EXHIBIT A

MICHAEL A. CARDOZO
Corporation Counsel

The City of New York
LAW DEPARTMENT
100 CHURCH STREET
NEW YORK, N.Y. 10007

JENNIFER ROSSAN
Assistant Corporation Counsel
jrossan@law.nyc.gov
(212) 788-0867
(212) 788-9776 (fax)

August 3, 2009

<u>**BY EMAIL**</u>

Darius Charney, Esq.
Center for Constitutional Rights
666 Broadway, 7th Floor
New York, NY 10012

     Re: <u>David Floyd, et al. v. City of New York, et al.</u>, 08 Civ. 01034 (SAS)

Dear Mr. Charney:

     In accordance with the Court's Order dated May 26, 2009, defendants identify the following individuals whom defendants intend to call as expert witnesses:

    1.   Professor Dennis C. Smith
        New York University
        Robert F. Wagner Graduate School of Public Service
        295 Lafayette Street
        New York, NY 10012

    2.   Professor Robert Purtell, PhD
        State University of New York
        University at Albany
        Rockefeller College of Public Affairs & Policy
        135 Western Avenue
        Albany, NY 12222

Very truly yours,

Jennifer Rossan
Assistant Corporation Counsel

EXHIBIT B
Pt. 1

1

United States District Court
Southern District of New York
---x

David Floyd et al.,

Plaintiffs,

-against-

08 Civ. 01034 (SAS)

Report of

Dennis C. Smith, Ph.D.

City of New York et al.,

Defendants.
---x

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

2

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,**a nd 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

3

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

4

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 a 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 questions 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 that wait until a crime has occurred to take action.[1]

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

5

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 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

7

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.

8

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."

3. "I also provide evidence that addresses the Intersection of the Fourth and Fourteenth Amendments claims. Specifically, I provide evidence that the NYPD has engaged in a pattern of unconstitutional stops of City residents that are more likely to affect Black and Latino citizens" (p.2)

4. Professor Fagan notes that a Rand Report, commissioned by NYPD to examine the charge of "racial profiling," found that police stops did not provide evidence of "racial bias" when appropriate benchmarks are used In the analysis. The Fagan Report states, "I review the Rand Report in detail, and provide an assessment of the social science reliability of the Report and its probative value as additional evidence in the case."

The Response to Professor Fagan's Report

The Fourth Amendment Claim: The Fagan Report repeatedly alleges that the police are engaged in a pattern of "unconstitutional" stops (often referred to as "unjustified" stops) based on an analysis of the official record of police stop activity, the UF250 form completed by officers to document the stop. Professor Fagan implicitly acknowledges the complexity of an officer's decision when he contemplates the challenge of coding the UF 250 form. Officers have ten circumstances on the UF250 list and can check as many as apply, as well as Indicate other circumstances from a separate list, and can also list additional circumstances.

After completing the "Specify Which Felony/P.L. Misdemeanor Suspected" by writing In an answer the form lists the following options as potential answers to the question on the form See Appendix A for copy of the double-sided UF 250):

10

What were the circumstances which led to stop? (Must check at least one box)

o   Carrying Objects In Plain View Used In Commission of Crime, e.g., slim jim, pry

bar, etc.

o   Fits Description

o   Actions Indicative of "Casing Victim" or Location

o   Actions Indicative of Acting As A Lookout

o   Suspicious Bulge/Object (Describe)

o   Actions Indicative Of Engaging In Drug Transaction

o   Furtive Movements

o   Actions Indicative Of Engaging In Violent Crimes

o   Wearing Clothes/Disguises Commonly Used In Commission Of Crimes

o   Other Reasonable Suspicion of Criminal Activity (Specify)

The first question that might be asked is, which of the behaviors listed on the form

should a trained police officer on patrol, charged with crime prevention as well response

to crime, ignore? Should the officer attempt to avoid detection by the person arousing

suspicion in order to see if an actual crime is committed?[2]

The UF250 also has a section for Additional **Circumstance/ Factors (Check All That**

Apply):

o   Report From Victim/Witness

o   Area Has High Incidence Offense of Type Under Investigation

o   Time Of Day, Day Of Week, Seasons Corresponding To Reports Of Criminal

Activity

---

[2] This query is not hypothetical. Well documented in the literature are tensions between the practices of
officers on patrol whose modus operandi is to intervene when they observe misconduct and any criminal
acts being committed, and officers in other bureaus, such as organized crime and narcotics, who are
willing to delay action or even ignore "minor" crimes in the process of building a "major case" or pursuing
a "bigger" fish in crime hierarchy.

11

- 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

12

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

13

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.

14

Unjustified and indeterminate should not be combined. The report's characterization of the 24.6% of stops that professor Fagan categorized as lacking sufficient information to ascertain justification is per se a problem. However, instead of setting aside these cases as missing data, or distributing the UF 250 reports that Fagan was unable to classify by the proportions that he judges were "justified" and "unjustified" (70/6.7), his analysis combines the unjustified and the three time larger category of unknown (to Fagan) cases, leading to implications in the text and headlines in the media that 30% of the stops have been found, to be unconstitutional stops. That by his own account 70% are justified is reported without any emphasis. The possibility that by using a proportional distribution rule (70/6.7) applied to the undeterminable cases the number of "justified" would reach 90% is not even considered. Accepting for a moment the validity of the coding scheme used by Professor Fagan, but appropriately distributing the undeterminable cases it is reasonable to ask, **if 90% of all police stops are "justified," does not that call into question the claim that the police "often" make stops due to race or ethnicity rather than on the basis of reasonable suspicion?**

Since even that small minority of cases were classified by Professor Fagan as unjustified using less than fully clarified criteria, and the vast majority of classified cases were found to be justified, it does not seem credible to find that the Fagan Report refutes the plaintiff's claim in this case that stops in New York violated the Fourth Amendment rights of New Yorkers.

The Fourteenth Amendment Claim

The analysis of the second, Fourteenth Amendment, claim is does not examine specific stops but instead uses a variety of statistical analyses that mine the data to search for

15

patterns of stops that are consistent with the Plaintiff's claim that 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." "Often" is not, of course, a precise standard by which to judge police behavior.

Statistical analysis is a powerful tool but it depends for it.power on the quality of the ideas it tests.[3] Statistical evidence is always indirect due to the long ago discovered limitation facing empiricism that causality cannot be directly observed, it has to be inferred. [4]Social scientists must construct tests that allow them, based on the best evidence available, to rule out explanations that are rival hypotheses to the one that, based on their theory, they want to establish as the most plausible.

Carol Weiss, one of the founders of the field of program evaluation, argues that valid evaluations depend on solid explication of the theory underlying the policy or program being evaluated.[5] Robert Goodman in an article entitled "Principles and Tools for Evaluating Community Based Prevention and Health Promotion Programs," drawing on "common themes in contemporary evaluation literature" lists as "Principle 1: An evaluation of community prevention programs should include an assessment of program theory."[6]

A central contention of this response to the Fagan Report is that the model of policing New York City used in the analysis to test the Plaintiff's hypothesis (the Fourteenth Amendment claim) is fundamentally flawed. The Plaintiff's analysis does not

---

[3] Professor Fagan asserts this same point in criticizing the Rand Internal benchmarking study for not explicating the theory underlying the design for matching used in its statistical analyses." "In other words, there should be a theory of bias in stops that should inform the matching process, rather than just employing and actuarial method." (p.82)
[4] David Hume, An Inquiry Concerning Human Understanding, 1748.
[5] Carol Weiss, "Nothing is a Practical as Good Theory: Exploring Theory-based Evaluations for Comprehensive Community Based Interventions for Families and Children," in
[6] Robert M. Goodman, Journal of Public Health Management Practices, 1998, 4(2) 37-47, Aspen Publishers, Inc.

16

address the rival hypothesis that the actions of NYPD over the past fifteen years have
been based on a model or theory of crime reduction, rather than giving priority to
responding to crimes *after* they have been committed. Further, over the course of the
past fifteen year, NYPD has used an evidence-based approach to achieving its mission
of improving public safety in the City to refine the model of crime prevention in ways that
are even farther removed from the theory of policing underlying the analysis presented
in the Fagan Report.

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 Fagan Report cites William Bratton's
book, *Turnaround: How America's Top Cop Reversed the Crime Epidemic* in which he
gives his account of the innovation in policing called Compstat, but does not
acknowledge the clear statement in the book that a fundamental key to the successful
"turnaround" in crime was the replacement of a reactive approach to a proactive one.
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
command the expectation that police will intervene in response to suspicious behavior,
rather that wait until a crime has occurred to take action.[7]

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

---

[7] The systematic recording of stop, question and frisk by police was not in place in New York during the
two years in the mid 1990s when William Bratton was Commissioner, but careful monitoring of stops was
included in the Court ordered review of Los Angeles Police Department during his entire tenure as Chief.
Christopher Stone, Fogelsong, Cole's study, *Policing Los Angeles Under a Consent Decree: The
Dynamics of Change in LAPD*, 2009, found the pedestrian stops doubled under Chief Bratton, and crime
declined dramatically, as it did in New York City under proactive policing.

concentrated in Black and Hispanic communities in the City, which is in the 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 the 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 in the model used in the statistical analyses in the Fagan Report is the assumption, rep eatedly stated, that police crime pattern analysis and resource deployment are based at the precinct level rather than small areas within precincts. Th e 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.

In a report of a task force of national experts on policing that reviewed empirical evidence of what does and does not work to reduce crime," hot spot policing " was one of the few interventions for which powerful findings of efficacy were found.[8] A study of Operation Impact in New York found that hot spot policing contributed significantly to the already existing downward trend in crime.[9]

---

[8] National Research Council, Fairness and Effectiveness in Policing: The Evidence.2003.
[9] Smith and Purtell,

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 managementto 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

20

used measure what you think it does? The use of "hit rates" in analyzing the "success" of the police stops depend on the meaning of "success."

In the philosophy of police management that was in use during the period of increasing crime in the 1980s, when the NYPD defined its mission as "responding to crime," the finding that over time a decreasing number of stops result in arrest, and that weapons in general and firearms in particular are found in a small and decreasing percentage of stops, might have warranted a charge of lack of efficacy, or at least might have raised a question of cost effectiveness. With the critical shift to a mission of finding crime patterns, deploying police where and when crime is occurring before it occurs, and reducing crime by proactive efforts to stop crime before it happens, ie, preventing crime, the measure of success has changed. In contrast to the definition of success used in the Fagan Report, a downward trend in the number of weapons found, a nd even of arrests, by prevention standards, are evidence of success.

A central goal of proactive policing is to have people leave their weapons at home. In the Fagan Report the fact that a small percent of stops result in arrest is offered as evidence that the stops are unjustified or of questionable efficacy. This seems to convey a confusion of the distinction of stops based on reasonable suspicion and arrests made on the basis of probable cause. If police were omniscient, which they are of course not, and they could intervene 100% of the time just before a crime is committed, crime could be reduced to zero, no constitution rights would be jeopardized and there were would be zero arrests: no crime, no probable cause, no arrest.

Since that is a goal of NYPD, if in the process of making stops based on suspicious behavior, a declining number of weapons are found, that should be read as a positive sign. In addition, given the pattern of crime reduction achieved by NYPD using

proactive policing tactics, the idea of hits has to include its broader preventive effects. Therefore, the finding that there was a "low number of hits" is not evidence of unwarranted or unjustified stops,o r evidence of unconstitutional practice by the police. Rather, it is evidence that proactive policing is succeeding in its goal of making the streets of New York safer for all of its citizens. If the NYC Health Department launched an intervention to reduce cancer in some population in the City, and subsequent screenings found declining incidence of the disease, that would not be viewed as evidence of a failed intervention.

The finding in the Fagan Report that in *only* 20% of stops do officers cite "matches suspect description" as the reason for the stop should not be seen as evidence that the rest of the stops are unjustified. This way of interpreting useful stops appears to be predicated on the ineffective model of policing discarded by NYPD more than fifteen years ago. For there to be a suspect description there has to have been a crime. The extraordinary decline in reported crime, ranging from 60 to 90 percent depending on the category of crime,h as resulted in a commensurate decline in the broadcast by NYPD of specific crime suspect descriptions, just it has resulted in a significant decline in felony arrests, and a 58% decline in the proportion of convicted offenders from New York City entering the New York State prison system. Both of these trends have disproportionately benefited people and communities of color. Would any reasonable persons interpret this by product of crime fighting success in the City as evidence of police failure? Crime prevention policies and practices require definitions of success missing from and antithetical to the Fagan analysis.

In addition to the noted flaws in the models used in the analysis of police practice in the Fagan Report, there are issues with the statistical analysis that must also be raised. Some of the issues are rather esoteric points about which statisticians may disagree but others, like which variable are included in analyses, whether the use of

tools like factor analysis are presented in a sufficiently rigorous and transparent way to allow assessment of their contribution to our understanding of police practices, and how findings are interpreted, a ll have to be addressed to assess the analytic process used in the Fagan Report to draw conclusions about the constitutionality of NYPD crime fighting practices.   I will argue that the misspecification of the models used in the Fagan statistical analyses make them incapable of substantiating any finding of racial bias in NYPD practice.

The ambiguity of the evidence used to ascertain whether stops by police violate constitutional standards in connection with the Fourth Amendment claim (Note: Professor Fagan finds that the vast majority of stops do meet the standard he sets), and the anachronistic nature of the statistical analyses used in addressing the Fourteenth Amendment claim, mean there is little basis for expecting any meaningful finding to emerge from the intersection between the two claims.

Patterns of Crime in New York

As a problem-solving community-oriented police department, NYPD for the past two decades has addressed the problem of crime, which peaked in 1990 with 527,257 serious crimes including 2,262 murders, 3,126 rapes, 100,280 robberies, 44,122 felony assaults, all in the explicitly violent crime categories, and 122,055 burglary, 108,487 grand larceny, and 146,925 grand larceny automobile victims.

To solve the problem of crime, NYPD had to diagnose crime patterns and develop innovative prevention strategies.[10] The diagnoses produced by NYPD showed

---

[10] Ideology may block the diagnostic approach described here. In an analysis of how four Western European countries responded to the emergence of HIV AIDS as a health crisis, three of the four countries (West Germany, Italy and the United Kingdom) used a public health, target the at risk population approach, but France, due its commitment to "Egalite" did not and does not now collect health data that distinguishes French subpopulations(in other words, there are no hyphenated French citizens). As a result France did not adopt public health interventions as was done in the other countries that paid special attention to the loci in the population of the problem. The result, involving some other factors, was a more rapid and extensive spread of the disease in France than in the other countries, and

23

unequivocally that crime, especially violent crime, wa s not randomly distributed across the communities of New York. In 1990, the community of East New York in Brooklyn was afflicted by 109 murders, 133 rapes, 3,452 robberies and 1,789 felonious assaults. A Bronx community in 1990 suffered 89 murders, 90 rapes, 2,187 robberies and 1,640 felonious assaults. By contrast, that same year the Greenwich Village community, reported 7 murders, 10 rapes, 1,433 robberies, and 279 felonious assaults.

NYPD's preventive strategies require accurate and timely intelligence about problems, effective tactics, rapid deployment of personnel and resources, and relentless follow up and evaluation. See Figure 1. Police commanders use evidence-based targeting, with rapid feedback, and adaptive responses to changing conditions, not on an annual or even quarterly time horizon, in deploying resources, but on a real-time basis.[11] The goal is to put vigilant police officers where crime, particularly violent crime, is happening, when it is Happening, and to be on alert for the patterns of crime that analysis has found.

---

a failure to protect the blood supply used in transfusions. See Steffen, Monika. 2005. "Comparing Complex Policies: Lessons from a Public Health Case. Journal of Comparative Policy Analysis" 7 (4):267-9 To deploy police resources equally across all parts of the City without reference to the evident concentration of the problems of violent crime in some subareas of the City could be seen as an policy based on ideology, not prudent public management.

[11] The process of making evidence based decisions involves different time frames for different levels of decision making. The budgetary process that allocates City resources is an annual process, the selection of Impact Zones operates on a six month cycle, Compstat meetings occur weekly and even though a particular precinct may be reviewed periodically, lessons learned each week relevant to crime reduction are disseminated to all commands and are expected to be used as when they are received. Field command within precincts and in Impact Zones are made on a weekly or even daily basis, subject to review at higher levels of command. See Dennis C. Smith and Robert Purtell, "An Empirical Assessment of Operation Impact: NYPD's Targeted Zone Policing," 2007.

24

Figure 1. .
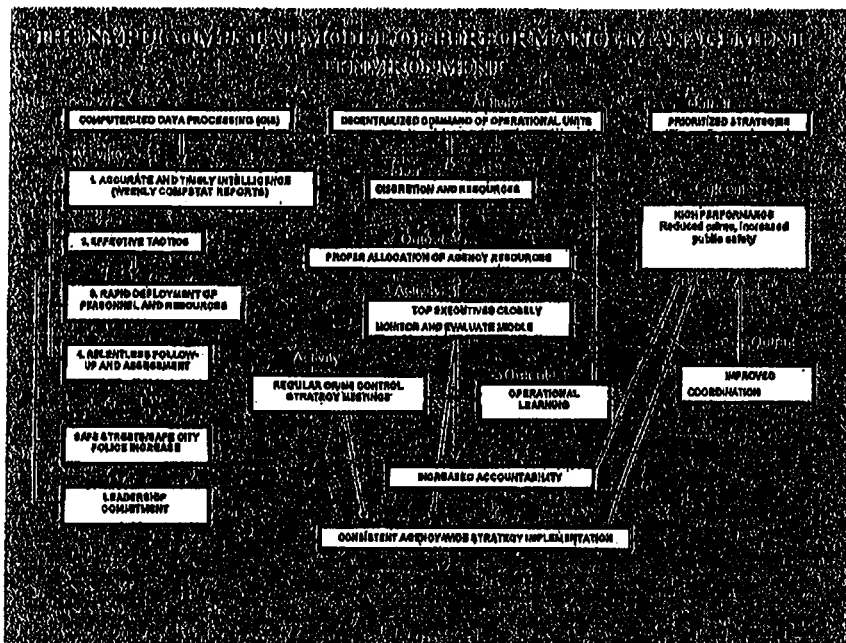
Similarly, the diverse population of the City is not randomly distributed. There are predominately affluent and white neighborhoods, like Greenwich Village, largely African American parts of the City, like East New York, and increasingly Hispanic neighborhoods like Washington Heights, which also have higher concentrations of people living below the poverty level.

Crime victimization is also not randomly distributed across the black, Hispanic or Latino, and white population in the City. As shown in Table 1, Black and Hispanics are disproportionately victims of crime.

Table 1. The distribution of crime victimization across Black, White and Hispanic New Yorkers

Victims	Black (24 % of population)	White (35%)	Hispanic (28%)	Total number of victims in these categories-2009
Murder and non-negligent homicide	57.6%	9.6%	28.9%	453
Rape	40.5	14.7	39.3	1,005
Other felony sex crimes	39,2	15.8	41.1	692
Robbery	31. 0	18.0	38.5	20,642
Felonious Assault	46.7	12.1	35.5	17,035
Grand Larceny	23.8	44.7	20.0	38,877
Shooting Victims	72.8	3.1	23.0	1,729

Source: NYPD, Crime and Enforcement Activity in New York City (Jan 1- December 31, 2009)

As shown in Table 1, in 2009 black New Yorkers were more than twice as likely to be murdered as their share of the population (24%), three times as likely to be shot, significantly more likely to be victims of rape (40.5%) and other felonious sex crimes (39.2%), and assault (46.7%). For Black New Yorkers, the only category in which the share of victimization is slightly less than their population share is grand larceny (23.8%). Robbery victimization among the City's black population, at 31%, is higher than its share of the population but not as dramatically as the other categories of violent crime.

Hispanic or Latino residents of the City, 28% of the population, also experience higher levels of victimization: rape (39.3%), other felonious sex crimes (41.1%) robbery (38.5%) and felonious assault (35.5%). Murder victims in this population are almost

identical to its population share but grand, larceny (20%) and shooting victims (23%) are lower in the Hispanic population than its share.

White New Yorkers are the least likely to be victims of all violent crime except grand larceny. Their disproportionately low share of victimization is most noticeable in the category of shooting victims. Whites are ten time less likely to be victim of a shooting as their share of the City's population. Black New Yorkers, by contrast, are three times more likely to be a shooting victim than their share of the overall population.

Given the patterns of residence in the City these higher rates of victimization for Blacks and Hispanics are not randomly distributed spatially, but concentrated in the specific communities. Almost two third of the murders in 2009 (65%) occurred in three of the City's eight Police Borough commands (Brooklyn North, Brooklyn South, and the Bronx), and less than 3% of all murders in 2009 occurred in Manhattan South. While Manhattan South has a smaller resident population than the boroughs experiencing higher levels of crime, it host on a daily basis a much larger share than other boroughs of the more than 42 million visitors who come to New York annually,[12] as well as at least its share of commuters who come to Manhattan, midtown and south, to work or go to school.

As will be explored more fully later, the ability to determine characteristics of crime perpetrators is not equally distributed across all categories of crime. Burglary and grand larceny automobile are crimes that typically have no information in the complaint filed with the police regarding who committed the offense. For violent crimes, the percent of incidents in 2009 in which the race and ethnicity of victims, suspects (when

---

[12] From 2004 to 2009 the number of visitors, domestic and international ranged, from 39.9 in 2004, to 45.6 million in 2009, and peaked in 2008 with 47 million. See NYC Statistics at http://www.nycgo.com. The visitors were not merely passing through the airports, stopping over en route to other destinations. The City estimates that visitors annual spending during their visits ranged from a low of $21 billion in 2004 to a high of $32 billion in 2008.

27

there is a suspect)[13] and arrestee related to the crime varies by category of crime are

presented in Table 2.

Table 2. Percent of incidents where race/ethnicity of victim, suspect[14] and arrestee is known 2009

Crime reported	Victim	Suspect	Arrestee	Total
Murder and non-negligent homicide	99.3%	100%	100%	
Rape	95.8	88.5	99.5	
Other felony sex crimes	93.2	75.6	99.2	
Robbery	86.7	82.9	99.4	
Felonious Assault	86.4	68.0	99.2	
Grand Larceny	80.4	52.5	99.2	
Shooting Victims	99.4	65.4	98.4	

Source: NYPD, Crime and Enforcement Activity in New York City (Jan 1- December 31, 2009)

For all violent crime categories, however, except grand larceny, where the theft

from a person may occur in a way that does not involve the victim seeing the

perpetrator, where there is a suspect, two thirds or more of crime reports provide

information about the race/ethnicity of suspects.

---

[13] The nature of some of the larger volume crime categories, e.g., burglary, happen in ways that often do not yield any "suspect." Violent crimes are more likely produce a suspect, but even in these cases the circumstance surrounding the crime may preclude identifying a suspect on the complaint form.
[14] The denominator for the suspect calculation of "percent known" is the incidents in which there are suspects.

28

Table 3 shows that the persons committing violent crime in New York City are not representative of the population.

Table 3. Distribution of Distribution of Victims by Race Compared to Suspects in Violent Crime Reports, by Race

Attributed Race of Suspect Compared to Share of Victim Population	Black (24 % of population*)	White (35 %)	Hispanic (28 %)	Total number of crime victims in these categories- 2009
Murder and non-negligent homicide	57.6%/59.8%	9.6%/5.5%	28.9%/31.4%	453
Rape	40.5/ 52.4	14.7/7.6	39.3/36.6	1,005
Other felony sex crimes	39.2/44.8	15.8/7.8	41.1/46.0	692
Robbery	31. 0/70.6	18.0/4.3	38.5/ 23.8	18,602
Felonious Assault	46.7/54.3	12.1/7.6	35.5/33.5	16,768
Grand Larceny	23.9./62.4	44.7/11.4	20.0/23.3	38,877
Shooting Victims	72.8/79.8	3.1/1.4	23.0/18.3	1,729

Source: Source: NYPD, Crime and Enforcement Activity in New York City (Jan 1- December 31, 2009)

Table 3 shows that both victims and their victimizers are disproportionately concentrated in the black population of the City. Hispanic New Yorkers, victims and suspects, are both higher than their share of the population in all categories except grand larceny, robbery and (even lower) shootings. White New Yorkers, who comprise 35% of the population, are underrepresented in all categories of victimization except grand larceny and even more underrepresented as suspects. Whites are suspects in only 1.4% of shootings, 4.3% of robberies, and 5.5% of murders. The closest Whites approximate their share of the population is in the crime category of grand larceny.

29

These three maps also show the patterned nature of crime and police responses:

Figure 2.

2009 CrimeComplaints
where suspect
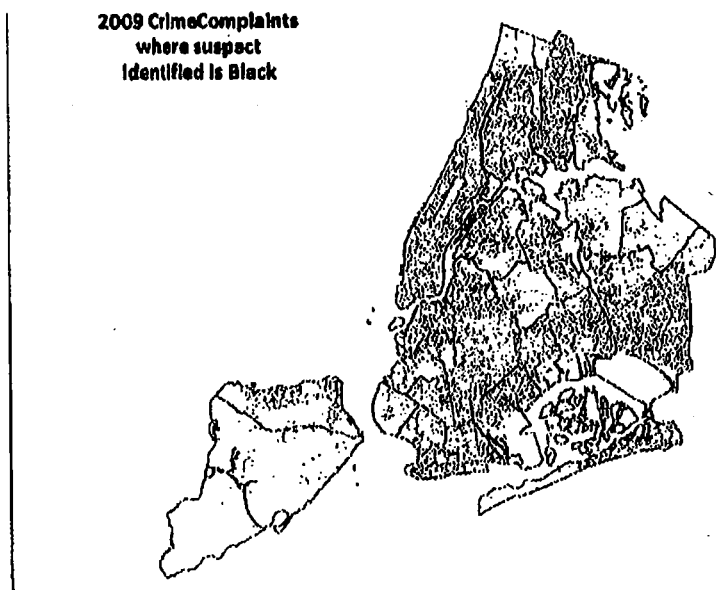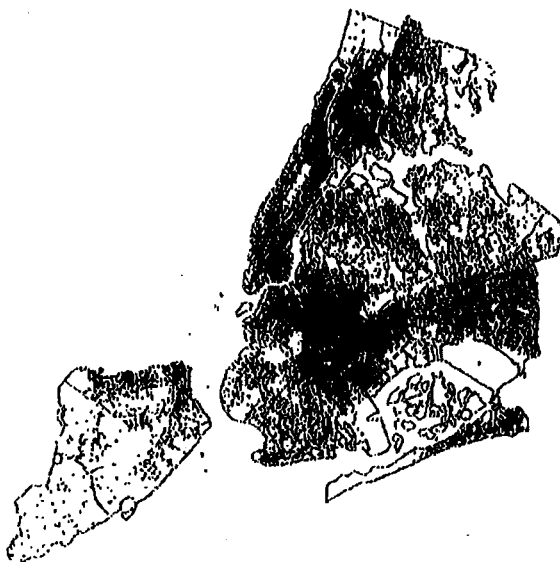identified is Black

**Figure 3.**

Figure 4.

2009 Black Arrests

These three maps of show the widespread distribution but also alignment of the pattern of characteristics of those with race attributed to perpetrators by victims, of those stopped and those arrested. Anyone familiar with the City will see that victims identify the suspects as Black in neighborhood that are predominantly Black neighborhoods but also in parts of the City that are predominantly white neighborhoods.

The non-random nature of crime in New York is not only evident in its distribution by race/ethnicity and community. Patterns of crime also vary by gender, with males committing crime vastly out of proportion to their share of the population. Gender is the most dramatic example of the fact that criminal acts are not random. Crime is also not randomly distributed across all ages. Although there is some discussion in the criminology literature of rising crime rates among "elders" and some disputes in the field about when crime propensity is outgrown, there is no dispute that crime is

31

disproportionately committed by persons starting in the mid teens and persisting at least through the mid-twenties. Even more specifically, males in this age band are disproportionate contributors to the victimization of people *in the communities where they live*. Blacks, males and young combined commit a portion of crime, especially violent crime, very much out of proportion to their share of the population.

The pattern of crime decline in New York is not random either. Since 1990 New York has experienced what University of California Professor Zimring has characterized as a "historic" crime decline.

Figure 5.

Chart 1. New York City Index Crime 1988 -2009
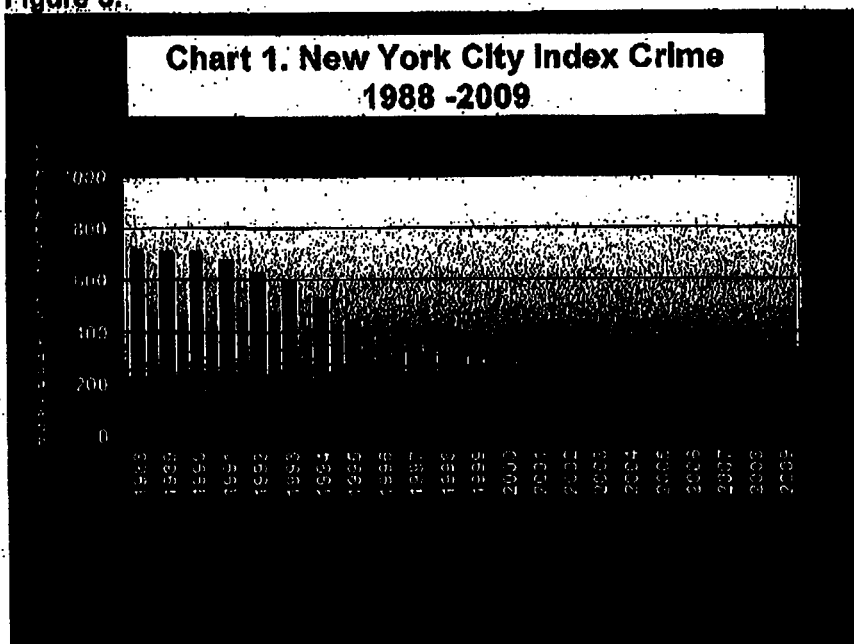
Source: NYPD Office of Management Analysis and Planning

The crime decline in New York has occurred at a time when crime was declining in many part of the nation, but not consistently in New York State outside of the City. The New York City decline began earlier, declined more steeply and has continued longer that the rest of the country. See Chart 2.

32

Figure 6.

US & NYC Index Crime Trends
1988 - 2008
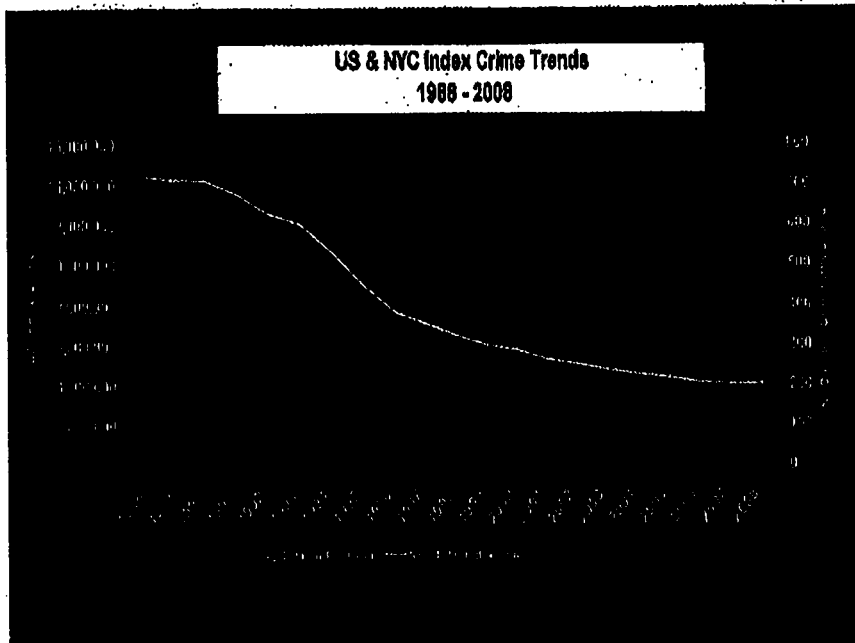
Source: NYPD Office of Management Analysis and Planning

The success of the NYPD approach to fighting crime is even more dramatically shown

in an analysis of specific categories of crime.

Figure 7.

New York City vs. Nation
Index Crime Percentage Change
2008 vs. 1988

	NYC % -/-	Nation % -/-
Murder and Non-Negligent Manslaughter	72.4	24.7
Forcible Rape	77.9	4.3
Robbery	74.4	49.4
Aggravated Assault	65.0	11.4
Burglary	84.4	38.4
Larceny-Theft	61.9	15.3
Motor Vehicle Theft	89.6	37.1
Total Crime Index	72.4	20.9

33

While crime is now down in the nation 20.9%, it is down in New York 72.4%. All categories of major crime show this exceptional performance, but it is especially notable in violent crime. Rape is down 73.9% in New York compared to the nation's 4.4% drop; robbery is down in New York City 74.4% but only 19.4% elsewhere in the United States. Similarly, aggravate assault in the City is down 64.0% compared to 11.4% in the nation.

Given the non-random distribution of crime in the City it should be clear that the beneficiaries of this crime decline are concentrated in the victimized population subgroups. To return to the three neighborhoods cited earlier as examples, crim e is down in East New York, Washington Height and Greenwich Village since 1990. Greenwich Village saw an overall decline of 79.9%, with a decline in murders (1990 to 2009) from 7 to 1, rapes declined 10 to 9, robberies dropped 1,433 to 147, and felonious assaults went down from 279 to 106. East New York's crime declined 75.2%, but that translates into a reduction in murders from 109 to 24, of rapes 133 to 50, robberies 3,452 to 682, and felony assaults 1,789 to 805. Inthe 44th Precinct in the Bronx an 76.8.% overall decline is translates in human terms into a decline in murders from 89 to11 , rapes from 66 to 32, robberies from 2,187 to 408, and a decline in felony assaults from 1,630 to 583. Thus, these comparable percent declines represent hugely positive disproportionate impacts both in terms of the number of lives that were saved and the number of lives that were not disrupted in the communities where they have been achieved. They also show that crime remain a problem in the high crime communities. These examples are not isolated or unrepresentative of the experience in crime reduction in the City. As shown in three maps of crime decline by precinct, the lowest decline in any precinct was 61% and the highest was 87%. Five of the precincts with the lowest crime decline are located in Manhattan where crime was traditionally

34

lower than in other parts of the City. The most dramatic crime drops occurred in precincts with the largest Black and Hispanic resident populations. Therefore, in both percentage and absolute victimization reduction, people of color shared disproportionately the benefits of greater public safety.
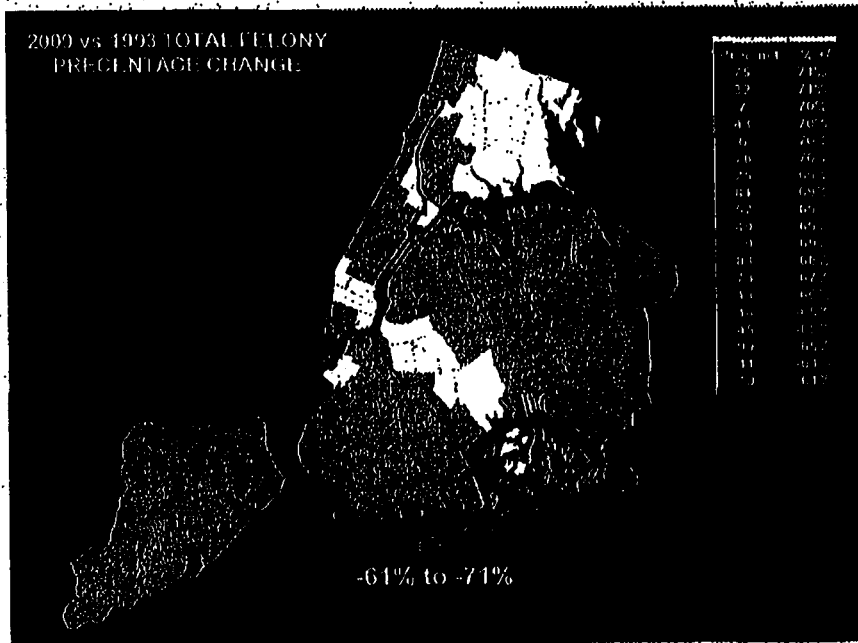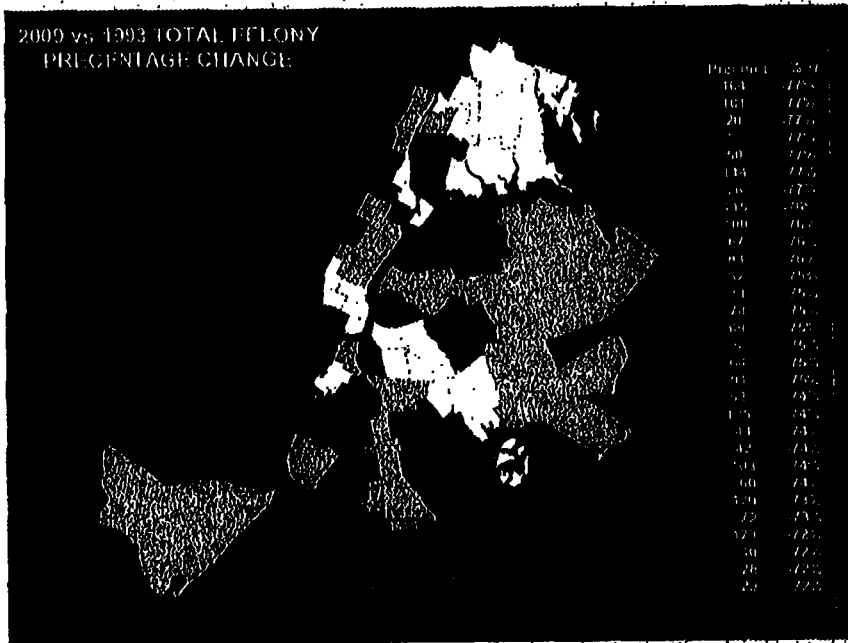
Figure 8.

35

Figure 9.

Figure 10

The Revolution in Crime Fighting in New York City

During the 1970s and 1980s period of steady increase in crime American cities and in New York the dominant approach of police departments was random visible patrol and reactive response to 911 emergency service calls dispatched by radio. Police measured their performance in terms of effort, e.g. officer hours on random patrol or outputs, e.g. response time to calls for service, or clearance by arrest rates of crimes known to police. Crime was dutifully recorded throughout this period and presented in annual reports. It was not used as a performance measure but as a reflection of demand for service and a basis for claims in the budgetary process for more resources. The approach of police departments during this period, including NYPD, was validated by leading scholars in the field of police administration from James Q. Wilson who observed in *Varieties of Police Behavior* (1967) that the police administrator "is in the unhappy position of being responsible for an organization that lacks a proven technology for achieving its purpose". Since police cannot prevent crime, Wilson observed, they concentrate on managing response to crime. Another leading student of crime and police, David Bayley who in *The Police for the Future* (1994) claimed, "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." Bayley further noted that studies of "primary strategies adopted by modern police" found "little or no effect on crime."

The basic premises of the random visible patrol, response to 911 calls, investigative follow up were all the subject of rigorous evaluations in the 1970s and early 1980s. The studies found little or no evidence of their efficacy. These findings, however, had little impact on the practice of police departments across the country, including NYPD.

The widespread assumption among criminologists that police are unable to effectively prevent crime has undergone major revisions in the past fifteen years,

37

largely as result of what followed the announcement by the Mayor and Police Commissioner of New York early in 1994 that they were setting a target of a crime decline for the year. When the crime decline exceeded that target in 1994 and came down even more the following year, and has continued to decline through 2009, some adjustment was required in the assumptions about police efficacy. Leading scholars have varied in the proportion of the decline they attribute to the work of police but there is wide agreement that the contribution of NYPD's reformed approach to fighting crime, first community policing under Mayor David Dinkins, second the introduction of Compstat in the Giuliani Administration, developed by Commissioner William Bratton and his Deputy Commissioner for Crime Strategies, Jack Maple, and over the past eight years of the Bloomberg Administration the initiative of hot spot policing, Operation Impact, led by Police Commissioner Raymond Kelly. [15]

The Fagan analysis appears to have ignored these development in police management and instead predicates its analyses on the assumption that the production of public safety in New York is based on a strategy of responding to crime after victimizations have occurred rather than the prevention of crime. That assumption is almost two decades out of date and that tactic did not work. The Fagan analysis also assumes that the NYPD crime-fighting strategy is focused and managed solely at the precinct level. [16] That assumption ignores a widely recognized innovation in policing

---

[15] Eli Silverman, NYPD Battles Crime: InnovativeStrategies in Fighting Crime (1999), Franklin Zimring, *The Great American Crime Decline* (2007) ,Alfred Blumstein and Joel Waldman, *The Crime Drop in America (2000)*. William Bratton'account of police reform in New York is in Turnaround and Jack Maples's is in Crime Fighter A more scholarly presentation is Dennis C. Smith with William Bratton, "Performance Management in New York City: Compstat and the Revolution in Police Management", from *Quicker, Better, Cheaper? Managing Performance in American Government (2001).*

[16] The Fagan analysis cites the work of Eli Silverman (1999) in asserting the priority of precincts in the development of crime fighting strategies and police management of resources, including deployment of officers. The initiation of Operation Impact in 2003 explicitly shifted the focus of crime fighting from precincts to "hot spots" within precincts.

New York called Operation Impact that was introduced in 2003. Operation Impact involves an evidence-based selection of small areas called hotspots within precincts where plateaus of a violent crime remain despite extraordinary reduction levels of crime in the city as a whole and in the precincts where the hotspots are found. The Fagan analysis assumes that police crime-fighting tactics are based on a planning model that can use quarters of a year, when "timely intelligence" about crime and "rapid response" have been and remain the central premises of the approach to policing New York since the introduction of Compstat in police management in 1994. Compstat meeting are conducted at NYPD headquarters weekly and the results of those intensive crime pattern review meetings are disseminated within the department immediately. The Department has invested significant resources in the creation of a Real Time Crime Center, another highly specialized unit with NYPD that also focuses on finding crime patterns as they emerge and mobilizing rapid response. For the crime of terrorism, where the NYPD has gained national and international recognition for its preventive approach,h igh level meetings occur daily, not quarterly, with immediate deployment to areas of concern.

To summarize, these fundamental flaws in the Fagan analysis have severe consequences for the appropriateness and efficacy of the models he uses to interpret police practice and their results. The Fagan analysis is silent on the subject of whether NYPD has improved public safety in predominately black and Hispanic neighborhoods. He ignores the evidence that policing strategy is driven by timely information focused on very localized areas. As noted above, the lowest crime reduction result in of the NYPD precincts is more that 60% and some precincts in which a majority of residents are black and Hispanic have experience more than 80% reduction in crime. In the three precincts with more than 75% Black populations noted in the Fagan Report (73, 75, 81) crime declined from 1990 to 2009 by 75.6, 75.2 and 72.0, respectively. One recent

study showed that the level of robbery victimization in low-income neighborhoods by the middle of this decade was substantially lower than it was in high income neighborhoods in 1990.

In the Fagan analysis of "hit rates" in police stops there is no recognition of the fact that the test of success in a proactive, prevention-focused program is not the same as in an assessment of a reactive program. In the Fagan Report, the fact that few stops result in gun arrests is treated as evidence of the lack of efficacy of these stops. If the goal of NYPD is to pursue practices that convince would be gun carriers to leave their guns at home, why would the fact that over time fewer guns are found in suspicion-based stops be a sign of failure? If in response to concern about safety a frisk is conducted and no weapon is found is this not a positive outcome no weapon is found is this not also a positive outcome. If a public health policy aimed at preventing a particular disease found in subsequent screenings that the incidence of the disease was declining this would not be judged a failure. If the security checks at airports find an infinitesimal number of weapons or bombs would any reasonable person assess this as a failure of this deterrence practice?

Much is made in the media and in the Fagan and Reiter reports about the absolute number of stops (560,000) made annually by NYPD, and the increase in reported stops over the decade.[17] New York is a city of large numbers. Our public

---

[17] As has been reported elsewhere, and acknowledged in a published study co-authored by Professor Fagan, the process used by NYPD to record police stop activity has been transformed in the past decade. Prior to the revision of the form and currently prescribed practices the UF250 form for recording stops was a paper report with open ended questions, inconsistently completed by officers and collected at the precinct for use by detectives in follow up investigations. The forms were counted monthly and filed. With the introduction of Compstat review meetings and the decentralization of crime data entry in the precincts the counts of UF 250 reports but not the reports themselves were entered in regular reports to headquarters. Following the study completed in 1999 by the office of Attorney General Eliot Spitzer, and the Daniels et al v. City of New York, the police are required to present regularly detailed reports on stop, question and frisk practices. This reporting demand has led to a standardization of the forms and their use. During the decade NYPD has been under both external pressure and internal pressure to achieve consistent submission of UF250 reports and full compliance with the requirement of form completion by officers. Some of the increase in recorded stops is, therefore, not more actual stops, but an increase in *reported* stops.

schools enroll more than a million students. In fact, New York City's under 18 population of 1,940,269 in 2000 is greater than the total population of all but three American cities. The 311 City service call line receives 43,000 calls per day. Between the day it opened for calls in March, 2003, and July, 2007, the City's 311 call center received 50 million calls. New York City's emergency service number, 911, receives on average 38,000 calls a day, or more than 13million a year. The Department dispatches more than 4 million radio runs a year. More than 260,000 noise complaints are forwarded by 311 to the police in a year.

In the Fagan Report,he uses an elaborate construct that compares area precincts and officer staffing with resident population data, adjusted for daytime fluctuations to calculate the exposure of citizens to the probability of police encounters. Another way to calculate the likelihood of a police stop question and frisk occurring to estimate how much police patrol time is devoted to this activity. The fact that NYPD officers are suspicious of citizen behavior sufficiently to make 560,000 stops in one year could appropriately be viewed in the context that the 22,931 police officers, as distinct from sergeants, detectives and other ranks, are on duty a total of approximately 32 million person hours a year. If each stop requires on average twenty minutes of an officer's time, which is an estimate based on the "duration of stop" data in UF 250 reports, and officers are spending less than 1% of their time, less than one minutes out of each hour, while on duty stopping citizens in response to suspicious behavior.[18] A

---

[18] If all members of the Department of the rank of patrol officer made *one stop a day* the total number of stops would not be 560,000 it would be 5 million. For the percent of patrol time calculation if one uses the lower number of officers in the Rand Study who actually made stops and were included in its analysis, approximately 18,000, the amount of total time available to make stops would be reduced by 22%. And if one further assumes that some stops are made by two officers, for example when they occur in the context of a radio run, the number of hours would be also adjusted downward. None of these alternative scenarios produce a percent of patrol time devoted to stops higher than 3%. In the Rand Study officers were considered "high stoppers" if they made 50 or more stops a year, or less than one per week. As noted above for officers whose explicit assignment is to be vigilant, the message police are given is not, "If you see something, say something." The public's charge to the NYPD is, "If you see something, do something."

question never addressed anywhere in the Fagan Report is the following: If an officer observes suspicious behavior would the plaintiff expect any officer not to take action?

What is the role of stop, question, and frisk activity in the historic crime decline achieved by New York City?

The answer to the question of whether SQF has contributed to crime reduction has to begin with a broader question of the role NYPD has played in this dramatic change in the level of public safety in the City. Rival hypotheses purporting to explain the crime decline include claims that it is largely a myth, that the police "fudge" the statistics,[19] economic recovery, increased levels of incarceration, decline in the use of crack cocaine, among others,[20] and decline in lead poisoning in urban neighborhoods where poverty and crime are concentrated. Professor Fagan at a City Council hearing added gentrification of high crime neighborhoods as leading cause of crime reduction. For some, the fact that crime declined in the 1990s across the United States and in Canada also called into question the role of NYPD reforms (community policing early in the 1990s, the introduction of Compstat (data-driven, crime-reduction focused policing) in the mid 1990s, and the addition of hot spot policing, Operation Impact in the current decade. Over time, evidence has mounted that challenge these rival hypotheses. All of the rival explanations have been seriously challenged elsewhere[21] and will not be those rebuttals will not be rehearsed here except for the claim that crime has not declined as much as reported because the crime reports have been fudged. Since it is part of the critique of the Fagan Report that what NYPD has been doing over the past two decades

---

[19] Wayne Barrett, "These Statistics are Crime," in **Rudy! : An Investigative Biography of Rudolph Giuliani**, 2000.

[20] Steven D. Levitt "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—Pages 163–190.*

[21] Frank Zimring, The City that Became Safe: New York and the Future of Crime Control

42

is developing successful crime-reduction strategies and practices, it seems useful to establish the validity of the crime data on which that claim is based.

Fudging of crime statistics by NYPD? A study by the author and a colleague compared the data integrity system used by NYPD with practice in the field of urban policing and with professional quality assurance audit standards. We found the combined efforts and procedures of NYPDs Data Integrity and Quality Control units exceed the practices of other departments, and exceed profession association prescribed standards. When audited crime reports were changed based on scrutiny, which a small fraction of reports, increases in seriousness of reports were ten times as frequent as decreases. In addition, NYPD crime reports are highly correlated with the independent annual US Department of Justice National Victimization Survey. To test statistically for evidence of data tampering, we analyzed the stability over time of larceny reports, using the ratio of grand larceny to petty larceny, to see if there were any unexplained shifts in that ratio over time, and found no evidence of any down shifting of larcenies, from grand to petty. To these findings can be added Professor Frank Zimring's report the NYPD murder reports show a .999 correlation with independent medical examiners reports, and almost as high a correlation between police auto theft reports and claims made to auto insurance companies. Thus, all systematic evidence points to the reliability of NYPD crime reports.

Critique of Statistical Analysis of Police Stop, Question and Frisk Practices of NYPD in the Fagan Report

The time available to respond to the use of statistics to address the Fourteenth Amendment claim of disparate impact on Blacks and Hispanics limited the range of tests that were feasible. Professor Fagan has sought and used data from various

sources, such as the NYC Department of City Planning, to add variables of interest, that were not in the original data set I used in several recent studies of the New York Police Department crime fighting programs. In addition, some of the ways variables were operationally defined in the analyses undertaken and reported by Professor Fagan were not explicated sufficiently to replicate the analysis and modify the statistical models in ways that might provide additional insight. The power of doing a replication and comparative statistical analysis is demonstrated in the Rand Report that replicated an earlier analysis presented by Professor Fagan,[22] and added variables based on a different interpretation of the factor at work in policing the City. The Rand approach substantially reduced the Fagan finding of disparate results correlated with race of persons stopped. In this case, modifying Professor Fagan's analysis to include a control for gender of persons stopped might diminish or eliminate his findings that race explains variation in stops. Although Blacks and Hispanics are stopped by NYPD at higher rates than whites, compared to the entire Census counts of these subpopulations, this over-representation is much smaller than the difference in stop rates among males compared to females. Women comprise more than half of the City's population, a fact that most likely persists in all characterizations of the population (resident, daytime/night time, weekend, commuter, visitors (which approximate 44 million annually). As is shown (p.22) in a Table 3. Age, Gender, and Race or Ethnicity of Persons Stopped, 2004-2009 (%) in the Fagan Report, but not used in any of the statistical analyses, *nine of ten persons stopped by NYPD are men: White males (89.02%), Black males (92.2%) and*

---

[22] Andrew Gelman, Jeffrey Fagan nd Alex Kiss. An Analysis of NYPD Stop-and-Frisk Policy in the Context of Claims of Racial Bias, "Journal of American Statistical Association, 813 (2007)

44

Hispanic males (92.2). Gender is highly correlated with crime[23] and police stops, and is thus an appropriate candidate for a control variable.

Our analysis of 2009 stop and frisk data show distributions similar to those reported in the Fagan Report.

Table 4

Stops and Frisks by Sex (2009)				
Gender	Stopped	%	Frisked	%
Female	38,951	6.76%	11,398	3.49%
Male	529,172	91.81%	311,156	95.16%
Unknown/Unspecified	8,271	1.43%	4,414	1.35%
Total	576,394	100.00%	326,968	100.00%

---

[23] According to the FBI Crime Report (2009) of total of 357,014 violent crime arrests 289,066 were male, 67,948 were female. In other words, 81.0% of those arrested for violent crimes were male. For murder the males share of arrests was 90.1. for rape the male share was 98.8, and for robbery it was 88.0.

45

Figure 9

Stopped by sex 2009

1%

- Female
- Male
- Unknown/Uspecified

Figure 10

Frisked by sex 2009

1% 4%

- Female
- Male
- Unknown/Uspecified
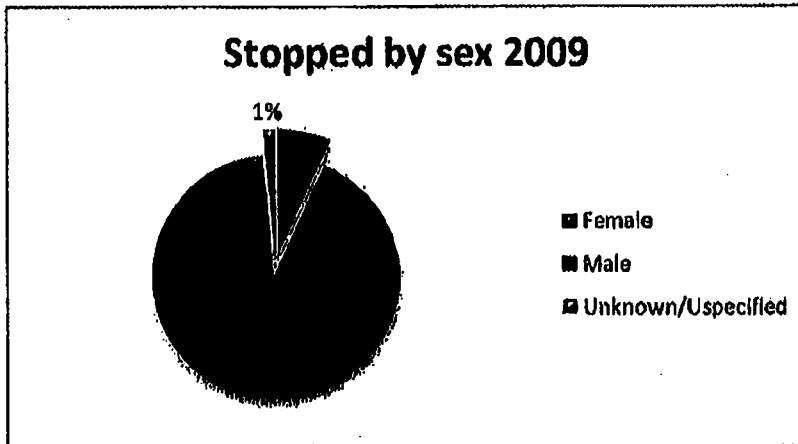
Stops by age are also not randomly distributed, as shown in both Table 3 in the Fagan Report and in our analysis of 2009 stop data. Both show the expected, based on crime pattern analysis, a concentration of stops in the ages 15-24.

Figure 11
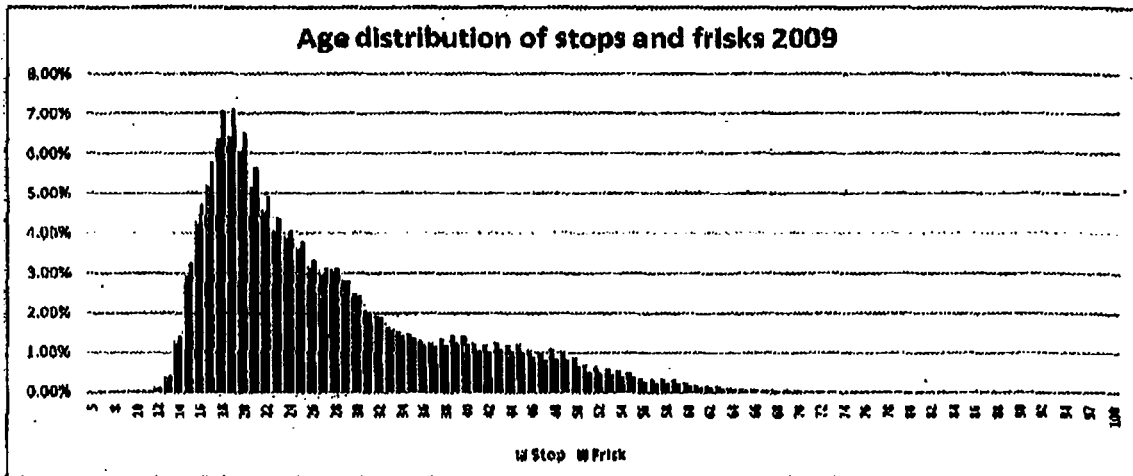
Age distribution of stops and frisks 2009

Table 5

Age Category	Stopped Count	%	Frisked Count	%
Under 10	17	0.0%	6	0.0%
10-14	10,326	1.8%	6,235	1.9%
15-19	144,496	25.1%	90,657	27.8%
20-24	136,021	23.7%	82,777	25.4%
25-29	89,520	15.6%	52,213	16.0%
30-34	54,539	9.5%	29,954	9.2%
35-39	38,719	6.7%	19,657	6.0%
40-44	35,597	6.2%	17,125	5.2%
45-49	30,502	5.3%	13,811	4.2%
50-54	18,667	3.2%	7,760	2.4%
55-59	9,876	1.7%	3,904	1.2%
60 and Over	6,714	1.2%	2,313	0.7%
Total	574,994	100.0%	326,412	100.0%
Missing	1,400		556	

47

Figure 12
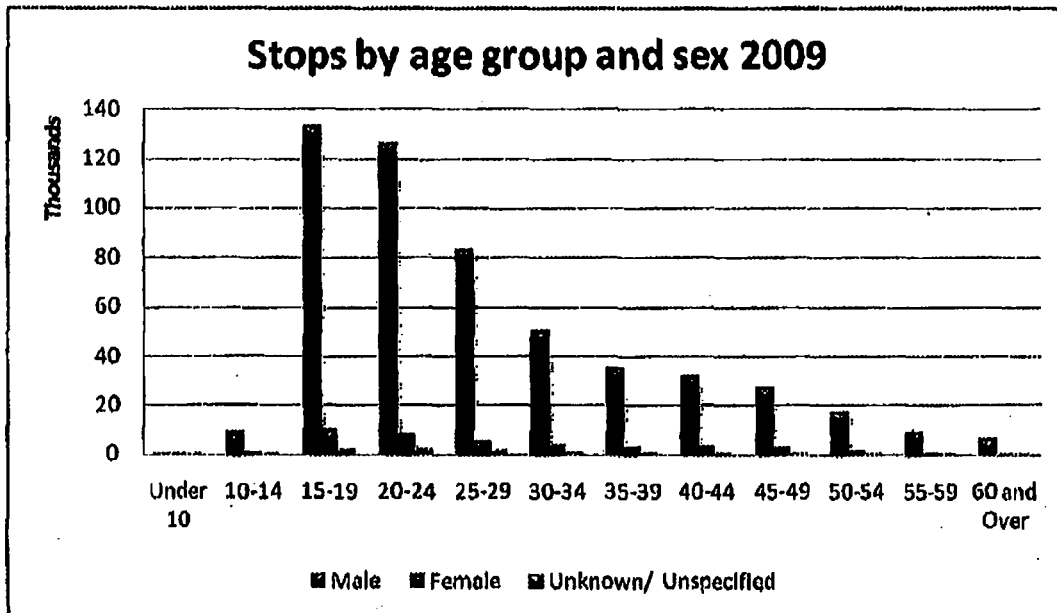
The omission of gender and age in Fagan's analysis, which otherwise argues for using population characteristics to benchmark police stop patterns, biases results. It would have been informative to replicate Professor Fagan's analysis and then include the gender variable in the multiple-regression to 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.

48

The largest problem from a statistical perspective is that Professor Fagan's explanation of police practice does not reflect the way NYPD currently polices the City, nor the way NYPD policed the City during the period studied (2004 to 2009). The Plaintiff contends and the Fagan analysis portends to support through complex statistical analyses that NYPD officers make decisions to stop, question and frisk persons they encounter on the street because of their Black or white race or their Hispanic or non-Hispanic ethnicity. In contrast, the City and NYPD leaders contend that the police make stops based on a strategic approach to crime reduction that relies heavily on using past crime data to prevent future violent crime. To compare these completing claims, the Fagan analysis should have considered whether the NYPD's careful analysis of crime patterns to focus on violent crime reduction led NYPD to increasing deploy officers in the neighborhoods where the City Black and Hispanic population are concentrated. Without doing so, the results reported by Professor Fagan arguably measure the impact of an evidence-driven crime-reduction strategy rather than race which is highly-correlated with crime and the descriptions of suspects that the police act on. To support his claim, Professor Fagan must separate these two effects and show that after controlling for the impact of all available evidence, racial bias remains. For example, early in effort to reduce crime in the mid 1990s, when Safe Street/Safe City funding enabled NYPD to restore some of the patrol strength lost in the wake of the 1970s fiscal crisis, the SatCom deployment sent more than 4,000 additional officers to one Borough (principally Brooklyn North), to combat drug crime; this deployment represented more officers than most police departments in the country have in their entire department. Crime that year dropped in the area selected for this

deployment.[24] Since 2003, the Operation Impact Initiative has used careful weekly statistical monitoring of crime patterns to adapt current deployment strategies in an effort to prevent violent crime. In percentage terms, the reductions in serious crime has been remarkably consistent through all boroughs and precincts. This is not an accident but the result of an approach to crime reductions that focuses on targeting resources where violent crime is most evident. Brooklyn North was not randomly selected for extraordinary anti drug crime enforcement in the mid 1990s. It was selected because at the time, it was the epicenter of drug related violent crime.

The Fagan analysis reflects a very academic rather than practical view of the use of evidence in police decision making. Academics have the luxury of taking the necessary time to ensure that all data required for the planned analyses are available. Police and other public managers have to make decisions on the best available data, rather than wait for ideal data. Professor Fagan questions the use of crime statistics in police decision making because it is well known that not all crime is reported to the police. National crime victimization studies find that the unreported crime of concern to Professor Fagan are highly correlated with the crime reported to NYPD.[25] Even without this evidence, it seems reasonable for the police to use observed crime as an approximation of the whole picture (observed and unobserved crime) to guide the Department's crime fighting effort. The idea of acting on the "best evidence available"

---

[24] The development of this intense and coordinated attack on drug related crime in Brooklyn North, originally named Operation Juggernaut, and its success in its first year, is recounted in both by William Bratton in Turnaround, and Jack Maple, in Crime Fighter. For an evaluation of SatCom see Dennis C. Smith and Joseph Benning, " An Empirical Assessment of Seven Years of SATCOM: The NYPD Command Structure in Brooklyn North" A paper presented at the 26th Annual Research Conference of the Association for Public Policy Analysis and Management (APPAM) in Atlanta, Georgia November 3-5, 2005.

[25] Despite the 100,000 respondents to the National Crime Victimization Survey New York City is one of the few cities that has a subsample of respondent of sufficient size in the total sample for separate analysis. The finding of a high correlation between victimization patterns found in the survey responses and NYPD reported crime complaints is in Langan, Patrick A., Durose, Matthew R. (2003, December). *The Remarkable Drop in Crime in New York City*. New York: Bureau of Justice Statistics.

50

also applies to the police use of known suspect patterns to assess whether the patterns

of stops by officers manifest evidence of racial or ethnic bias. Known suspect patterns

are highly correlated with the population characteristics of victimization and places

where victimization are concentrated, as well as with arrest and conviction patterns.

Professor Fagan, however, criticizes the mathematics of the Rand report's use of known

suspect patterns as a benchmark (e.g., The Rand report's use of 71.10% of robbery

complaints where the suspect known are Black):

> In such cases 72.54% of suspects were Black. However, these statistics fail to
> consider the 45.85 % of violent crime complaints in 2005 and 46.56% in 2006
> where race of suspect is missing or unknown. Some simple arithmetic shows that
> Black were in fact identified as the suspect race in only 38.50% of all violent
> crime complaints (.7110 x. 54.15) in 2005 the benchmark year for the analyses
> in Figure 3.1. Information about the 45% of cases where the suspect race was
> unknown in violent crimes was not incorporated into the analysis, and the
> analysis proceeds without accounting for the selection bias of racial identification
> in violent crime complaints....

Professor Fagan continues:

> We cannot know the data generating process by which the large set of non
> observed cases of the missing suspect race were created, and thus are
> challenged to make reasonable and testable assumptions about their distribution.
> Yet the analysis proceeds simply by excluding these cases without
> accommodation for the potential biasing effects of the characteristics of other
> violent crimes. The analysis proceeds assuming that the distribution of race in
> the totality of stops assume (where it is known), or even in this subset of crime
> complaints, is similar to the distribution of race known cases.[26] There is no basis
> to that inference, and conclusion based on analyses that ignore this selection
> process is unreliable.

Is there any reason for the police or analysts of police behavior to believe that whites

are disproportionately committing the violent crimes in the cases where the suspects'

racial and ethnic identity is unknown, but the pattern of victim race and ethnicity, and the

location of cases with unknown suspect characteristics, are the same as crime patterns

with known suspects? Are the police to believe, without evidence to even suggest it,

that there is an undetected wave of crime by white perpetrators in these communities?

---

[26] There is something wrong in the construction of this quoted sentence but the author's intended point seems clear.

51

Without a theory that presents a plausible reason to believe that known and unknown cases differ dramatically, extrapolating patterns from the known to the unknown is consistent with decision-making on the "best available evidence." It must also be noted that the allocation of police resources strategy using this "best available evidence" approach is validated by the continuing success in the, to be sure unfinished, mission of improving public safety in high crime City neighborhoods. There is ample evidence in work I have done with a colleague of the effectiveness of the use of the "best available evidence" in the NYPD's Operation Impact policing initiative in minority neighborhoods throughout the city where crime pattern data were used to deploy additional officers to very-localized areas which evidenced persistently higher levels of crime.

Professor Fagan offers no argument or evidence to support a rival hypothesis that perpetrators of crime in predominantly Black and Hispanic neighborhoods in the City are whites, significantly out of proportion to their residency in those neighborhoods. Without such support, there is no basis for the claim that stop and frisk activity disproportionately targets Blacks and other minorities. Rather, the reasonable conclusion would be that stops are proportional to reports of suspect descriptions and supportive of the argument that they are a proportional response to that information. Certainly, recent commentary by Black religious leaders from Brooklyn do not subscribe to the proposition that whites are entering their communities and victimizing Black families. Recently, a task force comprising 37 members of the clergy from Brooklyn spoke at press conference with Police Commissioner Raymond Kelly and emphasized the importance of addressing Black-on-Black crime[27]:

---

[27] Al Baker, "Police Heed Black Clergy and Set Up Crime Panel," New York Times, September 29, 2010. See also Sean Gardiner, "Brooklyn Clergy and NYPD Form Partnership," September 30, 2010: Asked about the current state of police-community relations and especially how the NYPD's "stop, question and frisk" policy is received by locals, Craig said that "quite often" people in his neighborhood don't understand why they're being stopped. Craig said he hopes the task force will make clergy better

52

Bishop Gerald Seabrooks of Rehoboth Cathedral International, said:

> We, the Brooklyn Clergy-NYPD Task Force would like to commend NYPD's
> Police Commissioner Kelly and the State of New York's Division of Parole
> Chairwoman Andrea Evans for coming together with this body. We are here to
> send a message that we want to stop homicide, violence and shootings of any
> kind of people, but especially we want to speak out on black-on-black shooting,
> hurting and harming one another. By working together we realize that we make
> our city, borough and communities a safer place to live in. We do not want our
> children going to school in fear. We want to ask the black community to stand
> with us to denounce all killings of any nature and stand with us in this
> monumental task. Churches across this city will come together in our efforts to
> help our young people find Godly principles instead of violence. We thank the
> many churches who stand with us in our address today and to those that will
> come abroad. We ask that you stand with us to stop violence against our
> children, our precious resources. We buried too many children and counseled too
> many going to school with negative and poor images about our people. This is
> not our heritage. It is now mothers and grandmothers out-living their children. We
> have to take a self-assessment at what is going on and deal with four factors: 1)
> Self-Honesty: We are tired of black-on-black crime, shootings and killings; 2)
> Self-Image: What is being perceived is not our greatness; 3) Self-Awareness: We
> are going to become a model and denounce and stop violence in our
> communities to make it a better place; 4) Self-Responsibilities: We are killing
> ourselves with black-on-black crime. We cannot blame it on the police or others.
> Dr. Martin Luther King, Jr. said "Injustice anywhere is a threat to justice
> everywhere. Thank you and God bless you.

Rev. Dan Craig of Mount Zion Baptist Church of Brownsville said:

> As members of the Clergy, we are increasingly concerned by the amount of
> crime within our Brooklyn communities. We have come today to strongly and
> categorically denounce all black-on-black Crime as well as crimes against any
> person regardless of race, ethnicity, religious beliefs or any other factor. We
> come reaching out to all segments of our community, asking that they join us in
> this effort to make our communities safer for all and to work with us to achieve
> our goal of dramatically reducing crime and violence. We, the members of the
> Clergy, realize that in order to achieve meaningful and measurable success this
> must be an all inclusive effort. Therefore, members of the Clergy shall engage in
> meaningful and continuous dialogue with leaders in various segments of the
> community, including those who may be engaged in violence or other criminal
> activity. It is our prayer and firm belief that, working together and being led by
> The Spirit of God, we can make a difference and the time for making that
> difference is now.

---

positioned to explain why police make those stops — and also to urge police to use caution and
care when stopping people in their neighborhoods.

53

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.[28]

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

---

[28] Christopher Dickey, **Securing the City: Inside America Best Counterterror Force—NYPD, 2009**

54

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).[29]

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.

---

[29] 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, 2005.

55

In a footnote (page 31), Professor Fagan states:

> All models for control for the one calendar quarter lag of logged crime complaints. The log transformation of the actual number of crimes is used. Log transformation is necessary to adjust when distributions are highly skewed and nonlinear. The lag reflects the planning process whereby SQF and other enforcement activity are adjusted to reflect actual crime conditions. Although Compstat meeting occur more often, using a lag that is too short can confuse naturally occurring spikes and declines in crime with reactions to policing. Calendar quarters in effect adjust for those naturally occurring variations.

In this short note, Professor Fagan summarizes a significant part of the problem with his analysis. As is explained here, the use of log transformed crime counts (not crime rates adjusted for population) has the effect of smoothing the "highly skewed and nonlinear" or other non-random occurrences of crime. Quarter lags (rather than the weekly adjustments reported by the NYPD) are used in order to reduce the effects of "naturally occurring spikes and declines in crime" and distinguish them from "reactions to policing." Contemporary police management is predicated precisely on the assumption that crime patterns are "skewed" and spikes in crime are exactly the occurrences, natural or otherwise, that do and should provoke rapid police response. Indeed, the NYPD has explained to me that they adjust their practices based on a weekly review of past crime data. Professor Fagan's note indicates that the analysis was done in a way to deny the possibility that "reactions to policing" might be found to explain police response to an impact on crime. In effect, Professor Fagan's analysis assumes away the real impact that evidence-based policing has had on crime, rather than properly accounting for its impact before attempting to measure what part, if any, race played in police stop decisions. The use of crime counts instead of crime rates is another significant weakness in the analysis and findings reported because of varying populations within precincts. Elsewhere Professor Fagan has gone to some lengths to introduce population estimates in his analysis but in this analysis where it could be significant it is missing.

56

It is customary in rigorous empirical research to provide clearly stated conceptual and operational definitions of variables (what they mean and how they are measured), but in the Fagan Report those expectations are not consistently met. Without clear definitions and theoretically-based arguments about appropriate control variables, it is difficult to interpret and replicate his findings.

I have noted previously in the discussion of Professor Fagan' coding procedures the difficulty of interpreting the report's claim that some stops are constitutional, unconstitutional, or justified or unjustified, and others are insufficiently documented without clear specification of the operational definitions that enabled the report to characterize hundreds of thousands of decisions made by officers policing the streets of New York City.

One notable example of weak operational definitions is in the coding and description of the race variable, which is a primary variable of interest. Race is obviously a key variable in the report as it is reported crime and suspect-description statistics, but its definition is not consistently defined or applied throughout Fagan analysis. In one place the report combines non-Hispanic Black and Hispanic Black:

> The racial distribution of stops has been discussed widely, both in official reports from the City as well as a variety of secondary analyses by organizations and agencies in New York. Over half the persons stopped - 51.52% - over time were African-American. Table 3 shows that both Hispanic Blacks and Non-Hispanic Blacks are included in this category.

The report does not clarify whether this is the way race is operationalized throughout the report,[30] nor does it address the fact that in other analyses (including the NYPD report on Crime and Enforcement Activity in New York City), the "Black" category explicitly excludes Hispanic Black:

> Black Hispanic and White Hispanic categories have been combined into a single Hispanic category for statistical tables and charts presented in this report.

---

[30] When numbers are available in the Fagan tables it appears that in fact the definition used is based on the same definition as is used by NYPD, but the point is the need for clarity.

57

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.,

58

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 of 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

59

complexes. He also acknowledges it on pg. 30: "Precinct commanders are accountable for precinct-level statistics on crime tends, <u>though they have discretion to allocate officers tactically within precincts to specific beats or sectors</u>." (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.[31] 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.

---

[31] 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.

Professor Fagan uses a logistic regression to look at various stop outcomes (page 69). This is certainly appropriate for the outcomes listed in Table 16, because the events in the analysis happen with a relatively high probability. However, the general model framework tends to be very sensitive to specification when the probability is very low—as is the case with weapons, guns, and contraband. Here, according to standard statistical practice, Professor Fagan should have tested alternate specifications, such as relative risk regressions, or probit models. While it is not clear that his results would differ under alternative specifications, a more careful analysis would have included sensitivity analyses to determine how sensitive the results were to the model specification. Again, this issue persists for for all of the outcomes that happen with low probabilities.

Questions must be raised by the claimed use in the Fagan Report of "principle components factor analysis." Principal components analysis (PCA) and factor analysis (FA) are two distinct but related methodological tools. (See Sharma, 1996, *Applied Multivariate Techniques*). In the discussion of the use of factor analysis there was minimal description of the underlying data structure, and the factor loadings which are used to make the larger index. One major criticism of these techniques is that they are empirically (rather than theoretically) derived. That means that the pattern loadings will change across datasets. Subsequent regression results may be heavily impacted by analytic decisions on the factor analysis. In the results, the report does not clearly explain what the "SES Factor" means—does a high value indicate relative wealth or relative poverty?

Standard analysis using this tool presents extensive statistical output that shows various sensitivity analyses, including alternative specifications such as how to rotate the data (e.g. varimax rotation). It would show how these alternative specifications would affect

the regression models, and how that might change interpretations of the statistical model. Typically, analysts using factor analysis would also consider alternative ways to combine the variables into a composite index, such as creating scales that sum the items and would also contain a clear description of the values of the summary variable ("SES Factor") and what high and low values mean.

Some of the interpretations of findings in the Fagan Report are flawed, such as the report's claim (p. 32) that "It is also noteworthy that the size of the coefficients for Percent Black and Percent Hispanic are more than three times greater than the size of the coefficient for the crime rate." It is not meaningful to compare the magnitude of coefficients unless the variables represent data with similar underlying distributions. Coefficients are interpreted in terms of a one-unit increase in the in percent Black is not the same as a one-unit increase in crime rate, but Professor Fagan fails to recognize that the predictor variables have different underlying distributions and measurement scales used. Two ways to compare the magnitude include: (a) using standardized coefficients, or (b) calculating the expected change in Y for a given change in X, and describing the effect in a few sentences.

In all regression tables throughout the report, Fagan does not explicitly discuss the signs, magnitude, and significance of control variables, which makes it impossible to interpret those coefficients. Control covariates that do not have effects consistent with what would be expected based on theory may indicate problems with the model specification. It is difficult to assess Professor Fagan's findings because he does not link the signs and significance of each control variable to what is expected based on theory. Standard practice would be to omit any statistically-insignificant variables that were not justified on a theoretical basis and, at a minimum, to report results with and without those variables. Since parameter estimates in regressions are conditioned both on the data set as well as the variables included in the models, failing to report results with and

62

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 [32]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

---

[32] 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

64

patterns of police stops did not meet normal standard of research methods. In a

forthcoming book, Ridway and McDonald explore alternative approaches to

benchmarking and reflect on the approach used in the 2006 NYPD study[33]:

> The crux of the external benchmarking analysis is to develop a
> benchmark that estimates the racial distribution of the individuals who would be
> stopped if the police were racially unbiased and then comparing that benchmark
> to the observed racial distribution of stopped citizens. The external benchmark
> can be thought of as the population at risk for official police contact. As we will
> see, estimating the appropriate population at risk is complicated. Crude
> approximations of the population at risk for police contact are poor substitutes
> and can hide evidence o racial bias or lead to exaggerated estimates of racial
> bias.

> There is a compulsion in media reports on racial disparities in police stops to
> compare the racial distribution of the stops to the racial distribution for the
> community's population as estimated by the US Census. For example, in 2006 in
> New York City, 53% of stops police made of pedestrians involved black
> pedestrians while according to the US Census they comprise only 24% of the
> city's residential population. When the two racial distributions do not align, and
> they seem to do so rarely, such statistics promote the conclusion that there is
> evidence of racial bias in police decision making. Racial bias could be a factor in
> generating such disparities, but a basic introductory research methods course in
> the social sciences would argue that other explanations may be contributing
> factors.

The Rand study used suspect population distribution as its benchmark in the NYPD

study. Ridgway and Hamilton, while finding potential weaknesses in all choices

available, observe in their review of benchmarking options that "The criminal suspect

benchmark may be more plausible approach than the arrestee benchmark for

establishing the population at risk for official police contact. It represents the public's

reporting of those involved in suspicious activity and crime and would correspond more

closely to racial distribution of criminals on the street." They further observe,

"Comparing the police to the public's reporting of suspicious activity at least answers the

---

[33] Greg Ridgeway and John MacDonald, **Methods for Assessing Racially Biased Policing:
Forthcoming in Race, Ethnicity, and Policing: The Issues, Methods, Research, and Future (Eds. S.
Rice & M. White).** NY: New York University press.

65

question whether the police are finding suspicious individuals with features similar to those the public reports committing or attempting to commit crimes."

The disagreement between Professor Fagan and the Plaintiff with the Rand Report over the appropriateness of using the general census population distribution arises pervasively in this dispute. Throughout the Fagan Report complicated statistics are presented to show that NYPD does not randomly distribute its resources or their vigilance in detecting suspicious behavior in order to prevent crime. This effort by Professor Fagan seems unnecessary, since NYPD readily and consistently admits that it concentrates police resources as precisely as it can, where and when violent crime is observed to be the greatest problem. Since crime is not remotely random, police deployment is not and should not be random. Patrol officers are deployed and they act based on the best evidence available about crime patterns.

Relevant to Professor Fagan's critique of the Rand Report but not presented in that section of his report is his analysis of "a series of graphs showing the basic distribution of stops arrayed across a range of benchmarks based on crime complaints for each calendar quarter. The basic comparison is stop rates per crime complaint. To provide illustrations relevant to the disparate treatment claims in the litigation, the graphs divide the City into quartiles based on percent Black or Hispanic population."

His finding is that "Each of the graphs shows that stop rates per crime complaint are higher, for each crime complaint and crime-specific stop metric in the population with the highest concentration of minority population. ...Although these are places where crime rates are generally higher, the disparity in stops per crime are in some cases quite wide." What constitutes "quite wide" is not specified but Figure 4, the graph for Weapon stops per violent crime complaint by quartile % black appears by far to show the widest gap, with Black stops high above the others. This does not seem

surprising in light of the pattern disparity in the pattern of shootings recorded by NYPD in 2009. Black New Yorkers, with 24% of the population are 72.8% of the victims of shootings in the City and 79.8 % of the suspects in shooting incidents, while white New Yorkers are 31% of the population, but are victims in only 3.1% of shootings, and 1.4% of suspects.

As Professor Fagan notes (p.74) in his critique, "The Rand analysis strongly rejects the exclusive use of residential census information as a benchmark against which to assess racial bias in the decision to stop a citizen." As is reported in the critique most of the findings in the Rand study fail to support the claim that police stop practices are evidence of the kind of racial bias found by Professor Fagan and his colleagues in previous studies using the population census benchmark (e.g.," We found that black pedestrians were stopped at a rate that is 20 to 30 percent lower than there representation in the crime-suspect descriptions. Hispanic pedestrians were stopped disproportionately more than their representation among crime-suspect descriptions would predict." p.72). Part of Professor Fagan's critique of the Rand study is that, in its effort to replicate the earlier study by Gelman and Fagan, was that it did not perfectly follow the previous study in every respect, including some of the variable included in its analysis. Fagan notes that "Even with this uncertainty as to the fealty of the replication Figure .3.1 shows that stops of Blacks and Hispanics were disproportionately high when using a benchmark of weapons arrest in the previous year." (p.75) Of course, we have argued that in a post-Operation Impact study of stop and frisk practices, crime or arrest patterns from a previous year are seriously out of sync with the work of officers in the Department. It is hard to imagine that NYPD's success in reducing crime relied on waiting a year, or even a quarter, to act which is what such a lag structure implicitly assumes.

Professor Fagan's primary criticism of Rand's external benchmarking study is its use of suspect descriptions of violent crime offenders, since less than half of the racial or ethnic identities of the perpetrators are known. Of those victimizations where a suspect was indentified in terms of race and ethnicity, the percentage that were described as Black or Hispanic was far above 50% across all categories of violent crime. A second criticism Professor Fagan leveled at the Rand use of suspect identification in constructing a benchmark was the use of violent crime when it is only a fraction, less than 10% of all crime complaints reported to the police. The fact that giving priority to fighting violent crime is a policy of the City and thus provides the strategic focus that guide the police carries little weight with Professor Fagan. According to Fagan, "The large proportion of crime complaints were suspect race is not observed casts strong doubts on the conclusions based solely on the half of the cases where suspect race is known." As noted above, the police also can document that the locations of victimization is known to be concentrated in the same part of the City, and race of victims is the same, for cases where suspect race is known and unknown.

Professor Fagan devotes even more attention to his critique of the internal benchmarking part of the Rand Report. It is not clear why it deserved this attention because the internal benchmarking exercise seemed mostly useful as a potential tool for police managers to monitor the stop and frisk behavior of individual officers. The design of the internal benchmarking study, despite its elaborate construction, was deemed inadequately complex by Professor Fagan. The Rand Stuy identified of a set of police stops based on a set of stop characteristics matching those in stops made by officers identified as "outliers" (either because they made exceptionally high numbers of stops, or low numbers of stops.) By matching stops based on location, time of day, command, and assignment, the Rand researchers intended to hold constant factors other than the race and ethnicity of the persons stopped to see if officers making a

68

relatively high number of stops, 50 or more a year,[34] were disproportionately stopping Black and Hispanic pedestrians. This goal is consistent with the desires of the plaintiffs and the stated objectives of NYPD to avoid racial profiling in stop activity. In addition to the design controls built into the comparisons of the matches, a variety of statistical adjustments and controls to further isolate the variables of interest.

Despite this elaborate effort to approximate experimental control conditions to assess police stop practices, Rand methodology was found to be seriously flawed in the judgment of Professor Fagan.The controls used were too constraining, other controls should have been added even though every match factor included made finding appropriately matched stops that more difficult. If they could not be matched they would have to be dropped from the study.[35] The focus on outliers, despite the disproportionately large share of stops produced by this cohort made the finding, according to Fagan, ungeneralizable to all police stops because the Rand analysis did not include the majority of officers who made fewer stops. Professor Fagan expresses concern that Plaintiffs,wh en they used the software obtained by NYPD Rand to conduct the benchmarking analysis in 2007, were unable to replicate the City's exact results for the 'benchmark percent black' reported in the Rand study. The replication produced a 'benchmark percent black' of .534939 (standard deviation=.2516027) compared to the NYPD run of the 2007 data produced a benchmark percent black of .5349202 (standard deviation +2515774). Unfortunately, the inability of the replication analysis to reproduce exact results is apparently a concern but the significance of that concern is not specified by Professor Fagan.   .   ·

---

[34] Given all the attention to the "high number of stops by police in New York City" it may come as a surprise that officers that make 50 stops a year, less than one per week, are outlier, heavy stoppers. Furthermore, in the year of the Rand study there were only 2,756 officers who reached this threshold. The remaining 15,855 who made any stops made fewer than one a week.The following year replicating the study found 2,670 officers making a stop a week.

[35] Given the difficulty Professor Fagan encountered trying to code the complexity of a single stop in his analysis of whether stops were justified one would expect some sympathy facing Rand in its effort to match stops across a number of officers.

Given all of the criticism of the methodology used in the internal benchmarking study reported by Rand, it was surprising that any attention was given to its findings. Perhaps the explanation for attending to the findings, despite the flawed methods allegedly used to produce them is the fact that some differences across race were found. Officers frisked white suspects slightly less frequently than "similarly situated" non whites. In this case the difficulties of fully matching situations is set aside. Police recovered contraband in stops of whites at a slightly higher rate than Blacks or Hispanics. Higher rates of searching nonwhites was found in Staten Island precincts. However, the use of force varied little (15% v.16%) by race among matched stops. While Professor Fagan criticized the Rand Report for its "actuarial" approach to match (time, place, assignment) and not paying sufficient attention to interpersonal and even psychological aspects of police citizen encounters on the street, the Rand Report acknowledges that since the UF250 report does not capture the demeanor of the persons stop it cannot rule out that there are differences among the subgroups stopped cooperated with the officers. If black suspects are more likely to flee or resist, the observed differences in of use of force may not be due to officer bias." (p.41)

NYPD acquire the Rand Internal benchmarking tool, used it a second time, found that its identification of small number of underperformers ("outliers") did not provide sufficiently valuable to warrant its routine use.

The Fagan Report devotes almost a third of it space to a review of the Rand Report, and more than half of that to the internal benchmarking study that, given its design, could not speak broadly to either of the Plaintiff's claims of constitutional violations. For all of the issues raised with specific aspects of the Rand analysis of external benchmarking its finding of no significant evidence of racial bias in NYPD practice

70

stands if you accept as I do its use of victims' attribution of suspects race and ethnicity as information should be used to determine, as Ridgway and Hamilton say, " if the pattern of persons stopped approximate the pattern in terms of race of the people citizens say are victimizing them." Absent a plausible argument for assuming that the victimizations that occurred where the suspects' race is unknown differ significantly from those where it is known, using the reports of those who are able to identify the race or ethnicity of their attackers to focus their tactics seems a responsible approach on the part of the police.

The following two recent empirical studies[36] document the effectiveness of crime reduction strategies and practices used by NYPD demonstrate the central claim in his report that crime reduction is the motivating force underlying police action.

Conclusion

The review presented here of the reports of Professor Fagan and Mr. Reiter finds they have failed to make a persuasive, evidence based case that officers of NYPD use race or ethnicity as a reason for or substitute for reasonable suspicion in deciding to stop pedestrians on the streets of New York City, question them, and if justified by concerns about safety, also frisk, which they do less than half the time. The vast majority are by Professor Fagan's estimate "justified" and the remaining cases are all indeterminate with regard to supporting a claim of racial or ethnic bias.

Extensive statistical analysis employed by Professor Fagan offers evidence of a fact not in dispute: NYPD does not make stops proportionate to Black and Hispanic's share of the City's population. NYPD claims and we found evidence to support the claim

---

[36] A version of Professor Fagan's study on claims of racial profiling and the Smith and Purtell study,(" Does Stop and Frisk Stop Crime?") were presented together on panel at the Association of Public Policy and Management Annual Research Conference in Los Angeles, California, November, 2008.

71

that police deployment is reasonably proportioned to the problem and distribution of crime, especially violent across areas and population groups in the City. Due to problems in the specification of the model used in his statistical analysis (unit of analysis, variables included or excluded, time frame, interpretation of variables such as "hit rate") the findings do warrant his claim that they demonstrate bias rather than a rationale and proportionate response to the problem of violent crime especially present in Black and Hispanic communities.

A central contention of this response to the Fagan Report is that the model of policing New York City used in the analysis to test the Plaintiff's hypothesis (the Fourteenth Amendment claim) is fundamentally flawed. The Plaintiff's analysis does not address the rival hypothesis that the actions of NYPD over the past fifteen years have been based on a model or theory of crime reduction, rather than giving priority to responding to crimes *after* they have been committed. Further, over the course of the past fifteen year, NYPD has used an evidence-based approach to achieving its mission of improving public safety in the City to refine the model of crime prevention in ways that are even farther removed from the theory of policing underlying the analysis presented in the Fagan Report.

72

DECLARATION

I have been compensated for this work at the rate of $250 per hour.

Dennis C. Smith, Ph.D.

November 15, 2010

EXHIBIT B
Pt. 2

APPENDIX A. CURRICULUM VITAE

DENNIS CHARLES SMITH
Associate Professor of Public Administration

NEW YORK UNIVERSITY
ROBERT F. WAGNER GRADUATE SCHOOL OF PUBLIC SERVICE

The Puck Building 295 Lafayette, Room 3073
New York, NY 10012
telephone:.   212-998-7425
telefax: 212-995-4162
e-mail: dennis.smithde@nyu.edu

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 Boconni University, Milan, Italy. Fall, 2005.

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

1

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
Trasnporttion 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).

2

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, SEEDCO/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

3

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).

4

"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-CD-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 13th 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.

5

"Performance Management in New York City: The Mayor's Management Plan and Report System in the Koch Administration, a paper presented at the 15th 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 16th 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 25th 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 26th

6

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 26th 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 Re-distributional Effects of Improving Public Safety " (with Robert Purtell) 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.
"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 4th TransAtlantic Public Administration Dialogue in Milan, Italy, June, 2008.

"Does Stop and Frisk Stop Crime" (with Robert Purtell) A paper presented at the 29th 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.

7

"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.

APPENDIX B. UF 250

8

(COMPLETE ALL CAPTIONS)

STOP, QUESTION AND FRISK REPORT WORKSHEET PD344-151A (Rev. 11-02)	Pct. Serial No.		
	Date		Pct. Of Occ.
Time Of Stop	Period Of Observation Prior To Stop		Radio Run/Sprint #

Address/Intersection Or Cross Streets Of Stop

☐ Inside ☐ Transit	Type Of Location	
☐ Outside ☐ Housing	Describe:	
Specify Which Felony/P.L. Misdemeanor Suspected		Duration Of Stop

What Were Circumstances Which Led To Stop?
(MUST CHECK AT LEAST ONE BOX)

☐ Carrying Objects in Plain View Used In Commission Of Crime e.g., Slim Jim/Pry Bar, etc.
☐ Fits Description.
☐ Actions Indicative Of "Casing" Victim Or Location.
☐ Actions Indicative of Acting As A Lookout.
☐ Suspicious Bulge/Object (Describe)
☐ Other Reasonable Suspicion Of Criminal Activity (Specify)

☐ Actions Indicative Of Engaging In Drug Transaction.
☐ Furtive Movements.
☐ Actions Indicative Of Engaging In Violent Crimes.
☐ Wearing Clothes/Disguises Commonly Used In Commission Of Crime.

Name Of Person Stopped	Nickname/ Street Name		Date Of Birth
Address		Apt. No.	Tel. No.

Identification: ☐ Verbal ☐ Photo I.D. ☐ Refused ☐ Other (Specify)					
Sex:☐ Male Race:☐ White ☐ Black☐ White Hispanic ☐ Black Hispanic ☐ Female ☐ Asian/Pacific Islander ☐ American Indian/Alaskan Native					
Age	Height	Weight	Hair	Eyes	Build

Other (Scars, Tattoos, Etc.)

Did Officer Explain If No, Explain: Reason For Stop ☐ Yes ☐ No		
Were Other Persons Stopped/ ☐ Yes If Yes, List Pct. Serial Nos. Questioned/Frisked? ☐ No		

If Physical Force Was Used, Indicate Type:
☐ Hands On Suspect
☐ Suspect On Ground
☐ Pointing Firearm At Suspect
☐ Handcuffing Suspect
☐ Suspect Against Wall/Car

☐ Drawing Firearm
☐ Baton
☐ Pepper Spray
☐ Other (Describe)

Was Suspect Arrested? ☐ Yes ☐ No	Offense	Arrest No.
Was Summons Issued? ☐ Yes ☐ No	Offense	Summons No.
Officer In Uniform? ☐ Yes ☐ No	If No, How Identified? ☐ Shield ☐ I.D. Card ☐ Verbal	

APPENDIX B. UF 250 (page 2)

9

APPENDIX C. Review of the Preliminary Expert Report

of Lou Reiter

The review by Mr. Reiter of management practices of NYPD is preceded by a lengthy review of his experience. Until 1981 he was an officer and commander in the Los Angeles Police Department and has had an even longer career as a trainer, auditor and expert witness in police cases throughout the United States. He does not indicate what if any prior experience he has had with NYPD, or recent experience with large urban police departments. Nor does he indicate his familiarity with the transformation in policing involving the shift from predominantly reactive policing to the proactive approach pioneered among big cities by NYPD and now well established as the approach in the Department he served almost thirty years ago, LAPD.

My commentary on the Reiter Report is from the vantage point of a academic and scholars who has studied police organization, professional development, police training, crime reduction programs and police performance since the early 1970s, involving studies of police departments in the metropolitan areas of Indianapolis, Chicago, St. Louis, Tampa/St.Petersberg and Rochester,NY, , and as well as service on the Research Advisory Committee of NYPD in the late 1970s and a total of nine studies of different aspects of NYPD. The perspective I bring is that of a professional in evaluation research and public sector performance management. Therefore, my attention is on the quality of the evidence presented in the Reiter Report.

Mr. Reiter asserts that "My examination of the factors in police practice cases embodies the basic fundamentals which I employ in my professional

11

examination of police agencies in my audits and working as a consultant with the

U.S. Department of Justice. My opinions are provided with a reasonable degree

of certainty within the field of law enforcement, police activity and police

administration and supervision." Without questioning his confidence in his

professional opinions, my assessment has to be based on the evidence and

analysis presented in his report.

The crux of Mr. Reiter criticism of police practices is his judgment that the

Department does not exercise proper supervisory review of stop, question, and

frisk decisions by officers serving the City of New York. He states that

> It is my understanding that this current litigation stems from the New York
> City Police Department's on-going practice of 'stop, question and
> frisk'(SQF) of persons by field level officers. The thrust of this litigation is
> that field implementation is unreasonable, and contrary to generally
> accepted police practices for this aspect of common and normal search
> and seizure practices by field level police officers. The resulting custom
> and practice causes persons to be stopped without sufficient cause and
> targets persons of color." (p.7)

He does not offer evidence that the police are in fact improperly conducting

stops, or evidence that they are "targeting people of color" other than to refer to

the Attorney General Spitzer report which found the pattern of stops does not

mirror the racial distribution in the general population. He also refers to the fact

that the Rand Study made some recommendations for improving selected

aspects of the monitoring of stop practices but does not acknowledge that the

Rand Study fundamentally challenged the benchmarking approach used in the

Spitzer Study as being inconsistent with the best scientific practice. Social

12

science standard for benchmarking, according to Rand, requires benchmarks that are justifiable based on their relevance to the practice being studied. Using patterns of known suspects as a benchmark the Rand Study did not find any substantial pattern of racial or ethnic bias in NYPD stop records.

The Reiter Report, again without having established any factual basis for the claims about the behavior he proposes to explain, states

> These outcome performance results of unreasonable seizures and searches are directly related to failures in supervision and operational control over the field practices of the line level officers. Some of these supervisory and management oversight failures are the pressure for officers to produce statistics and numbers of SQF encounters, ineffective monitoring of the field encounters and failure to take corrective action when obvious deficiencies are observed and noted, and failure to reasonably discipline officers who are found to have engaged in field practices contrary to agency directives and Constitutional protections.

Apparently the method used in Reiter's Report is to assume the pattern of behavior to be explained and then look for factors in managerial practice that produced that assumed behavior. It should be noted that nowhere in the evidence reviewed or presented by Mr. Reiter is there a documented or adjudicated case of action by NYPD officers "contrary" to Constitutional protections. There are allegations and there is litigation but the issues have not been resolved. He cites very senior NYPD officials who deny that this is either the policy or practice of the Department. In place of evidence that there is in the current management of NYPD pressure to produce "statistics and numbers" showing SQF activity Mr. Reiter cites a book published in 1993 by two distinguished authorities on policing who describe in some detail police practice

13

of two decade ago when police management emphasized statistics that showed high levels of activity.[1] He also asserts --but offers no evidence to support—that the result of these pressures "targets people of color." Mr. Reiter nowhere acknowledges that since 1993 when the work he cites was published policing in the United States, starting with NYPD, has undergone a managerial revolution that included a shift away from a focus on activities and toward a laser like focus on the outcome of crime reduction primarily through crime prevention. Measuring activities are not the central focus of police management review. The measurement focus is on outcomes, reducing crimes.

Instead of evidence of unconstitutional practice by police the Reiter Report focuses on the pattern of supervisory review of practices related to police stop, question and frisk activity, and remedial actions taken. The Report cites testimony from a limited number of police official up and down the chain of command and in relevant oversight positions, such as the Quality Assurance Division that audit police records, including UF 250s, who focus their review on the completion of UF250 reports required of officers after stops. Although Mr. Reiter repeatedly expresses dismay that the stops are not substantively reviewed to determine their adherence to legal requirements, he does to use his extensive experience to provide a clear statement of what would constitute an appropriate

[1] Mr. Reiter cites a New York Times (September 9, 2010) and a Village Voice (August 25, 2010) story about pressure to produce "tickets" as confirmation that Department quotas or productivity goals are in operation. The squads of officers, according to the story, were being pressed to be productive in issuing summons, twenty for the entire squad per week, for double parking, parking bus stops, using mobile phones while driving, and not wearing seat belts, arguably all legitimate actions by police on patrol. These stories do not suggest pressure or quotas for stop and frisk production.

14

review of a stop decision. He asks whether NYPD officials follow up audits with persons stopped to ascertain their perspective, but he does not specifically say that is what "established professional practice in well managed departments" do. If fact in the entire report Mr, Reiter does not cite the SQF practice of a single other police agency that adheres to the standards to which, without stating them specifically, he holds NYPD to account.

Mr. Reiter repeatedly expresses his dismay after each reporting of series of deposed NYPD officials who state that he or she "never goes back to the officer to determine whether reasonable suspicion was present." (p.15) What would the question to the officer be: "We you really suspicious of the person you stopped?" "Were you really concerned about your safety or the safety of others when you frisked the person you stopped?"

If the Quality Assurance Division were to make follow up calls to persons stopped, what is the question Mr. Reiter would have NYPD ask? "Were you acting in a furtive manner?" "Were you preparing to commit or participate in a crime?" If the respondent took such a call from NYPD[2] what would the Quality Assurance Division do with the predicted denial of both allegations? A recent study of Los Angeles Police Department by Harvard University scholars[3] found that there is no established way to question a police officer's judgment that a person's behavior provoked his or her suspicion.

_____

[2] A recent study of police crime statistics criticized the NYPD Quality Assurance Division for calling citizens to audit crime reports (instead of detectives doing follow-up investigations) claiming citizens might feel they were being pressured to withdraw their complaints. Eterno and Silverman, 2010.
[3] Christopher Stone, Fogelsong, Cole's study, *Policing Los Angeles Under a Consent Decree: The Dynamics of Change in LAPD*, 2009.

There are institutions in the City to which complaints by citizens about the conduct of any official or about any City service can be lodged. With the introduction of the City 311 call number complaints about the police can be made without going to NYPD, and the calls are independently logged into the system and distributed to the appropriate agency. In this case one of the appropriate agencies is the Civilian Complaint Review Board. Mr. Reiter is not entirely satisfied with the practices of CCRB but his major charge is that NYPD did not punish every officer whom CCRB determined had "committed misconduct?" Mr. Reiter quotes a CCRB report that NYPD declined to pursue 34% of those 296 cases. Apparently, NYPD did pursue 66% of the cases with adverse CCRB findings. What were the charges, which were pursued and not pursued by NYPD? We are not told. Mr. Reiter does not provide any benchmark to compare how such issues are disposed by other police departments which presumably are following the practices believes are "generally accepted police practices.".

Much of the Reiter Report is devoted to a detailed review of the failure in his view of supervisors to properly check the compliance of officers with a procedure that calls for all stops to be documented in the officers' memo book. After repeatedly raising the Department's alleged failure to make compliance with this requirement a priority Mr. Reiter offers this observation: "I have reviewed officer Memo Book entries in this and other cases. I have always found these police documentation sources to be scant and of virtually no use in determining the actions and performance of the individual officer." The Report goes on to state:

16

"Thus, even if used properly and reviewed consistent with NYPD policies, I would not expect officers' memo book entries to be a useful tool with which to ensure compliance with SQF policies." Having just dismissed their utility Mr. Reiter states: "Moreover, my review of the deposition testimony in this case shows that substantive review of memo book entries are rarely done and seldom are officers sanctioned for failure to comply with the requirements for documenting SQF in his/her Memo Book.

It is not clear why, in light of his expert testimony on the lack of utility of memo books in this "and other cases" Mr. Reiter makes such an issue of the evidence that some NYPD official share his view.

It does not appear that Mr. Reiter examined in detail the UF250 on which officers do record information on the stops they conduct. He observes (p.11) that

> The governmental intrusion into a person's private life is significant and should not be done absent reasonable suspicion that the officer should be able to articulate. However, the forms used by NYPD simply require the officer to check boxes on the preprinted form. There is no requirement on this form for the officer to further articulate details of the stop. My review of the deposition testimony in this case shows that supervisors consistently fail to inquire about the officers' supposed reasonable suspicion for a stop during their review of a UF 250 entry, instead focusing on whether the UF250 is properly filled out.

It would have been more instructive if Mr. Reiter had addressed the specific deficiencies, if any, that he found in the almost one hundred specific data points in the UF250 form. Mr. Reiter does not specify the details of the stop he would have officers "further articulate." Completion of the UF250 does provide a tremendous amount of information. I think it safe to say that it would be a rare memo book entry that would ever include remotely this much information about a

17

police encounter. These UF250s are now routinely coded and the information that the law allows the department to retain is electronically stored, and used in reports.

Nowhere does Mr. Reiter indicate that he is aware that Professor Fagan's analysis of the product of the UF250 records allowed him to classify 70% of all stops as "justified" and only, by his count, 6.7% unjustified. We are not told by Mr. Reiter how NYPD's record compares with the departments that adhere to "best police practices."

After reviewing a series of responses of officials to questions posed in their depositions which did not satisfy Mr.Reiter, he sums up his assessment as follows: "This lack of understanding and obvious avoidance of reasonable police performance by Police Department's highest commanders is indicative of a position of arrogance, avoidance or basic lack of knowledge of reasonable police practices for oversight of filed(sic) operations."

Given his extensive experience in police organization complexity and presumably the scale and specialization of the NYPD leadership team one would expect a more carefully calibrated indictment of the "highest commanders" in the Department when the set of depositions he reviewed included such a small fraction of that set and addressed only a limited part of their roles in the Department even with respect to issues of supervisory control. In his global characterization of their arrogance or lack of knowledge he does not provide any criteria or context for judging them as professionals or reason to accept his sweeping generalization based on the limited data he acknowledged reviewing.

18

Consequently, absent the kind of explicit criteria or specific benchmarks for judging these officers and the Department's performance in this limited but important area of their complex area, I am unable to find that Mr. Reiter's opinions are supported by the evidence presented in his report, or find any support here either for the Plaintiff's 4th or 14th amendment claims..

APPENDIX D

An Empirical Assessment of NYPD's "Operation Impact": A Targeted Zone Crime Reduction Strategy[4]

---

[4] Dennis C. Smith and Robert Purtell. 2007. "An Empirical Assessment of NYPD's Operation Impact : A target Zone Crime Reduction Strategy" A Report to the Commissioner, June 2007.

19

Two relevant studies that the rely on NYPD crime statistics to evaluate police policies aimed at increasing public safety in the City found evidence that both Operation Impact and the practice of stopping on suspicion contributed to crime reduction.

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." [5] Operation Impact is all about "planning" the deployment of scarce police resources.

Despite the overall and nearly ubiquitous pattern of crime reduction the City has achieved, there was still serious crime in New York, and it was 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,

---

[5] James Q. Wilson, Varieties of Police Behavior (Cambridge, 1968, 60)

20

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 confirmed that the precincts chosen for Impact Zones had higher rates of crime, and that crime in those precincts was declining faster than the rate for the City overall even before the start of operation impact. However, we also found that the rate of crime-decline in the city was itself slowing over time, with the Impact Zones slowing even faster than the rest of the City.[6]

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 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, an

---

[6] 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.

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. Table 1 shows the distribution of Impact Zones across time and precincts.

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		5.75 Start 7/10	
19	12	12	6.5 7/17	End	0	
23	12	12	12		0	
25	0	12	0		0	
28	0	0	0		6 End 7/09	
32	12	12	12		12	
40	0	0	12		0	
43	12	7.5 7/10	End 0		0	
44	0	0	7.5 7/17	End	12	
46	12	12	7.5 7/17	End	12	
47	0	12	0		0	
52	12	12	7.5 .7/17	End	5.75 Start 7/10	
67	12	12	7.5 7/17	End	12	
70	12	12	12		12	

22

71	12	12	0		0	
73	12	12	12		12	
75	12	12	0		12	
77	12	12	7.5	End	0	
			7/17			
79	6	Start 0.5 End 1/11	5.6	Start	12	
	7/01		7/18			
83	0	0	7.5	End	0	
			7/17			
90	0	0	5.5	Start	0	
			7/18			
102	12	12	0		0	
103	12	12	12		12	
104	0	12	7.5 End 7/17		0	
107	0	9 Start 4/01	0		0	
109	12	0.5 End 1/11	0		0	
110	0	12	12		12	
115	12	0.5 End 1/11	0		6.75 Start 7/09	
120	12	12	7.5 End 7/17		0	
Active	19	24	19		15	
Precinct						
Started	19	5	4		2	
Year						
Non-zone	57	52	57		61	
Precinct						
Total	76	76	76		76	

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 has been increasing in many other major cities. Those numbers are readily available and widely reported. Our task was to answer the question, "How much of New York

23

City's success in fighting crime can be attributed to Operation Impact?" 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.

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

24

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.[7] 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

---

[7] Thomas J. Lueck, "Serious Crime Declines Again in New York at a Rate Outpacing the Nation's," *New York Times*, June 7, 2005.

25

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 more productive post-Academy training environment for "rookie" police officers than their closely-supervised crime "hot spots".[8]

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

---

[8] 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.

26

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)

Operation Impact has varied in the number and location of Zones since it began in 2003, with locally proposed, but centrally approved, adjustments during implementation, and intensive review and possible revision each time a new cadet class graduated from the academy.[9] 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 centralize mainframe computer-analyses of crime-statistics maintained 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 it 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 deployed in 30 precincts. Eleven precincts have had Zones continuously since the inception of the program. The small areas and shifting boundaries over time

---

[9] 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.

27

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.

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

30

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[11] 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.

According to Weisburd and Braga's 2006 summary of hot-spot policing research, the foundation for hot-spots policing, was laid by the intersection of problem-oriented approaches to policing of Goldstein and work on situational crime-prevention-theory by Clarke,[12] and a growing body of empirical evidence showing the disproportionately high concentration of crimes in discrete places like street corners or apartment buildings. [13] They note that one implication of situational crime-prevention is that by preventing victims and offenders from

---

[11] Weisburd, Mastrofski and Greenspan, 2001.
[12] Herman Goldstein, Problem Oriented Policing (Tempe University Press, 1990) and R. V. Clarke, Situational Crime Prevention,
[13] They cite Lawrence Sherman, et al., 1989;Weisburd and Green, 1994; Spelman, 1995; Swartz, 2000

31

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

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 estimation techniques. 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.

32

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

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

33

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 censuses. Population numbers for non-census-reporting periods were estimated using the compound annual population growth rates derived from precinct-level census numbers.

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.

34

Figure 1

Hot-Spots Policing Deployment Areas

Historical Impact Zones

35
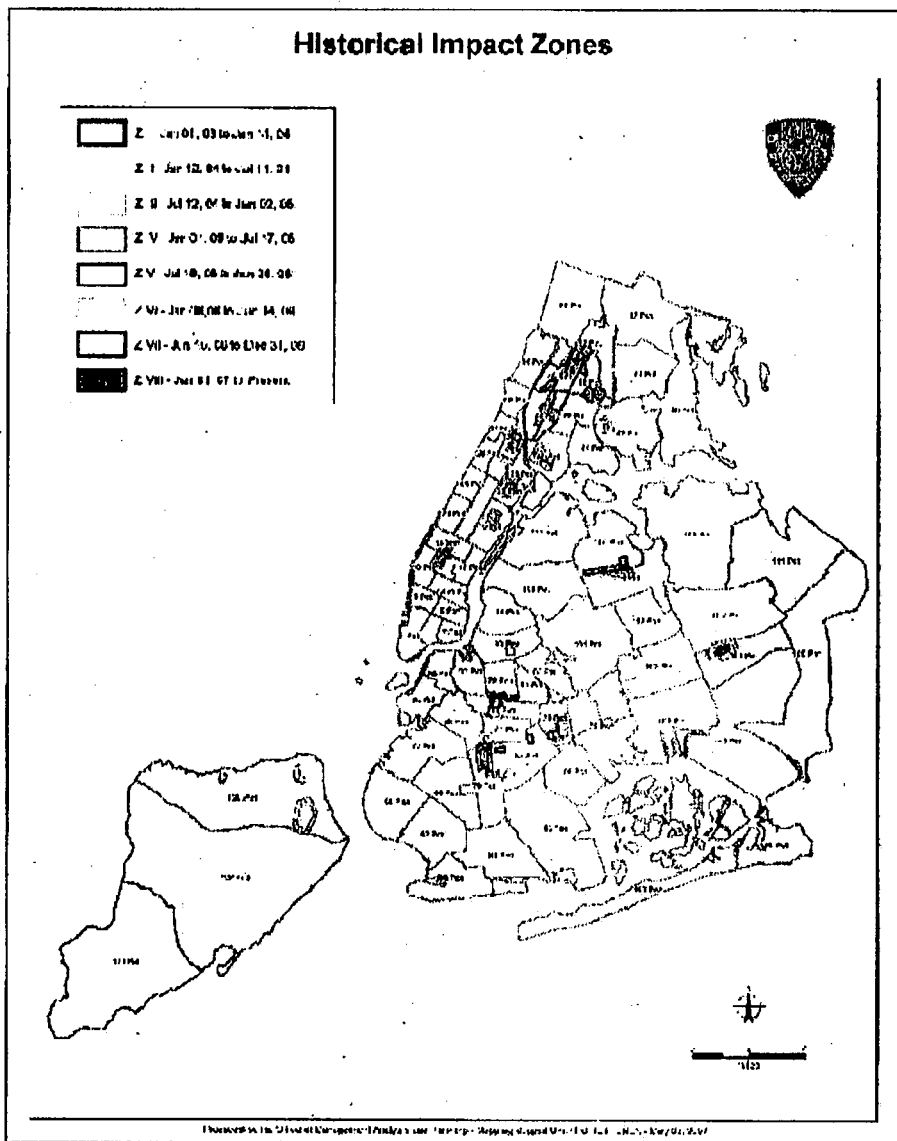
The Data Set

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 22nd Precinct encompassing Central Park from our analysis because there are no population statistics from which to calculate crime rates. We also excluded the 33rd and 34th Precincts – Washington Heights and Inwood - which were carved out of the 34th 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 were 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. Ninety-nine 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 these reclassification changes had *some* impact on reported results but we do not expect the effects to be material.

The Evaluation Model

36

We employed a panel-data formulation of an interrupted-time-series model in our analysis. In its most general form, that model contains variables that relate to overall city trends, pre-Impact-Zone trends in the hot-spot precincts and post-Impact-Zone trends in the hot-spot precincts. Our analysis involved doing separate evaluations of the impact of the hot-spots intervention for each of the seven major crimes.

In its most general form, the model we used for the analysis is a follows:

Crime rate = pre-intervention city-wide components

$$+ \text{ pre-intervention zone-precinct components}$$

$$+ \text{ post-intervention zone-precinct components}$$

Where the pre-intervention city-wide components are:

$$\text{Constant} \quad + B_1 * period \quad + B_2 * period\_sq$$

The pre-intervention zone-precinct components are:

$+ B_3 * z\_noz + B_4 * znz\_time + B_5 * znz\_per2$	(2003 zones)
$+ B_6 * time\_2004 + B_7 * z2004\_per2$	(2004 zones)
$+ B_8 * time\_2005 + B_9 * z2005\_per2$	(2005 zones)
$+ B_{10} * time\_2006 + B_{11} * z2006\_per2$	(2006 zones)

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 Appendix 1.

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,

37

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

38

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.[14]

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 autocorrelation in the crime-rate trends within each precinct. Autocorrelation in the error terms would have biased the coefficient estimates, significance measures and standard errors produced by ordinary-least-squares models and led to unreliable results.

We also tested 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. In addition, we 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 formulation 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

---

[14] 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.

39

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 found 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 random-effects models in which we allowed each precinct to have 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, there is strong statistical evidence

40

that the Impact-Zone strategy accelerated the rate of reduction for 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. .

Results of the Analysis

Because there is no generally accepted way to aggregate crimes, we show separate analyses for each of the seven major crimes and summarize our findings at the end of the results section. It is interesting to note that each of the models showed declining returns to time. That finding is consistent with crime patterns from other major US cities where the rates of reduction in the seven major crimes not only slowed but actually reversed direction.

41

Table 3
Hot-Spot Policing Analysis Results[15]

City	Murder	Rape	Robbery	Assault	GL	Burglary	GLMV
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
Zones Precincts							
z_noz	.19783	.23443	.01978	.32085	NS	.47577 P<.05	-.30714
znz_time	-.00019	-.00015	-.00482	-.00215	-.00852	-.00133	-.33071
znz_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

[15] 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. CHI^2 < .0001 for all regressions.

42

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
Hot-Spot Impact							
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

43

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[16] (znz_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 (znz_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 decline in the crime rate during the intervention (active_time = -.00011) was 24% faster than it was before the intervention began.

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[17] and 2006 Zone-precincts. Again, there were declining returns-to-

---

[16] 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 znz_per2 and z2006_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.
[17] The lack of significance for time_2004 suggests that the rate of change in rape rates was statistically identical to the 2003 zone-precincts.

44

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). 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.

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 robbery rates (active_time = -.00365). That equated to an overall acceleration of 21% in the drop in robbery.

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

45

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. 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).

Grand Larceny Results

The pre-zone 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.

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

46

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 than in the city as a whole 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%. Interestingly, when the Zones were suspended or terminated, the rate of decline in auto-theft rates accelerated (md_pst_per = .00069).

Based on this rigorous analysis of Operation Impact which began the year before the period studied by Professor Fagan and extending through the entire period covered by his study we conclude that NYPD has been successfully practicing evidence based, violent crime targeted problem solving policing. While it is consistent with the assignment of vigilance given to Impact Zone police officers that they intervene when they observe suspicious behavior, and given the high crime areas in which by definition Impact Zone officers were deployed, it is entirely likely that they were active contributors to the total number of stops conducted by NYPD during their period of deployment. Police stops on suspicion

47

were not the focus of the evaluation of Operation Impact. A second study addressed specifically the efficacy of stop, question, and frisk practices in reducing crime.

48

APPENDIX E

Does Stop, Question and Frisk Stop Crime?[18]

In a recent conversation, a group of graduate students interested in criminal justice administration were asked their views on the police practice of stopping and frisking citizens. The three women in the group reacted in terms of the controversy that they had followed in the press. The sole male and minority student had a much stronger reaction. He said,"I hate them", but......."

It seemed obvious and was confirmed that he had been stopped by NYPD a number of times since his arrival from the West Coast. He described, in particular, one harrowing experience in Harlem when, with a group of young men, being asked by police with guns drawn to lie down on the ground to be searched. The police, he said, ultimately explained that were looking for gang members seen in the area, reportedly with a gun. They were released and allowed to proceed, but even in retelling the story he was visibly shaken. Asked, So why the ambivalence? (The "but"...in his initial response.) His answer was that while living in Harlem he has been able to go out at night to a grocery store that is still open at 2 a.m. in the morning, and walk around his neighborhood at that time without any real fear of crime. He believes that police patrol of the neighborhood has contributed to that safety. Clearly, in his case, like society in general, he is weighing the trade-offs between intrusive police behavior and

---

[18] Presented at the Association of Public Policy and Management Annual Research Conference, Los Angeles, California. November, 2008.

49

safety in his neighborhood. Equally clearly, that trade-off has no meaning unless such stop-and-frisk behavior is in fact efficacious in the fight against crime.

While there is no question that NYPD has recorded a significant increase in the number of stop and frisks of citizens in the past several years (in the 500,000 to 400,000 per year range (2006, 2007)[19], it is less clear what this recorded shift actually represents. Some of the increase, police assert, is a function of a more accurate process of recording at every level within the department. In addition to being in part an artifact of improved systems, it may be no coincidence that this surge in recorded stops roughly parallels the citywide campaign post 9/11 asking everyone "if you see something say something" and the introduction of the practice of searching packages and packs of persons entering New York City subways after the bombings in London and Madrid. In other words, the surge in this police activity predicated on "reasonable suspicion" comes at a time when the city is in general a heightened state of vigilance.

The period of increased stop-and-frisk behavior by police also corresponds to a shift in strategy toward a greater attention to "quality-of-life crimes." With the decline in violent crime in particular and the crimes included in the FBI reports in general, felony arrests have witnessed a steady decline over the last decade. By

---

[19] For those not familiar with the *scale* of New York City some context is needed. In recent years NYPD has had approximately 35,000 sworn officers. The Department received in the range of 10 million 911 calls and dispatches about 4 million police radio runs per year. If only half of the officers are in patrol situations where they might stop and question a suspicious person make between two and three stops per month, it would reach the peak level of 500,000 for the City for a twelve month period.

50

contrast, misdemeanor arrests reflect a consistent upward trend. (See figure 1). This shift is the result of both public demand and expanding acceptance by police leaders of James Q. Wilson and George Keillings "broken windows" theory of public safety which holds that enforcing public order law is important in preventing an escalation toward more serious crime.
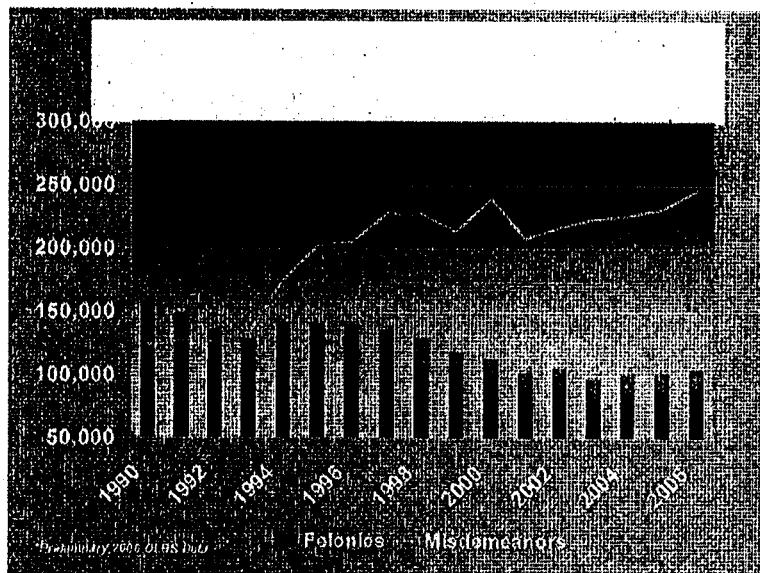
On the Stop, Question, and Frisk report worksheet (PD 344 -- 151A, also known as UF-250) officers are required to check reasons for stopping include that

- the person was carrying objects in plain view used in commission of crime,
- fits description [of a reported suspect],
- actions indicative of "casing" victim or location,

51

- actions indicative of acting as a lookout,

- suspicious bulge/object,

- actions indicative of engaging in drug transaction,

- furtive movements,

- actions indicative engaging in violent crimes,   .

- wearing clothes/disguises commonly used in commission of

  crimes.

Acknowledging the inherently subjective nature of the action categories, it still

seems reasonable to ask critics of the volume of stop-and-frisk police encounters

which of these indicated behaviors would they ask a vigilant police office to

overlook and let pass? The question has more cogency, however, if stop and

frisk is an effective tool in reducing crime than if it does not.

The subjectivity of police decision-making, also discussed in the literature under

the heading "police discretion," poses a real challenge to management. In an

early discussion of this issue, the sociologist Jerome Skolnick in his book **Justice**

without Trial introduced the concept of "symbolic assailant" to explain how

police officers on the street faced with danger and enormous uncertainty attempt

to organize information needed to carry out their job. To oversimplify, the

"symbolic assailant" in the minds of police officers is an evidence-based

stereotype used by officers to rapidly sort out the complex array of characters

they encounter as they patrol the streets of the city. Much has been made in the

published criticisms of stop-and-frisk behavior in New York in recent years of the

52

fact that the demography of person stopped does not mirror the population served. More African-Americans and Hispanics are reportedly stopped then their proportion of the general population. (Needless to say, the gender of person stopped does not mirror the population proportions either, but that is not mentioned.)

We have argued elsewhere that the success of CompStat and more recently Operation Impact has been precisely that NYPD has developed a system that enables it to know in a timely way and in considerable detail which kind of crime is happening where in the city, and deploying police where and when the crime is happening. (Smith and Bratton, 2001; Smith and Purtell, 2007) This has led to disproportionate deployment of police in lower income, predominately minority neighborhoods. In contrast to the literature critical of police administration in the 1950s and 60s that faulted the police for failing to address or respond to crime problems in the ghettos, the current criticism is that they are paying too much attention to it.[20] If we focus on outcomes, what is striking is the evidence that, in New York at least, crime reduction since 1990 has been universally achieved across all neighborhoods. Given the fact that crime is still much higher in poorer, minority neighborhoods, even where 75 to 80% reductions in crime have been achieved, there remain significant patterns of victimization. These locales have

---

[20] Operating under the old system of deployment based on the volume of 911 calls for police service also led to disproportionate deployment of police in minority neighborhood as well. The difference is that random patrol and radio dispatched response to calls was ineffective in reducing crime.

53

been typically the focal point of recent strategies like Operation Impact, the

Bloomberg /Kelly "hot spot" policing strategy. (Smith and Purtell, 2007)

	NYC % +/-	NATIONAL % +/-
Murder and Non-Negligent Manslaughter	71.7	22.4
Forcible Rape	58.6	6.5
Robbery	70.6	57.4
Aggravated Assault	40.5	53.2
Burglary	80.9	73.0
Larceny Theft	58.0	11.8
Motor Vehicle Theft	86.3	24.4
Total Crime Index	89.5	16.0

A recent NYPD report entitled "Crime and Enforcement Activity in New York City

(January 1 – June 30, 2008) "presents the ethnicity of crime victims, of the

known suspects, and of arrestees for various categories of crime. Murder and

non-negligent manslaughter victims are most frequently black (67.7%) or

Hispanic (22.8%).The percentages vary across categories of crime (eg. rape,

assault) but the pattern is the same with victims, known suspects and arrestees

showing black and Hispanics in larger percentages than found in the population

as a whole. Exceptions to this pattern are robbery, where Hispanics are more

frequently victimized (but the known ethnicity of suspects is Blacks, at 72%, the

highest of all categories of serious crime), and Grand Larceny, where whites (at

44.7) are the most frequent victims, and Blacks (63.2%) the most commonly

54

identified perpetrators. Shooting victims are overwhelmingly Black (76.6%) and so are the shooting suspects (81.8%), according to their attributed race/ethnicity.

Aggregating violent crime in the City, Blacks constitute 68.3% of the suspects but 51.6% of stops, Hispanics 24.6 suspects and 33.2% of stops, and whites are 5.3% of the suspects, an 11.5% of stops. So Hispanics and whites are stopped out of proportion to their status as suspects, but Blacks are not.

Finding such as these underlie a Rand Corporation study that concluded that while there are aspects of the management of stop-and-frisk behavior by police that needs management attention, such as closer scrutiny of individual officers' patterns of stops, there was not statistical evidence of systematic racial or ethnic bias in the practice. (Ridgeway, 2007)

In some of the policy debates on stop-and-frisk behavior by police, there is an underlying difference in understanding the nature of crime. If crime is like litter or debris from a storm, when crime goes down it is as if it has been removed from the scene, cleared away. Based on that view when crime goes down enforcement activities should decline as well. If, however, crime is more organic, more like a cancer or weeds than debris, its removal does not signal an end to the need for vigilance and continued intervention.

55

Although, for years, a few students of police like Lawrence Sherman have been calling for research on police practices to determine what police interventions work and which do not, a review of existing systematic studies of police effectiveness found few practices that had been subjected to critical evaluation. Stop and frisk, the subject of this paper is not one of the police practices that has been carefully studied. There has been a fair amount of research on police stop-and-frisk behavior but none of it has focused on the question of whether it is an effective strategy in fighting crime.

The absence of systematic study of the efficacy of stop and frisk has been in part attributable to a dearth of systematic data on incidence of stop and frisk. While the practice of stopping citizens who provoke police suspicion is hardly new, the systematic recording of this practice is a relatively new addition to the wide range of data collected and analyzed by police. NYPD, for example, has long required officers to record on a form their encounters involving stopping citizens. For most of its history, however, these forms accumulated on desks, shelves and in chronological files in precinct houses, but have not been part of the data collected centrally by police. It has not been systematically collected and analyzed as is, for example, crime data. These stop forms were used in precincts in follow-up investigations by detectives searching for clues where records of suspicious persons or activities in the vicinity of the crime might be of assistance.[21]

---

[21] Neither Bratton (1998)nor Maple (1999) even mention a stop and frisk strategy in their books recounting their roles in the fight against crime in New York.

56

In New York, it was only after the public outcry following the stop and fatal shooting of Amadou Diallo that pressure was brought through the courts on the Department to report on patterns of stopping citizens. In the late 90s when the police were required by advocates and the courts to produce records of their stop activity, the Department employed data-processing companies to assemble and enter data on the forms. Multiple vendors were employed to expedite the process but since the forms included open-ended responses and processing by different vendors varied, it created uncertainty about the consistency of coding on top of existing uncertainty about how regular or reliably the forms were completed. As the pressure to produce these records regularly for the City Council and others mounted, the Department determined to improve the form and process by providing more structured responses consistent with the legal issues arising in the stop-and-frisk encounter and more responsive to the questions being posed about the practice. In addition, the process of collecting the forms, of command review of data entry, and analysis of stop and frisk reports at the precinct-- and at headquarters-- was standardized. Contrasting the current data situation with that faced by researchers using the data produced for the New York State Attorney General in 1999, Gelman, Fagan,and Kiss (2006) at the end of their paper " An analysis of the NYPD's stop-and-frisk policy in the context of claims of racial bias" observed:

> In the years since the study was conducted, an extensive monitoring
> system was put into place that would accomplish two goals. First,
> procedures were developed and implemented that permitted monitoring of
> officers compliance with the mandates of the NYPD Patrol Guide for

57

accurate and comprehensive recording all police stops. Second, the new forms were entered into databases that would permit continuous monitoring of the racial proportionality of stops and their outcomes (frisks, arrests) When coupled with accurate reporting on race specific measures of crime and the rest, the new procedures and monitoring requirements to ensure that inquiries similar to the study can be institutionalized as part of a framework of accountability mechanisms.

What Gelman et al. do not contemplate is that the regular availability and saliency of this record of police activity would become a tool for managing police productivity for those who view it as an effective intervention in the effort to reduce crime and increase public safety. In fact, spokesmen for the Patrolmen's Benevolent Association now complain that precinct commanders are using stop-and-frisk records in their assessment of patrol-officer performance, and allege that police officials are setting quotas for numbers of stops conducted.[22] Ironically, the systematic reporting and analysis of stops, and the availability of these data to managers, may have had the unintended effect of producing a higher volume of stop activity. A union official, Mubarak Abdul Jabar, writing in PBA Magazine objects to the widening demand for stop and frisks by all officers on the grounds that it requires specialized training and experience. In his words, "Aggressive stop-and-frisk tactics employed by well-trained, experienced officers are one of the cornerstones of any successful law-enforcement attempt to eradicate violent crimes committed with guns. "

---

[22] One precinct commander reported that when he analyzed the patter of stops he found that officers were conducting two stops per month, not on average but uniformly and consistently each officer was reporting two stops. In his view this was classic rate setting by workers. He decided to signal to his officers that in his view actively engaged officers would see more than two suspicious persons worthy of stopping and questioning and that would be considering the level of engagement in his review of officer performance. He was accused, he said, by the union of setting a "quota."

58

Most recent discussion of stop-and-frisk behavior by police has focused not on effectiveness but on its fairness. Studies by Attorney General Eliot Spitzer (1999), US Commission on Civil Rights (2001) and by the Rand Corporation (2007) have searched the data on stop and frisk for evidence of racial or ethnic bias. The major differences in these analyses emerge from the way they frame the analysis. If the distribution of stops is compared to general population characteristics that research finds African-Americans disproportionately stopped by police. If the alleged ethnicity of perpetrators reported by crime victims is used as the denominator, African-Americans are not stopped in proportions out of line with crime reports. What is striking in all of the studies is that none of them asked the question, "Does stop and frisk stop crime"?

This exploration of the efficacy of stop and frisk as a crime reduction intervention is of course embedded in a larger controversy over whether dramatic reduction in crime in New York City and elsewhere in the last decade and half is a result, to a significant degree or not, of the work of urban police forces like NYPD. In our earlier studies we have concluded that a revolution in the management of the police in New York was a significant factor in bringing violent crime from historic highs in the 1990s to historic lows as we approach the end of the first decade of 21st-century. (Smith and Bratton, 2001) In our analysis at least, it was not improvement in the economy, a spontaneous decline in drug use or increase in incarceration, or for that matter a decline in the production of juvenile delinquents resulting from Roe v. Wade that explains a 75% drop or more in all categories of major crime, including homicide, in New York City since 1990. We have

59

hypothesized and found evidence to support the proposition that a shift away from a focus on inputs and activities in policing to a focus on reducing crime as an outcome, starting with community policing, and accelerated by the introduction of a profound management reform also directed at crime reduction called CompStat is a major reason public safety has significantly improved. While drug use of certain kinds may have declined, and in the early days of the reform incarceration increased, these were not independent of police action. Both problem-solving community policing and police strategies under CompStat focused attention on drug-related crime, and on effective arrest and prosecution of offenders. Our most recent study of Operation Impact, NYPD Commissioner Raymond Kelly's strategy of hotspot policing in New York, found statistically-significant evidence that the deployment of targeted, concentrated enforcement in areas that, despite the overall decline, were still, relatively speaking, plateaus of violent criminal activity, accelerated existing patterns of crime decline. (Smith and Purtell, 2007)

A relatively recent comprehensive review of research on policing Fairness and Effectiveness in Policing: The Evidence said:

> It is important to note that there is much about police practice and its effectiveness that is still unknown. While our review documents a substantial amount of research over the past four decades, it also illustrates the fact that many established police practices have not been carefully evaluated. One reason for the lack of evidence is the complexity and ambiguity of police strategies.

The report did find "a small group of studies support the position that field interrogations and aggressive traffic enforcement can reduce crime. However,

60

the number of studies available and generally lower quality of the research designs used to not allow for the development of strong conclusions regarding such approaches."

They report that in San Diego researchers examined the effects of the introduction and suspension a field interrogations. "The study found that when field interrogations were introduced, there was a decrease in disorder crime. When field interrogations were suspended, disorder returned to its previous level. (Boydstun,1975). Whitaker et al. (1985) report similar findings in non-experimental study of crime in 60 neighborhoods in Tampa, Florida; St. Louis, Missouri; and Rochester, New York." Poland and Wilson's 1979 study of field interrogations associated with traffic enforcement found that cities with higher levels of traffic citations had lower levels of robberies. Weiss and Freels (1996) more recent matched-control area study of traffic stops found no significant differences in reported crime.

As noted earlier, research on stop and frisk by police in New York City has not focused on effectiveness but rather on fairness. While not a study, a widely reported strategy used by William Bratton as superintendent of the NYC Transit Police in the early 1990s was arguably a learning experience on crime-fighting. As both he and Jack Maple, his Deputy Commissioner for Crime Strategies at NYPD recount in their books about crime-fighting, their use of targeted enforcement of the law against "transit fare beating," technically at the time the theft of $.75, and their use of frisk and interrogation of arrestees, which was

61

largely credited as a important tool in reduction of crime on the subways, has a lot in common with current stop-and-frisk interventions by police based on "reasonable suspicion." (Bratton and Knobler, 1998; Maple, 1999)

The "theory" (assumptions about cause and effect) underlying the use of stop and frisk as a crime-fighting intervention is that police officers deployed in response to crime patterns engage in a vigilant search for suspicious behavior, that they respond based on reasonable suspicion by stopping, questioning, and if warranted by concern about safety frisking those stopped, and arresting where evidence of crime is detected. This intervention is expected to reduce crime in subsequent periods by removing those apprehended from the street, and deterring through the prospect of detection criminal activities in areas where the likelihood of being stopped, questioned, and frisked is high. This study, using monthly precinct crime data as the dependent variable, monthly stop-and-frisk data as the primary independent variable, and controlling for the impact of hot-spot policing and the interaction of stop-and-frisk incidents with the existence of impact zones seeks to explore and answer the previously neglected question, Is Stop and Frisk an effective tool in the quest for lower crime and increased public safety?

An Empirical Assessment of Stop-and-Frisk Activities in New York City

This study reports findings from an empirical analysis of the impact of stop-and-frisk incidents across 73 of New York City's 76 police precincts using cross-

62

sectional, monthly crime and stop-and-frisk panel data from February 1997 to December 2006 in an interrupted time-series evaluation using mixed-effects maximum likelihood estimation techniques.

Specifically, we asked two related questions. First, we asked what impact stop-and frisk activities had on crime above and beyond what could be explained by the city- wide and impact-zone crime trends? Second, is stop-and-frisk the only explanation for those observed changes? To answer those questions, our analysis builds on the Smith and Purtell 2007 study of the effectiveness of impact policing. First, we estimated the trend in crime for the city as a whole and then layered on that the effect that hot-spots policing had on crime trends in those precincts selected for impact zones. Second, we estimated the impact of stop-and-frisk incidents on each of those two trends.

Again, building on Smith and Purtell (2007), we converted crime counts and incidents of stop-and-frisk activities to rates per thousand people to avoid having higher crime or stop rates bias the analysis. Monthly population estimates for each precinct were based on compound annual population growth rates derived from population data reported by the United States Bureau of the Census for the survey years 1990 and 2000.

As the box plots for four representative precincts presented in Figure 1 show, the intensity of stop-and-frisk activity varied significantly both across precincts and

63

across time with a noticeable increase in the volume of stops across virtually all precincts starting in 2003 and significant differences in the number of stops per-thousand population from precinct to precinct. We conducted some initial analysis of the relationships between levels of crime and the incidence of stops but were unable to find consistent patterns to explain the differences in rates of intensity. Nor were we able to develop a scheme for grouping precincts according to stated policing strategies or other precinct, crime or population characteristics that might help to explain the variations we observed.

Figure 3
Representative Box Plots

Harlem Precincts
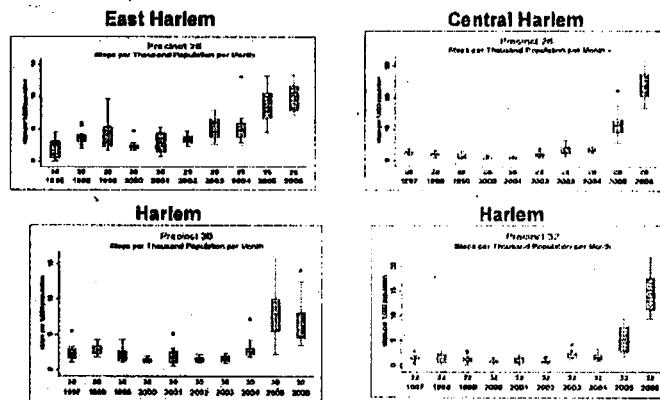
The stop-and-frisk patterns shown above for the four contiguous Harlem precincts are especially illustrative of the variation in the data that we observed. Despite having remarkably similar profiles in terms of economics and

64

demographics, both the year to year levels of stops varies considerably from precinct to precinct as does the pattern of change in the time series. For example, East Harlem, the 25th Precinct, averaged approximately 11 stops per thousand residents during 2006 while its immediate eastern neighbor Central Harlem, the 28th Precinct, averaged roughly 23 stops. These wide variations in stops in seemingly comparable precincts may suggest the existence of some other unifying structure which would require modeling or it could be a result of strategic differences across the precincts that have not been accounted for in the analysis presented here. One obvious potential explanation is that with the timely intelligence and rapid deployment of resources utilized by police managers, they were seeing patterns and directing responses that were at a level or scale or time frame that fell outside of our framework for analyzing the data.

The Data Set

Our analysis used seven time series that matched crime rates for each of the seven major crimes – robbery, assault, murder, rape, burglary, grand larceny and grand larceny motor vehicle – with lagged stop-and-frisk counts. The data included 119 monthly observations stretching from February 1997 to December 2006 for each crime for seventy-three of the seventy-six police precincts in the city. Excluded from the analysis were three precincts for which consistent population data was not available. They were the Central Park Precinct, the 22nd Precinct, which has no permanent population and the 33rd Precinct, Washington

65

Heights, – Inwood, the 34th Precinct, which were carved out of the 34th Precinct in 1994 and for which no 1990 census data was available.

Because stop-and-frisk activities were, at least in part, likely to be responses to concurrent crime and police officials interviewed stated an expectation that the crime-management impact of stops was likely to be felt in periods following the stops, we conducted our analysis using stop-and-frisk data lagged by one month.[23] In addition, the NYPD Crime Reporting System records crimes in the period when they were first reported and corrections in the period when they were approved. However, we were unable to identify the original reporting and adjustment periods where those changes may have occurred and crime rates for those periods may be misreported. However based on a previous work by Smith and Purtell (2006) where they evaluated the quality of policing data, reclassifications are likely to have impacted less than 2% of reported crimes. While we cannot rule out completely the impact reclassifications may have had, we do not believe that they will have had a material impact on the results reported here.

The Evaluation Model

We employed a panel-data formulation of an interrupted time-series model using lagged rates of stops for our analyses. This design allowed us to estimate an underlying crime pattern for the city as a whole and to isolate the differential

---

[23] We also tested alternative lag structures ranging from two to six months. None of those alternatives time lags resulted in statistically significant results.

66

impact of having active hot-spots in select precincts. We then layered onto this base model the impact of stop-and frisk activity on both the underlying city-wide crime trend as well as the differential crime patterns experienced in hot-spot precincts while they had active impact zones in place. To account for the declining returns to scale over time reported by Smith and Purtell (2007) in their analysis of impact policing, we included quadratic terms in time for both city-wide and zone-precincts. In addition to allow both for the return to scale findings reported by Smith and Purtell and to account for the patterns demonstrated in Figure 1, we tested for quadratic effects in the volume of stops in the impact of city-wide and impact-precincts crime patterns.

The model we employed took the following general form:

Crime rate = city-wide crime rate before the impact of stops

+ impact of stop and frisk on city-wide crime trends

+ differential crime rates in precincts with active hot spots

+ impact of stop and frisk on hot-spot precinct crime trends

Where the city-wide trend is modeled by

Constant + B1*period + B2 * period_sq

The impact of stop-and-frisk activity components are

+ B3 * stoplag1 + B4 * stoplag1sq

67

The differential pattern of crime rates in precincts with active hot-spots was estimated using:

$$+ B5 * z\_active + B6 * active\_time + B7 * z\_act\_per2$$

Finally, to estimate the impact of stop-and-frisk activities in precincts where active zones were in operation we used:

$$+ B8 * saf1\_zactive + B9 * saf1sq\_z$$

Definitions for each of the variables and a discussion of their interpretation is included in Appendix 1. This model looks at two trends in crime over two time periods. The first starts in 1997 and measures city-wide crime trends in precincts without active hot-spot policing zones. The second focuses on the period from 2003 to the end of 2006 and measures the impact of having an active impact-zone in a precinct. Within non-zone precincts the variables stoplag1 and stoplag1sq are used to measure the lagged impact of stop-and-frisk activity in precincts without active hot spots. Similarly, the saf1_zactive and saf1sq_z variables, interactions between the lagged stop variables and dummies indicating the existence of an active impact zone in a precinct, are used to estimate the differential lagged impact that stops had within precincts with active hot-spots.

As the results in Table 2 show, stop-and frisk was not uniformly effective for all classes of crimes and differential impacts of stops in precincts with active hot spots also varied by crime. We have reported the estimates for the full set of

68

coefficients for all models but only included those coefficients that were significant at the .1 level of higher in our discussion of the results.

The parameters were estimated using a fixed-effects panel-data model using maximum likelihood estimation techniques to compensate for possible bias introduced by autocorrelation in the crime rate trends within each precinct. Autocorrelation would have biased coefficient estimates and significance measures produced by ordinary least squares. Our initial examination of the data suggests that there may be multiple processes occurring that might result in statistically-significant differences in stop-and-frisk effectiveness based on one or more groupings of the precincts. However, the underlying structure that might drive such differences was not readily discernible. As a result, we did not test for differential results by precinct, time period or characteristic grouping of precincts in this preliminary analysis. To the extent such structure exists and has not been correctly modeled, it may have resulted in biased parameter estimates.

In several of the models we estimated, most notably burglary, grand larceny and motor vehicle theft, our estimates of the differential level of crime and rates of decline in crime in the zone precincts was different from those put forth by Smith and Purtell (2007). Those differences might have arisen from our inability to correctly identify and model underlying structures or one of three causes or interactions among them. First, due to data limitations, we estimated the model parameters using data from 1997 to 2006 while Smith and Purtell used a longer

69

time series that began in 1990. Second, we were faced with the same problem of variations in the start and stop dates for precinct zones that Smith and Purtell identified in their analysis of the effectiveness of hot-spot policing. These variations could have had a significant impact on estimates of both differential base and time-variant crime rates for precincts with active zones. Finally, our model did not correct for possible differential impact-zone effects for zones operating in only a portion of the full 2003-06 time period.

Results of the Analysis

Because there is no generally accepted way to aggregate crimes or a standard way of combining into an index, we performed separate analyses for each of the seven major crimes. In addition, we hypothesized that stop-and-frisk would have differential results by crime either because of the nature of each crime and the strategic reasons police commanders offered for their use of the stop-and-frisk strategy. To the extent that proved true, aggregating crimes might have masked crime-specific impacts of the stop-and-frisk strategy.

Also, as we mentioned above, this preliminary analysis did not attempt to parse out differential results at the precinct level nor did we attempt to determine whether there were nestings of precincts by demographic characteristics or crime patterns that might have shown differential results from what we found for the city as a whole and aggregate precincts with active impact zones. To the extent that

70

such effects exist, our analysis is incomplete and may have under or overestimated the extent and generalizability of the effects reported below.

Consistent with the results reported in the popular press and confirmed in Smith and Purtell (2007), all of our models showed a pattern of declining crime rates with one notable exception. That exception was for grand larceny where the advent of identity theft and an increase in incidents of stolen electronics beginning in the late 1990's may account for the results reported. In addition, many of the models we estimated showed declining returns to scale both over time and to the volume of stop-and-frisk activity. That finding is consistent with a conclusion presented by Smith and Purtell (2007),where they argued that effective policing required constant innovation to be successful.

Robbery Findings

Stop and frisk appears to have been a broadly effective strategy against robbery. The city-wide impact of stops was a decline in .002 instances of robbery per thousand people (stoplag1, p <.05) for each increase of one stop per thousand people. Further, the rate of decline in crime increased by .0002 robberies per thousand as the square of stops increased (stoplag1sq, p<.001). In addition, the strategy appears to have been more effective in precincts with active zones than it was for the city as a whole with an added drop of .0129 robberies for each increase on one stop per thousand people (saf1_zactive, p < .001). Offsetting

71

that is an estimated decline in returns to scale of .0006 per thousand as the square of stops increased (saf1sq_z, p < .001). This suggests that stop and frisk strategies may lose effectiveness as the volume of stops increases beyond some point in zone-active precincts.

72

Table 2

Results of Stop-and-Frisk Analysis

Variable	Robbery	Assault	Murder	Rape	Burglary	GL	GLMV
Period	-0.0117452 p < .01	-0.0049755 p < .01	0.0001005 p < .01	0.0003523 p < .01	-0.0128264 p < .01	0.0047440 p < .05	-0.0231157 p < .01
period_sq	0.0000334 p < .01	0.0000117 p < .01	0.0000003 p < .05	0.0000011 p < .01	0.0000338 p < .01	-0.0000297 p < .01	0.0000760 p < .01
z_active	-1.8631650 p < .05	-0.8853781	0.0226761	0.3610088 p < .01	-4.0260630 p < .01	-42.6058700 p < .01	29.7266200 p < .01
active_time	0.0211145 p < .05	0.0097692	0.0002862	0.0044412 p < .01	0.0474474 p < .01	0.4923589 p < .01	-0.3444004 p < .01
z_act_per2	-0.0000598 p < .05	-0.0000268	0.0000009	0.0000135 p < .01	-0.0001395 p < .01	-0.0014073 p < .01	0.0009879 p < .01
stoplag1	-0.0027395 p < .05	-0.0001207	0.0001969 p < .10	0.0001694	-0.0039877 p < .05	-0.0008226	-0.0087290 p < .05
stoplag1sq	-0.0001776 p < .01	-0.0001997 p < .01	0.0000101 p < .05	0.0000081	0.0000256	-0.0003813	0.0008765 p < .01
saf1_zactive	-0.0128547 p < .01	-0.0107120 p < .01	0.0000456	0.0002649	-0.0014851	-0.1088779 p < .01	0.0699575 p < .01
saf1sq_z	0.0006238 p < .01	0.0004718 p < .01	0.0000006	0.0000168	0.0002811 p < .10	0.0044445 p < .01	-0.0029504 p < .01
_cons	1.3442990 p < .01	0.7423059 p < .01	0.0158040 p < .01	0.0472351 p < .01	1.5145490 p < .01	0.6971123 p < .01	2.0185240 p < .01
Wald chi2(9)	4294.14 p < .01	3170.85 p < .01	46.28 p < .01	109.93 p < .01	3763.04 p < .01	865.25 p < .01	1380.53 p < .01

73

Assault Findings

The effectiveness of stops as a strategy against assault appears to have been less robust than for robbery. We found no city-wide impact on assaults from stops but did find that the strategy was effective in zone-active precincts. In those precincts, assaults declined by .01 instances for each increase of one stop per thousand people (saf1_zactive, $p < .001$). However, returns to scale declined as they had for robbery by .0006 times the square of stops (saf1sq_z, $p < .001$).

Murder Findings

Stop and frisk appears to have been an effective city-wide strategy against murder resulting in a drop of -.0002 murders per thousand people for each increase of one stop per thousand (stoplag1, $p < .10$). Again, there were declining returns to scale as the effectiveness of the strategy fell by .00001 for each increase per thousand people in stops (stoplag1sq, $p < .05$). Unlike robberies and assaults, there were no differential impacts in zone-active precincts.

Rape Findings

Our analysis of the effectiveness of stop-and-frisk tactics on incidents of rape found no statistically significant impact on the incidence of rapes either for the city as a whole or for those precincts with active impact zones.

74

Burglary Findings

The burglary model showed evidence that stops reduced burglaries by .004 incidents for each increase of one stop per thousand people (stoplag1, p <.05) with no city-wide statistically-significant changes in returns to scale. The rate of decline in burglaries in active-zone precincts was statistically indistinguishable from the city as a whole but there was evidence of declining returns to scale in active-zone precincts (saf1sq_z, p < .10).

Grand Larceny Findings

The results for grand larceny were similar to those reported for assault. We found no statistically-significant reduction in grand larceny on a city-wide basis. But we did find a statistically-significant impact on grand-larceny rates in precincts with active impact zones. There, grand larceny declined by .109 instances for each increase of one stop per thousand people (saf1_zactive, p < .001). Again paralling assault, there were declining returns to scale in active-zone precincts with grand larcenies increasing by .004 with the square of stops (saf1sq_z, p < .001).

75

Grand Larceny Motor Vehicle Findings

The stop-and-frisk strategy showed a statistically-significant effect on motor vehicle theft. On a city-wide basis, each increase of one stop per thousand people resulted in a decline of .009 in the rate of vehicle theft (stoplag1, p <.001) with declining returns to scale of .0009 versus the square of stops (stoplag1sq, p<.0015). Results in active zone precincts were not as positive. Consistent with the zone-precinct results reported by Smith and Purtell (20007), stop-and-frisk activities in those precincts were related to statistically-significant increases in auto thefts of .07 per thousand people per stop (saf1_zactive, p < .001) with increasing returns to scale of -.003 with the square of stops (saf1sq_z, p < .001).

Conclusion and Discussion

We have made the case that the debate about police stop-and-frisk practices should include the question of whether is it is effective in reducing crime and increasing public safety. Police can be faulted for using or expanding the practice without evidence of its efficacy but critics could be also be questioned about their failure to even raise the issue of effectiveness as if being an innocent victim of crime is not a violation of citizens equal or great than an innocent person being questioned by police.

With the first release of data on stop and frisk, we have only scratched the surface of the policy issues raised by stop and frisk and only begun to formulate

the questions and accumulate the relevant evidence to address them. With the data available we have cautiously presented our findings. Overall, this preliminary analysis the stop-and-frisk strategy showed mixed results. The strategy was effective city-wide for robbery, murder, burglary and motor vehicle theft. In addition, stops showed statistically-significant differential impacts on robbery, assault, and grand larceny in precincts with active impact zones. However, returns to scale tended to be negative both for the city as a whole and for active-zone precincts. The only exceptions to that pattern were for city-wide robbery and assault and for motor vehicle theft in the active-zone precincts where returns were positive to increased levels of stops.

One of the recurring findings reported above is that the intervention had variable patterns of result in response to scale. We want to examine this phenomenon more closely but what this means is that the fact that an intervention works at one level of intensity, or for a period of time, often does not mean that increasing its intensity or extending its use over time will have the same result. While we found several cases of "increasing returns to scale," in most cases the pattern observes was "decreasing return." One important implication is that effective crime fighting requires continuous innovation. Another is the inventions are blunt instruments that need to be used with care and constant monitoring.
The fact that the total number of stops declined significantly after is peak in 2006, from 500,000 to 400,000, may suggest that NYPD is aware of and responds to the issue of declining return to scale.

77

78

Appendix 1 – Definition of Variables

Variable	Definition	Interpretation
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_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 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.
Z_act_per2	Intersection of period_sq with z_active	Measures returns to scale from hot-spot policing efforts
stoplag1	Stop and frisk data lagged one month	Measures impact of stop and frisk activities city wide.
stoplag1sq	Square of the lagged stop and frisk data	Measures returns to scale for city-wide stop-and-frisk activity
saf1_zactive	Interaction of stoplag1 with the z_active dummy	Measures impact of lagged stop-and-frisk activities in precincts with active zones
saf1sq_z	Interaction of stoplag1sq with the z_active dummy	Measures returns to scale for stop-and-frisk activities in precincts with active zones

79

EXHIBIT C

Page 1

1

2   UNITED STATES DISTRICT COURT
     SOUTHERN DISTRICT OF NEW YORK
3   --x

4   DAVID FLOYD, LALIT CLARKSON, DEON DENNIS,
     and DAVID OURLICHT, individually and on
5   behalf of a class of all other similarly
     situated,
6   Plaintiffs,   Index No

7   -against-   08 CIV 01034

8   THE CITY OF NEW YORK, NEW YORK CITY POLICE
     COMMISSIONER RAYMOND KELLY, in his
9   individual and official capacity, et al,

10   Defendants.

11   --x

12   March 4, 2011

13   9:59 a.m.

14

15   DEPOSITION of DENNIS C. SMITH, Ph.D.,

16   taken by the Plaintiffs, held at the law offices

17   of Covington & Burling LLP, The New York Times

18   Building, 620 Eighth Avenue, New York, New York,

19   10018-1405, before Eleanor Greenhouse a Shorthand

20   Reporter and Notary Public by and for the State

21   of New York.

22

23
              GREENHOUSE REPORTING, INC.
24   875 Sixth Avenue - Suite 1716
             New York, New York 10001
25   (212) 279-5108

Page 10

1   D. Smith
2   A.   To refresh my recollection, no.
3   Q.   You said there was one other meeting
4   to prepare for the deposition?
5   A.   Right.
6   Q.   At that meeting, were you shown any
7   documents to refresh your recollection about any
8   of the matters you were going to be testifying
9   about?
10   A.   I believe there might have been. At
11 one point -- I'm not sure whether I was shown it
12 or I showed them something from my report that I
13 thought we should attend to.
14   Q.   Do you remember what that was?
15   A.   I believe it was the place in my
16 report where we were discussing the issue about
17 the unknowns in the suspect descriptions issue.
18   Q.   So you said this was a document you
19 showed --
20   A.   It was the document that I gave to
21 the Law Department to submit in this case in
22 response to Fagan.
23   Q.   Do you remember what that document
24 was? Was it a document that you created?
25   A.   Yes. It was their copy of a

Page 11

1   D. Smith
2   document I created.
3   MR. LARKIN: For the record, you're
4   referring to your report in the case?
5   THE WITNESS: Yes.
6   Q.   So you're saying the document you
7   showed your counsel was your report?
8   A.   Yes. Response to Fagan.
9   Q.   Was it only a portion of the report
10 regarding the issue around the unknowns in the
11 suspect --
12   A.   Do you mean was that the only thing
13 in it that we discussed?
14   MR. LARKIN: Objection. You don't
15   want to reveal what we discussed because
16   those matters are privileged under the
17   current version of the rules. So we're
18   talking specifically about the document or
19   the section of the document that you may
20   have shown us, if you recall what that was.
21   A.   I think I've answered that.
22   Q.   Let's go back for a second. So you
23 said that -- I guess this is at the first of the
24 three meetings to prepare for the deposition.
25 You said you showed counsel a document and then

Page 12

1   D. Smith
2   you said "I believe it was the place in my report
3   where we were discussing the issue about the
4   unknowns in the suspect description issue."
5   So the document you showed them, was
6   it that portion of your report that dealt with
7   the suspect description issue or did you just
8   give them the whole report?
9   A.   I don't understand. I gave them the
10 report that was submitted to the Court. I've had
11 that report, you know, and they had the copy of
12 the report. I don't remember whether it was my
13 copy or their copy of the report that we examined
14 together. But that's my recollection.
15   Q.   Just so I can close the loop on this
16 issue, I asked you, "At that meeting were you
17 shown any documents to refresh your recollection
18 about any of the matters you were going to
19 testify about?" And you said, "I believe there
20 might have been at one point. I'm not sure
21 whether I was shown it or I showed them something
22 from my report that I thought we should attend
23 to."
24   So the document you're referring to
25 was your report, the entirety of it, or was it a

Page 13

1   D. Smith
2   portion of the report?
3   MR. LARKIN: Objection. Asked and
4   answered. Go ahead.
5   A.   I don't know how to answer. The
6   section that we undoubtedly discussed was
7   embedded in the report. It wasn't a separate
8   piece of paper.
9   Q.   That section of the report that you
10 discussed, does that section appear in the report
11 that you said was submitted to the Court?
12   A.   Yes.
13   Q.   Are there any differences between
14 the portion that is in the version that was
15 submitted to the Court and the portion that you
16 discussed with your attorneys?
17   A.   No.
18   Q.   Other than meeting with your
19 attorneys, did you do any preparation on your own
20 to prepare for today's deposition?
21   A.   Yes.
22   Q.   What kind of preparation did you do?
23   A.   I'm not quite sure where to begin.
24 I have been examining the issues in the
25 plaintiffs' contentions since this issue was

Greenhouse Reporting, Inc.

www.GreenhouseReporting.com

(212)279-5108

Page 14

1   D. Smith
2 first drawn to my attention. I consider some of
3 the work that I did on these issues before there
4 was a case preparation for this deposition. I
5 started thinking about the issue of police stop,
6 question and frisk back at the time that it
7 became an issue in the news, and have been
8 interested in it, having studied police for as
9 long as I have, and began to do research on it
10 and so that is preparation for this deposition in
11 a sense.
12   In terms of, I don't know how else
13 to -- where do you want me to start?
14   Q.   For example, when I asked you about
15 your attorneys meetings, I asked you if you were
16 shown any documents to refresh your recollection.
17 Have you on your own reviewed any documents since
18 you found out you were going to be deposed to
19 refresh your recollection about any of the
20 matters that you're going to be testifying about
21 today?
22   A.   I have sort of looked at and read
23 various papers written by Professor Fagan, looked
24 at papers written by other people, looked at the
25 Rand report on stop, question and frisks, and

Page 15

1   D. Smith
2 again, was doing this before I was asked to do
3 some kind of work in connection with this case
4 and have had occasion to review it since.
5   Q.   You said you looked at some articles
6 by Professor Fagan. Do you remember which
7 articles those were?
8   A.   I saw an article that came out of a
9 presentation that one of his colleagues did, a
10 co-authored paper that we -- where we appeared
11 together at a research conference in California
12 that subsequently appeared as a paper and it was
13 about stop, question and frisk, and I read a
14 paper about how he sees this connected to broken
15 windows, and I read his paper on journal -- in
16 the Journal of Statistical Analysis --
17   MR. LARKIN: The Journal of the
18   American Statistical Association.
19   THE WITNESS: Right.
20   Q.   Any other papers or articles that
21 Professor Fagan wrote?
22   A.   Those are the ones that come to
23 mind.
24   Q.   You said one was a paper that was
25 presented at a conference you were at. You said

Page 16

1   D. Smith
2 it was about stop, question and frisk?
3   A.   Um-hum.
4   Q.   Do you recall who any of the other
5 authors were?
6   A.   Actually I don't. It's a woman
7 whose name has appeared on some of his
8 publications, but I don't --
9   Q.   Was it Amanda Geller?
10   A.   I think it was.
11   Q.   Did it deal with stop, question and
12 frisk generally or stop, question and frisk in a
13 particular context?
14   MR. LARKIN: Objection to form.
15   A.   It was about exploring the
16 contention that race is a factor in explaining
17 patterns of stop and frisk.
18   Q.   You also said that you reviewed the
19 Rand report. Did you speak to any of the Rand
20 researchers who wrote that report in preparation
21 for today's deposition?
22   A.   No.
23   Q.   Have you ever spoken to them?
24   THE WITNESS: Excuse me. Can I ask
25   a question?

Page 17

1   D. Smith
2   (Conference between witness and
3   counsel.)
4   THE WITNESS: I'm sorry.
5   Q.   Outside of preparing for your
6 deposition, have you ever spoken to the
7 researchers who wrote the Rand report?
8   A.   Only with Greg.
9   Q.   Do you remember when you spoke with
10 him? And this is Greg Ridgeway?
11   A.   Greg Ridgeway, I'm sorry.
12   Q.   When did you speak with Greg
13 Ridgeway?
14   A.   Greg Ridgeway was the discussant at
15 this panel in Los Angeles where both Amanda
16 Geller and Bob Purtell exchanged papers.
17   Q.   When you say a discussant, do you
18 mean he was on the panel?
19   A.   Yes. It was his role to comment on
20 the papers.
21   Q.   Was this panel specifically on the
22 issue of stop, question and frisk?
23   A.   No. As I recall, it was on
24 policing.
25   Q.   Where in Los Angeles was the panel?

5 (Pages 14 to 17)

Page 18

1   D. Smith
2   I'm sorry, who organized or put on this panel?
3   MR. LARKIN: Objection to form.
4   A.   It was the Association of Public
5   Policy in Management research conference.
6   Q.   Where in Los Angeles was it held?
7   A.   A downtown hotel. I don't remember
8   which one.
9   Q.   Do you remember the month and year
10 when this panel was?
11   A.   I'm thinking it was November of
12 2008.
13   Q.   Okay. So you said -- and it was at
14 this conference that you spoke with Greg
15 Ridgeway?
16   A.   He was a discussant. We chatted,
17 and then there was a City Council hearing in New
18 York City after that at which both Professor
19 Fagan and I appeared and also Greg Ridgeway also
20 appeared.
21   Q.   Did you speak to Dr. Ridgeway at
22 that City Council hearing?
23   A.   I chatted briefly with him as well.
24   Q.   At the conference in Los Angeles
25 when you chatted with him, do you remember what

Page 19

1   D. Smith
2   you discussed with him?
3   MR. LARKIN: Objection to form.
4   A.   We discussed the papers that were
5   being presented.
6   Q.   Did you discuss the report that he
7   did for the Rand Corporation?
8   A.   I think I assured him that I
9   understood that his -- we criticized the fact
10 that research on stop, question and frisk had not
11 asked the question of whether it had any role in
12 reducing crime and I assured him that I didn't
13 include him in that, because he had a specific
14 assignment to do what he did and he did it and I
15 was not including him in that criticism of
16 studies that have not included the question of
17 the effectiveness of stop, question and frisk.
18   Q.   Did you ask him any questions about
19 some of the methodological decisions he made in
20 conducting his research?
21   MR. LARKIN: Objection to form.
22   A.   No.
23   Q.   Did you discuss any of those
24 methodological issues with him, the issues
25 regarding his research?

Page 20

1   D. Smith
2   MR. LARKIN: Objection to form.
3   A.   Did I? It came up in the
4   conversation in this conference panel, yes. In
5   that sense, it was in the conversation that I was
6   included in, but it wasn't necessarily
7   specifically to the question I asked him or
8   something he said to me.
9   Q.   So it was discussed by the panel
10 generally?
11   A.   Yes.
12   Q.   Do you remember what the substance
13 was at all of what was discussed with respect to
14 the methodological choices he made in conducting
15 his research?
16   MR. LARKIN: Form objection.
17   A.   It had to do with our agreeing with
18 him and disagreeing with the Fagan-Geller use of
19 population characteristics as a benchmark
20 compared to suspect description as a benchmark.
21 That was in the discussion at this conference,
22 research conference. I think we also discussed
23 our agreement with him or his agreement with us
24 in our criticism of Fagan's use of last year's
25 homicide statistics as the crime benchmark, as

Page 21

1   D. Smith
2   the variable in the analysis. We discussed that.
3   Q.   So you said that what was discussed
4   on the panel "had to do with our agreeing with
5   him and disagreeing with the Fagan-Geller use of
6   population characteristics as a benchmark
7   compared to suspect description as a benchmark.
8   That was in the discussion at this conference,
9   research conference." And then you said, "I
10 think we also discussed our agreement with him or
11 his agreement with us and our criticism of
12 Fagan's use of last year's homicide statistics as
13 the crime benchmark."
14   I'm a little confused because you
15 seem to be saying both that Fagan used population
16 as a benchmark but he also used a crime
17 benchmark. Did he use both in your view?
18   MR. LARKIN: Objection to form.
19   A.   Both were variables in his analysis.
20 The characterization of crime as a benchmark is
21 probably a misstatement. He used -- he
22 controlled for crime using last year's homicide
23 statistics and there were a variety of
24 methodological issues that we had raised and that
25 Ridgeway raised with that paper about that.

6 (Pages 18 to 21)

Page 26

1	D. Smith
2	reason that you feel that it was not a benchmark
3	in his analysis?
4	MR. LARKIN: Objection to form.
5	A. I believe I've answered that the
6	only way I know how to.
7	Q. Can you answer it again, because I'm
8	asking a question.
9	MR. LARKIN: Objection to form. Go
10	ahead.
11	A. I argued that it's my understanding
12	that you can label any variable that you want to
13	highlight and contrasting with some other
14	variable your benchmark, and that's the
15	distinction. It's a matter of labelling.
16	Q. So it's just a matter of labelling?
17	A. I think so.
18	MR. LARKIN: Objection to form.
19	Q. Going back to I guess Professor
20	Ridgeway, you said you also spoke to him at the
21	City Council hearing at which he and Professor
22	Fagan testified; is that right?
23	A. And I testified.
24	Q. And you testified as well.
25	Incidentally, what did you testify about at that

Page 27

1	D. Smith
2	City Council hearing if you can recall?
3	A. I testified about the study I had
4	done on stop, question and frisk.
5	Q. This is the study you did with
6	Professor Purtell?
7	A. It is.
8	Q. Did you testify about anything else
9	besides that study?
10	A. There were questions that came up
11	from the Council members that drew upon my work
12	on crime reduction in New York City more broadly,
13	including the work I did with William Bratton
14	about CompStat and the work that I had done on
15	Operation Impact also in that case with Robert
16	Purtell.
17	Q. Other than that work and the study
18	you did on stop, question and frisk, were there
19	any other matters that you testified about at
20	that City Council hearing?
21	A. Not that I recall.
22	Q. So at the City Council hearing, you
23	said you spoke briefly with Dr. Ridgeway. Do you
24	remember what you and Dr. Ridgeway discussed?
25	A. It was a very brief conversation.

Page 28

1	D. Smith
2	It was a busy schedule. He came in and left, I
3	came in and left. Just that, you know, this
4	issue continues to be of interest.
5	Q. So other than the conference in Los
6	Angeles and the City Council hearing, have you
7	ever had any other discussions with Professor
8	Ridgeway at any other time about his research for
9	the Rand report?
10	A. No.
11	Q. Have you ever discussed the Rand
12	report with any other employees of the Rand
13	Corporation?
14	A. No.
15	Q. So you've mentioned that you've
16	reviewed the Rand report, you've reviewed several
17	articles by Professor Fagan, and you said you
18	also reviewed some papers by other people
19	regarding stop, question and frisk. Do you
20	remember what those papers were?
21	A. The issue of stop, question and
22	frisk wasn't necessarily the focus of places I'm
23	thinking about, but the report that was done by
24	Harvard on Los Angeles addressed the increase in
25	stop, question and frisk in Los Angeles. There

Page 29

1	D. Smith
2	was a study by Ian --
3	Q. Ian Ayres?
4	A. -- Ayres about Los Angeles that is
5	somewhat similar in structure and argument to
6	Fagan's, which I also read.
7	Q. This Harvard report, was it done by
8	a particular professor at Harvard, do you recall?
9	A. There were a team of professors, and
10	there's a Center on Criminal Justice at the
11	Kennedy School that did the report.
12	Q. Do you remember approximately what
13	year the study came out?
14	A. Probably two years ago. At the
15	most, three years ago.
16	Q. Was it before the Ian Ayres study if
17	you can recall?
18	A. I think it was after.
19	Q. Did it in any way respond to the Ian
20	Ayres study if you can recall?
21	A. I don't know that it directly took
22	it on, but implicitly it did.
23	Q. And do you recall, to the best of
24	your recollection, what the conclusions of that
25	Harvard study were?

8 (Pages 26 to 29)

Page 30
1   D. Smith
2   A.   It found that stop, question and
3   frisk had increased during the time that the
4   Bratton-led initiative to reduce crime had
5   occurred. It argued that there was no real way
6   that was known to determine whether or not a
7   police officer's decision to stop, question and
8   frisk was biased. That the amount of information
9   that we would need, given the situational context
10   of the encounters, just isn't available in any
11   data that we have available to us or can imagine
12   having available to us in a sense. So it did
13   address it in that way.
14   Q.   You said you also read the Ian Ayres
15   study; correct?
16   A.   Yes.
17   Q.   Do you remember what his conclusion
18   was?
19   A.   I remember him also finding, as has
20   Fagan, that stops in Los Angeles are of young
21   Black males out of proportion to their share of
22   the population, using the benchmark of
23   population.
24   Q.   Do you remember anything else about
25   that Ian Ayres study?

Page 31
1   D. Smith
2   A.   That's the main thing I remember.
3   Q.   So other than the Ian Ayres study
4   and the Harvard report, were there any other
5   papers by others, besides Rand or Fagan, that you
6   reviewed regarding stop, question and frisk?
7   A.   Nothing comes to mind right now.
8   Q.   Did you review any other statistical
9   studies on any other issues to prepare for
10   today's deposition?
11   A.   I reviewed my own work on Operation
12   Impact and stop, question and frisk, because I
13   included those in the report.
14   Q.   Other than those?
15   A.   Other studies did you say? I don't
16   think so, no.
17   Q.   Have you reviewed any other
18   documents, whether or not they were studies or
19   articles, or any other written materials to
20   prepare for today's deposition?
21   A.   Yes.
22   Q.   What would they be?
23   A.   A report that is prepared by the
24   Police Department on crime and arrests that
25   breaks out these patterns by race. It comes out

Page 32
1   D. Smith
2   now regularly. It used to be annually. I have
3   reviewed community board resource descriptions to
4   refresh my memory about the racial
5   characteristics of neighborhoods in New York.
6   I regularly review the crime
7   statistics on the New York City website. I have
8   reviewed New York City Police Department
9   documents that describe arrest patterns to see
10   what proportion of reported crimes are cleared by
11   arrest. Those are the main things that come to
12   mind.
13   Q.   Let me just backtrack and ask you a
14   couple of questions about these materials. You
15   said community board resource descriptions. Are
16   those New York City --
17   A.   Planning Department, yes.
18   Q.   Planning Department, okay.
19   A.   Statistical profiles of all the
20   community districts.
21   Q.   And then the crime statistics on the
22   New York City website. Are you referring to the
23   CompStat data that --
24   A.   NYPD crime statistics, yes.
25   Q.   That's the stuff that comes out

Page 33
1   D. Smith
2   weekly?
3   A.   That's right.
4   Q.   By precinct?
5   A.   Probably. Citywide, borough.
6   Q.   And then you said NYPD documents
7   that describe arrest patterns. Can you describe
8   what documents you're referring to?
9   A.   There's a document they produced
10   called "Who is doing the work?", and it shows
11   patterns of work by different bureaus within the
12   Department.
13   Q.   Just because I have to be thorough,
14   any other documents you can recall reviewing to
15   prepare for today's deposition that you haven't
16   already mentioned?
17   A.   I haven't specifically mentioned,
18   because I guess I thought it was obvious, but
19   everything should be made explicit, I reviewed
20   the report that Professor Fagan wrote for this
21   case, and I read his response to our report.
22   Q.   Have you spoken to anyone other than
23   counsel for the City to prepare for today's
24   deposition?
25   A.   Yes.

9 (Pages 30 to 33)

Page 34

1   D. Smith
2   Q.   Whom have you spoken to?
3   A.   To whom have I spoken? I have
4   spoken to Robert Purtell.
5   Q.   Do you remember when you most
6   recently spoke to Dr. Purtell?
7   A.   Last night.
8   Q.   What did you discuss with him last
9   night?
10   A.   The fact that I was being deposed
11   today.
12   Q.   Did you discuss anything else with
13   him last night?
14   A.   It was a brief conversation. He
15   just remembered that I was being deposed today
16   and was calling me after his class last night at
17   10:00 to say, "I hope it goes well."
18   Q.   Other than last night, have you
19   spoken to Dr. Purtell at any other time in
20   preparation for today's deposition?
21   A.   I would probably say I've spoken to
22   him 15 or 20 times at least since this case
23   began.
24   Q.   I don't know if we need to go
25   through every single one of those times, but

Page 35

1   D. Smith
2   before last time, when was the most recent time
3   if you can recall, approximately?
4   A.   A week ago Saturday.
5   Q.   A week ago Saturday, and do you
6   remember what you discussed with him then?
7   A.   We discussed the studies that we
8   have done together on Operation Impact, on stop,
9   question and frisk.
10   Q.   Do you remember specifically what
11   you discussed with respect to those two studies?
12   A.   We discussed how much we liked them,
13   the amount of additional work that could be done
14   in the future on these issues. We discussed a
15   few of the features of the analysis that he, as
16   the statistician and part of the study, had felt
17   were necessary to accurately model and address
18   the questions we were posing. Those were the
19   things we discussed.
20   Q.   When you say, "We discussed a few of
21   the features of the analysis that he, as the
22   statistician, and part of the study had felt were
23   necessary to accurately model and address the
24   questions we were posing," what do you mean by
25   that?

Page 36

1   D. Smith
2   A.   Well --
3   MR. LARKIN: Objection to form. I'm
4   sorry. Go ahead.
5   A.   There has been the issue of to log
6   or not to log a variable like crime, to use
7   logarithms in representing a variable like crime.
8   We discussed the use of a quadratic term in our
9   analysis of stop, question and frisk and in our
10   analysis of Operation Impact. Those kind of
11   things that are concepts in the analysis that I
12   wanted to review with him.
13   Q.   So in other words, you went -- first
14   of all, did you use those concepts or those
15   methods in the two studies?
16   A.   Yes.
17   Q.   When say you were discussing them
18   with him or went over them with him, I guess were
19   you asking him to explain to you how those two
20   methods worked?
21   MR. LARKIN: Objection to form.
22   A.   Refreshing my memory, yes. We
23   certainly discussed it when we were writing the
24   paper.
25   Q.   You said he was the statistician on

Page 37

1   D. Smith
2   those two studies; is that right?
3   A.   That's right.
4   Q.   So in other words, did he conduct
5   the statistical analyses that were included in
6   those studies?
7   A.   He did.
8   Q.   What was your role in terms of
9   writing those two studies?
10   A.   I'm a student of police. It has
11   been my area of research for 40 years. Bob
12   Purtell has used quantitative analysis in his
13   work for a similar period of time, but most of it
14   not on policing, and he has only done work on
15   policing in collaboration with me.
16   Q.   So in terms of all the statistical
17   analyses that are in both the Operation Impact
18   study and the stop, question and frisk study,
19   Dr. Purtell is the one who conducted those
20   analyses?
21   A.   That is correct.
22   Q.   You didn't conduct those analyses?
23   A.   Well, he actually sat at the
24   computer and produced the results. To say that
25   he conducted, I helped him shape the

10 (Pages 34 to 37)

Page 38

1   D. Smith
2   understanding of the phenomena we were searching
3   and helped him design the model and helped him
4   interpret the findings, so when you say conduct
5   the research, I need you to clarify.
6   Q.   So when you say that you helped him
7   shape the understanding of the -- what was it,
8   the phenomenon you were searching, is that right?
9   A.   The questions.
10   Q.   And you said you helped him design
11 the model. What do you mean by you helped him
12 design the model?
13   A.   When you have a question like is
14 Operation Impact effective or does it contribute
15 to the reduction of crime, you have to understand
16 what you're talking about in order to represent
17 it with some kind of interaction of variables.
18 And for example, as we discussed in the report
19 that I submitted, how you deal with time in a
20 statistical analysis is an important issue and my
21 understanding of how New York City does the job
22 of policing let me have a certain understanding
23 of how you needed to arrange your analysis,
24 construct the model, to be able to try to
25 represent that in your analysis.

Page 39

1   D. Smith
2   The notion of introducing a lag if
3   you -- if you're a farmer and you plant wheat and
4   you check in a month to see if it's produced
5   wheat, you're wasting your time, because
6   everybody knows that there's a certain period of
7   time that you have to wait for any kind of
8   germination to occur and for the sprouts to come
9   up and so on.
10   A lot of things are like that, and
11 so figuring out -- knowing about what is going on
12 in a particular area of work substantively is
13 important in order to design the analysis so you
14 know where to look. And so that was -- that's
15 why I say designing a model, figuring out which
16 variables to include or whether or not you need
17 to include a variable is in many respects based
18 on one's substantive understanding of the
19 phenomena being studied, and that's where my
20 experience and doing research on and following
21 research on policing helped shape the model.
22   Q.   In terms of which variables to
23 include in the model, was that your decision or
24 Dr. Purtell's or both?
25   A.   It was a collaborative work. It was

Page 40

1   D. Smith
2   probably led by me, but he certainly had his
3   opinions.
4   Q.   What about the actual statistical
5   tests that you would run, for example, whether it
6   was a regression or a multi-level approach, or
7   the decisions about which actual statistical
8   tests to run, was that your decision,
9   Dr. Purtell's or both?
10   MR. LARKIN: Objection to form.
11   A.   It was a collaborative decision in
12 which he took the lead on those questions.
13   Q.   What input, if any, did you have
14 into those questions?
15   A.   Oftentimes it was to interrogate his
16 thinking to have him explain to me -- in the
17 process sometimes my recollection is we might
18 come to a conclusion that the way he was thinking
19 about doing it might not be as good as another
20 way of doing it. I don't remember the specifics
21 of that, but we were constantly, when we do work
22 together, discussing every aspect of it, and it
23 becomes a bit of a blur of who said what that
24 sort of triggered adding some things and doing
25 something in a particular way, or trying to go

Page 41

1   D. Smith
2   back and get additional data. Sometimes that's
3   the result of these kind of discussions, and
4   sometimes it's available and sometimes it's not.
5   Q.   On the data question, in terms of
6   the data sets that were used in those two
7   studies, that data was provided to you by the
8   NYPD; correct?
9   A.   Yes. Well, most of it.
10   Q.   Which data was not provided to you?
11   A.   The population data, for example, we
12 got from the census, but the crime data and the
13 data about the timing of impact zones, the access
14 to police officials for the impact study, the
15 opportunity for me to ride along with impact
16 police, that was from the Police Department.
17   Q.   In terms of the data that you were
18 provided, was that data you asked for?
19   A.   Yes.
20   Q.   From the NYPD, were you provided
21 with all the data that asked you them for to do
22 these two studies?
23   A.   I'm trying to think if there's
24 anything we asked for that we didn't get. I
25 think we got everything we asked for.

11 (Pages 38 to 41)

Page 58

1   D. Smith
2 numbers.
3   Q.   Do you know of any other studies of
4 statistical or multi-variate studies of racial
5 disparities in stop and frisk or any other
6 policing practice that used time series?
7   MR. LARKIN: Objection to form. You
8 can answer. Go ahead.
9   A.   Any other studies of policing have
10 used time studies? Of course.
11   Q.   I'm sorry. Specifically relating to
12 analyzing data to test for racial disparities.
13   A.   Not that I know of.
14   Q.   Other than Professor Purtell or
15 counsel for the City, have you spoken to anyone
16 else to prepare for today's deposition?
17   A.   Yes. Professor Erika Martin.
18   Q.   Who is Professor Martin?
19   A.   She is an assistant professor at
20 SUNY Albany, a specialist in epidemiology.
21   Q.   When did you speak to her?
22   A.   Several times over the course of the
23 last 12 months.
24   Q.   What specifically did you discuss
25 with her over these last 12 months?

Page 59

1   D. Smith
2   A.   I was interested in her reading of
3 the statistical methods used by Professor Fagan,
4 and I was also interested in her familiarity with
5 prevention practices in the field of health
6 because I think that the analogies maybe useful.
7 Because it seems to me, again, something that is
8 a point of contention in the work that we were
9 doing in response Fagan, we think that the police
10 shift to an approach to policing which involves
11 prevention results in some different kinds of
12 questions, different kinds of standards of forms
13 of measurement. And we felt that maybe there's
14 some analogies from the world of preventative
15 health, of public health, that could be useful in
16 our thinking about what the police are doing,
17 thinking of crime as kind of a public health
18 problem.
19   Q.   You said you wanted to get her views
20 on Professor Fagan's statistical analysis?
21   A.   Um-hum.
22   Q.   What did she say about Professor
23 Fagan's statistical analysis?
24   A.   A big concern of hers was the things
25 that were omitted in his analysis, starting with

Page 60

1   D. Smith
2 omitted variables, but also just in terms of his
3 presentation of data, oftentimes she felt that he
4 didn't present enough information for a person to
5 make reasonable conclusions about the choices
6 that were made in the analysis that he presented.
7   Q.   What variables that he omitted did
8 she think he should have included?
9   MR. LARKIN: Objection to form.
10   A.   I believe it was Erika who suggested
11 that unemployment data might be really relevant
12 if you're trying to figure out this issue of
13 availability to be stopped. If you have
14 extremely high male unemployment in a
15 neighborhood, that gives them 40 hours a week
16 more to be available, and if you were going to
17 try to figure out what to include on that
18 strategy, she felt that the omission of that was
19 of concern.
20   I think since we had discussed -- I
21 was asked at the City Council hearing, "Professor
22 Smith, are you not aware that the police stop
23 young Black males more than others?" And I told
24 the council woman that I would answer that
25 question, but that first I wanted to point out to

Page 61

1   D. Smith
2 her or ask her if she was aware that the police
3 don't stop women at all in proportion to their
4 share of the population.
5   And she said to me, "Professor
6 Smith, everyone knows that women commit less
7 crime than men." And I said "Hold that thought."
8   So I had mentioned that to Erika,
9 and she wondered if you included gender in the
10 analysis, would we have a case of discrimination
11 against men because they are not stopping women
12 in proportion to their share of the population,
13 and they certainly aren't. Everybody agrees with
14 that, including the analysis of Fagan. So it was
15 those kind of conversations that I had with Erika
16 Martin.
17   Q.   Those two variables that you
18 mentioned, unemployment and gender, those are
19 actually listed in your report as variables that
20 you felt that Professor Fagan should have
21 included; correct?
22   A.   Yes.
23   Q.   So is it fair to say that it was
24 Dr. Martin who gave you the idea to include those
25 two variables in your report as variables that

16 (Pages 58 to 61)

Page 62

1	D. Smith
2	Professor Fagan omitted?
3	MR. LARKIN: Objection to form.
4	A. She certainly agreed that that would
5	be worth raising, yes.
6	Q. Was she the one that first raised
7	those issues or did you raise them?
8	A. Implicitly I raised them in the way
9	I just described. I told her my surprise that
10	anyone would any that population characteristics
11	would be an appropriate benchmark when we know
12	that a phenomenon like crime is not randomly
13	distributed in the population and, for example,
14	we know that about men and women, we know it
15	about age, which was also not included in the
16	analysis.
17	Q. I guess I'm trying to figure out
18	until you spoke to Professor Martin, had you at
19	that point thought of including unemployment and
20	gender as omitted variables to criticize
21	Professor Fagan about?
22	MR. LARKIN: Objection as a
23	mischaracterization of what he said. Go
24	ahead.
25	A. I think that I would credit probably

Page 63

1	D. Smith
2	the flagging of unemployment more to her, in the
3	particular way of framing it about the
4	availability of time, more than one gender.
5	Q. Professor Martin, you said, is a
6	Professor of epidemiology; is that correct?
7	A. Right.
8	Q. Does she have any training in
9	criminology?
10	A. No.
11	Q. What about policing?
12	A. No.
13	Q. Other than Professor Martin, was
14	there anyone else besides the people we've
15	already mentioned that you've spoken to to
16	prepare for today's deposition?
17	A. A woman named Kathleen Doherty, an
18	assistant professor.
19	Q. Where does she work?
20	A. SUNY Albany, an assistant professor.
21	Q. What is she a professor of?
22	A. Public policy, I believe.
23	Q. How many times have you spoken to
24	her in preparation for today's deposition?
25	A. Similar to Erika, three or four

Page 64

1	D. Smith
2	times in the last 12 months. She is a specialist
3	on homeland security.
4	Q. Okay.
5	A. And I was interested in whether or
6	not there are parallels in thinking and research
7	related to prevention in the field of homeland
8	security.
9	Q. Prevention of what?
10	A. Terrorist attacks.
11	Q. Okay.
12	A. We operate a huge stop and question
13	kind of process at our airports, for example, at
14	your building. You know, all over America and
15	all over the world pretty much, every time I go
16	into a hotel in Aman, Jordan, I have to be
17	frisked. My guess is as long as they have been
18	doing that, they haven't found anybody with
19	anything on them, but they still do it.
20	Q. Okay.
21	A. If you've flown, you know everybody
22	goes through a security process now. You know,
23	what could we make -- is there anything about
24	understanding investments in sort of preventing
25	some kind of unfortunate or undesirable event

Page 65

1	D. Smith
2	like a crime victimization that we could learn
3	from in the efforts to prevent terrorist attacks?
4	And she also is trained as a statistician and so
5	her views on the Fagan use of statistics was of
6	interest to me.
7	Q. So you spoke to her about these
8	strategies for prevention of terrorist attacks
9	and then you said you also spoke to her about
10	Fagan's statistical methods?
11	A. Yes.
12	Q. What did you discuss with her with
13	respect to the second issue about Fagan's
14	statistical methods?
15	A. I think in all of our conversations,
16	the issues of whether you should or shouldn't use
17	logarithms in doing a particular kind of
18	analysis, how to interpret if you change the unit
19	of analysis, and the results change, what do you
20	make of that? Because in response to our
21	questioning Fagan's work, he did some additional
22	analysis and the numbers changed, and he doesn't
23	really discuss much about changes. As long as
24	they still said basically that race shows up as a
25	significant variable, then he doesn't discuss --

17 (Pages 62 to 65)

Page 66

1   D. Smith
2 it doesn't matter that it's half as strong if you
3 use a sub-area of -- if you use a census tract or
4 something like that or this neighborhood
5 construct as the locus of the analysis.
6   We discussed -- what else did we
7 talk about? She was also simultaneously thinking
8 that unemployment would be -- if you're going to
9 do this kind of analysis, the fact that it would
10 effect people's availability to be stopped.
11   Q.   What specifically did she say about
12 these issues with respect to Professor Fagan's
13 results changing when you changed the units of
14 analysis?
15   A.   That he should have discussed it to
16 try to sort of interpret what it means, that if
17 there is a change of more than 10 percent, I
18 think she said, it suggests that there's some
19 mis-specifications of the model, and that that
20 should be addressed.
21   I think that she was -- she was I
22 think the one that said that the whole discussion
23 of factor analysis didn't provide enough
24 information about how factor loading was done and
25 the implications of the way in which the factor

Page 67

1   D. Smith
2 analysis was done informed the discussion. It
3 was just sort of lack of detail that she was
4 looking for.
5   You know, when you get the detail,
6 it might not change anything, but it was mostly
7 kind of a sense that there was missing
8 information in the way the research was presented
9 that she was accustomed to seeing in the
10 analysis. Things like that.
11   Q.   Are any of Professor Doherty's views
12 on Fagan's analysis reflected in your expert
13 report?
14   A.   I think it's fair to say they are.
15   Q.   Which ones?
16   A.   Her feeling that representing time
17 in the analysis was important, and its omission
18 was significant.
19   Q.   When you say representing time, is
20 this that issue about the time series that you
21 were discussing earlier?
22   A.   Yes. I mean, I think I've already
23 mentioned and I commented in my report that there
24 are parts of the analysis where information that
25 would be sort of helpful in understanding how the

Page 68

1   D. Smith
2 analysis -- whether there were alternative
3 explanations of the findings that are presented.
4 That was omitted from the presentation in ways
5 that from her experience in reading research of
6 this kind would normally be presented. So we
7 flagged that in the report.
8   Q.   Any other of her views that are
9 included in your report?
10   MR. LARKIN: Objection to form. Go
11   ahead.
12   A.   I asked both Erika Martin and
13 Kathleen to read our two papers and tell us
14 honestly if she felt that there was any problem
15 with the analysis that we had done. So --
16   Q.   What did she say about that?
17   A.   She was intrigued by the fact that
18 we were using monthly analysis, which is more
19 fine-grained than a lot of research, but what
20 would it show if we had weekly analysis? And we
21 acknowledged in the paper that in the end, we
22 realized that policing is not even done
23 necessarily on a monthly basis, police
24 strategizing and deployment, and that having
25 weekly information, if we could model that if we

Page 69

1   D. Smith
2 had that data, would probably come closer to the
3 way the actual process of the decisions are made
4 in the real world of policing. You know, I think
5 that --
6   Q.   Is that view expressed in your
7 expert report, that in other words, if you had
8 weekly data, it would have been made your
9 analysis stronger?
10   MR. LARKIN: Objection to form.
11   A.   The answer is yes.
12   Q.   Any other views that Professor
13 Doherty expressed that are included in your
14 expert report?
15   A.   None that I can recall.
16   Q.   Other than the fact that you did not
17 use weekly crime data in either of your two
18 studies, the Operation Impact or the stop,
19 question and frisk study, did Professor Doherty
20 note for you any other weaknesses -- I don't know
21 if that's the right word -- or areas of
22 improvement that could be made to your analysis?
23   MR. LARKIN: Objection. If it's not
24   in the report, then I don't believe that
25   that's appropriate for him to testify

Page 82

1   D. Smith
2   ahead. Go ahead.
3   A.   I mean, the water has been muddied
4   enough that I need you to give me the question
5   again.
6   Q.   I guess my question is, you said the
7   government can quarantine certain segments of the
8   population. My question is, you said they have
9   to have suspicion to do that. What does that
10   mean?
11   MR. LARKIN: Objection to form.
12   A.   Some professional has to decide that
13   you're going to be quarantined and he's not, and
14   they do it presumably on the basis that they have
15   suspicion that you're a carrier of some disease
16   that the public needs to be protected against.
17   Q.   Is it your understanding that they
18   do that on an individual-by-individual basis?
19   Let's take a particular neighborhood. Let's say
20   there was an out break of swine flu in some
21   portion of New York. Are you saying that in
22   order to quarantine that particular neighborhood
23   where there was a swine flu outbreak, the
24   government would have to, on an individual basis,
25   make decisions about individual people in that

Page 83

1   D. Smith
2   neighborhood that could be quarantined or not?
3   MR. LARKIN: Objection.
4   Q.   Or would they make a group decision
5   that the entire neighborhood would be quarantined
6   because there had been a certain number of
7   positive cases of swine flu in that neighborhood?
8   MR. LARKIN: Objection. Go ahead if
9   you understand it.
10   A.   Again this is not my area of
11   expertise, but I think that there probably -- my
12   understanding is that there are both types of
13   cases. There are instances where an individual
14   can be quarantined and there are cases where for
15   reasons of public safety, a group of people might
16   be quarantined.
17   Q.   So in the police stop context, is
18   there any circumstance that you're aware of where
19   the police, because there had been, let's say, an
20   outbreak of a certain high level of a particular
21   type of crime, a pattern, let's say, a robbery
22   pattern in a particular neighborhood, would the
23   police in that situation have the right to stop
24   whoever they wanted in that neighborhood because
25   they happened to live in a neighborhood where

Page 84

1   D. Smith
2   there had been a huge outbreak of robberies?
3   MR. LARKIN: Objection to form.
4   A.   My understanding is that they would
5   not have the authority to do that legally.
6   Q.   So isn't that an important
7   distinction between a public health -- let's say
8   a coercive public health strategy, such as
9   quarantining an entire neighborhood, and policing
10   a neighborhood?
11   MR. LARKIN: Objection to form.
12   A.   Again, I'm not a lawyer, but
13   watching crime shows and stuff, the police tell
14   sometimes people at a crime scene "Don't leave."
15   They don't have anything specifically to say, but
16   they say "You're not allowed to leave the
17   building until we interrogate you."
18   Maybe they could leave, I don't
19   know, but I've seen -- I have a sense that there
20   are circumstances where police do respond to a
21   group in that way. You're the lawyers, you can
22   tell me, but I've seen it happen often enough
23   that I believe it's within their power to tell
24   people that they have to stay on the scene until
25   they have been authorized to leave.

Page 85

1   D. Smith
2   Q.   Other than Professor Doherty --
3   Professors Doherty and Martin -- actually before
4   I get to that, Professor Doherty she's is -- her
5   field of expertise is homeland security issues?
6   A.   Yes.
7   Q.   Has she ever studied urban policing
8   outside of the homeland security context?
9   A.   I don't believe so, no.
10   Q.   Has she ever studied racial
11   disparities in police practices?
12   MR. LARKIN: Objection to any
13   questions about what she has done on
14   foundational grounds. Go ahead.
15   A.   Not that I know of.
16   Q.   Other than Professors Doherty and
17   Professors Martin and anyone else we've spoken
18   about today, is there anybody else you've spoken
19   with in preparation for today's deposition?
20   A.   You know, I want to be as complete
21   as I can be. And as I said at the very
22   beginning, I feel like I have been in some ways
23   preparing for this throughout my career, but I'll
24   only do sort of recent things. I've certainly
25   discussed issues related to the two papers, of

22 (Pages 82 to 85)

Page 110	Page 112
1 D. Smith 2 a building, and if they're not, telling them that 3 they're not supposed to be there. 4 Q. Just to be clear, this is what Chief 5 Jaffe told you or this is what you -- because I'm 6 unclear. Who is the person who said the things 7 about no doorman and protect the people who live 8 in the buildings? 9 A. I think I said it -- 10 MR. LARKIN: Objection to form. 11 A. -- and she agreed. 12 Q. Did she tell you anything else with 13 respect to this issue about stops for trespassing 14 in housing? 15 A. Not that I recall. 16 Q. Other than Chief Jaffe, anyone else 17 in the NYPD who you have spoken to to prepare for 18 today's deposition? 19 A. No. 20 Q. Have you reviewed the complaint 21 filed in this lawsuit? 22 A. Maybe at the very beginning. I have 23 only the dimmest recollection of it. 24 Q. What is your understanding of what 25 the plaintiffs' claims are in this case?	1 D. Smith 2 November 17, 2010 expert report, marked for 3 identification.) 4 Q. I'm going to represent that this is 5 a true and correct copy of Professor Smith's 6 November -- it's dated November 15, but I think 7 you guys produced it to us twice. There were 8 some formatting issues. This is a true and 9 correct copy of the November 17, 2010 report of 10 Dennis Smith submitted in this case. If you 11 want, Professor, to review it or read through it 12 to confirm that you believe this to be a true act 13 and accurate copy, you can take your time. 14 A. It looks like my report. It looks 15 familiar. 16 Q. Okay. I wanted to just start at 17 page 1 and just ask you a couple of questions 18 about your background. You are currently an 19 Associate Professor of Public Administration at 20 the Wagner School at NYU, correct? 21 A. Correct. 22 Q. I believe you say on page 1 that you 23 have studied urban police policy and management. 24 What do you mean by urban police policy? 25 A. Whether or not police should be
Page 111	**Page 113**
1 D. Smith 2 A. That individual police officers are 3 acting on the basis of bias in deciding who to 4 stop, and as a result of that, they are 5 disproportionately stopping African-Americans and 6 that as a result of the way the City is policing, 7 there is a disproportionate impact of their 8 policing strategy on Black males in the 9 community. 10 Q. And that understanding of the 11 plaintiffs' claims, what is the basis for that 12 understanding? How did you come to that 13 understanding? 14 A. Probably reading your website, 15 presentation of these issues, reading Fagan's 16 representation of the plaintiffs' position in 17 this case. 18 Q. Just a quick question: Did you 19 bring any documents with you to today's 20 deposition? 21 A. No. 22 MR. CHARNEY: I'm going to introduce 23 this as I guess Smith Exhibit 1. Here's a 24 copy to your counsel. 25 (Smith Exhibit 1, Professor Smith's	1 D. Smith 2 required to reside in the communities they 3 police, whether they should be required to have a 4 college education before they are either 5 appointed or -- like that. 6 Q. Have you studied, prior to serving 7 as an expert in this case, have you studied 8 issues around fairness and equity of particular 9 urban police practices? 10 MR. LARKIN: Objection to form. 11 A. The studies that I did with Elinor 12 Ostrom in Indianapolis, Chicago and St. Louis, 13 and then subsequently follow-up studies going 14 back to St. Louis and Tampa/St. Petersburg, 15 Florida, and Rochester/New York metropolitan 16 areas, in all of those studies, our performance 17 measurement included effectiveness, efficiency 18 and equity. 19 Q. When you say equity, how did you 20 include that in your analysis? 21 A. We used citizen surveys and asked 22 citizens about the fairness of their treatment, 23 the respect that they received in their treatment 24 by police officials. We looked at equity in 25 deployment of resources in terms of whether

29 (Pages 110 to 113)

Page 114	Page 116
1 D. Smith	1 D. Smith
2 neighborhoods with similar levels of crime were	2 submitted. I don't think it's come out yet, but
3 getting similar levels of attention. Because in	3 it will appear on my next CD, but it's not
4 the '60s and the '70s, it was a different issue.	4 related to policing.
5 The issue concerned was that in many places	5 Q. Anything else?
6 police were not providing enough police	6 A. I think this is complete.
7 protection to minority neighborhoods, that they	7 Q. So going back to the -- you said you
8 were basically ignoring the crime problems in the	8 did some research with Elinor Ostrom.
9 neighborhoods or if they dealt with crime by	9 A. Right.
10 minorities, it was only to, quote, "protect the	10 Q. Is that O-S-T-R-O-M?
11 whites." So we were very much interested in	11 A. It is.
12 analyzing that and including that in our frame of	12 Q. And you said that those studies --
13 measurement.	13 I'm sorry, how many studies did you do with
14 Q. You said these were studies with	14 Dr. Ostrom?
15 Elinor Ostrom.	15 A. It depends on how you count them. I
16 A. Um-hum.	16 guess you would say four, but the fourth one was
17 Q. They were published studies?	17 actually a study of three metropolitan areas.
18 A. There were a variety of published	18 Q. And how many of those four studies
19 studies, yes.	19 dealt with what you referred to as equity issues
20 Q. Let's actually turn to Exhibit A of	20 in policing?
21 your report.	21 A. All of them.
22 A. Okay.	22 Q. Were any of those studies published?
23 Q. Do you know what Exhibit A is?	23 A. Yes. "On the Fate of Lilliputs in
24 A. It's my curriculum vitae.	24 Metropolitan Policing," small police departments.
25 Q. Based on your review of it, if you	25 "The Effects of Training on Education and Police

Page 115	Page 117
1 D. Smith	1 D. Smith
2 want to look through it, as of March 4, 2011, is	2 Attitudes in Performance," "The Potential For
3 this an up-to-date curriculum vitae?	3 Reform of Criminal Justice," and "Dangers of
4 A. There are a few sort of things that	4 Police Professionalization," Journal of Criminal
5 would be added if I were doing it today.	5 Justice." "Impact of Residency," Urban Affairs
6 Q. What would those be?	6 Quarterly.
7 A. I'm appointed by Governor Elect	7 Q. Did any of those studies include
8 Cuomo to be on his transitional committee for	8 multi-variate statistical analyses?
9 public safety so I've participated with senior	9 A. Yes.
10 officials from the Cuomo administration. I'm now	10 Q. Which ones or one of those four?
11 a participant in the Police Executive Research	11 A. All of them.
12 Forum's exploration of CompStat and leadership in	12 Q. So let's start with the first one
13 policing. I've attended a meeting of police	13 then. You said it was the -- "On the Fate of
14 officials in Washington in connection with that.	14 Lilliputs." I'm going in the order of the way
15 I'm attending another conference on that next	15 you recited them. Maybe if we can go
16 week. Those would be the sort of things that	16 chronologically, it's better. So should we start
17 would be on my resume that aren't there now.	17 with the first one, "A Multi-Strata, Similar
18 Q. Specifically turning to page 4 of	18 Design for Measuring Police Performance." Did
19 your CD where it says "Articles and	19 that study include analyses related to equity of
20 Publications," and this continues on, it looks	20 particular police practices?
21 like, for several pages, is this list -- I guess	21 MR. LARKIN: Objection to form. Go
22 it goes from page 4 to 8 -- is this a complete	22 ahead.
23 and up-to-date list of your publications?	23 A. That was the methodological paper
24 A. There are -- there is a review of a	24 that explained how we were doing basically all of
25 book on New York City government that I have	25 those studies that I have identified so far, and

Page 118

1   D. Smith
2   those are the ones in which we used
3   effectiveness, efficiency and equity as the
4   dimensions of performance that we wanted to
5   include in analyzing. In one case, the size of
6   department is a variable in response to debate in
7   the field about whether or not we should
8   consolidate police in metropolitan areas. "The
9   Effects of Residency," which was a study that
10 used that data, was concerned with whether or not
11 police officers who reside in a community had a
12 better understanding of adversity in their
13 community than people who were outsiders coming
14 in and policing. So it was a -- it was the
15 approach to performance measurement that pervaded
16 that side.
17   Q.   Is it fair to say that this first
18 publication is actually just describing
19 methodology, it doesn't have results?
20   A.   That's correct.
21   Q.   So then the second one, which is
22 "The Effects of Training and Education on Police
23 Attitudes and Performance," did that include
24 multi-variate statistical analyses?
25   A.   It did.

Page 119

1   D. Smith
2   Q.   Did that study address issues of
3   equity?
4   A.   In the way I describe, yes.
5   Q.   So in other words, were there
6   multi-variate statistical analyses addressing
7   whether or not a particular police practice was
8   fair or equitable?
9   A.   No. It had to do with whether
10 officers' attitudes were more sensitive to equity
11 concerns.
12   Q.   What about "The Fate of Lilliputs in
13 Metropolitan Policing," did that study include
14 multi-variate statistical analyses?
15   A.   Yes.
16   Q.   Did any of those statistical
17 analyses relate to whether or not a particular
18 police practice was fair and equitable?
19   MR. LARKIN: Objection to form.
20   A.   In the way I described. We looked
21 at whether or not big city police departments,
22 small police departments, in the ways that we
23 could measure it, were similar or different with
24 respect to attitudes of officers about the
25 importance of fairness, their respect for

Page 120

1   D. Smith
2   citizens of all kinds. Whether or not when we
3   had citizen data, because we used citizen survey
4   data as well as police officer survey data, we
5   looked at whether or not the attitudes of
6   minorities in those communities toward police
7   varied from the attitudes of majorities out of
8   concern for whether or not policing was being
9   seen as legitimate equally in the different
10 communities under those different conditions of
11 big city police departments, small community
12 police departments.
13   Q.   So in that study, did you analyze
14 data on how any particular police practice was
15 impacting a particular segment of the population?
16   MR. LARKIN: Objection to form.
17   A.   Only in the larger context that how
18 you organize public services is a policy choice.
19 And we were looking at whether or not communities
20 of various kinds would be better off or worse off
21 if the organization of police services were
22 different. So in the broader sense, yes, but it
23 wasn't in the way this case raises those issues.
24   Q.   That is three. What about the
25 fourth one? What was the fourth study you did

Page 121

1   D. Smith
2   with Dr. Ostrom, or was it only those three that
3   were published?
4   A.   Well, you know, the studies that
5   were published were not typically papers that
6   were about the whole study. I focused on police
7   professionalization in my research and my
8   dissertation and so my publications, whether by
9   myself or with Elinor Ostrom, tended to go in
10 that direction.
11   Other people who were part of the
12 team doing research published other articles on
13 other dimensions, so some people wrote about the
14 way that police organizations work together in
15 the metropolitan area and that wasn't the focus
16 of my research.
17   I did the Journal of Criminal
18 Justice study with the data that I had because
19 there was a debate about education and training
20 of police. There were people who had great hopes
21 for it, and those hopes were the hypotheses
22 tested in the Elinor Ostrom paper that appeared
23 in the Sage Criminal Justice Annuals report, and
24 then because there were people out there who were
25 saying that actually professionalization would

31 (Pages 118 to 121)

Page 122

1   D. Smith
2 have some adverse effects, I did another paper to
3 see if the evidence supports the fears about
4 professionalization and published that in the
5 Journal of Criminal Justice.
6   Q.   Have you ever published any articles
7 or other written pieces that reflect analyses
8 you've done, statistical analyses, to test for
9 racial disparities in any kind of police
10 practice?
11   A.   Only in the way I've already
12 described which is in the studies that we did in
13 Indianapolis, Chicago and St. Louis, we were
14 interested in the way in which citizens of
15 different backgrounds, including race,
16 experienced the public service and, in
17 particular, policing. For reasons that would be
18 probably present today, race appears as kind of a
19 strange variable in some of this research because
20 we did our first study of three neighborhoods in
21 the Indianapolis area adjacent to neighborhoods
22 served by the City of Indianapolis, so Speedway,
23 Lawrence and Beach Grove are independent
24 communities.
25   Across the street from very similar

Page 123

1   D. Smith
2 neighborhoods in Indianapolis, you have
3 Indianapolis neighborhoods served by the
4 Indianapolis Police Department and the suburban
5 neighborhoods served by the very small, arguably
6 less professional police forces.
7   So the question is: Is the service
8 provided by the big city police departments with
9 their greater technology and greater training and
10 so forth producing less crime, greater feelings
11 of safety, greater sense of respect and
12 professionalism on the part of the police that
13 are serving them?
14   People advocating reform by
15 consolidation would have said yes. Elinor Ostrom
16 is from the small is beautiful sort of world, so
17 she was not surprised. In fact, she was not
18 pleased when our studies showed that small
19 departments performed as well or better than big
20 city police departments, but the problem was
21 those were all basically white working class
22 neighborhoods. And in the early 1970's, we were
23 presented with who cares about white working
24 class neighborhoods? The problems of crime and
25 civil disorder and police community relations are

Page 124

1   D. Smith
2 in Black neighborhoods, African-American
3 neighborhoods. So we did our next study in
4 Chicago looking at Black neighborhoods in Chicago
5 served by the Chicago Police Department and
6 suburban communities that were overwhelmingly
7 Black to try to reproduce the design of this
8 multi-system, multi-strata similar system design,
9 but in a different metropolitan area where we had
10 the race variable.
11   Q.   I'm almost done with this line of
12 questioning. The data you're talking about that
13 you analyzed was the survey data; is that right?
14   A.   Citizen and police officer survey
15 data.
16   Q.   But you didn't look at, for example,
17 arrest rates for Blacks versus other demographic
18 groups?
19   A.   No.
20   Q.   You didn't look at crime rates for
21 Blacks versus other demographic groups?
22   A.   No.
23   Q.   Have you ever published a study that
24 analyzes data on whether it be crime rates,
25 arrest rates or stop rates for different

Page 125

1   D. Smith
2 demographic groups?
3   MR. LARKIN: Objection to form. You
4   can answer.
5   A.   Stop, question and frisk has that as
6 part of the study, yes.
7   Q.   So that's the study that you did
8 with Professor Purtell?
9   A.   Right.
10   Q.   Any other studies?
11   A.   No.
12   MR. CHARNEY: We can take a break.
13   (Luncheon recess: 12:31 p.m.)
14
15
16
17
18
19
20
21
22
23
24
25

32 (Pages 122 to 125)

Page 126

1   D. Smith
2   A F T E R N O O N   S E S S I O N
3   1:35 p.m.
4   D E N N I S   S M I T H,   resumed the stand and
5   testified further as follows:
6   EXAMINATION (CONTINUED) BY
7   MR. CHARNEY:
8   Q.   Before the break, you were talking
9   about some of your statistical studies and since
10 we're going to talk about statistics a lot today,
11 I wanted to make sure we're on the same page
12 about what different terms mean. So is it okay
13 if I ask you -- I'm going to throw some terms out
14 there and you can tell me what they mean so I
15 know we're on the same page about that.
16   A.   Okay.
17   Q.   What is a multi-level logistic
18 progression?
19   A.   It's my understanding, and I've sort
20 of indicated that I'm not the statistician on the
21 team, that it is an analytic strategy that
22 involves introducing variables in a hierarchical
23 way so you have your sub-variables -- you have
24 other variables that you add to the analysis in
25 sequence and you sort of see the effects of

Page 127

1   D. Smith
2   adding variables to the analysis.
3   Q.   Have you ever conducted a study
4   either in the policing context or any kind of
5   analysis where you have analyzed data using
6   multi-level logistic progression?
7   A.   No.
8   Q.   What is a negative binomial
9   regression?
10   A.   There are variables that are
11 continuous and there are variables that are
12 basically yes or no variables. And if you're
13 doing an analysis in which you're basically --
14 and research mostly is rejecting hypotheses, so
15 you basically position yourself so you say
16 something is not black or not white, and that is
17 the way of sort of making sense out of a complex
18 set of numbers where you introduce a variable as
19 1 or zero, and it has the property, an advantage,
20 of acting like a continuous variable even though
21 it's not. Because the difference between 1 and 0
22 is presumably always the same. If you had rank
23 order kind of data, the difference between 2 and
24 3 may not be the same as between 3 and 4. So a
25 lot of time we use dummy variables, we use a

Page 128

1   D. Smith
2   binomial kind of construct to enable us to use
3   complicated statistical analysis in which you're
4   mostly using continuous variables like number of
5   crimes and population characteristics that can go
6   from 1 to a million or something like that in a
7   continuous way, but some of them don't.
8   Q.   Have you ever conducted a
9   statistical analysis of data either in the
10 policing context or in any other context using
11 negative binomial regression?
12   A.   Not that I specifically remember of
13 that characteristic.
14   Q.   What is a general estimating
15 equation?
16   A.   My understanding is that that is an
17 equation that describes the factors that you're
18 going to include to try to predict some variable.
19   Q.   Have you ever conducted a study
20 where you analyzed data using a general
21 estimating equation in your analysis?
22   A.   Yes. Both of the studies that I
23 presented as appendices present those kind of
24 equations.
25   Q.   That would be the Operation Impact

Page 129

1   D. Smith
2   Appendix D and the stop and frisk Appendix E of
3   your expert report?
4   A.   Correct.
5   Q.   What is a poisson regression,
6   P-O-I-S-S-O-N regression?
7   A.   I don't actually remember. I've
8   heard of it and I've been in conversations about
9   it through my life, but I'm not a statistician
10 and I haven't focused on it.
11   Q.   And then what is a marginal R square
12 statistic?
13   A.   It is a statistic that identifies
14 the specific contribution of a variable in a
15 multi-variate analysis.
16   Q.   Have you ever conducted a
17 statistical study analyzing data either from the
18 police context or any other context where you
19 have used marginal R square statistics in your
20 analysis?
21   A.   Yes.
22   Q.   Which studies have you used that in?
23   A.   These studies, these two that are
24 Appendix D and E. A study of SATCOM, which is a
25 study of a command structure in Brooklyn.

33 (Pages 126 to 129)

Page 130

D. Smith

1
2   Q.   Going back to page 1 of your expert
3 report, we had started to talk about the
4 qualifications. We were beginning to talk about
5 the work you've done in urban police policy and
6 management, and I think you had said that when
7 you talked about urban police policy, what you
8 meant by that. You mentioned whether or not
9 officers should be required to reside in the
10 communities where they work, whether they should
11 be required to have college degrees.
12   Were there other issues related to
13 urban police policy that you have studied in your
14 academic career?
15   A.   I studied the Training Academy of
16 the New York City Police Department. I studied
17 the -- as I mentioned before, the reform of the
18 command structure in New York City called SATCOM,
19 which was a reform of the Bratton era in Brooklyn
20 North, and how it contributed to crime reduction
21 compared to the arrangements in the other seven
22 boroughs of New York City.
23   I studied the organization and
24 management of the Police Department of the
25 Department of Environmental Protection to see how

Page 131

D. Smith

1
2 well it was organized and managed to protect the
3 water system of New York City.
4   Q.   Any other topics you've studied in
5 the field of urban police policy in your career?
6   A.   I studied the reform of the
7 anti-corruption policy of the NYPD, the reform of
8 the Internal Affairs Bureau. I studied the way
9 in which the New York City Police Department
10 managed the 25 percent reduction in force that
11 occurred from '75 to '80. It lost more officers
12 than most other departments in America had
13 officers to begin with, and what happened in
14 terms of crime and how did they organize to deal
15 with the circumstance of great retrenchment?
16   You know, in the '70s, I did a
17 number of studies of education and training and
18 police and police performance. I did a study of
19 the involvement of citizens in public safety
20 production, the published paper there, in pursuit
21 of public safety.
22   Q.   This is in your CV?
23   A.   It is.
24   Q.   Who did you do that study with?
25   A.   Diane Baillargeon. And it was

Page 132

D. Smith

1
2 looking at the fact -- it was a concept in public
3 service called co-production. And this was an
4 empirical study of alternative modes of producing
5 public safety. There are some communities who
6 rely entirely upon the police. There are some
7 communities who very heavily take care of their
8 own public safety and there are some that are
9 mixtures in between. And we had number variation
10 in the communities we studied in St. Louis to
11 examine that so that was the focus of that study.
12   Q.   Earlier we discussed studies you had
13 done around fairness and equity of particular
14 police practices and you mentioned the work you
15 did with I guess Dr. Ostrom.
16   A.   Yes.
17   Q.   Other than the work you did with
18 Dr. Ostrom, have you conducted any other studies
19 related to fairness and equity in particular
20 police practices?
21   MR. LARKIN: Objection to form. You
22   can answer.
23   A.   Not with that as a specific
24 variable, no.
25   Q.   Have you ever conducted a study

Page 133

D. Smith

1
2 where you've done statistical analysis of data in
3 which the study addresses claims of racial
4 discrimination whether it be in policing or any
5 other arena of life?
6   A.   No. I had said earlier, so I assume
7 you're not asking me again, the study of stop,
8 question and frisk addresses the issue of whether
9 or not the police practice of stop, question and
10 frisk might be explained as something other than
11 racial bias. So it is a -- it's part of the
12 conversation, the analysis in that study.
13   Q.   Other than that study, were there
14 any other --
15   A.   No. There's one study at the very
16 beginning of my career, what I call the
17 constitution of police legitimacy.
18   Q.   Is that in your CV?
19   A.   It is, and it was published in a
20 book edited by Joseph Hawes, H-A-W-E-S.
21   Q.   What year was that?
22   A.   Way back, but it got published with
23 the title Reforming the Police Organizational
24 Strategies For the Urban Crisis.
25   Q.   Okay. I've actually read that

34 (Pages 130 to 133)

Page 134

```
1                D. Smith
2   article you wrote, a very interesting article,
3   but I guess my question about it is, did you do
4   statistical analysis of police data?
5       A.    No.
6           MR. CHARNEY:  The article you did
7       with Dr. Baillargeon, I think this is the
8       article you're referring to.  I'll
9       introduce this as Smith Exhibit 2.
10          (Smith Exhibit 2, article entitled
11      In Pursuit of Safety:  Alternative Patterns
12      of Police Production in Three Metropolitan
13      Areas, by Diane L. Baillargeon and Dennis
14      C. Smith, marked for identification.) .
15      Q.    If you want a minute to review it, I
16  was going to ask you about a particular page but
17  if you want to read through it --
18      A.    If I need to go back on it, I will.
19      Q.    Based on your very quick review, is
20  this the article that you were referring to that
21  you did with Dr. Baillargeon?
22      A.    She is not Dr., but she is
23  Baillargeon.
24      Q.    She doesn't have a Ph.D. I guess?
25      A.    No.
```

Page 135

```
1                D. Smith
2       Q.    The article you did with
3   Ms. Baillargeon, this is the one you were
4   referring to?
5       A.    Yes.
6       Q.    So I just had a question on page 38
7   of this article.  There's a section that starts,
8   "Implications for the Study of Public safety."
9   And there's a paragraph there, the first
10  paragraph under that.  I was wondering if you
11  could read it and then I wanted to ask you about
12  it.
13      A.    Do you want me to read it silently?
14      Q.    Yes.  Just the first paragraph.  You
15  don't have to read the whole thing.
16      A.    Yes, I've read that.
17      Q.    My question is, this paragraph
18  states that "A study which addressed the factors
19  that determine the level of public safety in
20  urban communities would have a very different
21  focus than an inquiry into police productivity.
22  Attributes of the culture, social organization
23  and of the economy that consistently show high
24  correlations with measures of disorder, strife
25  and crime are the most obvious factors to
```

Page 136

```
1                D. Smith
2   explore.  While organizations created
3   specifically to maintain order and to enforce the
4   law play a role, order is maintained and laws are
5   enforced for the most part without direct
6   participation of police.  Architects and planners
7   may be more responsible for crime prevention than
8   police."
9           Is it correct that you did write
10  this paragraph or contributed to this paragraph?
11      A.    Yes.
12      Q.    Do you believe those statements that
13  are written here?
14          MR. LARKIN:  Objection to form.  Go
15      ahead.
16      A.    I believe they were accurate when I
17  wrote them.
18      Q.    Do you believe they're still
19  accurate today?
20      A.    Less so.
21      Q.    What do you mean by less so?
22      A.    Well, there's a quotation from Aaron
23  Wildavsky at the front of the paper.
24      Q.    Yes.
25      A.    "According to the Great Equation,
```

Page 137

```
1                D. Smith
2   Medical Care equals Health," and he talks, as we
3   know now from our appreciation of public health,
4   that prevention actually is more important in
5   terms of the health status of the community than
6   is reactive treatments by medical professionals,
7   that if you want to explain, as he says, 90
8   percent determined by factors over which doctors
9   have little or no control.  You know, for all of
10  us, the remaining 10 percent is pretty important
11  so you want a good diagnostician and you want a
12  good surgeon and so forth, but I would not take
13  away from the fact that a very significant factor
14  in producing public safety is citizens'
15  willingness to be law abiding, to their
16  orientation to be cautious.  They lock their
17  cars, they close their windows, they don't leave
18  valuables out where they can be taken.  All those
19  things are part of what I talked about in this
20  paper as co-production of public safety and I
21  certainly still believe that police and citizens
22  in communities and police are in this together
23  and what I think has changed is a lot of what I
24  wrote about in my response to Fagan, which is
25  major theorists in the field of policing, like
```

35 (Pages 134 to 137)

Page 198

```
1              D. Smith
2   patterned, that there was better recording here
3   in the places where there was more crime or
4   better recording in places with less crime, and I
5   don't have any such sort of reason for thinking
6   that, so I guess absent some proposition of that
7   kind, I'm inclined to think that the problem is
8   distributed.
9        Q.   Okay.
10       A.   It's present in the whole system.
11   We don't have a --
12       Q.   Is it fair to say, then, that you
13   didn't implement any specific controls in this
14   study to address the concern that I just raised
15   about the changes in the recording of the data?
16       A.   Other than the fact that, again, the
17   practices and culture of the Department in '98,
18   '99, 2000 and so forth, year by year, are in our
19   analysis, and we're taking into account that --
20   and so if there is some surge or anomaly in a
21   particular year, it would show up in our data,
22   and so we are, both by the time series and by
23   controlling for time, taking into account that
24   things do change over time, and one of the things
25   that changes is the overall volume of stops and
```

Page 199

```
1              D. Smith
2   the other thing that changes is the overall
3   volume of crime over time.
4            Throughout this period, we had this
5   story of declining crime, changing patterns of
6   crime, changing practices with regard to emphasis
7   on quality of life, changes in police focus.
8   After 9/11, we had 1,000 cops specifically
9   dealing with counter-terrorism responsibilities
10   either in intelligence or deployment, and we had
11   all the rest of the cops coming in for training
12   on how to be on guard for anything that might be
13   suspicious with respect to terrorist activities.
14           So the fact that that was happening
15   over time but happening in one Police Department
16   and we're tracking all of that information over a
17   period of time is the thing that allowed us to
18   look for any anomalies and we didn't find them.
19       Q.   Again, in the impact study, your
20   unit of analysis is again the precinct. You're
21   looking at stop rates in the precinct, crime
22   rates in the precinct.
23       A.   Yes.
24       Q.   Did you look at all, with respect to
25   the stop data, at where specifically in a
```

Page 200

```
1              D. Smith
2   precinct stop activity was occurring, or did you
3   just look at the precinct as a whole?
4        A.   We looked at the precinct as a
5   whole.
6        Q.   Did you in any way assess whether
7   crime was going down in the same area where stop
8   activity was taking place?
9        A.   At the level lower than the
10   precinct?  No.
11       Q.   Why did you not do that?
12       A.   Practical reason.  We didn't have
13   the data.
14       Q.   Is that the only reason?
15       A.   Yes.
16       Q.   Then with respect to serial
17   autocorrelation and spatial autocorrelation and
18   endogeneity, the way you accounted for those in
19   this study, is it the same way you accounted for
20   it in the impact study?
21       A.   Yes.
22       Q.   The last couple of questions on
23   Appendix C, D and E.  Did you at any point ever
24   submit either of these studies for publication in
25   a peer review journal?
```

Page 201

```
1              D. Smith
2        A.   Only now.
3        Q.   You have done so?
4        A.   I'm in the process -- it's being
5   submitted to -- the impact study, not the stop
6   and frisk, is submitted to a journal.
7        Q.   Which journal?
8        A.   International Journal of Public
9   Management.
10       Q.   Do you know what the status of that
11   is?  Has it been approved?
12       A.   No.  It hasn't -- it's just recently
13   been submitted.
14       Q.   Why did you not submit the stop and
15   frisk study?
16       A.   We regarded it as a preliminary
17   study, described it as such when we wrote it.
18   It's in the text.  My colleague, Bob Purtell, had
19   heart surgery and has taken on new
20   responsibilities and so the process of moving
21   ahead, plus I've been dealing with this material
22   in a different way in relation to this legal
23   proceeding, so I just -- in the competition for
24   time, it hasn't moved up in the queue.  People
25   have been asking for it, but we haven't --
```

51 (Pages 198 to 201)

Page 210

1   D. Smith
2   foundation.
3   A.   There were increases in some
4   categories of crime. Overall, the City of New
5   York continued its trend of taking crime down.
6   But homicide, for example, one of the crimes --
7   you know, it's a small number of crimes, and it's
8   gotten a lot smaller since 1990, when it was 2200
9   and some, but it's a huge concern.
10   So under 500 in 2009. It went over
11   500 in 2010, the first reversal in many, many
12   years. So if -- and I'm just saying that if one
13   of the tools that you have that you think is
14   effective in dealing with crime or gang problems
15   or something like that is stops, then I wouldn't
16   be surprised if the police are out there with
17   even greater vigilance trying to fight crime, and
18   as a result, stops go up.
19   Q.   Did crime go up in any of the other
20   seven major categories that you know of between
21   2009 and 2010 in New York City?
22   A.   Yes, it did, in a number of them.
23   Q.   So stops also went up between 2009
24   and 2010; correct?
25   A.   I think that's -- yes, that's what I

Page 211

1   D. Smith
2   think you just said.
3   Q.   So does that fact that stops went up
4   between 2009 and 2010, but crime also went up
5   during that period, does that give you any
6   concerns about whether stop and frisk is being
7   used in a way that is actually effectively
8   fighting crime?
9   MR. LARKIN: Objection to form.
10   A.   Not without looking at it, honestly,
11   because I expect them to move together, but
12   without breaking it out and looking at the
13   temporal sequence, you really can't see whether
14   or not maybe they got -- maybe they weren't doing
15   enough stops, and now crime is now coming back
16   down. Maybe last year, they did a course
17   correction, and crime is now back on its way
18   down. I don't know, but without looking at it as
19   we did in our study, with more detail, I can't
20   answer question, but by itself, it wouldn't raise
21   that flag per se.
22   MR. CHARNEY: We can take a break
23   now.
24   (Recess taken.)
25   MR. CHARNEY: This is going to be

Page 212

1   D. Smith
2   Smith Exhibit 4.
3   (Smith Exhibit 4, report of Jeffrey
4   Fagan dated October 15, 2010 submitted in
5   this case, as well as all the appendices to
6   that report, marked for identification.)
7   Q.   Do you need a minute to look at it?
8   I'll represent this is a true and correct and
9   complete copy of the report of Jeffrey Fagan
10   dated October 15, 2010 submitted in this case, as
11   well as all the appendices to that report. Based
12   on that representation, have you reviewed this
13   report before?
14   A.   I have.
15   Q.   Turning back to your report, I guess
16   Exhibit 1, specifically page 2 of your report, 2
17   to 3 of your report, I just wanted to make sure I
18   understand what opinions you offer in your
19   report, and I'm going to list them and you tell
20   me if I'm wrong or if I left them out, and then
21   the ones I've left out.
22   So based on my reading of your
23   report, is it correct that you offer an opinion
24   on Professor Fagan's analysis of the plaintiffs'
25   Fourth Amendment claim as well as their 14th

Page 213

1   D. Smith
2   Amendment claim? You also opine on Professor
3   Fagan's critique of the Rand study, as well as
4   plaintiffs' other expert, Lou Reiter's critique
5   of the NYPD's management practices. And then you
6   also discuss what we've already discussed
7   earlier, Appendices D and E, regarding the
8   effectiveness of Operation Impact and stop and
9   frisk. Are there any other opinions that you
10   offer that I didn't mention?
11   MR. LARKIN: Objection to form. Go
12   ahead.
13   A.   It's my understanding that's what I
14   did here, yes.
15   Q.   Did I inaccurately characterize any
16   of your opinions?
17   A.   I don't think you did.
18   Q.   Did you write this entire report
19   yourself?
20   A.   Yes.
21   Q.   Did anybody assist you in writing
22   any portions of it?
23   A.   The entire report, of course,
24   includes those two appendices and they include
25   two pieces co-authored by Robert Purtell, but I

54 (Pages 210 to 213)

Page 214

1	D. Smith
2	wrote this document.
3	Q. So other than the two appendices you
4	wrote with Dr. Purtell, did anyone else help you
5	write any of the other portions of the report?
6	A. No one else was sitting writing with
7	me. I had had discussions with Erika Martin and
8	Kathleen about Fagan's report, and I'm sure that
9	the conversations I had with them contributed to
10	what I wrote.
11	Q. Did you show them drafts of your
12	report at any point?
13	A. No.
14	Q. Did you show --
15	A. Bob Purtell, I did.
16	Q. Did Dr. Purtell provide you any
17	comments on those drafts?
18	A. Yes.
19	Q. Did you incorporate those comments
20	into the final version of the report that we have
21	here today?
22	A. I'm sure some I did, some I didn't.
23	Q. Did anyone else other than Professor
24	Purtell and Professors Martin and -- I'm sorry.
25	Doherty, is that right?

Page 215

1	D. Smith
2	A. Yes.
3	Q. Did anyone else see or comment on
4	any of the other drafts of this report, obviously
5	excluding counsel?
6	A. No.
7	Q. Did you accept all the comments and
8	edits that Professor Purtell gave you?
9	A. No.
10	Q. Why were there some that you didn't
11	accept?
12	MR. LARKIN: Objection. You can't
13	get into the content of drafts.
14	MR. CHARNEY: I understand. I'm
15	asking why he didn't accept certain
16	comments.
17	MR. LARKIN: Let me confer with the
18	witness before he answers that, solely for
19	the purpose of determining whether to
20	assert privilege. Just come with me
21	outside one second.
22	MR. LARKIN: Read the question back.
23	(The record was read.)
24	MR. LARKIN: Note an objection for
25	the record, but you can answer.

Page 216

1	D. Smith
2	A. I don't remember specifically. This
3	was a report that was done in a very short time
4	frame. I sort of remember times when the
5	suggestion was made that something be addressed
6	or covered and I felt that I had already
7	addressed or covered it, and that's the only kind
8	of thing that I remember.
9	Q. Putting aside the drafts and edits
10	of drafts, did you have discussions with
11	Dr. Purtell about Professor Fagan's first report?
12	A. Yes.
13	Q. Did he offer you any critiques of
14	Fagan's analysis?
15	A. Yes.
16	Q. What were those critiques he gave
17	you?
18	A. Many that you've already heard.
19	That his -- and again, oftentimes these were not
20	new thoughts. We worked on these things together
21	for so long. His feeling that his failure to
22	include time as a variable, his seeming
23	expectation that he would find an algorithm that
24	would explain police practice when it's
25	anti-algorithmic. The notion that it was useful

Page 217

1	D. Smith
2	or appropriate to log variables, and what we were
3	interested in is finding discrete variations
4	rather than smoothing variations. He had been
5	sufficiently sort of attuned to my arguments
6	about the changes in policing from a reactive
7	policing of the past to a proactive policing of
8	the present, to feel that in a lot of different
9	places, Fagan's analysis was looking at a Police
10	Department that is operating in a proactive way
11	through a reactive lens, that he was using
12	criteria that were appropriate perhaps for a
13	reactive policing analysis, but not for a
14	proactive policing analysis.
15	And he shared some of Erika and
16	Catherine's concerns about things that were not
17	presented in the Fagan report that would have
18	shown more -- shed more light on some of his
19	decisions and the way he conducted his analysis.
20	So all of those things were part of his reactions
21	to the Fagan document.
22	He was a strong proponent of the use
23	of suspect data, and I think made a fortune as a
24	person in financial management and felt that you
25	make decisions with the best information

55 (Pages 214 to 217)

Page 218

1   D. Smith
2   available. And he felt that there was good
3   information available to the police about sort of
4   how to interpret what was happening in their
5   practice of stop and frisk that seemed consistent
6   with that idea of using best available evidence.
7   And so all of those things were part of our
8   conversation about what was missing or perhaps
9   wrong in Fagan's report.
10   Q.   You said Dr. Purtell was a big
11   proponent of using the suspect description data
12   as a benchmark?
13   A.   Right.
14   Q.   Does he have any training or has he
15   conducted any research in the field of policing
16   other than the studies he's done with you?
17   A.   No.
18   Q.   Does he have a criminology
19   background?
20   A.   No.
21   Q.   So did he tell you his basis for his
22   conclusion that the best evidence, as you put it,
23   for use in this analysis was suspect description
24   data as opposed to some other benchmark?
25   A.   Just that in any other field, if you

Page 219

1   D. Smith
2   have -- if you know about 80 percent of the
3   story, but 20 percent is missing, absent some
4   explanation for making you think that the 20
5   percent that is missing is somehow patterned
6   different than the one part you have, it's
7   overwhelmingly the best evidence and it's
8   reasonable to take it into account.
9   Q.   What do you mean by 80 percent of
10   the story?
11   A.   The Police Department knows, for
12   violent crime, in approaching 80 percent of the
13   cases, the race of the offender, the victimizer,
14   the perpetrator, either by virtue of suspect
15   description or arrest information, when you
16   combine those, it approaches for violent crime --
17   it varies somewhat over time, but it approaches
18   80 percent.
19   Q.   The basis for that statement that it
20   approaches 80 percent, is that those crime in New
21   York City reports that --
22   A.   Right.
23   Q.   You're aware that Professor Fagan
24   also analyzed the crime data, NYPD's crime data
25   for 2004 through 2009; correct?

Page 220

1   D. Smith
2   A.   I am.
3   Q.   And you're aware that he actually
4   found that for violent crime, approximately half
5   of the reported crimes did not have a suspect
6   race description; are you aware of that?
7   MR. LARKIN: Objection. That's not
8   an accurate characterization of what Fagan
9   found, but he can answer.
10   Q.   Are you aware of that, Professor?
11   MR. LARKIN: Objection. The
12   question is improper.
13   A.   I have seen Professor Fagan make
14   assertions about the portion of crime that is
15   known to the police all over the range. So I'm
16   not quite sure what percentage. He sometimes
17   says less than half, more than half, are known or
18   unknown. In his deposition, he says that 80
19   percent is unknown of violent crime, which I
20   thought was stunning.
21   Q.   You've read Professor Fagan's
22   report; right?
23   A.   I have, and my hypothesis is that
24   he's confused, that he doesn't realize that the
25   numbers that the police provide aggregate race

Page 221

1   D. Smith
2   known based on either suspect description or
3   arrest, and they are careful to avoid duplicate
4   count, so an accurate count comes -- when you put
5   the numbers together, on violent crime, they have
6   information about characteristics of suspects in
7   approaching 80 percent of the cases.
8   Q.   Have you ever analyzed the crime
9   complaint data of the NYPD to determine what
10   percentage of reported crimes have a suspect race
11   description in them?
12   A.   No.
13   Q.   So you're basing this entirely off
14   the NYPD's reports, what those crime and
15   enforcement in New York City reports say?
16   A.   Right.
17   Q.   Going back to your conversations
18   with Dr. Purtell, were there any critiques of the
19   Fagan report that he communicated to you that you
20   did not include in this report?
21   A.   None that I recall.
22   Q.   Going back to the one we discussed
23   this morning and you mentioned a couple of
24   minutes ago, this not controlling for time, you
25   said Professor Fagan did not do that, and that is

Page 242

D. Smith

1
2   A.   Part of it maybe has no place in
3   this process, but part of it strikes me as common
4   sense. If you follow the argument that I make in
5   this that the police have learned that to be
6   effective, they need to put the police where the
7   crime is, this is something that Jack Maple
8   talked about, talks about in his book, and if we
9   look at where crime is concentrated in New York,
10 and you assume that the police are being
11 disproportionally put there, and a result of that
12 crime is dramatically declining, neighborhoods
13 that had 100 homicides in 1990 have zero or one
14 or two now, and those neighborhoods are where the
15 police are concentrating their attention,
16 concentrating their vigilance, that it would be
17 utterly spectacular and unbelievable if doing
18 their work there, they were stopping a lot of
19 white people, because they're not there.
20   I have been out there in those
21 neighborhoods with those officers and there are
22 major places where crime is concentrated where
23 the population is highly homogeneously minority.
24 In some places, it's Hispanic, in some places
25 it's Black, so if that's where you're policing

Page 243

D. Smith

1
2   because that's where the crime problem is, the
3   people that you see engaging in suspicious
4   behavior and that you take steps to respond to
5   are going to be the people who live in those
6   neighborhoods.
7   Q.   A couple of questions I have for you
8   about that. Would you agree that the police
9   presence in a particular community is distinct
10 from what they actually do in that community? In
11 other words, you could put a bunch of cops in the
12 high crime neighborhood, but whether they stop
13 someone is a completely separate act; correct?
14   MR. LARKIN: Objection to form.
15   A.   I would not say completely, but
16 they're separate.
17   Q.   Hot spot policing, which you studied
18 and the evidence shows is effective, that's about
19 deployment, right, where you send officers;
20 correct?
21   A.   Not only.
22   Q.   What else is it about?
23   A.   It is taking a group of officers
24 under close supervision and briefing them in some
25 detail about the nature of the crime problems

Page 244

D. Smith

1
2   that brings them there, that explains the time of
3   day that they're deployed there, and that they
4   are fully expected to be on guard, paying
5   attention and making it stop.
6   And so it's not just deployment.
7   It's also focus, direction, motivation,
8   monitoring of success, learning from success.
9   It's all of those things.
10   Q.   But in your study of Operation
11 Impact, you weren't -- and I'm not talking about
12 the stop and frisk study -- in the Operation
13 Impact study, you were not studying or measuring
14 how many stops each officer in Operation Impact
15 made; right?
16   So the amount of the stop activity
17 is distinct from their deployment, correct, in
18 terms of what you were studying and how you were
19 assessing the effect they had on crime?
20   MR. LARKIN: Objection to form.
21   A.   That is correct.
22   Q.   Another question I have is couldn't
23 a crime reduction strategy be both effective and
24 discriminatory or illegal? In other words, I'll
25 give you a hypothetical: The Police Department

Page 245

D. Smith

1
2   has data that shows that yes, in the South Bronx,
3   the robbery rate is really high. It's grown a
4   tremendous amount. Let's send our officers
5   there, but we want you to stop all young Black
6   men in that neighborhood that you see out at a
7   certain time.
8   If the data you had showed that all
9   the robbery suspects were young Black men between
10 the ages of 20 and 30, would wouldn't that reduce
11 the crime in that neighborhood?
12   A.   I'm reluctant to answer.
13   MR. LARKIN: Objection to form.
14   A.   I'm reluctant to answer a
15 hypothetical, but in the spirit of your wanting
16 an answer to the question, I don't think that
17 would be effective.
18   Q.   Why wouldn't it be effective?
19   A.   Because there was something tried in
20 the 1960's called aggressive preventative control
21 that sounded a lot like that, and it boomeranged.
22 There are going to be mistakes in any kind of
23 professional practice. You have a jumbo jet
24 worth of people die every day as a result of
25 medical malpractice. Best trained professionals,

62 (Pages 242 to 245)

Page 274

1   D. Smith
2 stopped out of proportion to their share of the
3 population because unfortunately, for reasons we
4 don't completely understand, they are
5 disproportionately engaged in crime.
6   Q.   Is it fair to say that the way an
7 analysis would control for the impact of
8 evidence-based management practices, the way that
9 an analysis of stop and frisk activity would
10 account for that is to account for crime patterns
11 and who is committing crimes and where they're
12 committing them?
13   A.   Those are the kind of issues I would
14 have introduced.
15   Q.   Are there any other kind of issues
16 you would have introduced in order to account for
17 evidence-based management practices besides crime
18 patterns?
19   A.   I wouldn't conduct an analysis using
20 methods that smooth sharp changes in crime
21 reports like logging crime does. Because
22 presumably those are the things that police are
23 paying attention to, and so evidence-based crime
24 fighting means having real time information and
25 rapid deployment, and so it's both doing analysis

Page 275

1   D. Smith
2 in which you conclude the rival hypothesis that
3 this is being done to reduce victimization, and
4 particularly victimization of Blacks and Hispanic
5 communities, and then see what is left over after
6 that to then attribute it to some other
7 explanation.
8   You know, on top of doing that, are
9 there some things that are going on in terms of
10 misconduct by police that we need to address?
11 But to leave that out entirely strikes me as not
12 a very balanced kind of analysis.
13   Q.   So what the "it" is, what is being
14 left out entirely of Professor Fagan's analysis,
15 is an account for crime patterns? Is that what
16 he's leaving out?
17   A.   It's looking for whether or not stop
18 and frisk is contributing to crime reduction, the
19 thing we studied.
20   Q.   That part. Is there anything else
21 that he's leaving out that would be necessary to
22 account for evidence-based management practices?
23   A.   I just mentioned some other things.
24   Q.   Other than what you mentioned.
25   A.   I mentioned things like the real

Page 276

1   D. Smith
2 time, rapid response, small area, things that are
3 missing in the reports that I was responding to.
4   Q.   Since we're on that point, when
5 you're saying account for the impact of
6 evidence-based management practices, is that the
7 same concept as accounting for the shift to
8 proactive policing? Is that what you mean by
9 that?
10   A.   I intended them to be kind of
11 synonyms, yes.
12   Q.   So let's make sure we have it. So
13 the ways in which, in your view, Professor
14 Fagan's analysis fails to account for the shift
15 to proactive policing, one would be that he
16 doesn't account for crime patterns; is that
17 correct?
18   A.   In a way that I'm talking about,
19 right. He includes crime in his analysis, but
20 not in a way that I think deals with what I'm
21 talking about.
22   Q.   And the way you're talking about it
23 is looking at it in a very small geographic
24 level, not a precinct level, but at a small
25 level?

Page 277

1   D. Smith
2   A.   Right.
3   Q.   Looking at much smaller time lags?
4 In other words, not the calendar quarters?
5   A.   Small areas, but also -- yes, where
6 the crime is in a small area analysis rather than
7 precinct level.
8   Q.   What about the temporal aspect of
9 it? In other words, he lags crime and stops by
10 three months; correct?
11   A.   And a shorter time in his subsequent
12 analysis.
13   Q.   So what would be an appropriate time
14 lag in your view to do an analysis of the racial
15 disparities in stop practices?
16   MR. LARKIN: Objection to form.
17   A.   We were wishing we could have done
18 it by week.
19   Q.   You did it by month; correct?
20   A.   We did it by month because that's
21 what we had, and we acknowledged that it wasn't
22 entirely satisfying. What we would expect to
23 find is a higher evidence of contribution rather
24 than less, but that's just the hypothesis based
25 on what we've done.

70 (Pages 274 to 277)

Page 278

1   D. Smith
2   Q.   You've been to CompStat meetings;
3   right?
4   A.   I have.
5   Q.   Isn't it true at the meetings you've
6   been to, that one of the time periods of crime
7   statistics that they do look at for each command
8   is a 28-day period; correct?
9   A.   Yes.
10   Q.   So isn't it fair to say that some of
11   the deployment decisions, some of the decisions
12   commanders are making, are based on examination
13   of a monthly crime data set; correct?
14   MR. LARKIN: Objection to form.
15   A.   But here the distinction you made
16   earlier between deployment and practice is
17   relevant.
18   Q.   Do you think they're making
19   distinctions about practice based on a monthly
20   crime pattern in any respect?
21   MR. LARKIN: Objection. Are you
22   finished with your answer?
23   A.   They have those numbers up there,
24   but in every CompStat meeting I've attended, they
25   very quickly go to a discussion of very specific

Page 279

1   D. Smith
2   crime factoids, a particular small set of
3   incidents of violent crime that are of concern
4   and how does it connect to these others and what
5   is the pattern? And the patterns may extend
6   across months. They may focus on a very small
7   area within a precinct.
8   It provides sort of a standard
9   thing, but as you know, the crime statistics that
10   are presented on the website are weekly and
11   certainly weekly patterns are also part of the
12   conversation in CompStat. And now, not
13   infrequently, they bring several precinct
14   commanders to a CompStat meeting because the
15   crime that they're interested in seems to be a
16   pattern that cuts across precincts.
17   So it's an evolving, adapting kind
18   of way to use information about crime patterns
19   and not just, you know, an isolated -- as I said
20   earlier, a homicide is not necessarily a
21   homicide. They're much more interested in seeing
22   patterns of crime and it could be that a pattern
23   of homicides related to family disputes could get
24   a lot of attention, but it would be because there
25   have been a number of them and it would suggest

Page 280

1   D. Smith
2   that maybe the police in that precinct are not
3   handling family disputes in the way that other
4   precincts have learned to do it to reduce the
5   escalation of violence, but it wouldn't be a
6   single, whereas a single gang shooting puts up
7   all kinds of flags in terms of knowing that there
8   is a pattern within gang life of retaliation.
9   And so they use all of that information in their
10   discussion, their search for in the discussion of
11   crime patterns and their search for strategies
12   for dealing with it.
13   MR. HOFFMAN: Can I get that
14   question back.
15   (The record was read.)
16   Q.   And is the answer to that question
17   yes, but all the other stuff you said?
18   A.   It's among --
19   MR. LARKIN: Objection to form.
20   A.   -- a bunch of different things that
21   have come up in those meetings.
22   Q.   So I just want to make sure I've got
23   the list. So in terms of factors that need to be
24   considered in doing an analysis that accounts for
25   evidence-based management practices, we've talked

Page 281

1   D. Smith
2   about looking at crime patterns at a much smaller
3   geographical location than a precinct, that's
4   one. Right?
5   The second is looking at it in
6   various temporal aspects, month, week, three
7   months?
8   A.   Um-hum.
9   Q.   Are there other things in your view,
10   that would account for the evidence-based
11   management practices that an analysis would have
12   to include besides the two that I've just
13   mentioned?
14   A.   Well, I don't know where you would
15   put things like the fact that if crime is coming
16   down as dramatically as it has, the proportion of
17   the police responses that are the result of an
18   actual suspicion of a perpetrator of a crime is
19   going to decline because there are fewer crimes
20   being perpetrated. So in the mix of reasons why
21   stops are occurring, a low number of stops based
22   on descriptions of a perpetrator who just robbed
23   a bodega shouldn't be interpreted as evidence
24   that they don't have real reasons for stopping
25   people. That particular drop is entirely

71 (Pages 278 to 281)

Page 282

D. Smith

1   D. Smith
2 consistent with the fact that -- with the
3 evidence that crime is declining, so you would
4 expect fewer such circumstances to arise.
5   The business we discussed earlier
6 about how you interpret hits if your goal is to
7 prevent crime rather than you're just out there
8 catching people who have committed crimes.
9 That's why I object to Fagan's statement in his
10 response that a stop is a stop whether it's
11 proactive or reactive. I don't agree.
12   Q.   But on that point, in either case,
13 if it was proactive or reactive, doesn't it have
14 to be based on reasonable suspicion?
15   A.   I always stipulate that. If I need
16 to say it every time, I will.
17   Q.   Isn't the standard for reasonable
18 suspicion the same regardless of whether the stop
19 is reactive or proactive? What reasonable
20 suspicion is, under the law, is the same as far
21 as you know. Is there a different kind of
22 reasonable suspicion that's acceptable?
23   MR. LARKIN: Objection to form.
24   A.   In the report, he does call
25 attention to the fact that known suspect

Page 283

D. Smith

1   D. Smith
2 description is a small fraction as if that's a
3 problem. And I'm saying in connection with this
4 discussion on page 17, that not so much. That's
5 something we should find a way -- there's a sunny
6 side to that story.
7   Q.   Then I have a question about that
8 because -- and I agree with you, if suspect
9 descriptions are -- if it's not really a problem
10 that that's not the basis for most stops, then
11 why is using suspect data a valid benchmark?
12 That's what I don't get because that seems to be
13 a disconnect for me.
14   MR. LARKIN: Objection to form.
15   A.   Then I haven't been very clear
16 because I'm looking for a guy with a purple
17 polka-dotted tie. Is that what you're wearing?
18   Q.   Yes.
19   A.   That's a particular kind of suspect
20 we're looking for, he's just robbed a bodega,
21 versus there have been a whole bunch of smash and
22 grabs and here's a little old lady walking down
23 the street and there's somebody kind of following
24 along behind her looking really interested in her
25 bag. That's a general pattern of crime that has

Page 284

D. Smith

1   D. Smith
2 been occurring that people are alert to be on
3 guard against, and I'm never saying that this
4 pattern of suspect information that we think
5 should be used as a benchmark should be used by
6 officers in making a decision about stopping
7 somebody.
8   I'm just saying that after they have
9 been out there policing in the neighborhoods
10 we've sent them to police, that are
11 overwhelmingly the high crime areas and
12 overwhelmingly minority areas, that we should
13 not -- when we look at what is the
14 characteristics of the people that are stopped,
15 we shouldn't then say, "Oh, my goodness. You're
16 stopping Black people, Black males." We should
17 say, "Does that look sort of fishy based on" -- I
18 mean, if they were out there stopping women, we
19 would say they're up to something else. You
20 know, they may be trying to hit on them or
21 something like that, and that has been known to
22 happen in policing, but you know, it wouldn't
23 align with the pattern of crime that we know that
24 is happening by the people that suspects think
25 are perpetuating it.

Page 285

D. Smith

1   D. Smith
2   So I've never said that if I'm out
3 there on patrol, I should be using that kind of
4 data as my map to say, okay, you fit the profile
5 because you're Black and most -- because if that
6 were all they were going on, they would be
7 stopping everybody, every young Black male,
8 because they're Black and -- but that's not in
9 fact what's happening. A very small fraction of
10 the Blacks who are out there at the time the
11 police are out there over time are being stopped.
12   Q.   But an even smaller fraction of
13 white people who are out there are being stopped;
14 correct?
15   MR. LARKIN: Objection to form. Go
16   ahead.
17   A.   Do you know that they're out there?
18 I'm saying --
19   Q.   Is it your position that Black men
20 are out on the street more often during whatever
21 portion of the day you're talking about than
22 white people are? That's your --
23   MR. LARKIN: Objection.
24   Mischaracterizes.
25   A.   They certainly are in the

Page 286

```
 1                    D. Smith
 2   neighborhoods where the police are being deployed
 3   to deal with high crime problems.  And there are
 4   women out there too, and if they do something
 5   suspicious, we would expect the police to stop
 6   them.  But until women begin to be identified as
 7   the perpetrators of crime comparable to their
 8   proportion of the population, we shouldn't be
 9   surprised or think it's strange that they're not
10   stopped in the same proportion as males.
11        Q.   I'm going to come back to the gender
12   issue, but I want to ask you just again, just to
13   close this, in terms of factors that need to be
14   examined if you're doing an analysis of racial
15   disparities and stops that accounts for the
16   impact of evidence-based management practices,
17   we've now talked about looking at crime at a very
18   small geographical level.  We've talked about
19   looking at it at various temporal periods, very
20   very small periods, very larger periods.  We've
21   talked about the question of hit rates and how to
22   analyze their value.
23           Are there other pieces of evidence,
24   data, that need to be incorporated in your view
25   of doing an analysis of racial disparities and
```

Page 287

```
 1                    D. Smith
 2   stops that accounts for the evidence-based
 3   management practices?
 4           MR. LARKIN:  Objection to form.
 5        A.   That sounds like a pretty good list
 6   to me.
 7        Q.   I want to ask you then very quickly
 8   about your critique of the justified,
 9   unjustified, indeterminate coding that Professor
10   Fagan does.  I believe you say he should have
11   either -- first of all, you claim that he
12   combines the indeterminate and the unjustified
13   into one category.  Where in his report does he
14   do that?
15        A.   In his report?
16        Q.   Yes.  I mean, if it will help, I
17   think he discusses it on page 55, but I don't
18   know if that's what you were referring to.
19        A.   I believe it's later in the report
20   where he's sort of summing up or something like
21   that, where he lumps them together.
22        Q.   In the interests of time we will
23   look at the report.  It speaks for itself.  But
24   another question --
25        A.   I'm sure -- I made that allegation
```

Page 288

```
 1                    D. Smith
 2   to the lawyers.  I did find it.  Do you remember,
 3   Arthur where I found it?
 4        Q.   I don't want you to reveal any
 5   privileged communications.
 6        A.   But I know it's here.
 7        Q.   Okay.
 8        A.   If this were just an academic
 9   conversation, I'd send you an e-mail.
10        Q.   But my follow-up question is, I
11   believe you also, in your report, suggest that
12   what Professor Fagan should have done was
13   distribute the indeterminate stops proportionally
14   to the justified category and the unjustified
15   category, which would then result in 90 percent
16   of the stops being based on being justified and
17   10 percent being unjustified, is that right?
18        A.   Using his coding scheme?
19        Q.   Yes, using his coding scheme.  Do
20   you know of any statistical literature that would
21   justify that kind of extrapolation?
22        A.   Well, we're relying here -- this is
23   not a missing data problem.  The data are there.
24   It's a categorization problem, and we have --
25   we're using Professor Fagan's categorization
```

Page 289

```
 1                    D. Smith
 2   scheme.  So absent some evidence that suggests
 3   that somehow the ones that he couldn't categorize
 4   are examples of unconstitutional behavior, it
 5   seems to me a reasonable strategy is to
 6   distribute them in the same proportions where he
 7   could make the judgment.  It's not a statistical
 8   argument per se.  It's just a reasonable -- if
 9   you can -- you can drop them out entirely because
10   you don't know.  And then -- you just take it
11   out, and that would be one way to say here's the
12   ones we know, here's the ones we don't know, and
13   that would give you even higher than 90 percent.
14           So it's a reasonable -- given the
15   fact that this is your categorization scheme, it
16   didn't work for this percentage of the cases.
17   What do we do with that?
18        Q.   Okay.  Similarly, I wanted to talk
19   about a similar point you make with respect
20   Fagan's critique of using the suspect description
21   data.  Professor Fagan says that it's not
22   statistically sound to extrapolate from what he
23   concluded was only about 50 percent of the
24   reported crimes, to extrapolate the racial
25   breakdown of that to all of the reported crimes.
```

73 (Pages 286 to 289)

Page 290

D. Smith

1
2 And you disagree with that approach.
3   A. Um-hum.
4   Q.   I wanted to know -- I wanted you to
5 take a look at Professor Fagan's report. I
6 believe it's page 77. Professor Fagan says one
7 of the reasons he refuses to do that is because
8 he believes it will result in serious selection
9 bias and he cites a couple of articles in
10 Footnote 112 of his report.
11   And I guess my question for you is:
12 Do you know of any studies or have you conducted
13 any studies where you do extrapolate from less
14 than half of the data set, extrapolate something
15 about that half to the entire data set?
16   MR. LARKIN: Objection to form. You
17   can answer. Go ahead.
18   A.   I cannot give you a specific study.
19   Q.   Do you have -- have you read either
20 of the articles that Professor Fagan cites in
21 Footnote 112 of his report on page 77?
22   A.   I have not. While you're waiting,
23 I'll repeat that the analysis I see from the
24 Police Department is much higher than 50 percent.
25   Q.   It's more like 80; right?

Page 291

D. Smith

1
2   A.   Right, and not the 80 percent that's
3 missing that he said in his deposition.
4   Q.   With respect to the point you made
5 earlier about the hit rates and we shouldn't view
6 low hit rates as a sign of problems, I believe
7 you also make the point on pages 20 and 39 of
8 your report that the low hit rates are a sign to
9 you that the stop and frisk practices are causing
10 would be gun carriers to leave their guns at
11 home. Is that a fair statement?
12   A.   I do say that, yes.
13   Q.   Do you have any empirical evidence
14 that, in fact, what is causing would be gun
15 carriers to leave their guns at home is stop and
16 frisk practices?
17   MR. LARKIN: Objection to form. Go
18   ahead.
19   A.   Just that they are leaving their
20 guns at home.
21   Q.   How do you know they're leaving
22 their guns at home?
23   A.   Because they're not finding them on
24 them when they stop them and given the number of
25 shootings is going down, the number of crimes

Page 292

D. Smith

1
2 involving weapons is going down, all those seem
3 to point in the same direction and when you have
4 multiple measures that point in the same
5 direction, it's reassuring.
6   Q.   So you're assuming that some of the
7 people who are being stopped who don't have guns
8 on them, that some portion of them actually do
9 own guns, they just don't have them on them when
10 they're being stopped?
11   MR. LARKIN: Objection to form.
12   A.   Or would get guns if you could do it
13 with impunity. Some combination --
14   Q.   Is there empirical evidence that you
15 know of that supports your hypothesis that if
16 stop and frisk was less prevalent, some of these
17 folks would, in fact, go out and get guns?
18   MR. LARKIN: Objection to form. Go
19   ahead.
20   A.   Just in the bad old days when the
21 police were not proactively preventing crime,
22 there were far more shootings. We had
23 grandmothers putting their children in bathtubs
24 so they wouldn't get shot. The year that we had
25 2,257, or whatever it was, homicides that we had

Page 293

D. Smith

1
2 in 1990 -- the number of shots fired in New York
3 City, which is reported over time, has
4 dramatically declined as well.
5   All of those things suggest that the
6 combination of things that the police are
7 doing -- one of the major reasons why I had some
8 difficulty answering your question about what are
9 other police strategies are we controlling for,
10 is that basically what the police do is they go
11 out there and they still respond to calls. You
12 know, they still have a few other things that
13 they do, but one of the main things that they do
14 is they are out there being vigilant, and they're
15 being encouraged by management to do that.
16   Q.   I want to turn to pages 54 of your
17 report. Actually, I'm going to be looking at 54
18 to 63. If you want to look at them real quickly
19 and tell me, and I think you've already answered
20 this, you wrote pages 54 to 63 by yourself;
21 correct?
22   A.   54 how far?
23   Q.   To 63.
24   A.   Yes, I wrote this.
25   Q.   And the opinions and critiques

74 (Pages 290 to 293)

Page 294

1   D. Smith
2   contained in those pages, those are all your
3   opinions?
4   A.   Yes.
5   Q.   Are they anyone else's?
6   A.   I think probably Bob Purtell concurs
7   in them but these are my opinions.
8   Q.   So these aren't his opinions that
9   then you adopted?
10   A.   No.
11   Q.   On page 56, I believe you state that
12 Professor Fagan fails to provide clear,
13 conceptual and operational definitions of many of
14 the variables he uses in his analysis.
15   A.   Um-hum.
16   Q.   Which particular variables do you
17 feel he did to the provide clear, conceptual and
18 operational definitions of?
19   A.   He has this social condition sort of
20 variable which he didn't spell out. He has race,
21 which he defines variably in the course of the
22 study. Those are two big ones.
23   I had difficulty fully understanding
24 how he got to his characterizations as justified
25 and unjustified.

Page 295

1   D. Smith
2   Q.   Okay.
3   A.   Although he said it was explained,
4   it was not that clear to me. I've already
5   mentioned the fact that he acknowledges that it's
6   more complex than he can capture so he truncates
7   it, but it's not clear what he thinks the
8   implications of leaving some things out are.
9   He says that, in that sort of effort
10 to define "unjustified," there's sort of like a
11 second condition, but he doesn't say what
12 proportion of his unjustified were unjustified
13 because that second condition was missing, and
14 there's just some specificity that I was noticing
15 that was missing that troubled me.
16   Q.   Anything else? Any other variables
17 you felt he did not define clearly?
18   A.   I think those are the main ones.
19   Q.   I want to turn to page 61 of your
20 report very quickly and I want to ask you to
21 explain to me what certain things mean here.
22   A.   Okay.
23   Q.   The middle of the bottom paragraph,
24 you say "Standard practice would be to omit any
25 statistically insignificant variables that were

Page 296

1   D. Smith
2   not justified on a theoretical basis and at a
3   minimum, to report results with and without those
4   variables."
5   So my question to you is, what
6   variables that Professor Fagan used were not in
7   your view supported or justified on a theoretical
8   basis?
9   MR. LARKIN: Note an objection to
10   the form. Go ahead.
11   A.   He uses patrol strength, but patrol
12 strength, it seems to me, could be theoretically
13 connected to volume of stops. There's no
14 theoretical basis for thinking that patrol
15 strength is related with bias stops.
16   Q.   Let me interrupt you for a second.
17 What if what he's trying to figure out is the
18 volume of stops in a particular precinct or a
19 particular census tract? Would it then be
20 appropriate to look at patrol strength?
21   A.   It's a perfectly reasonable thing to
22 look at patrol strength at any unit of analysis
23 in relation to volume of stops. I have no
24 problem with that. But I do think the notion
25 that somehow some theory provides a basis for

Page 297

1   D. Smith
2   linking that to bias stops is sort of missing
3   here.
4   Q.   But if Professor Fagan wanted to
5   determine what is driving the volume of stops in
6   the 75th Precinct, would it be appropriate, based
7   on theory as far as you're concerned, for him to
8   include patrol strength in the 75th Precinct in
9   his analysis?
10   A.   But that wasn't -- this study that
11 he was presenting us was not about volume of
12 stops. It was about volume of unjustified stops.
13   Q.   I disagree with you, but let's
14 assume for the sake of my question that he was
15 just trying to --
16   A.   He was saying that the volume of
17 stops alone was --
18   Q.   No.
19   A.   I'm sorry.
20   Q.   Let's just assume that he was trying
21 to figure out the volume of stops in all the
22 different precincts and compare volume of stops
23 in one precinct to volume of stops in another.
24 If that's the analysis he was doing, let's assume
25 he wasn't trying to measure bias, would it be

75 (Pages 294 to 297)

Page 298

1   D. Smith
2   appropriate in your view for him to use patrol
3   strength in that analysis?
4   A.   No.
5   MR. LARKIN: Objection to form.
6   A.   There's at least some connection,
7   but again, missing here is any discussion of how
8   many stops does it take to stop crime, to prevent
9   crime, to send a message that --
10   Q.   That's not my question.
11   A.   I'm sorry?
12   Q.   That's not my question. My question
13   is simply --
14   A.   But it's part of the question. What
15   is the theory that says that the number of police
16   is going to predict by itself the volume of
17   stops?
18   Q.   But I'm asking, should it be one of
19   many variables to include in an analysis of
20   volume of stops between precincts?
21   A.   If it is adequately explained and if
22   it is -- if it is explained in -- it's not
23   endogenous in the sense that if the reason why we
24   have more police there is because there's more
25   crime, and then there are more stops, is it

Page 299

1   D. Smith
2   because there's more crime or because there's
3   more cops? And so without saying how you are
4   going to use theory to make sense out of what you
5   find with your data analysis, there's a problem.
6   Q.   Okay. The other question I want to
7   ask you about page 61 is the sentence, "It is
8   difficult to assess Professor Fagan's findings
9   because he does not link the signs and
10   significance of each control variable to what is
11   expected based on theory."
12   That statement that you make, is
13   that based on your review or training in
14   statistics?
15   MR. LARKIN: Objection to form.
16   A.   This is something that I was trained
17   in statistics, but I had a refresher course in my
18   conversations with Bob Purtell and with Erika
19   Martin, and Kathleen. And while I wrote this, I
20   can't deny that their discussion of these issues
21   with me probably revived my concern and
22   recollection that an appropriate sort of
23   presentation of these kinds of findings will sort
24   of explain if you, as Professor Fagan does, and
25   this part is appropriate, looks at the data

Page 300

1   D. Smith
2   several different ways. If things shift, if
3   they're -- if you go from one level of analysis
4   to another, and there's a say bigger than 10
5   percent shift in the strength of a coefficient or
6   if there's a shift in the sign of the
7   coefficient, do you just walk on by, or do you
8   say what is going on here? What is happening
9   here that would explain the fact that when I look
10   at this this way, these variables that were
11   aligned in a particular way in an earlier
12   analysis are now aligned in a different way?
13   And that's the sort of thing that it
14   seems to me a helpful, more fully transparent
15   presentation of findings provides. So that's
16   what this addresses.
17   Q.   Just incidentally, you don't have
18   any degree in statistics; correct?
19   A.   No, I don't.
20   Q.   Have you taken any graduate level
21   courses in statistics?
22   A.   I did in my Ph.D. program, yes.
23   Q.   Since your Ph.D. program, have you?
24   A.   No.
25   Q.   Have you taken any courses in

Page 301

1   D. Smith
2   econometric analysis?
3   A.   No.
4   Q.   Have you taken any courses in
5   probability theory?
6   A.   No.
7   Q.   Applied regression analysis?
8   A.   No.
9   Q.   Stochastic modeling?
10   A.   No.
11   Q.   Sampling theory?
12   A.   No.
13   Q.   Game theory?
14   A.   No.
15   Q.   Or spatial regression?
16   A.   Your question is have I taken any
17   courses?
18   Q.   Yes.
19   A.   The answer is no.
20   Q.   Have you studied any of those
21   concepts on your own?
22   A.   Yes.
23   Q.   How did you study them?
24   MR. LARKIN: Objection. Break it
25   down. Go ahead, give him a narrative.

76 (Pages 298 to 301)

Page 302

1   D. Smith
2   A.   In the course of being a scholar in
3   this field, many of the studies, including
4   Fagan's and others, used many of those kinds of
5   forms of analysis and we have presentations of
6   almost all the people presenting as candidates
7   for faculty appointment at the Wagner School in
8   the last 15 years, who present statistical
9   analysis using these techniques. And I sit
10 through and I evaluate their presentations and I
11 hear my colleagues' evaluation of their
12 presentations, and many of them, like Erika
13 Martin and Kathleen, are recent products of
14 economics programs, MIT's analytic programs, so
15 I'm emersed in a milieu where these concepts are
16 regularly being discussed. So is that a course?
17 No.
18   Q.   Have you ever read any books,
19 statistical textbooks, to familiarize yourself
20 with any of the concepts I've just mentioned?
21   A.   I have on occasion referred to
22 Blalock's Social Statistics, which I used in
23 graduate school. I have looked at some of these
24 concepts on the web and read accounts of them,
25 but I haven't taken a course.

Page 303

1   D. Smith
2   Q.   The last couple of questions about
3   this section of your report. The point about the
4   control variables, is it your position -- I just
5   want to make sure I understand that when doing a
6   multi-variate regression analysis, that it's
7   necessary to compare the statistical significance
8   of the control variable with the independent
9   variable that you're actually testing?
10   A.   Maybe it's late in the day, but I
11 didn't quite understand the question. Can you
12 repeat it again.
13   Q.   I thought on page 61 you said that
14 Professor Fagan failed to link the signs and the
15 significance of each control variable. I guess
16 my question is: In your understanding of
17 multi-variate regression analysis and the purpose
18 of a control variable in that type of analysis,
19 is it necessary always to compare the level of
20 statistical significance of the control variable
21 with the level of statistical significance of the
22 independent variable that you're testing for in
23 terms of the correlation with the dependent
24 variable?
25   MR. LARKIN: Objection to form.

Page 304

1   D. Smith
2   A.   I think that that is -- looking at
3   the performance of different variables is a
4   standard feature of this whole process of
5   analysis, and again, with this particular data
6   set, when you have -- is it a million, 2 million
7   cases? -- if you have 2 million cases, the
8   smallest little difference can be statistically
9   significant.
10   I mean, if you have 75 cases, 76
11 cases, or if you're doing an analysis of a
12 smaller number, it takes a much bigger difference
13 to be statistically significant. So if you
14 change your -- if you shift the analysis and
15 something that was significant becomes
16 insignificant, if it was twice as big as it was
17 before, if the sign changes, it usually raises
18 some questions. It says tell us what this is
19 about; does it mean anything or is it not
20 clinically significant?
21   Q.   So in your view, when you do a
22 multi-variate regression analysis, it's important
23 that you do compare the level of statistical
24 significance of the control variable with the
25 level of statistical significance of the

Page 305

1   D. Smith
2   independent variable?
3   A.   And every other aspect of the other
4   variables, strength and sign and so forth.
5   Q.   Is that something you learned in the
6   training you have received on statistics?
7   A.   Yes, I assume so.
8   Q.   Have you read any articles or books
9   that say that?
10   A.   Not specifically, no.
11   MR. CHARNEY: I want to introduce
12 this as Exhibit 5.
13   (Smith Exhibit 5, Supplemental
14 Report of Jeffrey Fagan, marked for
15 identification.)
16   Q.   Dr. Smith, did you get to review
17 Exhibit 5?
18   A.   Is this the supplemental report?
19   Q.   Yes.
20   A.   Will you stipulate it's the
21 supplemental report.
22   Q.   I'll stipulate this is the true and
23 accurate copy of Professor Fagan's supplemental
24 report in this case. Have you reviewed this
25 document?

77 (Pages 302 to 305)