45.6%	21.9%	<b>67.5%</b>	2.5%	20.5%	1	107	31.2%	12.6%	17.0%	<b>29.6%</b>	4.2%	35.0%
108	15.4%	12.0%	55.2%	<b>67.2%</b>	1.0%	16.4%	1	108	13.1%	16.6%	47.5%	<b>64.1%</b>	1.8%	21.0%	1	108	32.0%	1.9%	34.6%	<b>36.5%</b>	2.8%	28.7%
109	16.3%	16.5%	47.7%	<b>64.2%</b>	2.8%	16.6%	1	109	30.7%	15.3%	29.7%	<b>45.1%</b>	1.0%	23.3%	1	109	49.4%	2.2%	16.6%	<b>18.9%</b>	2.0%	29.8%
110	4.6%	6.8%	82.6%	<b>89.4%</b>	2.3%	3.7%	1	110	8.5%	18.6%	61.9%	<b>80.6%</b>	1.7%	9.2%	1	110	33.2%	5.3%	52.3%	<b>57.6%</b>	2.1%	7.2%
111	18.5%	15.9%	27.1%	<b>43.0%</b>	6.1%	32.5%	1	111	15.6%	20.0%	19.8%	<b>39.8%</b>	2.4%	42.1%	1	111	39.3%	2.1%	10.0%	<b>12.1%</b>	1.6%	47.0%
112	5.8%	17.0%	31.0%	<b>48.0%</b>	7.1%	39.1%	1	112	7.5%	21.7%	29.0%	<b>50.7%</b>	1.6%	40.2%	1	112	26.1%	2.5%	13.5%	<b>16.0%</b>	2.7%	55.3%
113	1.9%	88.2%	4.6%	<b>92.8%</b>	4.1%	1.2%	1	113	2.9%	79.3%	10.2%	<b>89.5%</b>	1.2%	6.5%	1	113	2.2%	84.7%	8.1%	<b>92.8%</b>	4.1%	0.9%
114	6.0%	35.0%	35.4%	<b>70.5%</b>	5.0%	18.5%	1	114	6.8%	33.0%	34.5%	<b>67.5%</b>	2.1%	23.7%	1	114	14.3%	10.4%	26.8%	<b>37.2%</b>	3.3%	45.1%
115	2.9%	9.9%	79.5%	<b>89.4%</b>	4.1%	3.6%	1	115	4.9%	14.3%	71.3%	<b>85.6%</b>	1.5%	8.0%	1	115	15.8%	6.2%	64.2%	<b>70.4%</b>	2.0%	11.9%
120	1.0%	55.8%	24.8%	<b>80.7%</b>	3.6%	14.8%	1	120	1.1%	48.7%	26.1%	<b>74.8%</b>	1.6%	22.5%	1	120	7.5%	22.0%	28.5%	<b>50.4%</b>	2.5%	39.6%
122	2.2%	14.1%	16.4%	<b>30.6%</b>	5.3%	62.0%	1	122	2.2%	16.0%	16.7%	<b>32.7%</b>	1.2%	63.8%	1	122	8.8%	2.3%	11.8%	<b>14.1%</b>	1.5%	75.6%
123	1.1%	4.7%	8.7%	<b>13.4%</b>	5.4%	80.2%	1	123	.9%	6.4%	9.5%	<b>15.9%</b>	1.3%	81.9%	1	123	4.6%	1.2%	8.1%	<b>9.4%</b>	1.0%	85.0%
TOTAL	3.3%	52.4%	31.5%	<b>83.9%</b>	3.7%	9.1%	1	TOTAL	3.6%	50.1%	31.5%	<b>81.6%</b>	1.5%	13.3%	1	TOTAL	12.6%	22.8%	28.6%	<b>51.3%</b>	2.7%	33.3%

1. Source NYPD UF250 report data base for 2010.

2. Source NYPD Records management system merging all unarrested suspect and arrested suspect known Race/Ethnicity information for all crime incidents occurring in 2010 and arrests made within 24 hours of the incident record created date.

3. Source City Planning Department 2010 Census Bureau population counts by precinct.

# Exhibit D



# Exhibit E

2009 Precinct level data	
	<b>Correlation Coefficient</b>
Hispanic Stops and Hispanic Suspects/Arrestees	0.70
White Stops and White Suspects/Arrestees	0.84
Black Stops and Black Suspects/Arrestees	0.84
Total Stops and Total crime	0.66



# Exhibit F



Robert F. Wagner Graduate School of Public Service

# **An Empirical Assessment of NYPD's "Operation Impact": A Targeted Zone Crime Reduction Strategy**

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## **ACKNOWLEDGEMENTS**

**We wish to thank the Police Commissioner Raymond Kelly for inviting this evaluation, Deputy Commissioner Strategic Initiatives, Michael J. Farrell, for his assistance throughout this study, Deputy Chief John P. Gerrish and Inspector Michael Healey of the Office of Management Analysis and Planning for providing documents and helping us navigate the access and fieldwork part this study, and Assistant Commissioner Phillip McGuire of the Crime Analysis Unit for providing data and helping us understand it. We thank also precinct and borough commanders for taking their valuable time to explore with us their strategies in managing Impact Zones. We also are grateful to The University at Albany Associate Professor Gerald Marschke for his insightful advice on statistical methodology, and to our Research Assistant, NYU Wagner student, now graduate, Vaughn Crandall, for his help in the early stage of this study.**

**While the NYPD officials were responsive to multiple demands for data and on their time, they made no attempt to influence our conclusions.**

**We especially want to acknowledge and to thank the New York City Police Foundation for funding independent evaluations of NYPD programs and practices, including this one.**

## EXECUTIVE SUMMARY

About a decade ago one of the leading students of policing in America, David Bayley in a widely-praised book, Police for the Future, wrote “The Police do not prevent crime. This is one of the best kept secrets of modern life. Experts know it, the police know it, yet the police pretend that they are society’s best defense against crime.” In making this observation about the “myth” that police prevent crime Bayley was echoing the conclusion written more than two decades earlier of another distinguished expert, James Q. Wilson, who wrote in his pioneering empirical study of eight police departments, Varieties of Police Behavior, that the police administrator “is in the unhappy position of being responsible for an organization that lacks a proven technology for achieving its purpose”.<sup>1</sup> Bayley was in the position to go further than Wilson and base his conclusion on research that “consistently failed to find any connection between the number of police officers and crime rates,” and studies of “primary strategies adopted by modern police” that found “little or no effect on crime”.<sup>2</sup>

In the past decade and a half in the crime laboratory called New York City, these dire assessments of the plight of the police and by extension of the public have undergone a substantial revision. At the time Bayley published his commentary on the myth of police efficacy in preventing crime, New York City had used new police resources provided by Safe Streets, Safe City and a new police strategy called “community policing” to begin a reversal of an upward crime trend that had

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<sup>1</sup> Wilson, 1968,63.

<sup>2</sup> Bayley, 1994, 3.

lasted more than a decade, and peaked in 1990 with more than 2,200 homicides. In 1993, a new anti-corruption system that would over time produce a two-thirds reduction in complaints of police corruption had been designed and implemented by then Police Commissioner Raymond Kelly, and in 1994 a new management system at the City, Borough, and Precinct level was being introduced that committed the police to fighting crime as the highest priority. Since then, crime has dramatically declined in every borough and every precinct in the City.

The remarkable achievement of crime reductions achieved from 1988 though 2001, led many to question whether it would be possible for a new administration to continue the relentless downward trend in crime.

The fear that crime had been brought down as much as was possible was not entirely unreasonable. Criminologists have long tracked the cyclical nature of crime patterns, and most people instinctively understand the economic concept of a “declining marginal return on investment,” the idea that “low hanging fruit” are found and harvested first, and that the challenges of production grow increasingly more difficult after that. For those who firmly believe, despite evidence, that the economy in New York rebounded *after* crime came down, that economic trends explain the crime rate, the economic downturn following the 911 attack further fueled pessimism about the prospects of continuing the successful fight against crime in New York.

Across the United States, the skepticism expressed in New York has been validated in cities large and small. After a decade long decline in crime in America's big cities, recent national crime statistics show a disturbing upward turn. An October, 2006, Police Executive Research Forum report, "A Gathering Storm: Violent Crime in America," documents that shift, which it finds became evident in the 2005 crime statistics.

New York City, which led the national decline, is an exception to this much noted reversal. The New York Times reported in late March, 2007, homicides in New York City were averaging fewer than one per day. Although by the end of May, with the City was recording slightly more than one murder per day, the trend is downward by almost 17% in the first five months of the year. As of the end of May, 2007, NYPD showed an almost 9% drop in total major crimes for the year to date.

When crime declined over the past decade, some criminologists pointed to declines in other cities, even though they were less than New York's, to say that NYC was part of a national trend, and thus discounted claims that anything special had been accomplished by NYPD. Now that New York is clearly not following the national pattern, attention returns to the question: what is New York doing to reduce crime?

This is a report on an evaluation of the City's primary program directed at violent crime reduction, Operation Impact. Since the start of the Bloomberg administration, NYPD Police Commissioner Raymond Kelly has pursued a strategy called "hot-spots policing." By 2002, evidence had accumulated from seven rigorous studies that "hot-spots policing" produced crime reductions in cities other than New York. (Braga, 2003) Operation Impact deploys most members of the graduating classes of NYPD's recruit-training Academy in units to carefully selected "hot spots" in precincts around the City, under close monitoring and supervision to focus on particular times, places and types of crime that have been found to be concentrated in those locations.

Operation Impact in New York City reveals vividly how far the field of police management has developed in the decades since James Q. Wilson reported that all that police administrators and their departments can try to do is "cope" with crime.

Wilson observed at the end of the 1960s that "few police administrators show much interest in 'planning' the deployment of their manpower and equipment. There is no information—and in the nature of the case, there can never be sufficient information—on the effects of alternative police strategies on the several kinds of crime."<sup>3</sup>

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<sup>3</sup> James Q. Wilson, Varieties of Police Behavior ( Cambridge, 1968, 60)

Despite the overall and nearly ubiquitous pattern of crime reduction the City has achieved, there is still serious crime in New York, and it is not randomly distributed. In 2001, the last year of the Giuliani administration, the full year of crime data available when NYPD was planning the launch of Operation Impact, there were 162,064 major crimes reported in New York City. In the planning phase of hot spots policing deployment, crime data were analyzed to find small areas of the City that reported not only disproportionate amounts of crime, especially crimes against persons, but also patterns of crime that were concentrated in a few square blocks. Our analysis using precinct-level monthly crime-data from 1990 to 2006 showed that the precincts chosen for Impact Zones had higher rates of crime, that crime was declining in those precincts faster than the rate for the City overall. We also found that the rate of crime decline was itself slowing over time, with the Impact Zones slowing even faster than the rest of the City.<sup>4</sup>

In the first year of Operation Impact, Zones were created in nineteen of NYPD's seventy-six precincts. Those nineteen precincts (25% of the City's police districts) accounted for 43% of the murders reported in 2001, 39% of the rapes, 28% of robberies, 39% of felony assaults, 34% of burglaries, 32% of grand larcenies, and 30% of automobiles thefts citywide. In contrast to the flying blind days of police management observed by James Q. Wilson, NYPD developed a

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<sup>4</sup> This imbedded dynamic pattern of crime made any evaluation of impact of an intervention triply complex: any changes in the precincts with Zones had to be seen in the context of the overall City trends, the specific precinct trends, and the fact that rates of change were changing at different rates for different crimes, in different parts of the City.



virtual mountain of analysis, prepared at all levels of the Department, in preparation for deploying graduates from the Academy to Impact Zones selected on the basis of intense scrutiny of crime patterns. Equally striking given the absence of crime-data analysis when Wilson did his study is the amount of real time scrutiny at every level of NYPD used to monitor Impact Zone operations and results during their implementation. Operation Impact is outcome performance management, symbolized by the police management practice called CompStat, on steroids.

Since 2003, Zones have been introduced in eleven additional precincts, some zones have been modified or ended, and zones in some precincts have been interrupted and restarted, based on analysis and available resources. In three precincts, where crime was high but not concentrated in small sub-areas, all alternative approach to concentrating police attention to fighting crime was implemented as a variant of Impact Zone policing. Over time, aspects of the Impact operating rules, such as the ability of commanders to shift the boundaries or time of operation of Zones based on crime patterns, have been modified.

No special study was needed to document the fact that during the past five years of the Bloomberg Administration crime has continued to decline while it was reportedly increasing in many other major cities. Those numbers are readily available and widely reported. Our task was to answer the question, "How successful has Operation Impact been as a strategy for continued crime

reduction in New York?” The simple answer is that Operation Impact, using a small fraction of the City’s total police force, focused on a very small fraction the total area policed by NYPD, has been consistently successful throughout its implementation in all precincts for all categories of violent crime. Since crime was already coming down when Operation Impact was inaugurated (although at a rate that was declining over time), “success” has to be defined in terms of its effect on the existing downward trajectory of crime. Precincts that were assigned Impact Zones starting in 2003 experienced a 24% acceleration in declining murder rates, a more than doubling of the rate of decline in rapes and grand larcenies, a 21% boost in the decline of robbery rate and of 23% in assault rate by 2006. Automobile theft which, as a property crime, and as a crime that has almost disappeared citywide (down almost 90% in most precincts) was not a priority focus of Operation Impact, alone among major crimes did not show an accelerated decline in Impact Zone precincts.

**Clearly in a time of shrinking resources, Operation Impact has earned its place as an empirically-validated crime-reduction tool worthy of continued adaptation in New York, and emulation in other cities facing resurgent crime, if they have the capacity to replicate the kind of careful analysis on which the implementation of Operation Impact was launched and its implementation has been tracked and managed.**

## Introduction

Despite the historic nature of the decline in crime that has occurred in America's largest city and the extraordinary amount of attention it has received, there remain many persistent myths about that history, and not a few surprises. Since the media and the public failed to notice when crime started its consistent downward trend (in the Dinkins administration, *not* the Giuliani administration) from its peak in the late 1980s and 1990, when there were more than 2,220 homicides reported in New York City, they were not prepared to believe the announced -- and achieved ---crime reduction target of more than 10% that occurred in 1994, the first year of the Giuliani administration, nor the continued decline each year of his two terms in office.

Related to the disbelief in the reality of crime reduction is the entrenched resistance among some scholars and some critics of police to accept the idea that police policies and management are responsible for a significant amount of the crime decline that has occurred. Criminologists and others have been resourceful in generating alternative hypotheses to explain the drop in crime, and have gone to great, some would say heroic, lengths to find evidence that supports their rival hypotheses.<sup>5</sup>

A new skepticism about the role of police in crime fighting was introduced the end of the Giuliani administration. With 1990 to 2002 reductions in all categories

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<sup>5</sup> Leavitt, Steven, D., "Understanding Why Crime Fell in the 1990s: Four Factors that Explain the Decline and Six that Do Not," *Journal of Economic Perspectives*, Volume 18, Number 1, Winter 2004.

of crime of between 50 and 90 percent, many questioned how much longer crime could continue to decline in New York. This skepticism was further fueled by a realization, particularly for those that believed that the police deserved the lion share of credit that, in the wake of the terrorist attack of 9/11, significant police attention and resources would be diverted from crime fighting to counterterrorism. Furthermore, in the post-9/11 economy, there was realistic concern that sustaining the level of police staffing achieved in the 1990s would be difficult. Finally, Mayor Giuliani ran for office on a claim that he was uniquely “tough on crime,” and some doubted that any other Mayor, especially in view of the reduced sense of a crime crisis, would assign fighting crime the same high priority.

Across the United States, the skepticism expressed in New York has been validated in cities large and small. After a decade long decline in crime in America’s big cities, recent national crime-statistics show a disturbing upward turn. An October, 2006 Police Executive Research Forum report, “A Gathering Storm: Violent Crime in America,” documents that shift, which it finds became evident in the 2005 crime-statistics.

New York City, which led the national decline, is an exception to this much noted reversal. In 1990 New York City averaged more than six murders per day. As of late May, 2007, NYPD reported that crime is down in all categories, with an overall 8.63% drop in major crimes. While it proved impossible to sustain, The

New York Times reported in late March that homicides in New York City this year averaged less than one per day. Murder in New York City, which has dropped 82% since 1990, is now tracking at slightly *more* than one per day, has declined an additional 17% in the first five months of 2007. New York City remains the safest large city in America.

When crime declined over the past decade, some criminologists pointed to declines in other cities, even though they were less than New York's, to say that NYC was part of a national trend. They attempted to discount claims that anything special had been accomplished by NYPD. Now that New York is clearly not following the national pattern, attention returns to the question: what is New York City doing to reduce crime? This is a report on an evaluation of the City's primary program directed at violent crime reduction, Operation IMPACT.

### **Crime Reduction in New York City**

The police officials from around the nation whose experience and views are reported in PERF's "A Gathering Storm" attributed the reversal in the declining crime trend to a host of factors, including decreasing police staff, increasing demand for other police services, the ready availability of guns, increasingly violent strains in the youth culture, declining federal funding for policing coupled with increased demand for local-police attention to homeland-security concerns,

resurgent drug use, especially methamphetamines, and increasing prisoner re-entry into society in the wake of a several decade-long surge in incarceration.

While the PERF report does not quantify most of these factors or examine their variability across jurisdictions, there is no apparent reason to doubt that these factors are present in New York. Gun availability, for example, is such a problem that the Mayor and Police Commissioner of New York are leading a national effort to change gun policy. NYPD had more than 4,000 fewer uniformed officers in 2006 (36,101) than were in service in 2000 (40,311), and has devoted upwards of 1,000 of that reduced force to counter terrorism and intelligence units. The decline in Federal funding for local police has been painfully felt in New York, and the Mayor of New York has consistently petitioned Congress for a fairer share of homeland security funding for the only American city that has experienced two terrorist attacks. If the factors listed in the PERF reports were determinate of crime patterns, it seems likely that New York City would also be experiencing a crime-trend reversal.

Starting with Safe Streets, Safe City and the introduction of community policing in the early 1990s, New York City made crime reduction --- not just responding to crime --- its goal. Building on the crime reductions begun in the Dinkins administration, using the performance management reform CompStat, the NYPD has achieved consistent, continuing crime-reduction and public-safety

improvement of historic proportions.<sup>6</sup> This has been achieved while the City has faced the quantum change in the challenge to public-safety posed by the discovery of modern technology by global terrorist-organizations, and their apparent selection of New York City as a prime target. However, the Department could not -- and did not -- rest on its laurels.

While major crime over the past decade has been reduced by more than two thirds overall, (down from 527,257 major reported crimes in 1990), and by more in some parts of the City and in some categories, each year when the totals are in, there remain thousands of robberies and hundreds of murders. In 2001, the last year of the Giuliani administration, there were 162,064 major crimes reported in New York City. To sustain the downward trajectory of reported crime and the upward trend in confidence in public safety, as the City has done even since 9/11, required a relentless search for new sources of leverage in the quest for effectiveness and efficiency. At the start of the Bloomberg Administration, Police Commissioner Raymond Kelly identified one possible contributor to improved effectiveness: the Department's resource-deployment strategy. Turning the tables on modern day Willie Suttons, who reportedly said he robbed banks because "that is where the money is," NYPD has been concentrating new police staff resources as they become available on remaining, empirically mapped "hot spots" because that is where the crime is. On reflection, it is difficult to imagine a

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<sup>6</sup> Thomas J. Lueck, "Serious Crime Declines Again in New York at a Rate Outpacing the Nation's," *New York Times*, June 7, 2005.

more productive post-Academy training environment for “rookie” police officers than their closely-supervised crime “hot spots”.<sup>7</sup>

### **What is Operation Impact?**

Since the start of the Bloomberg Administration, Police Commissioner Raymond Kelly has assigned new personnel resources as they emerge from the NYPD Academy to sometimes very small sub-areas of precincts where crime rates were relatively higher than they were for the City as a whole. When this study began, this new strategy, named “Operation Impact,” was in its third year. The initial results appeared to be clearly positive. Crime consistently declined in the targeted, “Impact Zone” areas more than in the rest of the City.

The NYPD reduced crime within the Impact Zones by 26% in 2004 by tracking crimes, enforcement and deployment on a daily basis, placing highly visible Field Command Posts throughout the Impact Zones and conducting daily intelligence briefings to examine current crime trends and conditions. Operation Impact targeted gangs and narcotics, as well as identified and apprehending individuals with outstanding warrants for past crimes. In all, Operation Impact resulted in over 33,438 arrests and almost 360,308 summonses in Impact Zones Citywide in 2004. Operation Impact helped drive overall crime down 5% last year, 14% over the last three years and also contributed to reducing the number of murders to the lowest level since 1963. The key element of the success of Operation Impact is shifting to meet an area’s needs. (NEWS from the BLUE ROOM, January 13, 2005)

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<sup>7</sup> Another result of Operation Impact worthy of study is its efficacy as a training strategy. In discussions with precinct commanders it was clear that they counted, and took pride in, the number of Impact Zone officers they were able to retain after they completed their Zone assignment.



Operation Impact has varied in the number and location of Zones since it began in 2003, with local proposed, but centrally approved, adjustments during implementation, and intensive review and possible revision each time a new cadet class graduated from the academy.<sup>8</sup> In contrast to the plan-less, data-less and presumably clueless police managers of James Q. Wilson's study in the 1960s, NYPD approaches each Impact deployment with analyses at the precinct, borough, and headquarters levels, complete with competing computer graphic presentations to make the case for favored Zones. The issues addressed are types of crime, clusters in place, time and form, as well as insights into local crime history. To a degree that is unimaginable in the early 1990s when NYPD was entirely dependent on centralized mainframe computer analyses of crime statistics by the Management Information Systems Division at NYPD headquarters, Operation Impact has converted NYPD into a pervasively evidence-driven crime-fighting agency, even at the lowest levels of the Department.

By January 2005, Operation Impact, in its fourth refinement, covered 20 Zones. Some Zones were entirely within precincts and some, based on crime patterns, were constructed across precinct boundaries. Zones also operated in targeted areas in two Housing Commands. Through 2006, Impact Zones have been

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<sup>8</sup> Precinct commanders interviewed were uniformly enthusiastic about Operation Impact, and the fact that they were part of it, but did voice some reservations about the amount of central control exercised over the definition of boundaries. They wanted to be able to make adjustments, for example in block parameters of Zones, without awaiting approval from headquarters. This was a difficult feature of the program to relax because the idea was to test the efficacy of sustained policing in a fixed area and time. By the time of the study some experimentation with limited local discretion was being tested.

deployed in 30 precincts. Eleven precincts have had Zones continuously since the inception of the program. The small areas and shifting boundaries over time posed both opportunities and challenges for evaluation of the intervention's impact.

A special variant of Operation Impact was created first for use in one of the City's highest crime precincts, the 75<sup>th</sup> in East New York, and subsequently two others in the Bronx, the 44<sup>rd</sup> and 46<sup>th</sup>. At the time that a new approach to policing hot spots was introduced in the 75<sup>th</sup> precinct, it had witnessed a 12% decline major crime and a 17% drop in murder, but "still leads the City in homicides, robberies and assaults."<sup>9</sup> While overall crime in the East New York precinct was certainly high enough to warrant an Impact Zone, the patterns were less concentrated than in some other precincts. To address the diffuse pattern of crime in the 75<sup>th</sup> Precinct, the Department launched Operation Trident which divided the 5.6 square miles of the precinct into three separate areas, each under a Police Captain. Like other Impact Zones, these three areas received additional police resources to "cut down crime, reduce response time, and maximize assets". In the original small-area hot-spots, Zone officers were expected to remain in their assigned small areas, and their adherence to this assignment was closely monitored. In Trident in East New York, and in the bisected precincts in the Bronx, officers are assigned to specific sections of the precinct and were directed not to leave their assigned areas. This variation of Operation Impact demonstrated the flexibility of the Department's approach to hot-spots policing,

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<sup>9</sup> NEWS from the BLUE ROOM, January 13, 2005. [http://www.nyc/recent\\_events.html](http://www.nyc/recent_events.html)

but also reflects the challenges posed by the diversity of patterns of life in the City, and crime patterns.

### **The Research on Hot Spots Policing**

All of these efforts by NYPD to target limited resources and to focus attention on the remaining areas of relatively high crime concentrations in the City build upon a growing body of evidence that suggest that targeting police-enforcement efforts on geographic “hot spots” is a particularly effective crime-reduction strategy. This is the conclusion of a national panel of police research experts who reviewed all published empirical studies of policing completed since 1968. The National Research Council review of studies on police effectiveness, which appeared in 2004, well after NYPD launched Operation Impact, found that few police interventions demonstrably work, but it reported that research has shown that *hot-spots policing can effectively reduce crime and disorder*. The report and an earlier review of hot-spot policing studies by Braga, examined randomized experiments in Minneapolis (2), Jersey City and Kansas City (2), as well as quasi-experiments in St. Louis, Kansas City and Houston. (See Braga, 2001) These studies offer evidence that focused police actions can prevent crime, or at least reduce 911 crime calls. Unfortunately, although the best evidence available in support of an existing crime-fighting strategy, these studies were not focused on America’s largest cities (only Houston is larger than New York’s smallest borough), some focused on a specific type of crime only, none examined effects over an extended period of time (the experiments were for less than a year), and

told us little about what specific types of interventions are most effective at reducing crime in hot spots.

The emergence of place-based, geographic focused approaches to crime reduction is one of the most important changes in American policing in the last decade. In a recent police foundation study, 70% of police departments with more than 100 officers reported using crime-mapping to identify hot spots<sup>10</sup> The important question is, of course, what to do with these hot-spots once they are identified, and what happens when this focus is adopted. The 2001 study did not address these questions.

In Weisburd and Braga's 2006 summary of hot-spot policing research, the emergence of hot-spots policing is traced to a combination of theory and technology in the 1980s and early 1990s.<sup>11</sup> The foundation for hot-spots policing, according to these authors, was laid by the intersection of problem-oriented approaches to policing of Goldstein and work on situational crime-prevention-theory by Clarke,<sup>12</sup> and a growing body of empirical evidence showing the disproportionately high concentration of crimes in discrete places like street corners or apartment buildings. In particular, these studies showed that crime is concentrated in specific places in the urban landscape, and that both "good" and "bad" neighborhoods contained areas relatively free of crime and disorder, as

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<sup>10</sup> Weisburd, Mastrofski and Greenspan, 2001.

<sup>11</sup> Weisburd, David and Braga A., ed., Police Innovation ( Cambridge University Press, 2006)

<sup>12</sup> Herman Goldstein, Problem Oriented Policing (Tempe University Press, 1990) and R. V. Clarke, Situational Crime Prevention,

well as areas with disproportionately high levels of crime and disorder.<sup>13</sup> They note that one implication of situational crime-prevention is that by preventing victims and offenders from converging in time and space, police can reduce crime. The essential conclusion of hot-spot policing is that police could be more effective if they focused resources and strategies on these crime hot-spots. This has never been attempted on the scale, intensity or duration of Operation Impact in New York City.

The technological innovation that led to the growth and adoption of hot-spots policing by many police agencies was the development of computerized crime-mapping programs that made it practical for these agencies to develop timely geographic representations of crime in their communities. While CompStat used mapping in the management of crime-reduction efforts in New York, its use did not precisely or consistently follow the model of concentrated deployment of resources on targeted small areas that is central to Operation Impact's model of hot-spots policing.

New York City's robust and extended "experiment" in hot-spot policing offers an opportunity to build on existing research and to answer questions not addressed in the literature.

### **An Empirical Assessment of Operation Impact: Hot Spots Policing in New York City**

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<sup>13</sup> They cite Lawrence Sherman, et al., 1989; Weisburd and Green, 1994; Spelman, 1995; Swartz, 2000

This report presents findings from a study of the impact on crime of the introduction of hot spots policing Zones in ultimately thirty of the seventy-six NYPD precincts, using cross-sectional monthly crime-and-staffing panel-data from 1990 through 2006 in an interrupted time-series evaluation using maximum likelihood expectations. With additional data from interviews with precinct commanders, field observations, and internal planning documents, the study also analyzes the effect of Impact interventions to determine whether it is equally effective and enduringly effective in reducing all types of crimes in all parts of the City where it has been deployed.

We analyzed crime, staffing and other precinct and Zone level data using a variety of statistical measures to assess the impact of Operation Impact, including Trident in East New York and the special versions of Impact in two precincts in the Bronx. We interviewed and observed officials in the various Impact Zones to obtain a more complete portrait of the implementation of crime reduction strategies. During the data-analysis phase of the project we met regularly with NYPD staff to provide preliminary results and obtained midcourse guidance in order to guarantee the maximum utility of the assessment.

### **The Analytic Problem Facing an Empirical Assessment of Operation Impact**

We were asked to evaluate rigorously the effectiveness of Operation Impact, NYPD's Hot Spots Policing Zone strategy. As with all modern empirical policy or program evaluations using social-science research methods, the challenge was to isolate the effects of the intervention from all other major factors that might

constitute alternative explanations of what is observed. The first question is usually the easiest: “did the targeted condition change in the desired and intended direction”? Second, “is the intervention the only plausible explanation for the change”? To answer that question, we needed to segregate the underlying trend in New York City crime for the city as a whole and in the precincts that were ultimately selected for Impact Zone interventions from the impact of hot-spots policing. We did that by modeling three levels of trend.

First, we estimated the trend in crime for the city as a whole without regard to hot-spot policing. Second, we asked if and how crime rates in the precincts selected for hot-spot policing differed from the city as a whole prior to the introduction of the Impact Zones. Finally, we evaluated the incremental impact of the Impact Zone interventions including, where the data allowed, the trend in crime in Impact-Zone precincts when Zones were either suspended or terminated. As described below, we also tested for pre- and post- hot-spots differences at the precinct level and based on the year the NYPD elected to introduce Zones into the precincts.

To prevent crime counts in higher-population precincts from biasing the analysis, we converted gross crime counts into crime rates per thousand people in each precinct. Monthly population estimates were based on population data by precinct as reported by the United States Census Bureau in the 1990 and 2000

**Table 1 - Police Precincts with Impact Zones**

## Number of Months with Active Zones 2003 to 2006

Precinct	2003	2004	2005	2006
14	12	12	12	12
18	0	0	0	<b>5.75 Start 7/10</b>
19	12	12	<b>6.5 End 7/17</b>	0
23	12	12	12	0
25	0	12	0	0
28	0	0	0	<b>6 End 7/09</b>
32	12	12	12	12
40	0	0	12	0
43	12	<b>7.5 End 7/10</b>	0	0
44	0	0	<b>7.5 End 7/17</b>	12
46	12	12	<b>7.5 End 7/17</b>	12
47	0	12	0	0
52	12	12	<b>7.5 End 7/17</b>	<b>5.75 Start 7/10</b>
67	12	12	<b>7.5 End 7/17</b>	12
70	12	12	12	12
71	12	12	0	0
73	12	12	12	12
75	12	12	0	12
77	12	12	<b>7.5 End 7/17</b>	0
79	<b>6 Start 7/01</b>	<b>0.5 End 1/11</b>	<b>5.5 Start 7/18</b>	12
83	0	0	<b>7.5 End 7/17</b>	0
90	0	0	<b>5.5 Start 7/18</b>	0
102	12	12	0	0
103	12	12	12	12
104	0	12	<b>7.5 End 7/17</b>	0
107	0	<b>9 Start 4/01</b>	0	0
109	12	<b>0.5 End 1/11</b>	0	0
110	0	12	12	12
115	12	<b>0.5 End 1/11</b>	0	<b>6.75 Start 7/09</b>
120	12	12	<b>7.5 End 7/17</b>	0
Active Precincts	19	24	19	15
Started in	19	5	4	2
Non-zone Precincts	57	52	57	61
Total	76	76	76	76



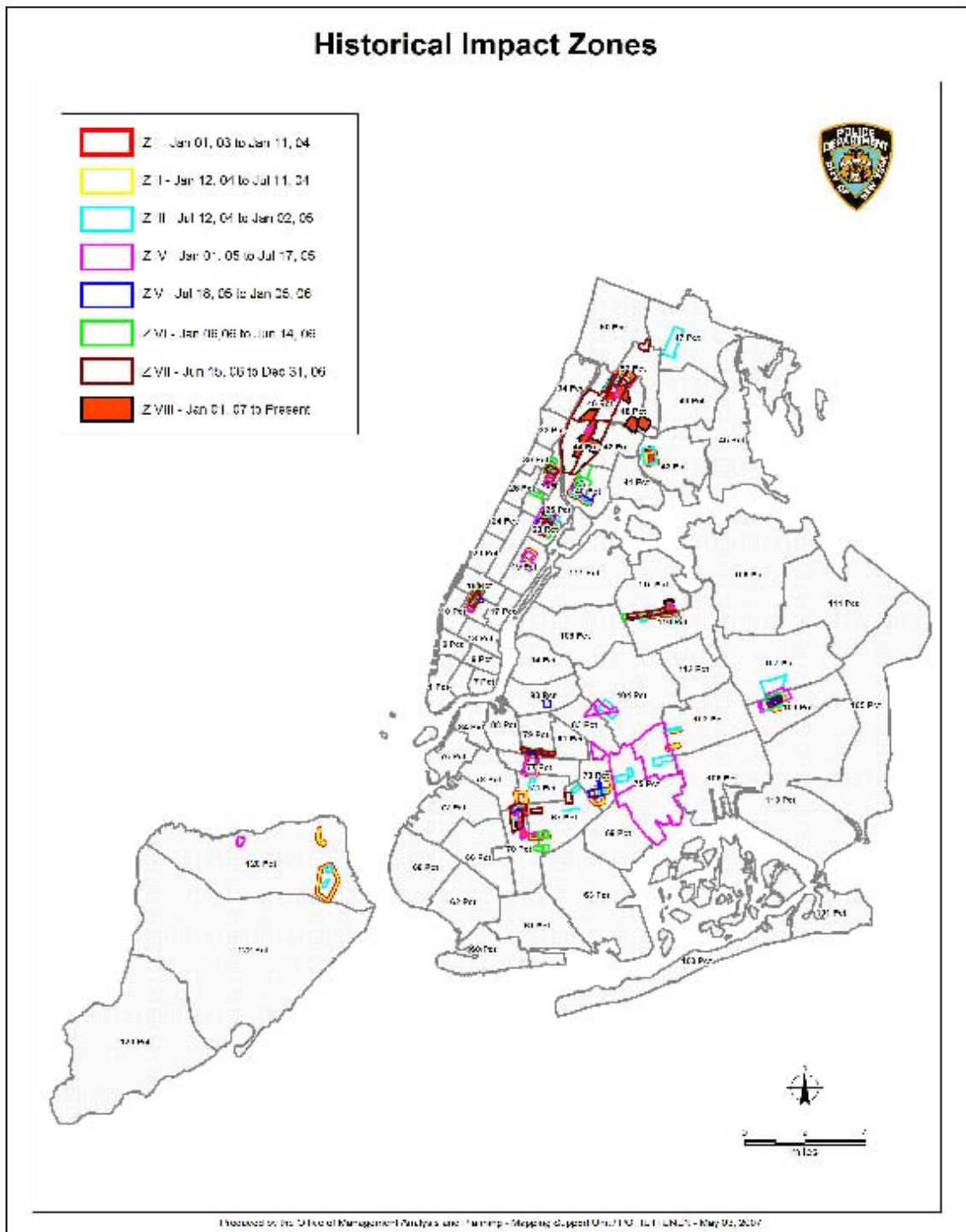
censuses. Population numbers for non-census-reporting periods were estimated using the compound annual population growth rates derived from precinct-level census numbers. Precinct-level census and the compound annual-population-growth estimates used in the study are included in Appendix 1.

As Table 1 shows, Impact Zones were implemented in a total of thirty of the city's seventy-six precincts between 2003 and 2006. Consistent with a targeted management-strategy, zone police activity varied by precinct and by year. The evaluation presented here was complicated by the staggered start and stop dates and the varying lengths and timing of the interventions that are shown in the Table. Those variations made it impossible to isolate the impact of the hot-spot strategy in each year from the effect of the varied start dates, changing intervention intensities and the impact of differential Zone durations on the measured effect of the strategy. While, the results presented below suggest there was little variation in impact either by precinct or start year, we cannot say with certainty if and how the pattern of Impact Zone interventions affected the overall estimates of the program's effectiveness or the year-to-year results estimated.

The map in Figure 1 reveals the highly concentrated nature of Impact deployments. With the exception of the three precincts noted earlier that were designed as fractions of the whole, typical Zones comprised an almost minuscule portion, a few square blocks, of the area in a precinct. Even in the precincts with bisected or trisected Zones, police managers did not randomly deploy the Impact

Zone police they were allocated but assigned them to variable -- rather than fixed -- priority areas of concern based on ongoing crime-analysis in the precinct.

**Figure 1**  
**Hot-Spots Policing Deployment Areas**



## **The Data Set**

Our analysis was based on seven longitudinal crime-rate time-series produced by the NYPD's Crime Reporting system. The data included 202 monthly observations of each of the seven major crimes – murder, rape, robbery, burglary, grand larceny, felony assault, and auto theft – for seventy-three of the City's seventy-six precincts covering the period April 1990 to December 2006. We excluded the 22<sup>nd</sup> Precinct encompassing Central Park from our analysis because there are no population statistics from which to calculate crime rates. We also excluded the 33<sup>rd</sup> and 34<sup>th</sup> Precincts – Washington Heights and Inwood - which were carved out of the 34<sup>th</sup> precinct in 1994. As a result of that carve out, neither crime nor population statistics were available for the all of the time periods used in the analysis.

Because the Crime Reporting system records crimes in their original classification period and corrections in the period when they are approved, there were periods in the data set when reported crime-rates were less than zero. When that occurred, we set the crime rate equal to zero. Comparisons of analyses done before and after these changes were not materially different. However, we were unable to identify the periods when these overstatements occurred. As a result, crime rates in those periods have not been adjusted. These changes did not involve a substantive number of periods for most crime rates. However, 99 entries out of a total of 14,744 total observations were changed for murder and 400 were changed for rape. We cannot rule out that this



The Hot-Spots impact components of the model are:

+  $B_{12} * z\_active$  +  $B_{13} * active\_time$  (impact measures)

+  $B_{14} * md\_pst\_per$  (zone-ended measure)

Definitions of each of the variables and their interpretation are presented in Table

2.

**Table 2**  
**Definition of Variables**

<b>Variable</b>	<b>Definition</b>	<b>Interpretation</b>
period	Time-series variable ranging from 1 to 202 to reflect April 1990 to December 2006.	Reflects the overall crime trend in the city absent hot-spot policing.
period_sq	Period squared.	Measure declining/increasing returns to time of the NYPD core crime-fighting strategy for the city absent hot-spot policing.
z_noz	Dummy variable set equal to 1 for all precincts where Impact Zones were initiated in 2003. It is equal to zero for all other precincts.	Variable measures the difference in the base crime rate for the city (as indicated by the model constant) before the start of any zones and 2003 zone-precincts absent hot-spot policing.
znz_time	Interaction of the z_noz dummy variable with period.	Reflects the difference between crime trend in the 2003 zone-precincts and the city as a whole absent hot-spot policing.
znz_per2	Interaction of the z_noz dummy variable with period_sq.	Measure declining/increasing returns to time of the NYPD core crime-fighting strategy for the 2003 zone-precincts absent hot-spot policing.
time_2004	Interaction of a dummy variable set equal to 1 for all precincts where zones were started in 2004 with period.	Difference between crime trends in the 2004 zone-precincts and 2003 zone-precincts where zones w absent hot-spot policing.
time_2005	Interaction of a dummy variable set equal to 1 for all precincts where zones were started in 2005 with period.	Measure declining/increasing returns to time of the NYPD core crime-fighting strategy for the 2004 zone-precincts.
time_2006	Interaction of a dummy variable set equal to 1 for all precincts where zones were started in 2006 with period.	Difference between crime trends in 2005 zone-precincts and the 2003 zone-precincts w absent hot-spot policing .
z2004_per2	Interaction of a dummy variable set equal to 1 for all precincts where zones were started in 2004 with period_sq.	Measure declining/increasing returns to time of the NYPD core crime-fighting strategy for the 2005 zone-precincts.
z2004_per2	Interaction of a dummy variable set equal to 1 for all precincts where zones were started in 2005 with period_sq.	Difference between crime trends in 2006 zone precincts and 2003 zone-precincts absent hot-spot policing.
z2004_per2	Interaction of a dummy variable set equal to 1 for all precincts where zones were started in 2006 with period_sq.	Measure declining/increasing returns to time of the NYPD core crime-fighting strategy for the 2006 zone precincts.
Z_active	Dummy variable set equal to one for any month when a zone is active in a precinct.	Measures the difference in the absolute number of crimes in the city and the zone precincts.
Active_time	Interaction of z_active with period.	Measures the impact of hot-spot policing on the decline in crime. Negative sign signifies an additional reduction in crime. Positive sign indicates a slowing in the rate of decline.
Md_pst_per	Interaction of a dummy variable set equal to one when any zone is either temporarily suspended or terminated with period.	Measures the impact of suspending or terminating a zone on the fall in crime rates.

This general model looks at the trends in crime over two time periods – pre-hot-spot policing and post-Impact-Zone policing. During the pre-intervention period, the city-wide components of the model isolate a city-wide base level of crime, an overall-city crime-trend and the change in that trend prior to the start of hot-spot policing. The pre-intervention Zone-precinct components of the model look for differences between the zone and non-zone precincts. Within the zone precincts, the model tests to see if there were statistically significant differences between the city as a whole and each of four groups of Zone-precincts prior to the intervention. Those zone-precinct groups are defined by their start-years with separate groupings for precincts where Zones were implemented in 2003, 2004, 2005, and 2006. The model allows Impact-Zone-groupings to differ from city-wide levels of crime, rates of change in crime rates and the trends in those rates of change.

Like the city-wide variables, pre-intervention Zone-precinct measures, grouped by the year their hot-spots were initiated, have intercepts (base crime level) that are allowed to differ from the city-wide average, rates of change in crime that may differ from the city-wide average and quadratic terms that indicates whether the rate of change in crime itself is changing. These quadratic terms can be interpreted as declining (positive sign) or increasing (negative sign) returns to time from pre-intervention policing strategies. They represent differences between the pre-Impact-Zone results in the Zone-precincts and the city as a whole. A negative sign for any of the quadratic terms indicates the policing

strategy was, in effect, gathering steam with each successive month yielding higher levels of crime reduction than the prior month. In contrast, positive signs for these quadratic terms, as was the case for most crime categories, indicate that the rate of the drop in crime was slowing month-to-month.

The Hot-Spot-Impact section of the model tests for the effects of the Impact-Zone intervention on pre-existing crime trends. These measures indicate whether the hot-spot strategy had an incremental impact on crime above and beyond the historical downward city-wide trend plus the specific rates of crime-change in each of the Impact Zone start-year groupings. Specifically, the trend variable (`active_time`), measures the incremental change in the crime-rate due to Hot-Spots policing. In addition, the hot-spots section of the model also tests for what is called regression to the mean. If regression to the mean exists, the coefficient of the variable `md_pst_per` will be positive indicating that crime rates rose when Zones were suspended or permanently terminated.

As the results below show, not all of these factors were statistically significant for every crime category and some of the variables tested in the complete model were not significant in any final model. For clarity, factors that were not significant at the .1 level were not reported.<sup>14</sup>

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<sup>14</sup> The one exception to that rule was the impact coefficient for burglary – “`active_time`”. For consistency, we did report that coefficient and indicated its p value of .116.



The model presented above can be categorized as a cross-sectional panel-data model or, in the parlance of the Criminal-Justice discipline, a two-level hierarchical model. The model was estimated using Maximum Likelihood Estimation. MLE estimation techniques were used to adjust for the possible bias that might be introduced by the trends in the crime-rates within each of precincts. Those trends would have biased the coefficient estimates, significance measures and standard errors produced by ordinary-least-squares models and led to unreliable results.

In addition to the results reported below and specified in the model above, we examined a three-level hierarchical formulation of the model where Impact Zones were clustered according to the year they were started. None of the alternative formulations of that model were significant. We also tested the impact of staffing levels - standardized both on a per-capita basis and per-square mile as a measure of patrol density – to determine the impact staffing had on post-hot-spot results. Both formulations of staffing proved to be proxies for the time components in the models described above with comparable results to those reported below. As a result, we completed the analysis using the model described above.

As part of our analysis, we also tested for differential results for Zone-precincts grouped by the years the Zones were started. That was done both by adding a third hierarchical level to the model that attempted to cluster Impact Zone precincts by the year the NYPD elected to start Zones in those precincts. Despite

the application of a variety of optimization techniques and starting points for the models, none of them converged to a solution.

There are two interpretations for why neither of these modeling approaches failed to find differential levels of performance. First, it may be that there was insufficient variation among the groups to define an optimal solution. If that is the case, it suggests that there was little variation among the results for each of the start years and the results reported here are consistent across all start years.

A second explanation for the lack of significant results may lie in the unbalanced sample sizes, variations in start and stop dates, and lengths of intervention among the Zones. As Table 1 shows, the NYPD instituted Impact Zones in nineteen precincts in 2003 but only two new Zones in 2006. In addition, eight of the 2003 Impact Zone precincts had continuous or almost continuous Zones in place through 2006 while neither of the Zones started in 2006 were in place for more than six months. To the extent that is the cause of the results that were observed, there may have been year-to-year or precinct to-precinct variations in outcomes that we were unable to estimate.

In addition, we tested for differences for the Zone-precincts individually. Those tests were run using what are called random-effects models where each precinct is allowed to have a unique base-crime-level and crime-trend. When that formulation of the model was tested, we were unable to extract any statistically

significant results. Again there are two explanations for why this may have occurred. First, it may be a reflection of the fact that there were no precinct-to-precinct variations in the results generated by the hot-spots strategy. Alternatively, the lack of significance could have been caused by the structure of the underlying data with differential start times, hot spots durations, and occasional Zone suspensions. We were unable to determine which of these explanations is correct. While the lack of differential results does not detract from our overall findings that, with one notable exception and one borderline case, the Impact-Zone strategy appears to have worked to reduce five of the seven major crimes. However, our inability to extract precinct-by-precinct differences in results made it impossible to test for the differential impact of specific intervention strategies.

### **Interpreting the Model**

While the formulation of the model is complex, its interpretation is fairly straightforward. The coefficient for the city, Zone-precincts prior to intervention and the post-intervention results can be interpreted as representing the difference between the city-wide crime trends and those that occurred in precincts where Zones put in place before and after the introduction of Impact Zones in those precincts. To illustrate, let's consider the results obtained from the murder-rate<sup>15</sup> analysis reported in Table 3 below and presented graphically in

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<sup>15</sup> It is important to remember that murder, arguably the most violent crime, even at its peak in 1990 was a rare occurrence. With 2,200 homicides in 1990, in a city of 7,305,000 inhabitants,

the murder-rate analysis section below. The table shows a city-wide decline in the murder rate (as reflected in the variable “period”) of approximately .003 murders per thousand people per month for the city as a whole before hot spots policing was introduced. However, the model also indicates that murder rates in precincts chosen for 2003 Impact-Zones were declining faster than the city as a whole even before hot-spots policing was introduced. To find the pre-hot spots rate of decline in the precincts chosen for 2003 Impact Zones, we add the coefficient for period (-.00281) to  $z_{nz\_time}$  (-.00019) - the coefficient for the 2003 Impact Zone precincts - to get the rate-of-decline in murders in those precincts (-.000471). That indicates that murder rates were falling nearly 68% faster in precincts chosen for 2003 Impact Zones, albeit from a higher crime level, than they were in the city as a whole even without the introduction of Impact Zones.

The hot-spot impact section of the model allowed us to measure whether the introduction of Impact Zones had a statistically significant impact on that underlying trend above and beyond what would have been expected by a continuation of the pre-intervention trend. We measured the hot-spots policing impact on the rate-of-change in crime through the “active\_time” variable. If the coefficient for that variable is negative and statistically significant, it indicates that the Zone was effective in speeding the reduction in crime. Continuing with the murder-rate example, the murder analysis coefficient for active\_time was equal to -.00011 with a p value of .045 which is below the traditionally used .05 cutoff

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there were .30 victimization per thousand. By 2006, with a city that was almost 8 million, homicides were far rarer: .07 per 1,000.

point for significance. That suggests that the total rate-of-decline in murder-rates in precincts where Impact Zones were started in 2003 was  $-.00482^{16}$  - the sum of the city trend, the pre-intervention Zone trend and the impact of the intervention. That change can be interpreted in one of two ways. First, the impact of the Zones added 24% to the crime-reduction rates that existed prior to implementing the hot-spot strategy. Alternatively, the model shows that 19.4% of the drop in crime experienced during the time the 2003 Zones were active can be attributed to the Zones.

### **Results of the Analysis**

Because there is no generally accepted way to aggregate crimes, the results of the analysis are shown for each crime and summarized qualitatively at the end of the results section. Our presentation of the results for each crime will follow the general explanation presented above and add additional insights into the underlying trends and results achieved in Zones started after 2003. We also found evidence that the policing strategies the NYPD was using prior to the introduction of Impact Zones was beginning to produce declining returns.

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<sup>16</sup> That is the sum of the pre-zone city and zone-precinct trends plus the differential impact produced by the zone.

Table 3  
Hot-Spot Policing Analysis Results<sup>17</sup>

	Murder	Rape	Robbery	Assault	GL	Burglary	GLMV
<b>City</b>							
Constant	.02672	.03566	1.3335	.51829	1.97094	1.53560	2.0070
Period	-.00028	-.00022	-.01241	-.00268	-.01056	-.01363	-.02258
period_sq	8.9e-07	5.7e-07	8.9e-07	4.1e-06	2.6e-05	3.6e-05	7.4e-05
<b>Zones Precincts</b>							
z_noz	.19783	.23443	.01978	.32085	NS	.47577 P<.05	-.30714
znoz_time	-.00019	-.00015	-.00482	-.00215	-.00852	-.00133	-.33071
znoz_per2	6.3e-07	4.2e-07 P<.01	6.3e-07	5.5e-06	4.1e-05	NS	-8.5e-06 P<.01
time_2004	.00003 P<.05	NS	.00683	.00367	.012427	.00128	-.00370
z2004_per2	NS	2.3e-07 P<.01	NS	-.00001	4.0e-05 P<.01	NS	NS
time_2005	-.00003 P<.05	.00004 P<.05	-.00102	-.00191	.01179	.00159	.00189
z2005_per2	NS	NS	NS	7.8e-06 P<.01	3.5e-05 P<.05	NS	NS
time_2006	-.00046	-.00049	-.03506	-.00394	-.05927	-.03998	.00512
z2006_per2	1.5e-06	1.7e-06	1.5e-06	NS	NS	9.1e-05	NS
<b>Hot-Spot Impact</b>							
z_active	.01878 P=.054	.06897	.01879	.17792 P<.05	4.18013	.06908 P<.1	-2.3620
active_time	-.00011 P<.05	-.00038	-.00365	-.00112 P<.05	-.02546	-.00138 P=.116	.01381
md_pst_per	NS	NS	NS	.00059 P<.01	NS	.00048	-.00069

<sup>17</sup> All coefficients are significant with  $p < .0001$  except where indicated. NS indicates that the parameter estimates for the indicated variable were not significant at the .1 level.  $\text{CHI}^2 < .0001$  for all regressions.

Table 3 above should be interpreted as follows. There are three sections in the output corresponding to the three elements of the model presented above. The first section presents the base crime level (constant), crime trend (period) and an indicator of changing returns-to-time (period\_sq). If the value of “period” is negative, it indicates a month-to-month decline in the crime rate. If it is positive, the crime rate is rising. If the “period\_sq” variable is positive, it indicates that the rate of decline in crime is slowing over time at approximately twice the rate indicated by the coefficient. If that value is less than zero, it indicates that the decline in crime is accelerating at twice the value of the coefficient per month.

Note the period\_sq coefficients have been presented in scientific notation because of their small size and space limitations in the table. Using the coefficient for period\_sq in the murder column as an example, the value 8.9e-07 can be converted to a decimal by putting six zeros after the decimal point – one less than the number after the e - and following that with the number 89. That makes 8.9e-07 is equivalent to .00000089.

The second section of the table reflects the level and trend in crime in the Zone-precincts prior to the instigation of the hot spots strategy. The three variables z\_noz, znz\_time and znz\_per2 are analogous to the three variables for the city. The variable z\_noz represent the difference between the base rate of crime in the precincts where Zones started in 2003 and the city as a whole. The variable znz\_time represents the difference in the monthly change in crime rates in the

2003 Zone-precincts versus the change in the crime rate for the city as a whole. Finally, `znz_per2` is a measure of the difference in the acceleration or deceleration in the crime rate for the 2003 Zone-precincts versus the city. In all cases, the 2003 Zone-precinct measure is the sum of the city-wide coefficient and the 2003 Zone-precinct coefficient.

Interpreting the variables `time_200X` and `z200X_per2` follow the same model. Whenever these variables are significant, they represent the difference between what happened in the 2003 Zone-precincts and those implemented in 2004. For example, the murder rate in precincts chosen for 2004 Zone introductions had a crime rate that was rising .00003 murders per month faster than the 2003 Impact Zones, while in Zones chosen for 2005 Zone starts had a murder rate that was falling .00003 murders per month faster than the 2003 Zone-precincts. Results for `time_2006` can be interpreted in the same way. Similarly, `z200X_per2` indicates the difference between the returns to time in the 2003 Zone-precincts and those started in 200X. For example, the rate of decline of murder in Zone precincts that were started in 2006 was falling roughly .00003 murders per month.

The final section of Table 3 reports on the results of the hot-spots initiative. Here `z_active` shows the difference between the Zone precincts and the city-wide average when the Zones started. Because of variations in the start dates for the Zone interventions, the `z_active` coefficient is difficult to interpret outside of its



sign. Using the results for murder as an example, the model indicates that murder rates were higher in the precincts chosen for hot-spots policing than they were in other areas of the city. The `active_time` variable measures the impact of the Zone-interventions on crime. If `active_time` is negative, it indicates that the Zone-intervention added to the reduction in crime above and beyond what was occurring prior to that intervention. In the case of murder, hot-spots policing reduced crime by .00011 murders per month. The final variable `md_pst_per` indicated whether crime continued to decrease (negative sign), increased (positive sign) or had no impact (coefficient was not significant) when the Zone was suspended or terminated. In effect, it measures regression to the mean.

In each of the crime-specific results presented above, we have provided overall effectiveness measures as well as impact measures for each of the groups of precincts based on their start years and percentage-impact measures. While the overall results as indicated by the `active_time` variables for each crime may be interpreted as strong evidence of the effectiveness of the Impact Zone-policing strategy, the percentage interpretations and Zone-year-specific results are less robust for the reasons stated above. As a result, those findings should only be used as an indicator of possible variations in the magnitude of crime changes and not construed as precise measures of relative effect.

### **Murder Results**

Prior to implementing hot spots policing, the model shows that murder rates were falling in the city as a whole (period = -.00028) with rates declining faster than

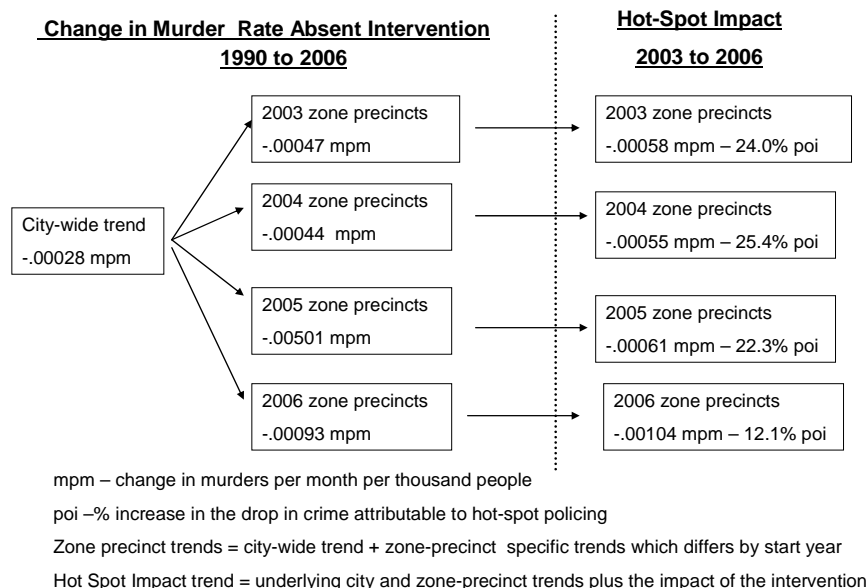
that base rate in the 2003 /2004<sup>18</sup> (znc\_time = -.00019) , 2005 (time\_2005 = .00003) and 2006 (time\_2006 = -.00046) Zone-precincts while murder rates were declining more slowly in the 2004 Zone precincts (time\_2004 = .00019). However, they were falling from a higher level of crime with incidents of murder in Zone-precinct (z\_noz) .198 murders per-thousand-people higher than the city as a whole. In addition, there were signs of declining returns-to-time in the city (period\_sq = 8.9e-07), the Zones as a whole (znc\_per2 = 6.3e-07) and the Zones started in 2006 (z2006\_per2 = 1.5e-06). As discussed above, these “quadratic” terms indicate that the rate of reduction in murder rates was declining on a month-to-month basis.

The hot-spots section of the model indicates that the precincts chosen for hot-spots interventions experienced higher overall rates of crime at the time when the intervention was started (z\_active = .01878). It also shows that the intervention was successful. The rate of change in the crime rate during the intervention (active\_time = -.00011) was 24% higher than it was before the intervention began with the strongest results in the 2003 and 2004 Zone-precincts (see Figure 2).

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<sup>18</sup> Where the quadratic term for a specific year as in z2004\_per2 are not statistically significant, it indicates that zone-precinct group’s performance could not be distinguished statistically from the trend in 2003. Where a quadratic term was significant as it was for 2005, the znc\_per2 and z2005\_per2 coefficients must be added to determine the rate for the 2004 group of zone-precincts. All values within 95% confidence intervals for all of the z\_active impact variables where statistically significant results were reported had negative signs.

### Murder Analysis Figure 2



### Rape Results

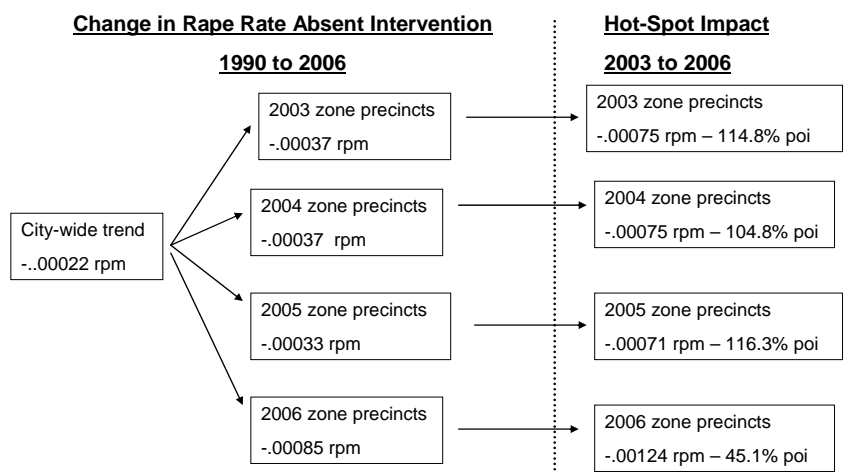
The results show a similar pattern for rape. Prior to the intervention, rape rates were falling in the city as a whole (period = -.00028) with rates falling faster in the 2003, 2004<sup>19</sup> and 2006 Zone-precincts. Again, there were declining returns-to-time for the city as a whole with similarly higher rates-of-decay for the 2003 and 2005 zone-precincts and even faster rates-of-decay in the 2004 and 2006 Zone-precincts.

Again, the hot-spots variables indicate that Impact Zones were effective in further reducing the incidence of rape (active\_time = -.00038) from a level that was higher than the overall city when the Zones were instigated (z\_active = .01878).

<sup>19</sup> The lack of significance for time\_2004 suggests that the rate of change in rape rates was statistically identical to the 2003 zone-precincts.

That equates to a more than a doubling in the rate of decline in incidents of rape in the 2003 Zone precincts compared to the pre-intervention trend. As figure 3 shows, the results were felt in all of the Zone-year precincts but appear to have been most pronounced in the precincts where Zones were started between 2003 and 2005. However, that difference may only reflect the fact that only two Zone-precincts were started in 2006, the lower overall level of rapes across the city and the Zone-precincts by that point in time or the approximately six-month duration of the interventions started in 2006.

**Rape Analysis Figure 3**



rpm – change in rapes per month per thousand people

poi –% increase in the drop in crime attributable to hot-spot policing

Zone precinct trends = city-wide trend + zone-precinct specific trends which differs by start year

Hot Spot Impact trend = underlying city and zone-precinct trends plus the impact of the intervention

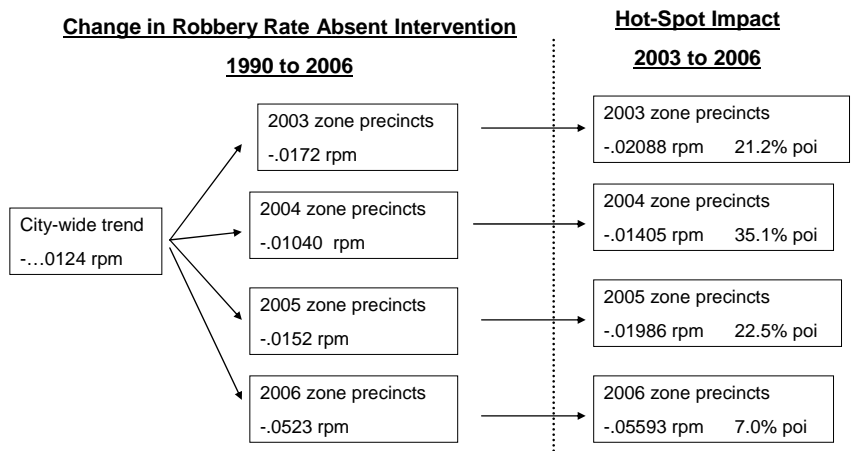
### Robbery Results

Robbery results mirror those found for murder and rape. The pre-intervention city-wide robbery trend was down with the 2003, 2005 and 2006 Zone precincts

experiencing faster drops in robbery rates than the city overall. As it was for murder, robbery rates were dropping more slowly for the 2004 Impact-Zones than they were for the other three Zone-precinct-groupings (time\_2004 = .00683). Again, there were declining pre-intervention returns-to-time for the city as a whole and the each of Zone-start-year groups.

Consistent with the results reported for murder and rape, the Impact-Zone intervention had a statistically significant impact on the drop in crime (active\_time = -.00365). That equated to an overall acceleration of 21% in the drop in crime (see Figure 4) with the strongest relative performance in the 2004 Zone-precincts and the lowest in the 2006 Zone-precincts.

**Robbery Analysis Figure 4**



rpm – change in robberies per month per thousand people

poi –% increase in the drop in crime attributable to hot-spot policing

Zone precinct trends = city-wide trend + zone-precinct specific trends which differs by start year

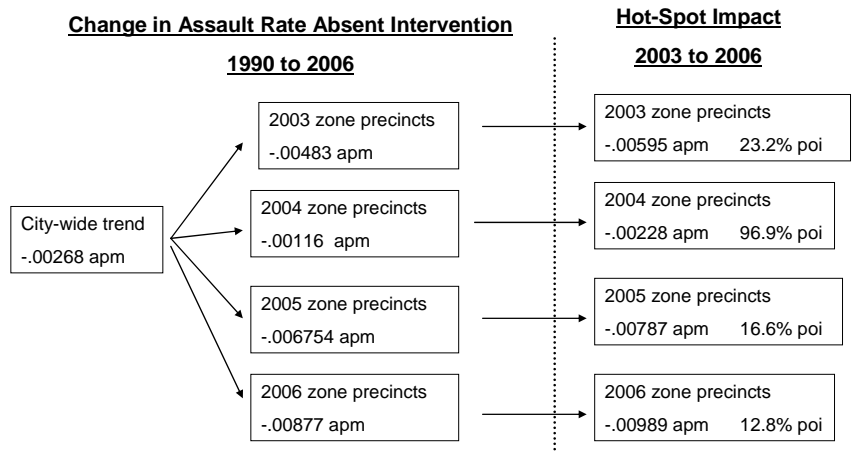
Hot Spot Impact trend = underlying city and zone-precinct trends plus the impact of the intervention

### Assault Results

Results for assault were consistent with the other crimes-against-person. Pre-Impact Zone assault-rates were dropping in the city and in the Zones. Again, there were declining returns both at the city level and in each of the Zone-start-year groupings. As it was with the prior three crime-categories, crime rates were higher in the Zone-precincts at the start of hot-spots policing and fell faster than the city after the start of the Impact Zones. That translates into an overall 23% acceleration in the drop in assaults while the Impact Zones were active. Further, there is evidence that the impact was greatest on Impact Zones that started in 2004 (see Figure 5).

However, there was evidence of regression to the mean for assault. While the Zones were either suspended and after they were terminated, the rate of decline in assaults slowed (md\_pst\_per = .00059).

**Assault Analysis Figure 5**



apm – change in assault per month per thousand people

poi –% increase in the drop in crime attributable to hot-spot policing

Zone precinct trends = city-wide trend + zone-precinct specific trends which differs by start year

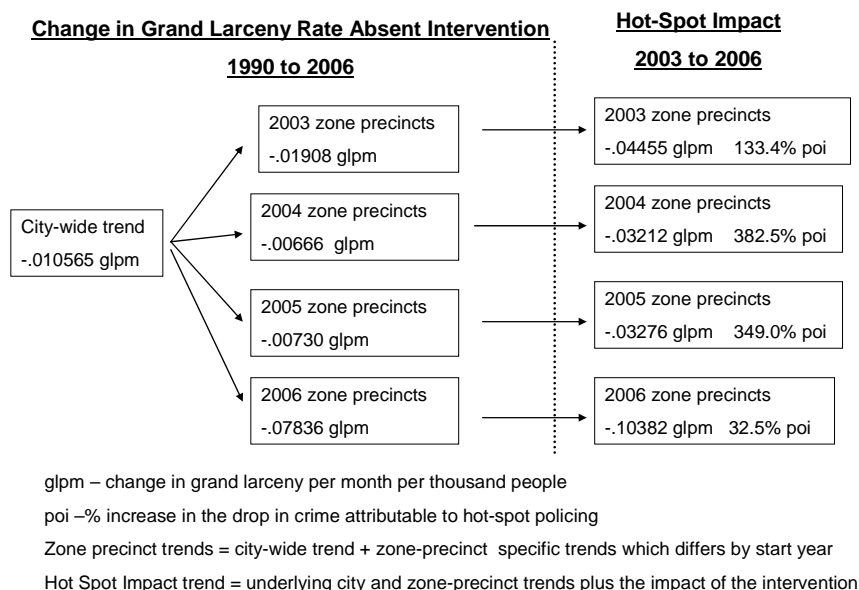
Hot Spot Impact trend = underlying city and zone-precinct trends plus the impact of the intervention

### **Grand Larceny Results**

The patterns for grand larceny were again similar to the first four crime categories. Before the introduction of hot-spots policing, city-wide grand-larceny rates were declining with Impact-Zone-precinct rates going down faster than the city as a whole. Again there were declining returns-to-time both at the city level and within the Impact-Zone precincts.

When the Impact-Zone interventions started, the model suggests that grand larceny levels in the Zone-precincts were higher than they were city-wide. Consistent with the results presents thus far, the rate-of-decline in grand larcenies while the Zones were active in the precincts more than doubled the drop in grand-larceny rates compared to the 2003 Zone-precincts with indications of even stronger effects in 2004 and 2005 Zone-precincts (see Figure 6).

## Grand Larceny Analysis Figure 6



## Burglary Results

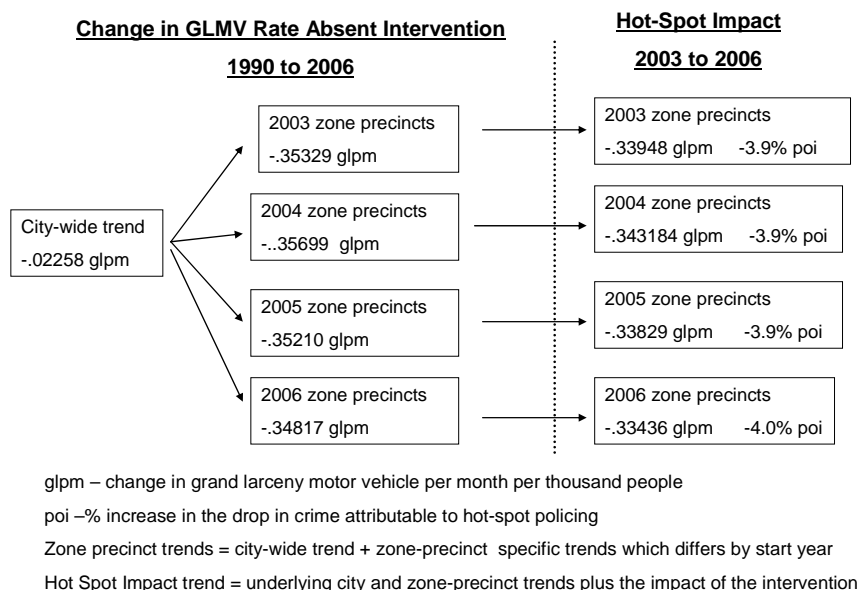
Pre-hot-spots-policing trends for burglary were consistent with what we have presented thus far. Burglary rates were higher in the Zone-precincts that they were in the city as a whole but dropping faster in the precincts selected for inclusion in the hot spots policing initiative. However, outcomes for burglary were significantly different. First, the hot-spots-policing impact measurement for burglary was not statistically significant. Plus, there is statistically-significant evidence of a drop in the rate-of-decline in crime when the Zones were either suspended or terminated. Those results suggest that Impact Zones did not have a material impact on the pattern of falling burglaries that existed prior to hot spots policing but that there was a negative impact when the Zones were inactive.



### **Grand Larceny Motor Vehicle Results**

The pattern in auto theft differed both pre- and post-intervention. First, auto-theft rates were lower in the precincts chosen for hot-spots policing than they were for the city as a whole. However, the pre-intervention pattern of declining crime rates, with higher Zone-precinct rates, and declining returns-to-time was consistent with the other crime-categories. At the start of the Impact Zones, auto-theft rates appear to have been significantly lower in the Zone-precincts in sharp contrast to evidence of higher rates across the other six major crimes. In addition, the model showed a small but statistically-significant slowing the rate of decline in auto-theft while the Zones were active. Overall, the Zones reduced the drop in auto thefts when compared to the pre-intervention period by 3.9% with consistent results across all four Zone-start years. Interestingly, when the Zones were suspended or terminated, the rate of change in auto-theft rates sped up (md\_pst\_per = .00069).

### Grand Larceny Motor Vehicle Analysis Figure 7



### Summary of Statistical Analysis of Operation Impact

Overall, it appears that the impact-policing strategy was effective against visible crimes-against-people. There were significant declines in crime rates for murder, rape, robbery, assault, and grand larceny across all of the Zone-start years. However, that result did not carry over for burglary, where no statistically significant impact was found, and auto theft, where the rates of decline slowed while the Zones were active.

The lack of results in burglary may be an artifact of the nature of the crime. Unlike the other categories, burglaries do not occur on the street and it may have been outside the scope and focus of hot-spots policing strategies to give priority

to that category of crime.<sup>20</sup> The findings for auto theft are a bit more difficult to explain. It may be that the rate of motor-vehicle theft was so low at the start of the interventions that further reductions were hard to achieve. Alternatively, it might have been the case that since auto theft was not a priority of Impact Zones they might not have received added attention in response to evidence that the city-wide and Zone-precinct trends were starting to change. Finally, evidence from a study conducted by the program evaluation team suggests that there may have been some amount of gentrification during the period when the Impact Zones were active. To the extent that is true, the change in auto-theft rates might reflect an increase in the number and types of vehicles in the Zone precincts. Without further study, we are unable to determine which if any of these possible explanations for the impact of hot spots policing on burglary and auto-theft rates explains what we observed in the models.

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<sup>20</sup> It bears repeating that the primary *raison d'être* for Operation Impact was reducing violent crime.

**Table 5****Overall Impact of Hot-Spot Policing  
Compared with Zones Started in 2003**

Crime Category	Change Crime Rate <sup>21</sup>	% Change in Drop in Crime Rates Due to Impact Zones <sup>22</sup>	% of Drop in Crime During Intervention Due to Hot-Spot Impact Zones <sup>23</sup>
Murder	-0.000112	24.0%	19.4%
Rape	-0.0003838	104.8%	51.2%
Robbery	-0.0036496	21.2%	17.5%
Assault	-0.0011215	23.2%	18.8%
Grand Larceny	-0.0254632	133.4%	57.2%
Burglary	-0.0013797	9.2%	8.4%
GLMV	0.0138108	-3.9%	-4.1%

**Managing Impact Zones**

At least since the mid 1990s, precinct commanders in NYPD have played a much more visible role in the management of crime reduction in the City. When the weekly Compstat meeting convenes to review crime trends and police performance in the management of crime, it is precinct commanders who are front and center with their teams reporting on their progress and answering questions. The dialogue in the meetings is all about the evidence presented in graphs, maps and charts. Throughout all the early years of NYPD's celebrated, historic turnaround of crime, the effort was supported by an upward surge in police resources coming from Safe Streets, Safe City, or federal funding for

<sup>21</sup> Negative signs for Crime Rate Change indicate that the hot spots strategy accelerated the month-to-month drop in crime. Positive signs indicate a slowing in the rate of decline in crime.

<sup>22</sup> This is the ratio of the impact of the hot spots interventions to the pre-intervention rate of decline in month-to-month crime rates. Positive signs indicate that impact-zone policing added to crime reduction.

<sup>23</sup> This is the ratio of the Impact Zone impact to the sum of the city-wide trend, the pre-intervention change in crime in the 2003 zone-precincts and the impact of hot spots policing. Because of data issues, we could not find a way to develop a weighted average that would reflect the proportional impact of each zone-start year on the overall average. Positive signs indicate that Impact Zone policing added to the overall reduction in crime.

police and the fight against crime. Today, and in the past several years, with no diminution of pressure to reduce crime further, the context has been one of declining police-personnel. It is not surprising therefore that in meeting after meeting with precinct commanders who had received allotments of Impact-Zone staffing, there was enthusiasm for the program and gratitude for having been selected. In most cases, the enthusiasm and gratitude was fueled by the victories, sometimes dramatic, they could report in reducing crime in the Zones. They also valued being included in one of the Department's key program-initiatives.

The initial design of the study was predicated on the assumption that the success of Operation Impact would vary, potentially widely, across the diverse "hot spots" selected as Zones. We intended the field interviews to provide insights into the different deployment strategies and activity pattern in the different precincts. As reported above we did not find significant differences in crime reduction success rates at the precinct level. Consequently, there was no significant variation in performance to explain. Nevertheless, the field interviews were useful in shedding light on an often neglected aspect of program evaluation, the experience of the program implementers at the local level.

In contrast to the design of our statistical study reported above, our data from interviews and site visits lacks longitudinal and comparative depth. We did not interview precinct commanders who did not receive Impact-Zone deployments,

and we did not interview commanders before their precincts were selected to receive an Impact Zone. Therefore, limited weight can be given to this part of the assessment. Nevertheless, after meeting with commanders in more than half of the participating precincts we can safely report that the introduction of hot-spots policing changes significantly the way crime was analyzed and monitored at the local level, and the degree to which the forces under a precinct commander were mobilized to make as certain as is possible that crime was deterred. If crime goes down in an assigned hot spot, the highest concentration of crime in the precinct, and if steps are taken to guard against any displacement or to respond to it at the first suggestion, the likelihood that crime will decline for the precinct as a whole is quite high. This, of course, is what the statistical analysis presented here found. Viewed in this way, Operation Impact has to be understood to be both a specific tactic but also a strategy of evidence-based crime-fighting at the precinct, borough and City-wide level. The focus on the outcome of violent-crime reduction is shared at all levels, the diagnosis of problem areas is shared, and the monitoring and analysis is focused on the same priority areas and crime patterns throughout the City. This constitutes a notable intensification of NYPD's emerging pattern of pervasive utilization of evidence-based, outcome-oriented policing, from the precinct hot-spots to the Real Time Crime Center.

#### **Methodological Note on this Empirical Assessment of Operation Impact**

None of the "experiments" in other cities of limited duration in a small number of randomly selected blocks, often with proxy measures (such as "crime calls") of

the outcome crime-reduction, can compare with the robustness of the results produced over the past four and a half years of hot-spots policing in New York City. Operation Impact has been studied here but it is not itself a study. Operation Impact is the actual, primary crime-fighting strategy of America's largest city, with all of the complex institutional context that entails. While lacking the power of a random assignment study, the rigorous quasi-experimental design used in the present study, combined with the organizational context, makes up in the extent and depth of real world data what it loses in departing from the methodological rigor -- but artificial nature --of earlier classical experimental efforts to assess the impact of hot spots policing. Both make a contribution to advancing knowledge of what works and does not work in urban policing.

## **Appendix 1**

### **Population and Growth Rates by Precinct**

<b>Precinct</b>	<b>Precinct Number</b>	<b>1990 Census</b>	<b>2000 Census</b>	<b>Monthly CAG</b>
Tribeca/Wall Street	1	29,667	38,470	0.241%
Chinatown/Little Italy	5	44,147	45,694	0.032%
Greenwich Village	6	89,860	88,805	-0.011%
Lower East Village	7	15,266	13,849	-0.090%
East Village	9	108,678	111,735	0.026%
Chelsea	10	39,992	40,104	0.003%
Gramercy	13	64,213	64,750	0.008%
Midtown South	14	53,425	55,731	0.039%
Midtown	17	73,156	76,360	0.040%
Midtown North	18	24,239	23,763	-0.018%
East Side	19	203,479	208,675	0.023%
West Side/Central Park	20	86,718	88,821	0.022%
Upper East Side	23	73,838	78,726	0.059%
Upper West Side	24	117,334	111,709	-0.045%
East Harlem	25	38,855	41,760	0.067%
Morningside Heights	26	52,717	54,560	0.032%
Central Harlem	28	34,738	38,338	0.091%
Harlem	30	57,270	60,180	0.046%
Harlem	32	63,533	68,081	0.064%
South Bronx	40	75,344	80,897	0.066%
Hunts Point	41	55,882	61,506	0.089%
Tremont	42	59,321	71,059	0.167%
Soundview	43	164,056	176,352	0.067%
Morris Heights	44	115,375	134,518	0.142%
Schuylerville	45	90,821	96,447	0.056%
University Heights	46	117,224	128,176	0.083%
Eastchester	47	137,549	156,922	0.122%
Fordham	48	72,441	80,062	0.093%
Baychester	49	98,319	112,083	0.121%
Riverdale	50	92,141	96,680	0.045%
Bedford park	52	125,292	137,925	0.089%
Coney Island	60	97,585	100,867	0.031%
Sheepshead Bay	61	146,692	163,381	0.100%
Bensonhurst	62	149,215	171,008	0.126%
Flatlands/Mill Basin	63	88,513	100,761	0.120%
Borough Park	66	159,127	184,093	0.135%
East Flatbush	67	154,429	161,661	0.042%
Bay Ridge	68	110,269	122,909	0.101%
Canarsie	69	80,982	100,830	0.203%
Kensington	70	161,916	168,880	0.039%
Flatbush	71	111,677	105,136	-0.056%
Sunset Park	72	105,349	123,118	0.144%
Bedford-Stuyvesant	73	85,935	86,174	0.003%
East New York	75	151,551	163,890	0.073%
Carroll Gardens/Red Hook	76	40,250	41,559	0.030%
Crown Heights	77	98,560	96,905	-0.016%
Park Slope	78	59,801	60,555	0.012%
Bedford-Stuyvesant	79	80,401	82,220	0.021%



Brownsville	81	60,385	63,095	0.041%
Bushwick	83	100,167	101,381	0.011%
Brooklyn Heights	84	53,689	57,143	0.058%
Fort Greene	88	43,595	44,569	0.020%
Williamsburg	90	106,969	111,027	0.034%
Greenpoint	94	48,337	50,547	0.041%
Rockaway	100	43,634	46,890	0.067%
Far Rockaway	101	60,553	119,592	0.632%
Richmond Hill	102	114,226	148,924	0.246%
Jamaica	103	105,865	117,549	0.097%
Ridgewood/Middle Village/Glendale	104	146,024	163,936	0.107%
Queens Village	105	174,264	196,051	0.109%
Ozone Park	106	96,703	136,112	0.317%
Fresh Meadows	107	139,552	156,649	0.107%
Long Island City	108	96,872	111,218	0.128%
Flushing	109	221,832	245,071	0.092%
Elmhurst	110	139,849	170,885	0.186%
Bayside	111	114,529	121,296	0.053%
Forest Hill	112	105,564	114,987	0.079%
Jamaica	113	86,928	97,964	0.111%
Astoria	114	173,403	196,478	0.116%
Jackson Heights	115	128,925	169,778	0.255%
St. George	120	139,413	164,316	0.152%
New Dorp	122	113,628	127,420	0.106%
Tottenville	123	125,937	151,992	0.174%

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# Exhibit G



December 27, 2007

## City Is Doubling Police Program to Reduce Crime

By [AL BAKER](#)

Every new police officer in New York City will be sent onto the streets of some of the city's toughest neighborhoods as part of a broad anticrime operation that the authorities say has helped produce historic drops in crime, the city announced on Wednesday.

Police officials and Mayor [Michael R. Bloomberg](#) said that each of the 914 police recruits being sworn in on Thursday would join the program, Operation Impact. They also announced that crime in almost every major category declined again this year, with violence down in the schools and on the subways and with homicides on track to fall below 500 for the first time since reliable statistics became available 44 years ago.

Because some areas, mostly in Brooklyn, show stubbornly higher crime rates, they will get a bigger influx of Operation Impact officers, Police Commissioner [Raymond W. Kelly](#) said. They include parts of Brownsville, Bedford-Stuyvesant, East New York and Crown Heights.

Operation Impact, begun in 2003, matches new recruits with seasoned officers and supervisors to tackle crime spikes in narrowly drawn geographic areas. Coming at a time when the department is facing recruitment challenges, the new influx will double — to more than 1,800 — the number of officers assigned to those duties in a force that currently has 35,400 members.

"If you look at a map showing where crime is, it is clearly concentrated in a couple of areas, and the people that live in those areas have a right to live in a safe neighborhood just like those who are lucky enough to do so today," Mayor Bloomberg said as he stood with Commissioner Kelly and a phalanx of police commanders inside the 28th Precinct station house in Harlem.

As of 7:30 a.m. Wednesday, 484 homicides had been recorded in New York City in 2007, Mr. Kelly said, 97 fewer than at the same time last year. Officials said the city was headed toward having fewer than 500 homicides this year, by far the lowest number in a 12-month period since reliable Police Department statistics became available in 1963, when there were 548 killings.

Asked why the officials had gathered in Harlem, Mr. Kelly said that so far this year, there have been three homicides in the 28th Precinct, while "we had over 100 homicides here, consistently," in years past.

Homicide, which is often viewed as a bellwether for larger trends in crime, was not the only type of violent crime to decrease.

Through Dec. 23, the latest date for which overall police statistics were available, crime had fallen by 6.3 percent compared with the same period in 2006, officials said. Rapes, robberies, burglaries, grand larcenies and auto thefts also declined, compared with last year. Only felony assaults increased, to 16,864 from 16,801,

a 0.3 percent rise.

Officials said crime in the subway system fell by 13 percent compared with last year. In 1990, the officials said, 48 crimes were committed, on average, each day in the subway system, compared with a current average of 6. The decline occurred despite increasing numbers of riders and a Police Department that has nearly 2,500 fewer officers than was allowed for in the city budget.

Police officials said crime in the school system dropped 20 percent compared with last year.

Dennis C. Smith, a professor at the Wagner Graduate School of Public Service at [New York University](#) and an author of an analysis of Operation Impact, hailed the new emphasis on the program as a “targeted use of scarce resources.” He said he had feared that city officials might curb the program because of a crisis in the recruitment of city police officer candidates.

“This is further validation of research that has been done around the country — on smaller, more temporary versions of this approach — that hot-spot policing really works,” Professor Smith said.

Homicides hit their peak in 1990, with 2,245. Mr. Bloomberg said on Wednesday that he hoped the declines would continue after he left office in two years. “I think Ray and I have one hope, and that is whoever succeeds us takes the numbers that we left and takes them down dramatically more,” the mayor said.

[Donna Lieberman](#), the executive director of the [New York Civil Liberties Union](#), said that stamping out crime was “good and important.” But in doing so, she said, the Police Department could not engage in tactics that alienate the community and violate individual rights.

“We have concerns, of course, about the possibility, or indeed the likelihood, that flooding the streets that are identified as ‘high crime’ will result in a sharp escalation of suspicionless street stops and breed antagonism on both sides,” Ms. Lieberman said.

“If police come in there with a hostile attitude and the assumption that everyone on the street is suspicious because it is a so-called high-crime neighborhood, then that is an invitation for civil rights violations that breed hostility, mistrust and bad experiences all around, and certainly no guarantee of a good result in reducing crime in the long term.”

Since criminals can get a sense of police operations, police officials must continually change their tactics, said Thomas A. Repetto, a police historian who monitors the city’s crime numbers.

“The police in New York have to continue to be two steps ahead of the criminals,” Mr. Repetto said. “There is now a lot more pinpointed police activity, aimed at smaller locales. It used to be, 10 or 12 years ago, there was drug gangs on every corner and the police swept through a whole precinct. But now there are smaller pockets of crime, and that is what these impact areas are for, and the areas are constantly shifting.”

Of the 76 police precincts in New York, there were 6 that showed slight increases in overall crime, officials said. Of those, four were in Brooklyn — the 73rd, 77th, 79th and 84th Precincts; one in Queens, the 101st Precinct; and one on Staten Island, the 122nd Precinct.

In one of the Brooklyn neighborhoods, Brooklyn Heights, the increase was very small, 0.65 percent higher than last year, the police said. And homicides rose in only one of those precincts, the 73rd, reaching 28 compared with 22 last year, officials said.

Mr. Kelly said that overall shootings — the number of occurrences and the number of victims — were down compared with last year.

He said that the Operation Impact program was being changed: Rather than moving the roughly 900 officers currently in the program to precinct assignments — and replacing them with two-thirds of the recruits graduating from the Police Academy on Thursday — the existing officers will remain in the program and be joined by all 914 recruits, who will go to existing zones or to others being newly configured.

Mr. Kelly said that about one-third of the 1,800 officers in the program would be sent to central Brooklyn precincts: the 70th, 71st, 73rd, 75th, 77th and 79th. Also, 45 officers will be assigned to northern Brooklyn as Impact Response Team officers, a flexible component within Operation Impact where the borough commander has the option of using the officers as he sees fit.

In the Bronx, the 44th, 46th and 52nd Precincts will get Operation Impact officers. In northern Manhattan, the 32nd Precinct in Harlem will get them. In southern Manhattan, the Midtown North and Midtown South Precincts will get Operation Impact officers. In Queens, the 103rd, 110th and 115th Precincts will get additional officers in the program.

In addition, a housing police unit in Brooklyn will get an Impact Response Team. Police in the transit system will get a similar team of officers, known as an Impact Task Force. Staten Island will also get more overtime tours for the program.

Mr. Kelly said that if he had to identify one program “that has been the prime reason why crime has gone down in this city, at least in this administration, it has been Operation Impact.”

The program could have fallen victim to the continuing recruiting crisis, officials said. But a historical oddity in hiring numbers is allowing Operation Impact to continue and expand. There were about 800 officers hired in 1988, compared with 5,000 the previous year, and since about 81 percent of police officers retire after 20 years on the job, Mr. Kelly said, a large loss of officers was not expected to occur in the coming year.

“We’re going to give this a try, and we’ll monitor it very closely to see if in fact we have to take officers from Impact and put them into precincts,” the commissioner said. “We’ll monitor it literally on a daily basis.”

The authorized head count for the Police Department is 37,838 officers — which is what is allowed for in the city budget. But the department has not been able to meet that goal.

Several city officials have criticized the starting salary for officers in their first six months of employment — \$25,100, which first went into effect for officers hired in January 2006 — as a reason for the current recruitment crisis.

The department is now authorized to hire 2,400 new officers, but as a result of the shortage of recruits, it says it will hire only 1,000 officers for the class that begins in January.

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# Exhibit H

**Foreword, *Crime in the United States, 2004***

In its 75<sup>th</sup> year, the Uniform Crime Reporting (UCR) Program serves as a long-standing example of how the country can benefit when information flows freely among local, state, and federal law enforcement agencies. The cooperative efforts of these agencies to report their jurisdictions' crime statistics enable the FBI to present a nationwide view of crime.

Though Congress passed an act in 1870 calling for the attorney general to gather crime statistics for the United States, the framework for collecting these statistics was missing until the formation of the International Association of Chiefs of Police (IACP) in 1893. The foreword of an IACP manual for police records, published in 1929, states, "We are compelled to recognize that crime statistics must originate with the police and that without police support, there can be no crime statistics." The FBI, tapped to coordinate the UCR Program in 1930, worked to foster this fundamental principle, helping the Program to grow in participation and refine its methods for data collection, analysis, and publication.

*Crime in the United States, 2004*, a manifestation of this collaboration, offers an array of offense, arrest, and police employment data with national totals broken down by region, state, and agency. Narrative and tabular portions highlight national and regional trends identified in the reported figures for the year. Yet, the statistics included in this publication represent only a small percentage of the voluminous amount of information the Program captures and makes available to law enforcement and the public.

This vast compilation of data serves a large and varied audience. In addition to law enforcement, the Program's data users include other members of the criminal justice community, governmental agencies, legislators, researchers, students, the media, corporate managers, and private citizens. The Program's data are essential for those seeking to understand the nature and extent of crime in the Nation, their region, their state, or their community.

Local and state law enforcement agencies and the UCR Program staff collaborate daily to gather and provide reliable crime statistics. The resulting valuable data resource is used in a multitude of real-world applications. In a Nation where information sharing has become a priority as law enforcement works together to investigate crimes and prevent terrorist acts, the UCR Program remains an open book for all who wish to better understand crime in the United States.



**Robert S. Mueller, III**  
*Director*

Data users are cautioned against comparing crime trends presented in this report and those estimated by the National Crime Victimization Survey (NCVS), administered by the Bureau of Justice Statistics. Because of differences in methodology and crime coverage, the two programs examine the Nation's crime problem from somewhat different perspectives, and their results are not strictly comparable. The definitional and procedural differences can account for many of the apparent discrepancies in results from the two programs.

The national Uniform Crime Reporting (UCR) Program would like to hear from you.

The staff at the national UCR Program are continually striving to improve the publications. We would appreciate it if the primary user of this publication would complete the evaluation form at the end of this book and either mail it to us at the indicated address or fax it: (304) 625-5394.

Until data users examine all the variables that affect crime in a town, city, county, state, region, or college or university, they can make no meaningful comparisons.

### Caution against ranking

Each year when *Crime in the United States* is published, many entities—news media, tourism agencies, and other groups with an interest in crime in our Nation—use reported figures to compile rankings of cities and counties. These rankings, however, are merely a quick choice made by the data user; they provide no insight into the many variables that mold the crime in a particular town, city, county, state, or region. Consequently, these rankings lead to simplistic and/or incomplete analyses that often create misleading perceptions adversely affecting cities and counties, along with their residents.

### Consider other characteristics of a jurisdiction

To assess criminality and law enforcement's response from jurisdiction to jurisdiction, one must consider many variables, some of which, while having significant impact on crime, are not readily measurable or applicable pervasively among all locales. Geographic and demographic factors specific to each jurisdiction must be considered and applied if one is going to make an accurate and complete assessment of crime in that jurisdiction. Several sources of information are available that may assist the responsible researcher in exploring the many variables that affect crime in a particular locale. The U.S. Census Bureau data, for example, can be used to better understand the makeup of a locale's population. The transience

of the population, its racial and ethnic makeup, its composition by age and gender, educational levels, and prevalent family structures are all key factors in assessing and comprehending the crime issue.

Local chambers of commerce, planning offices, or similar entities provide information regarding the economic and cultural makeup of cities and counties. Understanding a jurisdiction's industrial/economic base; its dependence upon neighboring jurisdictions; its transportation system; its economic dependence on nonresidents (such as tourists and convention attendees); its proximity to military installations, correctional facilities, etc., all contribute to accurately gauging and interpreting the crime known to and reported by law enforcement.

The strength (personnel and other resources) and the aggressiveness of a jurisdiction's law enforcement agency are also key factors in understanding the nature and extent of crime occurring in that area. Although information pertaining to the number of sworn and civilian law enforcement employees can be found in this publication, it cannot be used alone as an assessment of the emphasis that a community places on enforcing the law. For example, one city may report more crime than a comparable one, not because there is more crime, but rather because its law enforcement agency through proactive efforts identifies more offenses. Attitudes of the citizens toward crime and their crime reporting practices, especially concern-

ing minor offenses, also have an impact of the volume of crimes known to police.

### Make valid assessments of crime

It is incumbent upon all data users to become as well educated as possible about how to understand and quantify the nature and extent of crime in the United States and in any of the more than 17,000 jurisdictions represented by law enforcement contributors to the Uniform Crime Reporting (UCR) Program. Valid assessments are possible only with careful study and analysis of the various unique conditions affecting each local law enforcement jurisdiction.

Historically, the causes and origins of crime have been the subjects of investigation by many disciplines. Some factors that are known to affect the volume and type of crime occurring from place to place are:

- Population density and degree of urbanization.
- Variations in composition of the population, particularly youth concentration.
- Stability of population with respect to residents' mobility, commuting patterns, and transient factors.
- Modes of transportation and highway system.
- Economic conditions, including median income, poverty level, and job availability.

- Cultural factors and educational, recreational, and religious characteristics.
- Family conditions with respect to divorce and family cohesiveness.
- Climate.
- Effective strength of law enforcement agencies.
- Administrative and investigative emphases of law enforcement.
- Policies of other components of the criminal justice system (i.e., prosecutorial, judicial, correctional, and probational).
- Citizens' attitudes toward crime.
- Crime reporting practices of the citizenry.

*Crime in the United States* provides a nationwide view of crime based on statistics contributed by local, state, tribal, and federal law enforcement agencies. Population size is the only correlate of crime presented in this publication. Although many of the listed factors equally affect the crime of a particular area, the UCR Program makes no attempt to relate them to the data presented. ***The reader is, therefore, cautioned against comparing statistical data of individual reporting units from cities, counties, metropolitan areas, states, or colleges and universities solely on the basis of their population coverage or student enrollment.*** Until data users examine all the variables that affect crime in a town, city, county, state, region, or college or university, they can make no meaningful comparisons.

## Summary of the Uniform Crime Reporting (UCR) Program

The Program's primary objective is to generate reliable information for use in law enforcement administration, operation, and management; however, its data have over the years become one of the country's leading social indicators.

The Uniform Crime Reporting (UCR) Program is a nationwide, cooperative statistical effort of more than 17,000 city, university and college, county, state, tribal, and federal law enforcement agencies voluntarily reporting data on crimes brought to their attention. During 2004, law enforcement agencies active in the UCR Program represented 94.2 percent of the total population. The coverage amounted to 95.4 percent of the United States population in Metropolitan Statistical Areas (MSAs), 86.9 percent of the population in cities outside metropolitan areas, and 89.2 percent in nonmetropolitan counties.

Since 1930, the FBI has administered the UCR Program and continued to assess and monitor the nature and type of crime in the Nation. The Program's primary objective is to generate reliable information for use in law enforcement administration, operation, and management; however, its data have over the years become one of the country's leading social indicators. The American public looks to the Uniform Crime Reports for information on fluctuations in the level of crime, and criminologists, sociologists, legislators, municipal planners, the media, and other students of criminal justice use the statistics for varied research and planning purposes.

### Historical background

Recognizing a need for national crime statistics, the International Association of Chiefs of Police (IACP) formed the

Committee on Uniform Crime Records in the 1920s to develop a system of uniform crime statistics. Establishing offenses known to law enforcement as the appropriate measure, the Committee evaluated various crimes on the basis of their seriousness, frequency of occurrence, pervasiveness in all geographic areas of the country, and likelihood of being reported to law enforcement. After studying state criminal codes and making an evaluation of the recordkeeping practices in use, the Committee completed a plan for crime reporting that became the foundation of the UCR Program in 1929.

Seven main offense classifications, known as Part I crimes, were chosen to gauge the state of crime in the Nation. These seven offense classifications included the violent crimes of murder and nonnegligent manslaughter, forcible rape, robbery, aggravated assault, and the property crimes of burglary, larceny-theft, and motor vehicle theft. By congressional mandate, arson was added as the eighth Part I offense category in 1979. Agencies classify and score these offenses according to a Hierarchy Rule, with the exception of justifiable homicides, motor vehicle theft, and arson, and report their data to the FBI. More information regarding the Hierarchy Rule is presented in Appendix I.

During the early planning of the Program, it was recognized that the differences among criminal codes precluded a mere aggregation of state statistics to arrive at a national total. Further,

because of the variances in punishment for the same offenses in different state codes, no distinction between felony and misdemeanor crimes was possible. To avoid these problems and provide nationwide uniformity in crime reporting, standardized offense definitions by which law enforcement agencies were to submit data without regard for local statutes were formulated. The definitions used by the Program are set forth in Appendix II of this publication.

In January 1930, 400 cities representing 20 million inhabitants in 43 states began participating in the UCR Program. Congress enacted Title 28, Section 534, of the United States Code authorizing the Attorney General to gather crime information that same year. The Attorney General, in turn, designated the FBI to serve as the national clearinghouse for the crime data collected. Since that time, data based on uniform classifications and procedures for reporting have been obtained from the Nation's law enforcement agencies every year.

### Advisory Groups

Providing vital links between local law enforcement and the FBI in the conduct of the UCR Program are the Criminal Justice Information Systems Committees of the IACP and the National Sheriffs' Association (NSA). The IACP, as it has since the Program began, represents the thousands of police departments nationwide. The NSA encourages sheriffs

throughout the country to participate fully in the Program. Both committees serve in advisory capacities concerning the UCR Program's operation.

In 1988, a Data Providers' Advisory Policy Board was established. That Board operated until 1993 when it combined with the National Crime Information Center Advisory Policy Board to form a single Advisory Policy Board (APB) to address all FBI criminal justice information services. The current APB ensures continuing emphasis on UCR-related issues. The Association of State Uniform Crime Reporting Programs (ASUCRP) focuses on UCR issues within individual state law enforcement associations and also promotes interest in the UCR Program. These organizations foster widespread and responsible use of uniform crime statistics and lend assistance to data contributors when needed.

### Redesign of UCR

Although UCR data collection had originally been conceived as a tool for law enforcement administration, by the 1980s, the data were widely used by other entities involved in various forms of social planning. Recognizing the need for more detailed crime statistics, law enforcement called for a thorough evaluative study that would modernize the UCR Program. The FBI fully concurred with the need for an updated Program and lent its complete support, formulating a comprehensive three-phase redesign effort. The Bureau of Justice Statistics (BJS), the Department of Justice agency responsible for funding criminal justice information projects, agreed to underwrite the first two phases. Conducted by an independent contractor, these phases were structured to determine what, if any, changes should be made to the current Program. The third phase would involve implementa-

tion of the changes identified. Abt Associates Inc. of Cambridge, Massachusetts, overseen by the FBI, BJS, and a Steering Committee comprised of highly qualified individuals representing a myriad of disciplines, commenced the first phase in 1982.

During the first phase, the historical evolution of the UCR Program was examined. All aspects of the Program, including the objectives and intended user audience, data items, reporting mechanisms, quality control issues, publications and user services, and relationships with other criminal justice data systems, were studied.

Early in 1984, a conference on the future of UCR, held in Elkridge, Maryland, launched the second phase of the study that examined the potential of UCR and concluded with a set of recommended changes. Attendees at this conference reviewed work conducted during the first phase and discussed the recommendations that should be considered during phase two.

Findings from the evaluation's first phase and input on alternatives for the future were also major topics of discussion at the seventh National UCR Conference in July 1984. A survey of law enforcement agencies overlapped phases one and two.

Phase two ended in early 1985 with the production of a draft, *Blueprint for the Future of the Uniform Crime Reporting Program*. The study's Steering Committee reviewed the draft report at a March 1985 meeting and made various recommendations for revision. The Committee members, however, endorsed the report's concepts.

In April 1985, the phase two recommendations were presented at the eighth National UCR Conference. Various considerations for the final report were set forth, and the overall concept for the revised Program was unanimously

approved. The joint IACP/NSA Committee on UCR also issued a resolution endorsing the *Blueprint*.

The final report, the *Blueprint for the Future of the Uniform Crime Reporting Program*, was released in the summer of 1985. It specifically outlined recommendations for an expanded, improved UCR Program to meet future informational needs. There were three recommended areas of enhancement to the UCR Program. First, offenses and arrests would be reported using an incident-based system. Second, data would be collected on two levels. Agencies in level one would report important details about those offenses comprising the Part I crimes, their victims, and arrestees. Law enforcement agencies covering populations of over 100,000 and a sampling of smaller agencies that would collect expanded detail on all significant offenses would be included in level two. Third, a quality assurance program would be introduced.

To begin implementation, the FBI awarded a contract to develop new offense definitions and data elements for the redesigned system. The work involved (a) revising the definitions of certain Part I offenses (b) identifying additional significant offenses to be reported, (c) refining definitions for both, and (d) developing data elements (incident details) for all UCR offenses in order to fulfill the requirements of incident-based reporting versus the current summary system.

Concurrent with the preparation of the data elements, the FBI studied the various state systems to select an experimental site for implementing the redesigned Program. In view of its long-standing incident-based Program and well-established staff dedicated solely to UCR, the South Carolina Law Enforcement Division (SLED) was chosen. The SLED agreed to adapt its existing

system to meet the requirements of the redesigned Program and collect data on both offenses and arrests relating to the newly defined offenses.

To assist the SLED with the pilot project, offense definitions and data elements developed under the private contract were put at the staff's disposal. Also, FBI automated data processing personnel developed Automated Data Capture Specifications for use in adapting the state's data processing procedures to incorporate the revised system. The BJS supplied funding to facilitate software revisions needed by the state. The SLED completed its testing of the new Program in late 1987.

Following the completion of the pilot project conducted by the SLED, the FBI produced a draft of guidelines for an enhanced UCR Program. Law enforcement executives from around the country were then invited to a conference in Orange Beach, Alabama, where the guidelines were presented for final review.

During the conference, three overall recommendations were passed without dissent: first, that there be established a new, incident-based national crime reporting system; second, that the FBI manage this Program; and third, that an Advisory Policy Board composed of law enforcement executives be formed to assist in directing and implementing the new Program.

Information about the redesigned UCR Program, call the National Incident-Based Reporting System, or NIBRS, is contained in several documents. *Data Collection Guidelines* (August 2000) contains a system overview and descriptions of the offense codes, reports, data elements, and data values used in the system. *Error Message Manual* (December 1999) contains designations of mandatory and optional data elements, data element edits, and error

messages. *Data Submission Specifications* is for the use of local and state systems personnel who are responsible for preparing magnetic media for submission to the FBI. The document is only available electronically at the FBI's Internet site at <www.fbi.gov/ucr/ucr.htm>. Another publication, *Handbook for Acquiring a Records Management System (RMS) that is Compatible with NIBRS* is also available electronically at that Web site.

A NIBRS edition of the *UCR Handbook* was published in 1992 to assist law enforcement agency data contributors implementing the NIBRS within their departments. This document is geared toward familiarizing local and state law enforcement personnel with the definitions, policies, and procedures of the NIBRS. It does not contain the technical coding and data transmission requirements presented in the other NIBRS publications.

The NIBRS collects data on each single incident and arrest within 22 crime categories. For each offense known to police within these categories, incident, victim, property, offender, and arrestee information are gathered when available. The goal of the redesign is to modernize crime information by collecting data currently maintained law enforcement records, making the enhanced UCR Program a by-product of current records systems while maintaining the integrity of UCR's long-running statistical series.

It became apparent during the development of the prototype system that the level one and level two reporting proposed in the *Blueprint* might not be the most practical approach. Many local and state law enforcement administrators indicated that the collection of data on all pertinent offenses could be handled with more ease than could the extraction of selected ones. Although

"Limited" participation, equal to the *Blueprint's* level one, remains an option, most reporting jurisdictions, upon implementation, go immediately to "Full" participation, meeting all the NIBRS' data submission requirements.

Implementation of the NIBRS is occurring at a pace commensurate with the resources, abilities, and limitations of the contributing law enforcement agencies. The FBI was able to accept NIBRS data as of January 1989, and to date, the following 29 state Programs have been certified for NIBRS participation: Arizona, Arkansas, Colorado, Connecticut, Delaware, Idaho, Iowa, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Missouri, Nebraska, New Hampshire, North Dakota, Ohio, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, and Wisconsin. Among those that submit NIBRS data, eight states (Delaware, Idaho, Iowa, South Carolina, Tennessee, Virginia, West Virginia, and Vermont) submit all their data via the NIBRS.

Ten state Programs are in various stages of testing the NIBRS. Six other state agencies, as well as agencies in the District of Columbia, are in various stages of planning and developing NIBRS.

### **Suspension of the Crime Index and Modified Crime Index**

In June 2004, the CJIS APB approved discontinuing the use of the Crime Index in the UCR Program and its publications and directed the FBI publish a violent crime total and a property crime total until a more viable index is developed. The Crime Index was first published in *Crime in the United States* in 1960. Congress designated arson as a Part I offense in October 1978, and the UCR Program began collecting arson data in 1979. The FBI adopted the term Modified Crime Index to reflect the addition



of arson as a Part I offense. The Modified Crime Index was the number of Crime Index offenses plus arson. However, in recent years, the Crime Index (and subsequently the Modified Crime Index) has not been a true indicator of the degree of criminality. The Crime Index was simply the title used for an aggregation of the seven main offense classifications (Part I offenses) for which data has been collected since the Program's implementation. The Crime Index and Modified Crime Index were driven upward by the offense with the highest number, in this case, larceny-theft, creating a bias against a jurisdiction with a high number of larceny-thefts but a low number of other serious crimes such as murder and forcible

rape. Currently, larceny-theft makes up 59.4 percent of reported crime, and thus the sheer volume of those offenses overshadow more serious but less frequently committed offenses. The CJIS Division studied the appropriateness and usefulness of the Crime Index and Modified Crime Index for several years and brought the matter before many advisory groups including the UCR Subcommittee of the CJIS APB, the ASUCRP, and a meeting of leading criminologists and sociologists hosted by the BJS. The consensus was that the Crime Index and Modified Crime Index no longer served their original purpose, that the UCR Program should suspend their use, and that a more robust index should be developed.

# CRIME CLOCK 2004



**Every 23.1 seconds      One Violent Crime**

Every 32.6 minutes	One Murder
Every 5.6 minutes	One Forcible Rape
Every 1.3 minutes	One Robbery
Every 36.9 seconds	One Aggravated Assault

**Every 3.1 seconds      One Property Crime**

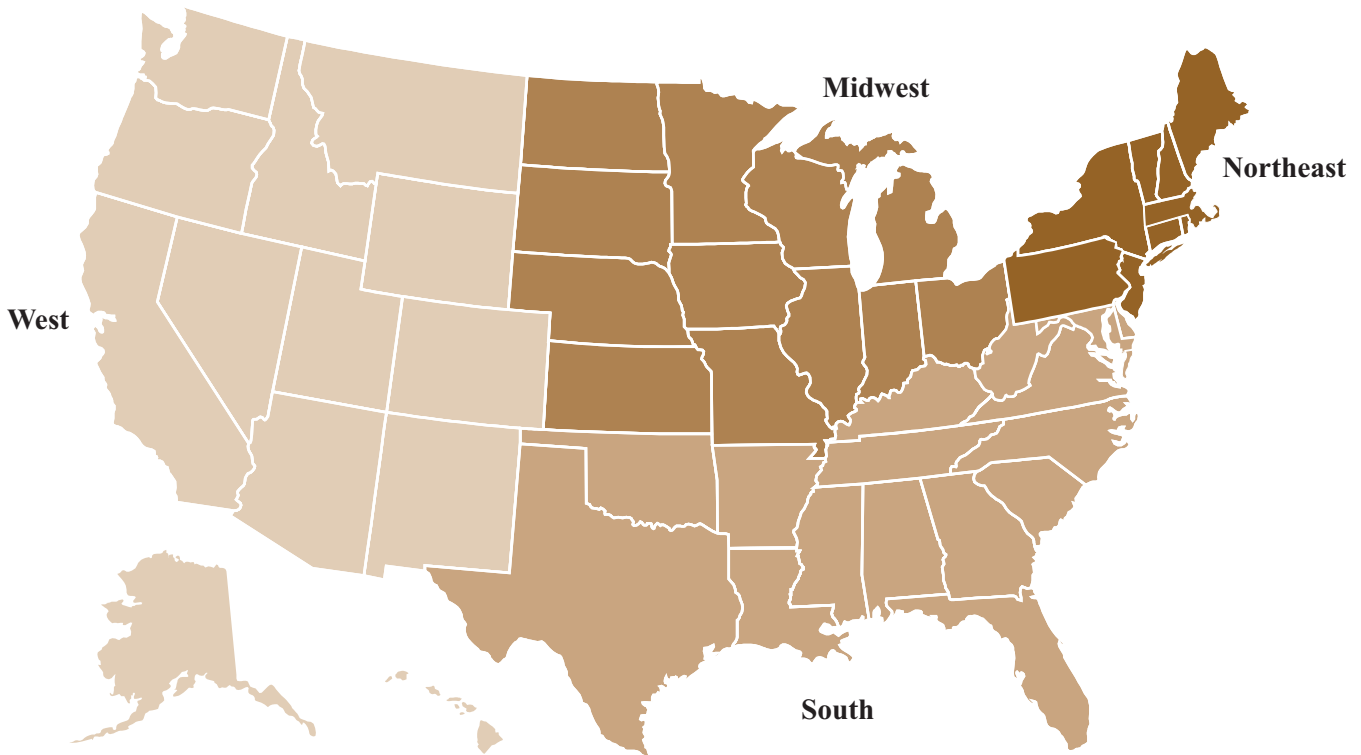
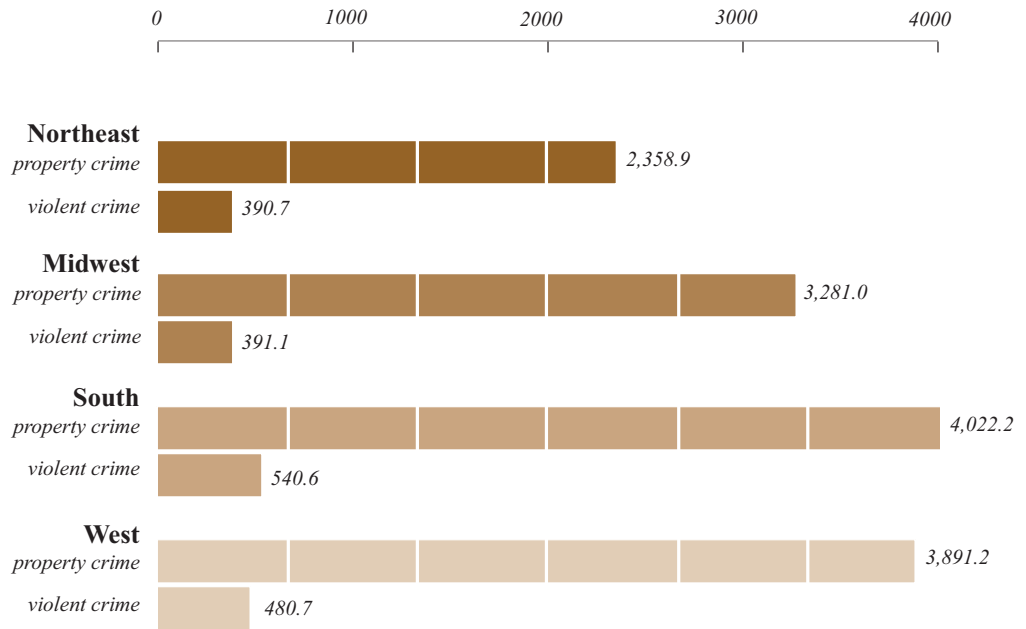
Every 14.7 seconds	One Burglary
Every 4.5 seconds	One Larceny-theft
Every 25.5 seconds	One Motor Vehicle Theft

*The Crime Clock should be viewed with care. The most aggregate representation of UCR data, it conveys the annual reported crime experience by showing a relative frequency of occurrence of Part I offenses. It should not be taken to imply a regularity in the commission of crime. The Crime Clock represents the annual ratio of crime to fixed time intervals.*

**Figure 2.16**

**Regional Crime Rates 2004**

Violent and Property Crimes per 100,000 Inhabitants



# Exhibit I

## Preliminary alternative to Fagan regression: Analysis of the relationship between patterns of stops and patterns of reported suspects

### GENERALIZED ESTIMATING EQUATION REGRESSION OF STOPS

	(Fagan) Total Stop and Frisk	(Alternative) Total Stop and Frisk
Total Complaints (logged)	218.00 <sup>***</sup> (18.52)	
Percent Black in precinct	7.99 <sup>***</sup> (1.17)	-0.16 (0.73)
Percent Hispanic in precinct	5.50 <sup>***</sup> (1.29)	2.00 (1.16)
Percent other in precinct	3.64 <sup>*</sup> (1.73)	4.78 <sup>**</sup> (1.82)
Black suspects		1.93 <sup>***</sup> (0.16)
Hispanic suspects		1.32 <sup>***</sup> (0.29)
Other suspects		0.13 (0.15)
White suspects		0.65 <sup>*</sup> (0.27)
Constant	-1124.91 <sup>***</sup> (109.80)	-9.98 (51.35)
<i>N</i>	1824	1824
adj. <i>R</i> <sup>2</sup>		

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Logged population exposure

Model estimated with robust standard errors

The table above shows some preliminary results comparing the model used by Fagan with an alternative model that includes the number of complaints by race of suspects ( merged suspect/arrest data) as independent variables instead of logged total complaints . Each observation is a precinct-month for the 24 months period starting January 2009 and ending December 2010. 76 precincts times 24 months = 1828 observations.

***Note that when the race related to the complaints is added, the percent Black and the percent Hispanic coefficients are no longer significant. Additionally, the percent black coefficient changes sign.*** This means that, if it were significant, which it is not, that stops are inversely related to percent Black in the population, the opposite of Fagan's claim.

These two results are clear evidence of an omitted variable bias. In respect to the new variables introduced, the Black suspects and Hispanic suspects are significant at the .001 level with positive coefficients. This shows that the total stops in a precinct in a month, are explained by the number of total black and Hispanic suspects rather than by the percentage black or Hispanic population, demonstrating that Fagan's model missed variables that are central to the analysis, and contradict his central claim that race per se explains stops. This results table demonstrates how the regression results can change dramatically by adding variables. The contrasting finding in the table reinforces our claim of the importance of omitted variables in the analysis.