

Do Police Matter? An Analysis of the Impact of New York City's Police Reforms

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EXECUTIVE SUMMARY

This study evaluates explanations that have been advanced for the sharp decline in crime in New York City during the 1990s. The authors consider arguments that crime drops have been the result of socio-economic factors, such as an improving economy, falling numbers of teenaged males, and declining use of crack cocaine. They also consider the argument that police interventions—particularly the enforcement of laws against minor crimes, known as “broken windows” policing—played a major role.

The study concludes that:

- “Broken windows” policing is significantly and consistently linked to declines in violent crime.
- Over 60,000 violent crimes were prevented from 1989 to 1998 because of “broken windows” policing.
- Changes in the number of young men of high-school age were not associated with a decline in violent crime.
- Decreasing use of crack cocaine was also not associated with a decline in violence.
- Other changes in police tactics and strategy may also be responsible for some of the City's drop in crime. Case studies conducted in six City police precincts in 2000 show that precinct commanders often use “Compstat” technology to identify when specific types of crime, such as robberies or burglaries, become unusually serious problems. Incidences of such crimes often fell after the commanders employed specifically devised tactics to combat the identified problem.
- As implemented by the NYPD, “broken windows” policing is not the rote and mindless “zero tolerance” approach that critics often contend it is. Case studies show that police vary their approach to quality-of-life crimes, from citation and arrest on one extreme to warnings and reminders on the other, depending upon the circumstances of the offense.

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The opinions expressed in this document are those of the authors and do not necessarily reflect those of the NYPD, the Manhattan Institute, or the NYC Mayor's Office.

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DO POLICE MATTER?

AN ANALYSIS OF THE IMPACT OF NEW YORK CITY'S POLICE REFORMS

Introduction

Over the last decade, crime rates in New York City plunged. Between 1990 and 1998, murder declined by over 70%, robbery by over 60%, total violent offenses by over 50%, and total property felonies by over 60%. These declines were the steepest ever recorded. Indeed, the slide in murder was so abrupt that it significantly affected the national murder rate.

Exactly *why* so many people stopped committing crimes remains a matter of contentious dispute. Some argue that the New York City Police Department deserves the lion's share of the credit. In their view, changes in police strategy and tactics initiated by Mayor Rudolph Giuliani and his first Police Commissioner, William Bratton, changed the behavior of New Yorkers by educating and warning citizens, and by citing and arresting offenders.

On the other side of the debate are those who have tried to annul the claim that police deserve major credit for the crime decline. Pointing to crime declines in other cities, such as San Diego and Boston, these critics argue that crime drops must be explained by factors common to all these cities—e.g. an improving economy, smaller numbers of the teen-aged males who most frequently commit violent crimes, and a reduction in the use of crack cocaine. Other critics concede that police practices did reduce crime, but maintain that they did so at the unacceptable cost of brutality, especially towards African Americans and other minorities.¹

Which side is right? Despite the importance of the answer to this question, there has to date been no systematic attempt to statistically parse out the relative contributions of police actions, the economy, demographics, and changing drug use patterns on crime. In Section 1 we consider the general question, "Do police matter?", and show how various answers to that question, over the past few decades, have cre-

ated the rancorous controversy which this study attempts to resolve. Section 2 presents the design that we have adopted to give what we believe will be the most-definitive possible answer to the question of whether police mattered in New York City during its intense crime-drop. Section 3 statistically tests competing hypotheses: that the crime drops were the result of police actions, demographics, the economy, and changing drug use patterns. Section 4 supplements the statistical analysis with empirical observation of police practices in six precincts, and uses these observations to assess claims that police have mattered, but at too high a cost. In the Conclusion we discuss the implications of our findings.

The Question: Do Police Matter?

Do police matter? Can they prevent crime? The long-prevailing view was spelled out in the famous "Principles of Law Enforcement" of Sir Robert Peel, founder of London's Metropolitan Police (Scotland Yard). "The basic mission for which the police exist," Peel wrote in 1829, "is to prevent crime and disorder." Accordingly, Peel proposed that the test of police efficiency should be "the absence of crime and disorder, not the visible evidence of police action dealing with them."²

As Peel's model of Anglo-Saxon policing was adopted in U.S. cities during the 19th century, this assumption prevailed as well. Police could prevent crime by their presence, by persuasion, by reducing opportunities for crime, and by law enforcement—arresting wrongdoers. Although U.S. policing narrowed its focus almost exclusively to law enforcement during most of the 20th century—or at least tried to—few police doubted that police really mattered in crime control.³

In the 1950s, however, researchers began to ask basic questions about the police "business"—what they did and what it accomplished. Initially, they stud-

ied “the law in action,” focusing on “what police actually did.”⁴ These police-function studies showed that police actually spent most of their time providing services, such as managing disputes, rather than “fighting crime.”⁵ Later, during the 1970s, research on widely practiced tactics—including rapid-response calls for service and automobile patrols—suggested that these tactics had little, if any, significant impact on crime.⁶

These empirical findings became grist for the mill of new theorists who posited that crime was the result of collective “root causes” like social injustice, racism, and poverty. The practical implication of such root-cause theory was that crime could only be prevented if *society itself* were radically changed. These views became memorialized in President Lyndon Johnson’s Commission on Law Enforcement and Administration of Justice and became the virtual dogma of criminal justice thinking. In academia, many scholars wedded this root-cause thinking to the empirical research: e.g., police, as *the research shows*, can have little impact on crime. All police and criminal justice agencies could do was react to crime after it occurred—much like firefighters reacting after the outbreak of a fire. When it came to *preventing* (and thus reducing crime), police did not really matter.⁷

Though root-cause theory dominated official criminology during the 1970s and 1980s, the consensus was not absolute. A dissenting movement of criminologists wondered whether the root-cause theorists, in their “de-policing” of crime control, had not perhaps thrown out the proverbial baby with the bathwater. Indeed, without really anyone being aware of it, the groundwork was slowly and quietly being laid for a return, in the 1990s, to an updated “Peelist” model. This new model accepted the empirical research, but interpreted it against a background theory which retained Peel’s time-honored assumption. Rather than concluding from effectiveness-studies that policing did not matter, these dissenting theorists incorporated the empirical findings into several “big ideas” that might make police matter more effectively. Three of these ideas in particular greatly influenced police work in New York City during the Giuliani years.⁸

The first was the idea of “problem solving,” advanced by Professor Herman Goldstein of the University of Wisconsin Law School. Goldstein—who had been among the first empirically-oriented police theorists⁹—argued that the proper business of police was *problems*, not incidents. Response-oriented policing,

in Professor Goldstein’s view, approached police work as a series of disconnected incidents that had neither history nor future. In fact, most police incidents had both: they had evidenced themselves before in one form or another and likely would re-surface in similar terms. Thus, incidents of spousal abuse, noisy and boisterous bars, prostitution, burglary, to give just a few examples, were often, in reality, signs of an ongoing problem that, if suitably addressed by police, could be managed or solved.¹⁰

The second idea, “Broken Windows,” was formulated by Professor James Q. Wilson (then at Harvard and later at the University of California, Los Angeles) and George Kelling (one of the authors of this report). Wilson and Kelling suggested that failure to control minor offenses such as prostitution and disorderly conduct destabilized neighborhoods by creating a sense of public disorder. Pushing the theory further, Kelling and Wilson argued that people were likelier to turn to crime in neighborhoods where toleration of petty crimes—such as graffiti-scrawling and window-breaking—indicated a lack of effective social control. Restoring order, Wilson and Kelling argued, would not only reduce neighborhood fear, but would substantially reduce crime. In 1989 Kelling worked with New York City transportation authorities and later in 1990 with Transit police chief William Bratton to implement the “broken windows” theory in the New York City subways—and when Bratton became NYPD chief in 1994, he moved to make the theory part of standard NYPD practice.¹¹

The third innovation was a new way of managing police resources and tactics, known as “Compstat.” Implemented by Bratton when he became NYPD police chief—and subsequently adopted by police departments across the country—Compstat was perhaps the single most important organizational/administrative innovation in policing during the latter half of the 20th century. Like other managers of large, geographically dispersed organizations, Bratton had faced the problem of how to ensure that his centralized vision of policing was carried out in all 76 NYPD precincts. To solve this problem, Bratton invested enormous authority in precinct commanders, devolving both resources and decision-making to the precinct level. He also mandated weekly planning meetings, in which precinct commanders had to both identify problems and discuss their plans for dealing with them. This administrative mechanism focused the NYPD on substantive community problems, rather than traditional bureaucratic

machinations. Precinct commanders, previously preoccupied with what happened at One Police Plaza (central police headquarters), riveted their attention on their precincts: Woe be it to the precinct commander who wasn't on top of her/his precinct's problems. These changes reoriented not only precinct commanders, but borough chiefs and top commanders as well: If precinct commanders looked bad, it reflected on the borough chiefs, and so on up the line.¹²

Shortly after Bratton implemented these new ideas, crime in New York City began its historic dive. Virtually everyone was caught off guard. Academic criminologists were especially confounded, for their root-cause theories had predicted the exact opposite: the "echo baby boom" was going to turn loose a new generation of predators on cities.¹³

The failure of these predictions to come true—and the apparent success of Bratton's "police-do-matter" strategies—created something of a furor in academic criminology. As early as the fall of 1995, the debate about the causes of the decline in crime surfaced at the annual meeting of the American Society of Criminology, and the next six years saw a prodigious scholarly output on the subject of New York's crime drop.¹⁴

Rejecting the idea that police mattered, academic criminologists proposed a host of other reasons to explain the city's crime decline. Running through many of these analyses were assumptions that the improved economy and labor market created opportunities for youths who were previously tempted by drug dealing.¹⁵ Specific explanations included:¹⁶

- The declining use of "crack cocaine";¹⁷
- The decreased number of youths in the population;¹⁸
- The changing values of at-risk youth;¹⁹
- Not certain what the cause was, but in New York it was not linked to broken-windows policing;²⁰
- Police probably played a role, but at the unacceptable cost of aggressive "stop and frisk" activities—an aberration of broken windows tactics;²¹
- Cannot be certain, every explanation has strengths and weaknesses;²²
- Police practices, especially targeted at guns and street drug dealing;²³
- The increased legitimacy of social institutions (family, education, etc.);²⁴ and,
- The "books are being cooked" (the NYPD is falsifying crime statistics).²⁵

While many hypotheses were advanced, few have yet been statistically tested. This has been due in part to difficulties inherent in any such assessment. Because scientific measuring mechanisms were not in place when trends so powerfully reversed, it is impossible to use random assignment, or differential application of interventions, to isolate precisely what worked. There is also what social scientists call "the problem of causation": just because a policy (e.g. policing) *correlates* with a result (e.g. a drop in crime), it does not necessarily follow that this policy *caused* that result. For these and other reasons, the debate over the crime-drop has, so far, generated more heat than light.

Nevertheless, our understanding of this phenomenon can be improved. We can reconstruct the history of the events; use whatever relevant data are available; make judgments about the reliability of the data, and analyze them carefully; test plausible interpretations; select what seem to be the most credible explanations, and eliminate unconvincing explanations. Accordingly, in the following section, we present and explain the model which, we believe, yields the most definitive possible assessment of whether police tactics—particularly, "broken-windows" policing—explain recent crime trends in New York City.

Measuring the Impact of Police

This study differs from earlier studies in four important ways.

First, while most studies examine crime data in some respect, few examine crime in relation to other factors. The current research includes a combined analysis of one measure each of criminal activity, police activity, economics, demographics and drug trends.

Second, most researchers utilize homicide as the sole outcome measure when examining factors that influence crime rates.²⁶ Scholars justify this because murder is the most likely to be reported and recorded crime, thus making it a proxy for violent crime. However, the mistake is that while homicide may be the most *reliable* measure of crime (particularly violent crime), it is not necessarily the most *valid* measure because it occurs so infrequently. To overcome this flaw in previous research, this study includes an outcome variable that captures a wider spectrum of criminal activity—violent crime (a composite of four violent offenses: murder, rape, felonious assault, and robbery).

Third, previous explanations of crime reduction in New York often suffer from one of two disadvantages: either they consider NYC with an unsuitable comparison (such as another city or the nation as a whole) or they consider NYC with no comparison at all. Yet, without a suitable comparison, it is difficult to separate the relative impact of one intervention (police tactics) from competing effects (demographics, economy, etc.). To overcome this difficulty, we simulate comparison groups. Rather than one entity, we view New York as 76 separate "cities," corresponding to the 76 police precincts.²⁷ These "cities" vary considerably economically, demographically, and socially, but they all received police interventions in unison from 1993 to the present. Therefore, if citywide data patterns that support police strategies generally hold for precincts (regardless of the precincts' economic, demographic, or social characteristics) then arguments supporting the importance of police activity will be considerably strengthened.

Finally, our study differs from the rest in that it includes fieldwork in the NYPD—a notable gap in other research. The six precincts that were sampled for this stage of the research were selected by the NYPD from six of the eight patrol boroughs: the 6th Precinct in Manhattan South (Greenwich Village), the 34th Precinct in Manhattan North (Washington Heights), the 43rd Precinct in the Bronx (Soundview and Parkchester), the 67th Precinct in Brooklyn South (Flatbush), the 75th Precinct in Brooklyn North (East New York), and the 114th Precinct in Queens North (Astoria).²⁸ We, frankly, are troubled by researchers or policy analysts who generalize about police practices from data drawn from secondary sources without familiarity with the dynamics of police departments, the nature and style of police tactics, the ways in which data are collected, or the overall context of police practices in which specific actions, activities or tactics take place. The police phrase, "you hadda be there to understand," can cover a multitude of sins, but it still makes an essential point: few incidents are understandable apart from their context. The purpose of methodical observation is not only to collect original data, but also to understand what data *mean*, including data collected from secondary sources.

Secondary Data

Our first set of analyses combines data from a variety of secondary data sources to capture key policing, economic, demographic, and drug use patterns over time from 1989-1998. This will be the primary data-

base used for the analysis. Although our goal was to get precinct level data for each factor, some data were not available at a precinct level. We still use these data, although we are cautious in interpreting the results. The following describes the data sources and the constructs they measure.

Official Police Data and Constructs: We obtained official data from the NYPD's Office of Management, Analysis and Planning (OMAP). The NYPD Complaints and Arrests Statistical Reports (CASR) contain, among other information, the following broken down by precinct of occurrence: reported crime for felonies and total misdemeanor arrests.²⁹

Demographic Data and Constructs: We also obtained 1990 census data at the precinct level. Within these data are key demographic variables that have been offered as possible contributors to NYC crime reduction. However, projections of precinct level census data for each year of the decade do not exist, and Census 2000 data at the precinct level were not available at the time of this writing. To proxy the changing population of youth in the precincts, school enrollment data for each year in the 90s has been gathered from the New York City Department of Education and the New York Police Department's Division of School Safety.

Economic Data and Constructs: Also within the 1990 census data are key economic indicators that have been offered as alternative explanations for the crime drop in NYC (unemployment, etc.). As with demographic variables, however, precinct level economic data over time do not exist. Nevertheless, economic data for each year of the last decade are available at the borough level from the N.Y. State Department of Labor and the U.S. Bureau of Labor Statistics. Although these data cannot be disaggregated to the precinct level, they can give an indication of borough level economic influences on precinct crime statistics.

Drug Data and Constructs: Precinct level drug use patterns are difficult to determine.³⁰ However, drug use patterns at the borough level are monitored by the New York State Department of Health, Bureau of Biometrics (NYDOH). NYDOH data record, among other information, hospital discharge information for different types of drug use. These data have been gathered at the borough level over time and will serve as the proxy measure of drug use in the database. As with the economic data, the drug use data cannot be disaggregated to the precincts, but they can show borough level influences on precinct crime.

Regression analysis is the primary statistical technique used at this stage of the research. Regression utilizes the relation between variables to determine the extent to which a dependent variable can be predicted given a set of independent variables. The dependent variable for statistical analyses is complaints of “total violent crime”—a variable captured by the NYPD’s CASR that is a composite of four violent offenses: murder, rape, robbery, and felonious assault.³¹

The independent variables consist of one measure each of policing efforts, economics, demographics, and drug use trends. The policing-effort variable is a measure of “broken-windows policing” (arrests for misdemeanors).³² The economic variable is a measure of unemployment. The demographic variable is a measure of youth population (young males enrolled in public high schools). Finally, the number of hospital discharges for cocaine-related hospitalizations is our measure of drug use trends.

Observational and Interview Data

The analyses described above are designed to determine the contribution of “broken windows” policing, relative to alternative explanations, in the reduction of crime. But while “broken windows” policing is the most publicized tool utilized by the NYPD, it is not the only one. In fact, NYPD crime reduction is a complex process of problem-solving initiatives.

Unfortunately, it is much more difficult to statistically model the impact of the NYPD’s other initiatives. That is because they rely on a theory that police tactics need to be flexible to specific crime-related problems as they are identified via the Compstat system. Since the problems and tactics are constantly changing, there is no single measure of police activity that can be used as a proxy for these other initiatives in the same way that the number of misdemeanor arrests can be used to proxy the implementation of “broken windows” policing.

To assess these other initiatives, our study incorporates observational and interview data, independently collected by project staff. Over the course of year 2000, researchers conducted case studies of six NYPD precincts. These case studies monitored the major crime problems in the precincts, along with decisions made to address the problems. Information was gathered from:

- Interviews and focus groups with officers;

- Observations of department, borough, and precinct strategy meetings; and,
- Observations on police ride-alongs.

The purpose of the case studies was to monitor the major crime problems in the precincts, along with decision-making processes that occur at each level of the organization in order to address those problems. The data provided in the case studies test whether problem-solving and crime-prevention techniques were conducted by precinct officers of all ranks in broader terms than “broken windows” policing.

Our strategy is to develop an understanding of the effectiveness of problem-solving at the precinct level. An argument can be made that a downward trend in a particular crime type that is accompanied by specific strategic analysis, planning, and implementation is an historical coincidence—perhaps a downward trend in that crime type would have happened without such strategizing as the result of alternative explanations. However, in identifying numerous instances where downward trends appear linked to specific problem-solving strategies, regardless of crime type or precinct of occurrence, the number of “coincidences” begins to grow. In this sense, the precincts serve as comparisons for each other—as the “coincidences” grow, there is cumulating evidence in support of problem solving at different levels of the precincts.

This research strategy for cumulating evidence is based on the notion of “realistic cumulation.”³³ This notion argues that in order to accumulate evidence of program effectiveness through replication, one need not replicate the program exactly.³⁴ Instead, it is more useful to examine the program abstractly, focusing on its core mechanisms (M), the context in which it is being implemented (C), and its intended outcomes (O). Using the MCO configuration, the spirit of a program can be replicated by modifying its mechanisms to fit different contexts. If the modified mechanisms in the different contexts regularly produce the predicted outcomes, then one can reasonably assume that the larger program had its intended causal impact. Applying this configuration to the current study, precinct problem-solving tactics arrived at through the problem-solving strategy (M), modified according to the particulars of the crime problem in the specific precinct (C), should produce a reduction in the intended crime problem (O). In the following section we present our findings and analyses along these lines.

The Impact of "Broken Windows" Policing

Violent crime (murders, rapes, felonious assaults, and robberies) increased substantially during the late 80s and early 90s in New York City. They then, as Figure 1A indicates, began a slow decrease, followed by a more dramatic decrease that continued through the end of the decade.

Figure 1A also displays misdemeanor arrests, a proxy of the "broken windows" policing practiced during the Giuliani/Bratton era. We find that these policies, as represented by the increase in arrests for misdemeanors were a significant source of the crime decline. A cursory examination of crime data suggests that this belief has merit. Figure 1A shows that as misdemeanor enforcement increased, violent crime decreased. Of course, it can be argued that this pattern is simply an historical coincidence: drug trends, demographic shifts, or economic forces were the real foundations of the change.

As noted earlier, a major difficulty with sorting out these competing claims lies with the fact that no adequate comparison exists for New York City. We believe, however, that we can simulate comparison groups. Rather than one city, we view New York as 75 separate entities, corresponding to the 75 police precincts. The average precinct has nearly 100,000 residents—the population of a small city.³⁵ Precincts, like cities, differ greatly economically, socially, politically, and demographically. Where the precincts do not differ however, is that they implemented the Giuliani/Bratton police interventions at approximately the same time and in the same manner. To be sure, the interventions were tailored to fit the characteris-

tics of each precinct. Nevertheless, the basic philosophy regarding policing in each precinct was essentially the same. Figures 1B and 1C illustrate this point using two very different communities as examples.

Figure 1B displays the same variables of 1A but localized to Brooklyn's 67th precinct (Flatbush). Figure 1C displays the pattern in Manhattan's 6th precinct (Greenwich Village). Flatbush and Greenwich Village are two very different places (see Table 1). Although it has some commercial and industrial

Figure 1A: Violent Crime vs. Misdemeanor Arrests, NYC, 1989–1998

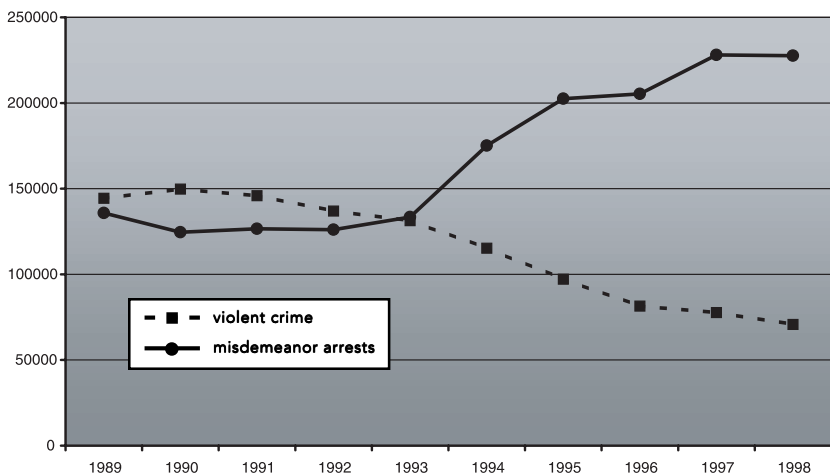


Figure 1B: Violent Crime vs. Misdemeanor Arrests, 67th Precinct (Flatbush), 1989–1998

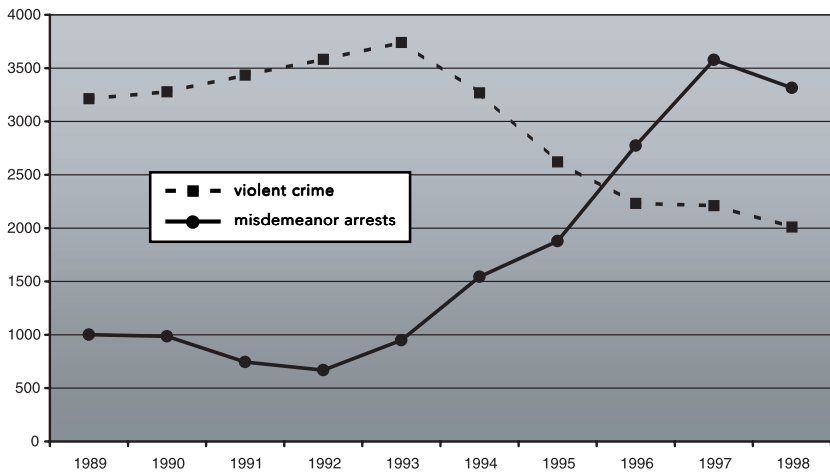


Table 1: 6th Precinct and 67th Precinct Comparison
(Based on 1990 Census)

	6 th Precinct (Greenwich Village)	67 th Precinct (Flatbush)
Square Miles	.79	3.4
Total Population	65,668	161,261
Percent Non-White	14%	97%
Median Age	37	31
Percent over 24 with College Degree	66%	13%
Per Capita Income	\$40,715	\$11,815
Percent Families below Poverty	3%	14%

sections, Flatbush is primarily a residential community made up of mostly working class, minority neighborhoods. Greenwich Village, in contrast, is one of the city's more affluent communities known for its liberal politics, entertainment industry, and student life (including the main campus of New York University).

An examination of the violence trends from 1989—1998 also reveals great differences between the two precincts. The 67th precinct is a community that was devastated by violence, crime, and drugs (particularly crack-cocaine) in the late 80s. With a peak of 3,741 violent incidents in 1993, the 67th was among the city leaders in violence—a position it occupied throughout the 90s. This is not the case in the 6th precinct. Serious offenses, particularly violent offenses, have never been a great problem there relative to other areas of New York—a total of 1,158 crimes of violence in 1993 ranked the 6th precinct in the bottom third of violent crime precincts in the city. In addition, by all accounts the crack-cocaine problem in the 6th was far less serious than in other communities.

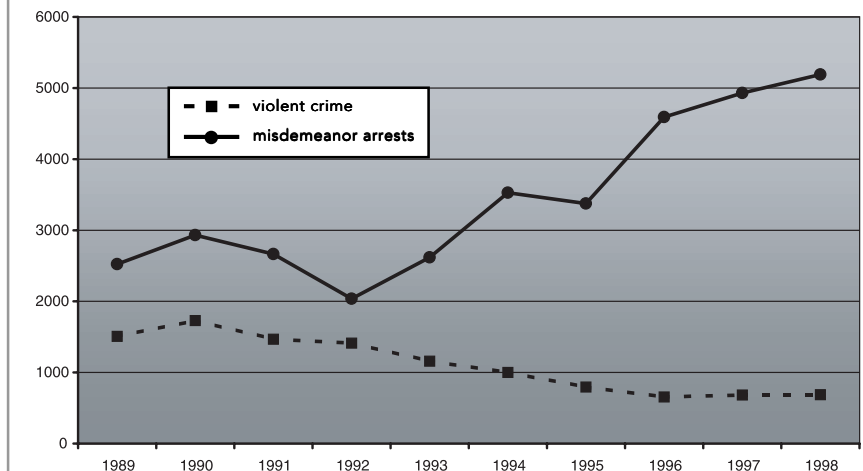
Yet, despite these differences, Figures 1B and 1C reveal similarities in their violent crime trends. In both precincts, arrests for misdemeanors increased, reflecting the policy change geared toward order-maintenance. Also in both precincts, offenses for violent

crime decreased at roughly the same time “broken windows” policing began. The pattern in each precinct is similar to the city as a whole.

The point here is that the *order-maintenance increase-violent crime decrease* relationship viewed at the citywide level (Figure 1A) also presents itself in two distinct precincts that are located in two very different areas of the city (Figures 1B and 1C). In fact, this relationship, or a variation of it, displays itself in nearly all precincts over the same ten-year period.

To be sure, not every precinct displays this pattern, nor is one precinct's trend the same as any other.³⁶ Nevertheless, regardless of crime rate, politics, culture, economy, or demography, precincts generally experienced a similar pattern at the predicted time. If the *order-maintenance increase-violent crime decrease* relationship was an historical coincidence at the citywide level, could it be that, in actuality, numerous historical coincidences are occurring? We think it much more likely that the “broken windows” policies instituted by Bratton—and continued by subsequent police chiefs—had a substantial impact on crime and violence in all areas of the city. In the following, the citywide *order-maintenance increase-violent crime decrease* relationship is demonstrated statistically.

Figure 1C: Violent Crime vs. Misdemeanor Arrests, 6th Precinct (Greenwich Village), 1989–1998



Statistical Analysis

As discussed in the previous section, regression analysis utilizes the relation between variables to determine the extent to which an outcome (or “dependent”) variable can be predicted given a set of independent variables. Hierarchical linear modeling is a type of regression analysis that can be particularly useful when data are structured into different levels of aggregation.³⁷ In this analysis, we consider two levels of aggregation: time and precinct.

For our purposes, we employ hierarchical linear modeling to examine change over time in our dependent variable—violent crime in a precinct.³⁸ We also include four predictor (or “independent”) variables that have been offered as popular explanations for crime declines: first, a measure of “broken windows” policing, represented by a precinct’s arrests for misdemeanor offenses; second, a measure of demographics, represented by the number of males enrolled in public high schools in each precinct;³⁹ third, a measure of drug use, represented by the borough’s number of hospital discharges for cocaine-related incidents, and; fourth, a measure of economy, represented by the

borough’s number of unemployed. The general trend for each of these variables in three key years, 1989, 1993 (the year before Giuliani and Bratton’s crime program began to be implemented), and 1998, is listed in Table 2. This model is designed to take into account precinct characteristics and their influence on violent crime over time.

The first step of the analysis is to estimate the unconditional model.⁴⁰ An unconditional model contains no predictor variables. It is used primarily to gauge the importance of the two class variables (time and precinct) on the dependent variable of violent crime before the introduction of the independent variables. In essence, this model examines if, statistically speaking, violent crime in precincts did indeed decline over time.

Table 3, which provides the results of the unconditional model, identifies several points of interest. First, examining the top half of the table, the coefficient of 1534.11 indicates precincts’ estimated average for violent offenses at the first observation point (i.e. the starting point of the average regression line for each precinct). The negative coefficient for the slope indicates that on average, violent crime in each precinct decreased over time. These statistics simply confirm what many have observed in New York—on average, every precinct has benefited from a decrease in crime and violence. The bottom half of Table 3 examines the variation between precincts in terms of violent crime over time. The finding of statistical significance for the intercept indicates that precincts vary significantly in terms of violent crime at the initial observation point.⁴¹ Additionally, the statistical significance of the time slope indicates that precincts differ in terms of the stability of their crime reductions. In other words, crime declined in some precincts relatively steadily, while in others it fell more jaggedly, in starts and spurts.

Table 2: Predictor Variables

	1989 (mean)	1993 (mean)	1998 (mean)
<i>arrests for misdemeanor offenses</i> (precinct mean, N = 75)	1811	1779	3034
<i>young males</i> (precinct mean, N = 75)	1639	1847	1921
<i>hospital discharges for cocaine-related episodes</i> (borough mean, N = 5)	1345	2631	2315
<i>unemployed</i> (borough mean, N = 5)	37960	67080	55280

Table 3: New York’s Violent-Crime Decline Was Statistically Significant

<i>Fixed Effect</i>	<i>Coefficient</i>	<i>Standard Error</i>	<i>T-ratio</i>	<i>P-value</i>
Mean Intercept	1534.11	94.95	16.16	< 0.001*
Time Slope	-131.37	10.58	-12.42	< 0.001*
<i>Random Effect</i>	<i>S.D.</i>	<i>Variance</i>	<i>X²</i>	<i>P-value</i>
Intercept	820.51	673234.92	17266.75	< 0.001*
Time Slope	90.28	8149.87	1791.05	< 0.001*

*statistical significance

From Table 3, we can conclude that while the average precinct benefited from crime reduction over the ten-year study period, precincts do differ in a number of ways. First, precincts differ significantly in terms of initial number of violent crimes. This finding is not unexpected—some precincts have always been known for more crime and violence than others. Second, the slopes of the crime reduction for each precinct vary over time. Again, we would expect this to be the case—some precincts benefited from greater decreases in violence than others.

We now turn our attention to those factors believed to influence precinct-level violent crime over time. This step in the analysis involves the introduction of the predictor variables into the model. Here we answer the question of which, if any, of the competing explanations for the decline in violent crime can be shown to have a significant impact on the decline. Table 4 estimates this “conditional” model.

Examining the top half of Table 4, we find that both misdemeanor arrests and borough unemployment are significantly related to precincts’ violent crime at the initial observation point. The positive coefficient for misdemeanor arrests indicates that the more violent crime a precinct has at the initial observation point, the more misdemeanor arrests it is likely to have. Similarly, the coefficient for unemployment indicates a positive relationship between the number unemployed at the borough level and a precinct’s number of violent crimes. The number of young males in a precinct and the number of borough cocaine episodes are not significantly related to precincts’ violent crime at the initial observation point.

The bottom half of Table 4 reveals that the number of young males in a precinct and the number of borough cocaine episodes are not significantly related to the change in precinct violent crime over the ten-year study period. Borough unemployment is associated with precinct violent crime over time to the point of statistical significance. However, the

direction of the association is the opposite of what is normally predicted. The negative coefficient for unemployment actually suggests that an *increase* in borough unemployment is related to a *decrease* in precinct violent crime.⁴²

Most importantly, the bottom half of Table 4 shows that *the number of precinct misdemeanor arrests is significantly related to precinct violent crime*. In fact, this measure of “broken windows” policing is *the strongest predictor of precinct violent crime in the model*. The coefficient is negative (-0.036) which indicates an inverse relationship between our measure of “broken windows” and violent crime: as misdemeanor arrests increase, violent crimes decrease. Stated more specifically, the coefficient of -.036 means that on average, for every misdemeanor arrest in a given precinct, there were .036 fewer violent crimes committed. Put another way:

The average NYPD precinct during the ten-year period studied could expect to suffer one less violent crime for approximately every 28 additional misdemeanor arrests made.

We thus find that “broken-windows” policing, as reflected by arrests for misdemeanor offenses, has exerted the most significant influence on trends in violent crime. Contrary to “root cause” advocates, overall declines in violent crime cannot be attributed to our measure of the economy, changes in drug use patterns, or demographics. Instead, as the experiences in the New York City subway system anticipated, and as Giuliani and Bratton predicted, “broken windows” policing achieved significant

Table 4: Broken-Windows Policing Was Responsible for a Significant Decrease in Violent Crime

Fixed Effect	Coefficient	Standard Error	T-ratio	P-value
Model for Intercept Episodes				
Misdemeanor Arrests	0.226	0.066	3.43	0.001*
Young Males	0.082	0.068	1.21	0.227
Borough Cocaine	0.131	0.122	1.07	0.284
Borough Unemployed	0.014	0.006	2.19	0.029*
Model for Time Slope Episodes				
Misdemeanor Arrests	- 0.036	0.003	- 11.37	< 0.001*
Young Males	- 0.004	0.006	- 0.66	0.509
Borough Cocaine	- 0.016	0.009	- 1.84	0.066
Borough Unemployed	- 0.002	0.001	- 3.35	0.001*

* statistical significance

gains, not just in restoring order, but in reducing violent crime as well. In fact, using our figure of a decline of one violent crime for every 28 misdemeanor arrests, we estimate that “broken windows” policing during the decade 1989–1998 prevented over 60,000 violent crimes, or a 5% reduction. Moreover, there are good reasons to suspect that this is a minimal estimate. While 5% of the overall total may not seem like a high percentage, it should be noted that our analysis encompasses a 10-year period—5 years in which “broken windows” policing was practiced at a fairly low pitch, and 5 years in which “broken windows” policing was emphasized. One can assume that a continued emphasis on “broken windows” will lead to greater reductions in violent crime in the future.⁴³

Our rationale is akin to the “tipping point” argument put forward by Malcolm Gladwell.⁴⁴ Basically, Gladwell argues that once a set of activities (like minor arrests) reach a critical level, their impact spreads and influences individuals incrementally. Like Gladwell, we believe this happened in New York City. Also, it should be added, our current analysis does not include the impact of “broken windows” policing on other serious felonies like burglary and auto theft. We believe that future analyses will demonstrate that broken windows has a similar impact on such crimes.

Finally, we decided to compare each of the precincts with the total group on two variables, complaints of violence and arrests for misdemeanors, for two reasons: first, to see how many “coincidences” occurred and, second, to see if particular precincts differed significantly from the total group.⁴⁵ This analysis revealed that 74 of the 76 precincts did not differ statistically from each other. Given the economic, social, and demographic diversity of these 74 beats, it would truly be remarkable if these similarities were merely “coincidences.” Only the 14th precinct (Midtown South) and the 75th precinct (East New York) were in some way statistically different from the larger group of precincts.⁴⁶

In the 75th, unlike most precincts, enforcement of misdemeanor offenses dropped from 1989 through 1991 as violent crime was decreasing—this may be a reason why the 75th is statistically different from the larger group. We are not sure what was happening in the 75th during this time, but later in the decade enforcement of misdemeanors increased (in much the same manner as the rest of the city) as complaints for violence continued to decrease.

The 14th precinct, however, is of particular interest. In the 14th precinct, enforcement of misdemeanors was stable from 1989 through 1998. In some respects, this finding is not surprising. Public outcry for something to be done about disorder and incivility began in Midtown South and other parts of southern Manhattan long before the 1990s. This demand brought about change in public policy and police enforcement of misdemeanors even before the efforts of the Giuliani administration. Business Improvement Districts (BIDs) had started to clean up the areas around Grand Central Station, 34th Street, Penn Station, and the Port Authority Bus Terminal prior to Giuliani's administration. Likewise, Bryant Park had been rejuvenated and the New York Transportation Authority had restored order in Grand Central and Penn Stations and the Port Authority in the Bus Terminal—again, all prior to the citywide approach under Giuliani and Bratton. Also, the Midtown Community Court, growing out of and reflecting concern for misdemeanors, opened in 1993 and concentrated on minor offenses like fare beating, prostitution, and aggressive panhandling.⁴⁷ In other words, both the actions to reclaim public spaces and the chronology of events in the 14th Precinct differ from the rest of the city in noteworthy ways. These differences appear to be reflected in the analysis.

To sum up, our major finding is that “broken windows” policing is strongly associated with the decline in violent crime in precincts, while major competing explanations are not. Many will not find this conclusion surprising: even critics of the NYPD have suggested that “broken windows” policing has had an impact, although they posit that the impact came at the expense of broader social justice. Others have suggested that other changes in NYPD policing—such as the implementation of Compstat—helped to reduce violent crime. Although Compstat, and social justice concerns, do not lend themselves to statistical modeling, we nonetheless consider it important to consider them. In the next section, therefore, we examine these factors in some detail.

Analyzing Other Crime-Reduction Strategies

The basic question this study has addressed is: “Do police matter?” We have answered this question positively: “broken windows” policing has contributed significantly to crime reduction in New York City. But while statistical modeling shows *that* police mattered, one must get out of the “ivory tower” to understand *how* they did so. In this section, therefore, we draw on field observation to consider (a)

how NYPD tactics have been managed and directed, through Compstat, and (b) *how* broken windows policing has been implemented by living, breathing, thinking officers in the field.

**Compstat and Its Derivatives:
Problem Solving and Accountability**

While “broken windows” policing receives great attention, it is but one tactic among many utilized by the NYPD in the 1990s. Fundamental shifts in the organization’s strategic approach to crime—along with key changes in the organizational culture of the NYPD—are also important to the crime reduction story. These shifts and changes were reflected in two key concepts—problem solving and accountability—both of which are key parts of the Compstat system.

A key to New York’s crime reduction success rests in a specific problem-solving strategy: accurate and timely intelligence, rapid deployment, effective tactics, and relentless follow-up and assessment.⁴⁸ Up-to-date crime analysis was combined with proven and innovative crime-reduction techniques, allowing police managers to immediately address current crime conditions and prevent future ones from arising.⁴⁹

The notion of accountability refers to a change in NYPD organizational behavior by which mid-managers (specifically precinct commanders) were given primary responsibility over crime reduction. As discussed in Section 2, Bratton considered the role of precinct commanding officers to be essential to the management of crime problems at the local level. Managerial changes occurred so that commanding officers were given credit when problems were solved and held accountable when problems arose. Commanding officers, in turn, began to rely primarily on precinct personnel (including patrol, detective, and specialized precinct units) for crime control, rather than on centralized special units.

Both the problem-solving strategy and the notion of accountability came to fruition in weekly NYPD headquarters meetings known as Compstat (short for “comparative” or “computer” statistics—both are used and nobody is sure what the original was).⁵⁰ In these meetings, department “super chiefs” assumed the role of “management inquisitors”⁵¹—quizzing precinct commanders about crime conditions and officer misconduct, and using the new problem-solving strategy to suggest tactics. To guarantee constant vigilance, precinct commanders were given short notice as to whether they would present; therefore,

they always had to be prepared. Bratton’s belief was that crime reduction tactics are most effective at the local level. Responsibility for crime management was rolled down to the position of precinct commander—Compstat was the mechanism by which commanders were held accountable.

Previous descriptions of Compstat have focused on the presentation of the meeting itself: on the department brass at one side of the room, facing a precinct commander and his or her entourage at the other (everyone in full uniform or business attire); on the large screens overhead that display sophisticated crime maps, crime patterns, and trends; on the exchanges between the commissioners and chiefs who question and provide advice, and the precinct personnel who answer and discuss strategies. These descriptions have given the impression that much is accomplished at a Compstat meeting in terms of strategizing over criminal activity and investigations.

We agree, but it is our opinion that Compstat meetings themselves are largely ceremonial. Much crime control strategizing is done in precincts long before the meeting takes place. Compstat meetings are *important* ceremonies, dramatizing the enormous changes in attitude and philosophy that have transformed the NYPD. But the true effectiveness of Compstat lies in its ability to drive the development of crime reduction tactics at the precinct level. By making precinct commanders accountable, centralized Compstat allows the problem-solving strategy to operate in a decentralized manner. The dynamics of this phenomenon owe much to data management and tactic development.

Data Management: Many discussions of Compstat meetings highlight their use of accurate and timely data for the creation of crime maps and identification of patterns, spikes, and crime trends. Our observations indicate, however, that some of the more detailed (and as it turns out, more important) data gathering is done at the precinct level.

The precincts themselves maintain data-analysis units. These units’ primary role is to aid precinct personnel in identifying and analyzing crime trends and patterns. These units are also responsible for submitting weekly crime reports to the centralized Compstat Unit in the Chief of Department’s Office. A commanding officer, along with operations coordinators under his/her command, will often ask for additional, in-depth analyses of patterns and high-profile investigations (shootings, homicides, etc.).

The in-depth analyses serve two purposes. First, they better prepare commanding officers for the “hard” questions they are likely to receive about crime problems from Compstat inquisitors. Second, they help to drive the tactics that are developed at the precinct level. These tactics can then be described to Compstat inquisitors, to show that the precinct has developed responses to particular problems.

Tactic Development and Execution: Rapid deployment and effective tactics have been key to the new strategy as well. After obtaining information about a problem through data analysis, systems are now in place whereby tactics can be developed and implemented immediately, thus eliminating opportunities for problems and preventing further criminal activity. The Compstat process constantly challenges precinct commanders to develop new responses to crime problems. Although Department managers encourage precincts to use proven tactics, they frown upon “cookie-cutter” responses to “standard problems.” The effectiveness of a precinct commander is partially determined by his or her ability to be independent and innovative in developing and implementing problem-solving tactics.

Compstat—A Final Note: It is fairly clear that crime reduction strategies are, by and large, developed and implemented at the precinct level in response to crime patterns and spikes in that precinct. Precisely because of Compstat meetings—or, more likely, the *threat* of Compstat meetings—crime is analyzed and crime reduction techniques are developed at the decentralized precinct level. When Compstat was still fairly new to the NYPD, precinct commanders often appeared unprepared when it came time to present before the lead inquisitors; they did not have a clear understanding of the problems, nor had they developed appropriate solutions. This lack of preparation often invited harsh criticism. Such occurrences, while occasional, are not nearly as common now as they once were. Now the precinct commanders, knowing the repercussions of coming unprepared, are often able to anticipate the questions that will be asked by upper management. They prepare for

these questions by knowing the nature of the problems and developing tactics to solve them.

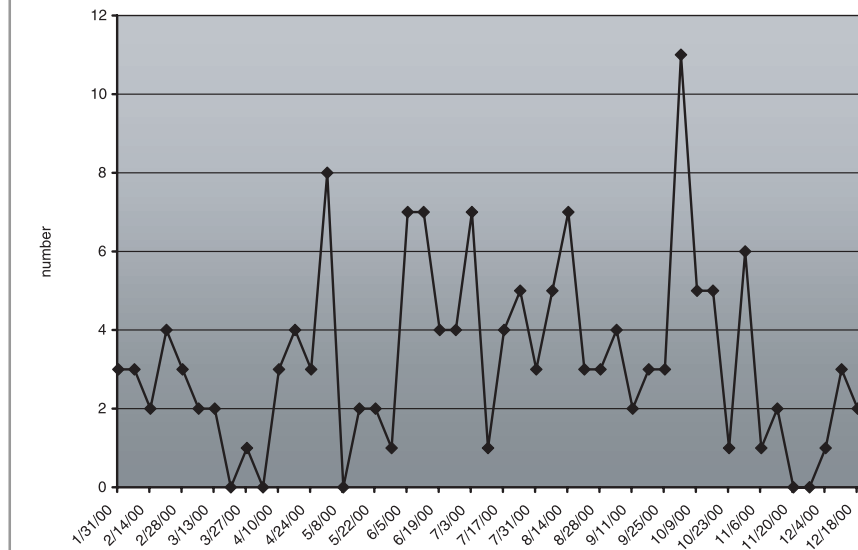
Precinct Problem Solving

During our observations in the precincts, we witnessed many examples of independent and innovative problem solving by precinct strategists. In some cases, the steps of the problem-solving strategy were evident. In others, precinct efforts were designed to *prevent* crime from occurring before it became a problem. Our purpose here is not to argue that every problem-solving effort worked. In our view, many did and some did not. The purpose here is to demonstrate that the NYPD’s approach to crime prevention is complex and innovative, and not merely “stop and frisk” activities as often suggested in the media and by critics. Three examples illustrate these dynamics: assault in the 6th precinct, grand larceny in the 67th precinct, and burglary in the 43rd precinct.

Assaults in the 6th: In many cases, precincts anticipate potential problems and work to prevent crime before it takes shape. The prevention of assaults in the 6th precinct provides a good example.

Figure 2A displays assaults, by week, from the end of January 2000 (when we began collecting Compstat data) to mid-December. Although serious assaults are relatively rare in the 6th precinct (the precinct averaged about 3 per week during the time frame displayed on Figure 2A), violence in the 6th is often connected to the active nightlife of Greenwich Vil-

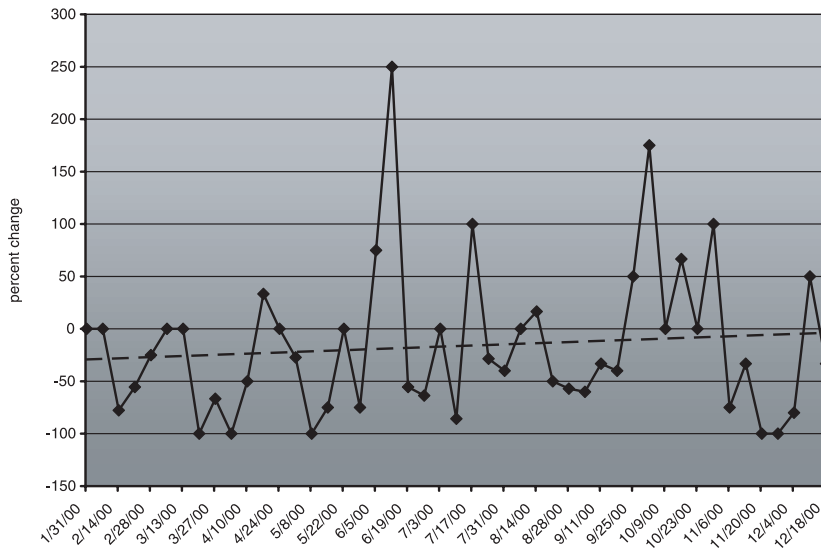
Figure 2A: Assaults, 6th Precinct, 2000



lage. Precinct personnel have recognized that patrons of the many bars and clubs in the 6th, once inebriated, are more prone than they would otherwise be to engage in violent confrontations (both with each other and with bar staff). Anticipating potential problems during the summer months, the Cabaret Conditions Unit of the 6th precinct—a special unit of patrol officers charged with code enforcement and “broken windows” policing in bars and clubs—identified establishments in the precinct historically associated with violence and criminal ac-

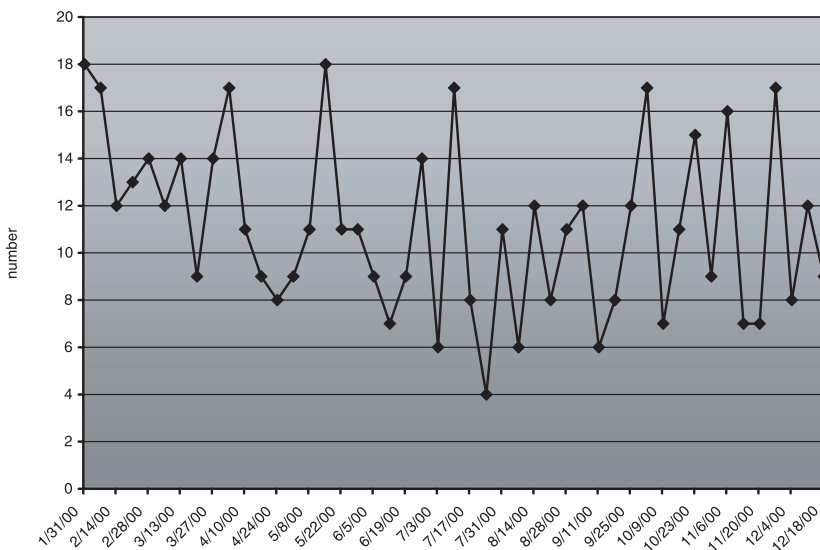
tivity. With the assistance of the New York State Liquor Authority and the NYPD's legal bureau, the precinct initiated a series of meetings with the owners and security personnel of the identified bars and clubs. These meetings were designed to provide individuals with information and suggestions on problem de-escalation and avoidance. Special emphasis was placed on issues pertaining to the use of force by club security—a particularly troublesome problem identified by the Cabaret unit that often resulted in criminal and/or civil liability.

Figure 2B: Percent Change, 1999–2000, Assault, 6th Precinct



Whether instances of serious assault went down as a result of these meetings is difficult to determine, primarily because instances of assault are so low in the precinct in the first place. However, Figure 2B may give some indication of the effectiveness of the strategy. This figure displays the percent change in assaults from one week in 1999 compared to the same week in 2000. NYPD data strategists routinely perform this analysis, because it is considered a better gauge of criminal activity than raw numbers (which can be subject to seasonal fluctuations). An examination of Figure 2B suggests that most weeks during the summer months of 2000 (the target of the intervention) compared favorably with their counterparts in 1999. Although this analysis is hardly conclusive, the effort, in any event, demonstrates the precinct's focus on prevention and its desire to educate and involve its communities.⁵²

Figure 3A: Grand Larcenies, 67th Precinct, 2000



Grand Larceny in the 67th: Figure 3A displays grand larcenies in the 67th precinct, by week, from the end of January 2000 to mid-December. During this time period, the weekly totals of grand larcenies ranged from a low of 4 to a high of 18, with an average of approximately 11 per week.

Detailed analysis of the trends reveals a more telling pattern (Figure 3B). Here, the percent change in grand larcenies from one week in 1999 is compared to the same week in 2000. Figure 3B indicates that in the early months of 2000, grand larcenies were consistently up from the previous year. During an eight-week period between the beginning of February and the end of March, grand larcenies increased from 58 in 1999 to 109 in 2000—a jump of nearly 90%. This crime “spike” is less evident later in the year, where the percent change hovers around 0% from week to week.

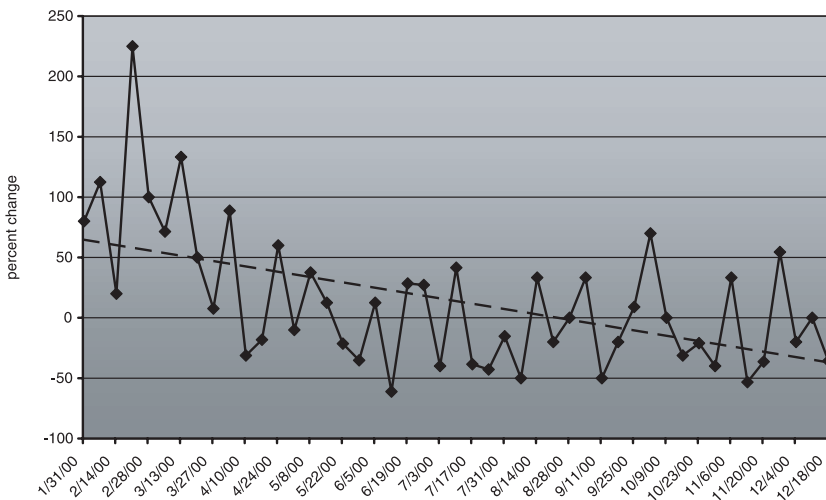
tives geared specifically toward the problem (“rapid deployment” using “effective tactics”). Officers in special units (including plainclothes) were notified of the areas, times, and types of cars most at risk and asked to adjust their schedules and deployment patterns accordingly. A decoy car of the same make and model was obtained by the precinct, outfitted with an engine “kill switch,” and placed in an at-risk area. Air bags were equipped with tracking devices in order to trace the location of garages that bought stolen airbags from thieves. After an initial start-up period, plans were made to publicize the efforts, in the hopes of deterring future air-bag thieves.⁵³ The precinct constantly monitored these initiatives (“follow-up and assessment”). Numerous arrests were attributed to the efforts. More importantly for the precinct, grand larcenies (as well as auto theft) began to decline.

Technically speaking, the above exercise would not withstand the methodological rigor required by social science. Experimental conditions were never satisfied. Several explanations could account for a sustained spike followed by the decrease in grand larcenies. Separating out the influence of one initiative from another is difficult even if one concludes that the police efforts were successful. Nevertheless, the ultimate goal was accomplished.

A problem was identified, tactics were tailored to it, and the problem ceased to be a significant problem. For the precinct and the department, the efforts were a clear success. At subsequent Compstat meetings, precinct executives were congratulated for their ingenuity.

Burglaries in the 43rd: We have diagrammed below both the raw number of burglaries in the 43rd precinct in 2000 (Figure 4A) and the weekly percent change in burglaries from 1999 to 2000 (Figure 4B). Over this period, the 43rd precinct averaged almost 16 burglaries a week. Similar to grand larcenies in the 67th, burglaries in the 43rd were spiking in the early weeks of the year. During the four-week period between January 31, 2000 and March 26, 2000, burglaries rose from 84 in 1999 to 139 in 2000—an increase of approximately 65%.

Figure 3B: Percent Change, 1999–2000, Grand Larceny, 67th Precinct

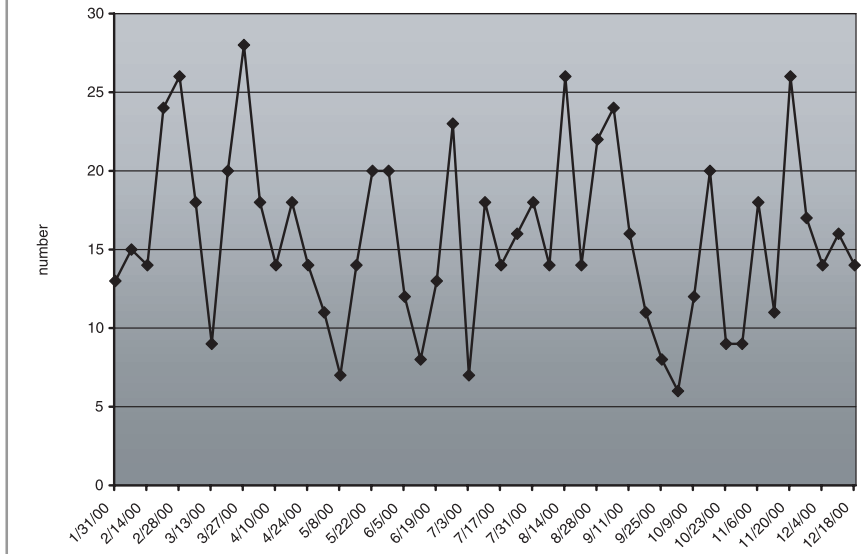


As grand larcenies began spiking, precinct personnel began to look closely at the characteristics of these crimes in the neighborhoods of the 67th. What was revealed was not a general problem of grand larcenies. The true problem was much more specific. Most of the grand larcenies involved airbag theft. Thieves would steal airbags from cars and pawn them to nearby garages. The garages could then sell the airbags to unsuspecting customers. Thieves targeted only precise makes, models, and years. The cars that were broken into were located primarily in particular sectors of the precinct. Not coincidentally, the precinct was also experiencing a spike in auto theft, involving the same types of cars in the same general locations as the grand larcenies.

With this information in hand (“accurate and timely intelligence”), the precinct began a number of initia-

An analysis of the burglaries by precinct strategists revealed several interesting findings. Most of the burglaries occurred in the northern sectors of precinct, at certain times of the day, and on certain days of the week. Many involved entry through unlocked doors and windows. The burglars were focusing on small electronic devices, such as cable boxes and Sony PlayStations. The nature of the offenses suggested youthful offenders, but the precinct also suspected a trend of individuals posing as homeless who would walk up to a house, try the door, and enter if the door was unlocked and the house unoccupied.

Figure 4A: Burglaries, 43rd Precinct, 2000

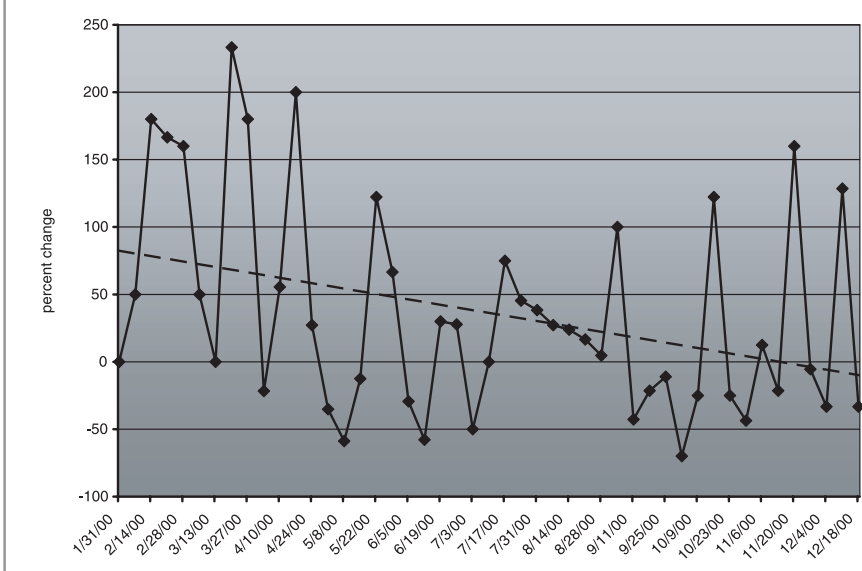


Faced with a continuing problem, the precinct created a burglary apprehension team (BAT) in mid-March.⁵⁴ BAT, working with other precinct personnel, began a series of initiatives. Crime prevention fliers were printed and disseminated to alert residents in at-risk neighborhoods and to inform the community (and potential burglars) of police activities. BAT constantly adjusted its schedule and deployment patterns according to the neighborhoods and the times most at-risk. The unit began re-interviewing burglary complainants and conducting follow-up investigations, tasks that were often difficult for the overburdened detective squad. BAT developed a “recidivist” book with pictures and information on known burglary recidivists for easy identification while on patrol. BAT also began working with precinct truancy programs, to identify potential youth offenders, and with Cablevision, on strategies to prevent cable box theft.

Although the trend in Figure 4B fluctuates considerably over the year, it does appear that burglaries were less a problem in the 43rd after BAT

was created. The precinct certainly believed BAT had an impact—and borough executives gave the unit praise as well. Again, this was not a controlled experiment. Other factors could have caused burglary trends to fluctuate.⁵⁵ Nevertheless, the pattern we saw in the 67th—the precinct identifies a problem, the precinct develops and initiates a solution, the problem dissipates—matches the pattern seen in the 43rd.

Figure 4B: Percent Change, 1999–2000, Burglaries, 43rd Precinct



Precinct problem solving—a final note: More examples similar to those above are apparent in the case studies—burglary programs in the 34th and 114th, prostitution initiatives in the 6th and 114th, a parole / police liaison program in the 75th—all of which were implemented either in response to or in anticipation of a well-defined problem.

In discussing these “success” stories, we do not mean to suggest that crime problems are always properly identified or that police efforts always produce the desired results. Indeed, on several occasions during our time in the precincts, trends for certain crime types fluctuated without apparent pattern or explanation. Phrases such as “there’s really no discernable pattern” in response to crime spiking or “we’re not sure we had anything to do with it” in response to crime decreasing were common along with the stories of success.

We do wish to make three points however. First, with each instance of apparent success, accumulating evidence grows in support of the problem-solving model as the key mechanism for crime reduction. Returning to the “MCO” formula discussed in Section 2, when a mechanism (the NYPD problem-solving model) is implemented within a given context (the specifics of the criminal activity in question) and repeatedly produces the desired outcome (specified crime is prevented), one can begin making inferences regarding the power of the mechanism. We cannot claim that the MCO configuration was always visible during our stay in the precincts, but we suspect that if one were to stay in each of the 76 precincts long enough, the configuration would be visible more times than not.

Second, we find that many problem-solving efforts, while having arrest components, are operationally oriented toward crime-prevention. Rather than merely “making collars” and building the “arrest numbers,” police are making contacts with residents and organizations to attempt to prevent assaults, grand larcenies, and burglaries.

Finally, problem-solving strategies involve more than diverting officers for “broken windows” policing. Although misdemeanor enforcement is an important tool, other techniques—crime prevention programs, investigation initiatives, and inventive strategizing—are important tools as well. In addition, because characteristics of the same offense type vary from place to place, precinct strategists must exercise their discretion to act independently in analyzing problems and formulating their efforts.

**Officer Discretion:
Zero Tolerance or Broken Windows?**

Some critics of the NYPD concede that the Department’s policies have reduced crime, but contend that the reductions have come at too high a social cost. These critics charge that “broken windows” policing has violated civil rights, especially those of minorities and the poor. In this scenario, officers mindlessly enforce all the laws, all the time, without consideration of the context, circumstances, or severity of the act, thus criminalizing relatively harmless behaviors—in other words, indiscriminate “stop and frisk.”⁵⁶ The term “zero tolerance” is often used derisively to describe NYPD policy in this regard, and then equated with other terms such as “quality of life” enforcement and “broken windows” policing.⁵⁷

To address such charges, we observed officers at work. We conducted over 40 ride-alongs with officers in the 6 precincts. Typically, we asked precinct strategists about the most pressing issues in their neighborhoods, and then asked to observe officers actively addressing those concerns. In most instances we were placed with special units, although on several occasions we were placed with a radio patrol car (RMP) or patrol supervisor.⁵⁸ We recorded in detail the activities of officers, with special attention to their interactions with the public. Decision making on the part of officers was of particular interest to us, and we routinely asked officers to describe their decisions after encounters with citizens.

In our time with the officers, we found that they consistently used discretion and often chose not to enforce the law regarding minor offenses. Before taking official action, officers routinely assessed the circumstances surrounding an offense. True, officers base their decision to take official action according to department and precinct policies,⁵⁹ but the context in which the offense occurs often plays a critical role as well.

The four scenarios below, drawn from our observations in four different precincts, illustrate the discretionary nature of officer response to quality-of-life offenses.

Observation 1A: While on routine patrol at night in an entertainment area, officers see two white males in front of a dumpster—one is urinating. The officers exit the car and approach the individuals. The first officer approaches the male who was urinat-

ing, asks to see his identification (which is produced), and then announces that he will be issued a summons for public urination. While the summons is being written, the individual states, "I don't get it, the homeless pee out in the street all the time." A second officer responds, "So what? We'll give them a summons for the same thing if we see them doing it." The individual continues to shake his head, "I just don't understand it." The officer replies, "What's there not to understand? You were peeing in public and you're not supposed to."

After issuing the summons and going back to the car, one officer stated, "The dumpster was right there, if he had gone behind it that would have at least been something—instead he decides to do it in full view of everybody."

Observation 1B: While on routine patrol at night in an industrial/residential area, officers observe an SUV drive down a dead-end alleyway. The officers swing the car around and slowly approach. At the end of the alleyway, the SUV is parked with its lights on. Next to it, two black males are urinating. The officers exit the car and approach as the individuals are about to get into the SUV. The officers ask them for identification (which they produce) and ask why they drove down the alleyway. At first, the individuals state that they were visiting a friend and took a wrong turn. After further questioning, the individuals admit that they pulled down the alleyway to urinate. One officer asks, "Why didn't you just say that in the first place?" The individuals shrug in reply. The officers issue verbal warnings before leaving the scene.

Once in the car, an officer commented on "broken-windows" policing: "People think that because of all the quality of life things, that if we see them peeing or with a joint that we're going to arrest them. A lot of times we have bigger things to worry about."

Observation 2A: While on routine patrol near an entertainment area, officers see three males (one black, two white) exit a taxi with open containers. When the men see the patrol car, they place the bottles on the ground and start to walk off. The officers exit the car, briefly pursue, and eventually stop them. One officer asks for their identification (which they produce), announces that they will be written up for open containers, and begins to fill out the summons forms. The second officer empties the bottles and begins a conversation with the three males who have questions about the summons process (the ex-

tent of the fine, court procedures, etc.). At one point, one male asks, "What is the big deal? It's harmless, it's just a beer—it's minor and victimless." The officer replies, "Yes, it is just a beer, but if you had been here a few years ago, and it was a little later and you were a little drunker, maybe you bump into someone accidentally who also was drinking, and that's how fights start and how violence breaks out. The reason why we're so strict now is because we're trying to prevent that from happening."

Observation 2B: While on routine patrol in a residential neighborhood, officers see a Hispanic male with an open container sitting on the front step of an apartment building. The officers exit the car, approach the individual and ask him for identification. Noticing the address on his license, the officer asks if he lives in the apartment building. When he replies that he does, the officer hands back his license and says, "Listen, you're not allowed to drink alcohol outside—go inside if you want to have a beer." The individual takes his license and goes inside the building.

Prior to this encounter, officers had issued several summonses to other individuals for drinking in public. This instance, one officer later explained, was different, "After all," he said, "this is New York. We can't be giving out summonses to people who are outside their own house with a beer."

Observations 1A and 1B both involved police response to public urination. The outcomes of the two cases, however, are quite different. In the first instance, officers appeared to take into account the overall context of the situation before issuing a summons. Many people were in the area, many public bathrooms were available, the individual was discourteous by not trying to hide from public view, etc. In the second case, the context was different. The area was virtually deserted of pedestrian traffic, and the individuals turned down an alley to discretely avoid public exposure. The offense was the same, but officers appeared to recognize the differing degrees of harm done to the community in each case.

Similarly, while both 2A and 2B involved the public consumption of alcohol, officers differentiated the contexts. In 2A, the officer acknowledged that the offense was minor, but described the reasons why the rules had to be enforced, and alluded to the problems that could arise if they were not. The officer in 2B, however, realized that the potential

harm that could result from the act was, in context, relatively minimal. A verbal warning therefore seemed to suffice.

Of course, we have no way of knowing if the results of each scenario would have changed if their contexts were different. Perhaps the officers in 1A and 2A would have issued summonses regardless of the circumstances surrounding the offense. Or maybe different officers who found themselves in 1B and 2B would have chosen an official sanction instead of verbal warnings. Nevertheless, the scenarios above are not atypical. On almost every ride-along we observed officers making decisions over whether or not to enforce minor, quality-of-life offenses, even when they indicated they had enough evidence to do so. In fact, of the nearly 250 police-citizen encounters we observed, about half involved a suspected minor offense, and less than 70 resulted in an actual summons or arrest.⁶⁰

Earlier we showed that “broken windows” policing was a significant contributor to crime reduction in New York City. The discretionary nature of the policing we observed, however, suggests that it is not just the *increase* in enforcement, but more importantly, the increase in the *quality* of the enforcement, that has made the difference. The order-maintenance and quality-of-life policies of the 1990s did not encourage officers to enforce all minor offenses without consideration of the consequences. Rather, they encouraged officers to assertively enforce those offenses that, using their discretion, they believe are most harmful to communities. In the words that are echoed time and again by officers (regardless of rank, precinct, or unit), the “broken windows” policies of the 1990s “let us do our job.”

We do not deny that there are times when officers enforce quality-of-life and other minor offenses just to “justify their existence.” More typically, however, officers view official action in regards to minor offenses as a means to an end, not as an end in of itself. Enforcement for enforcement's sake is also specifically discouraged by those who run Compstat meetings. The preventive focus identified above suggests that precinct commanders not only get this message, but also take it quite seriously. While the department brass examines the activity levels of officers within a precinct, quality arrests and quality enforcement are emphasized—ultimately it is the absence of crime and disorder, rather than the enforcement, that is most important.

Conclusion

The question of why so many people stopped committing so many crimes in New York City in recent years will never be answered with *scientific* certainty. But from what we have seen above, some conclusions may nonetheless be drawn.

First, despite the root-cause theories that have dominated criminological, criminal justice, and much popular thinking about crime control, police can have a significant impact on crime levels in neighborhoods and communities. One singularly important way of doing this is by restoring and maintaining order, through “broken windows” policing. While this may come as a shock to many criminologists and media elites, it is nothing new to citizens and residents of neighborhoods. This is confirmed by a recent report by the Citizens Commission of New York City. The survey showed that citizens broadly support the “broken windows” point of view.

On QOL [quality-of-life] enforcement, all four groups [Asians, Blacks, Hispanics, Whites] equally approved of the “broken windows” notion of urban decay (4.0 on a 1–5 scale), and continued to score above 3 on a 1–5 scale endorsing NYPD QOL enforcement.⁶¹

Moreover, it is not just that all ethnic groups broadly support quality of life enforcement, Hispanics, African-Americans, and Asians, actually support it more strongly than do Whites.

... When analyzed by ethnic group, all four groups strongly supported QOL enforcement. On the 0–20 scale, Whites' level of support (14.6) for QOL enforcement was actually exceeded by people of color—Hispanics (15.2), Blacks (15.3), and Asians (15.5). The likely reason for this is that ... problems are more troublesome in non-White neighborhoods.⁶²

Second, basic shifts in policing strategies—especially the decentralization of problem analysis and problem solving—have had a significant impact. Because crime has been increasingly deemed a local phenomenon that requires localized analysis, considerable organizational pressure now exists to move away from stock and “cookie cutter” responses.

Third, there has been a shift away from mere law enforcement to crime prevention. The major police department in the United States has heeded the admonition of Sir Robert Peel that “[t]he test of police efficiency is the absence of crime and disorder, not the visible evidence of police action dealing with them.”

Fourth, our observations do not support the idea that NYPD order-maintenance efforts are simply “stop and frisk” exercises or the expression of mindless “zero tolerance” policies. Some officers, in some precincts, may engage in “rote” enforcement. But our research suggests that police discretion, and not unwise use of discretion, is more the rule. Moreover, little evidence supports claims by critics that an increase in order-maintenance leads to an increase in citizen complaints against police. After an initial increase in complaints filed against NYPD officers from 1994 to 1995, the number of complaints actually declined over the rest of the decade—from 5,618 in 1995 to 4,903 in 1999.⁶³ This reduction in com-

plaints occurred despite the fact that the number of officers in the city increased over the same time period (from 30,524 in 1994 to 39,642 in 1999).

Finally, we have no doubt that in some neighborhoods, changing drug use patterns and family values have had an important impact on local crime reduction.⁶⁴ Likewise, in some neighborhoods, the number of youth can have an impact on level of crime. Indeed, all of those factors that can have an impact on crime—demographics, drug use patterns, imprisonment rates, prosecutorial and court policies, the economy, probation and parole policies, weapon availability, and so on—can and do have an impact on crime levels. But the strength and direction of their impacts is always dependent on the local context—and police, by their activities, can help shape that strength and direction. All of which argues, of course, for establishing a baseline expectation of public order through “broken windows” policing, and for the kind of planning and accountability that is embodied in Compstat when it is rigorously conducted.

NOTES

1. See Jeffrey Fagan and Garth Davies, "Street Stops and Broken Windows: Terry, Race, and Disorder in New York City," *Fordham Urban Law Review*, Volume XXVIII, 2, December 2000, p. 462, for an example of attempts to link order maintenance activities with deaths of citizens. *The New York Times* developed a variant of the two criticisms that denied the police credit as well. According to this view, police are instrumental in reducing crime in cities like Boston and San Diego through positive community policing, whereas in New York City police harass and brutalize citizens. Fox Butterfield wrote a series of stories on this theme. For a detailed analysis, see Heather MacDonald, "America's Best Urban Police Force," *City Journal*, Summer 2000, pp. 14-31.

2. W. L. Melville Lee, *A History of Police in England*, Methuen, London, 1901, Chapter 12.

3. For a summary overview of the history of American police, see George L. Kelling and Mark H. Moore, "The Evolving Strategies of Policing," in *Perspectives on Policing*, No. 1, National Institute of Justice, Washington D.C., 1988.

4. The first serious empirical research into policing was conducted during the 1950s by the American Bar Association (which later created the American Bar Foundation that completed the study) but had little to do with the impact of police on crime. The ABF report was comprised of five volumes, all edited by Frank Remington and published by Little and Brown: Wayne LaFave, *Arrest: The Decision to Take a Suspect into Custody*, 1965; Donald J. Newman, *Conviction: The Determination of Guilt or Innocence without Trial*, 1966; Lawrence P. Tiffany, Donald M. McIntyre, Jr., and Daniel Rotenberg, *Detection of Crime: Stopping and Questioning, Search and Seizure, Encouragement and Entrapment*, 1967; Robert O. Dawson, *Sentencing: The Decision as to the Type, Length and Conditions of Sentence*, 1969; and Frank W. Miller, *Prosecution: The Decision to Charge a Suspect with a Crime*, 1970.

5. Almost simultaneously, individual academics began to publish studies of police that remain classics to this time. See, as examples, Jerome H. Skolnick, *Justice without Trial: Law Enforcement in a Democratic Society*, Wiley, New York, NY, 1966; Arthur Niederhoffer, *Behind the Shield: The Police in Urban Society*, Doubleday, New York, NY, 1967; James Q. Wilson, *Varieties of Police Behavior*, Harvard University Press, Cambridge, MA, 1968; Egon Bittner, *The Functions of the Police in Modern Society*, NIMH, Center for Studies of Crime and Delinquency, Chevy Chase, MD, November 1970

6. George L. Kelling, Tony Pate, Duane Dieckman, and Charles Brown, *The Kansas City Preventive Patrol Experiment*, Police Foundation, Washington, DC, 1974; Alfred I. Schwartz and Sumner N. Clarren, *The Cincinnati Team Policing Experiment: A Summary Report*, Police Foundation, Washington, DC, 1977; *The Newark Foot Patrol Experiment*, Police Foundation, Washington, DC, 1981; Kansas City Police Department, *Response Time Analysis: Volume II - Part I Crime Analysis*, Kansas City, MO, 1977; Robert Trojanowicz, *An Evaluation of the Neighborhood Foot Patrol Study in Flint, Michigan*, Michigan State University, East Lansing, MI, 1982; William G. Spelman and Dale K. Brown, *Calling the Police: Citizen Reporting of Serious Crime*, Police Executive Research Forum, Washington, DC, 1981.

7. See, for example, David Bayley, *Police for the Future*, Oxford University Press, New York, NY, 1994, p. 3.

8. Two other important ideas, though less directly relevant to the controversy addressed in this study, should also be noted. First, there was a stress on "collaboration"—the idea that police, if they are to be effective, must form strong relations both with other public and private agencies, and with communities and community interests. The idea slowly evolved during the 1980s and 1990s. By the 1990s, many police came to believe that if they were to deal successfully with problems they needed to establish working relationships with other agencies and with neighborhoods and citizens. Second, police agencies began to coordinate in "pulling levers" against career criminals who accounted for a disproportionate share of crimes. See David Kennedy, "Pulling Levers: Chronic Offenders, High-Crime Settings, and a Theory of Prevention," *Valparaiso University Law Review*, 31, 1997. Growing out of a problem-solving project to deal with the high number of deaths resulting from guns, "pulling levers" integrated a criminological axiom into a viable set of policies. Since the 1972 research of Marvin Wolfgang and his colleagues, it has been widely understood that a small number of those who commit criminal offenses, commit an unusually high number of offenses. Marvin Wolfgang, Robert Figlio, and Thorsten Sellin, *Delinquency in a Birth Cohort*, University

of Chicago Press, Chicago, 1972. Kennedy, working with colleagues from the Boston Police Department, made a parallel discovery when he found that murderers and their victims had virtually identical backgrounds. They had extensive criminal records, were on probation or parole, had warrants out for their arrest for serious crimes, had charges pending, were out on bail—in other words, they were serious violent repeat offenders, most of whom were currently active in the criminal justice system when they either murdered someone or were murdered. The policy implications of this were, of course, that if criminal justice agencies were to coordinate their activities regarding these offenders, they had tremendous leverage over them—hence the term “pulling levers.”

9. Goldstein had been on the staff of the 1950s American Bar Foundation Survey.

10. Herman Goldstein, “Improving Policing: A Problem-Oriented Approach,” *Journal of Crime and Delinquency*, 25, April 1979, pp. 236-258. The reality that problems took particular forms, in turn, shaped most police research during the late 1980s and 1990s: research focused on particular problems and how police could manage them. Much of this research consisted of case studies. See, for example, John Eck and William Spelman, *Problem-Solving: Problem-Oriented Policing in Newport News*, Police Executive Research Forum, Washington, DC, 1987. Some of it was comprised by post hoc empirical studies. See, for example, David Kennedy, “Pulling Levers: Chronic Offenders, High-Crime Settings, and a Theory of Prevention,” *Valparaiso University Law Review*, 31, 1997. Some of the research was done with the use of experimental design. See, for example, Lawrence W. Sherman and Richard A. Beck, *The Minneapolis Domestic Violence Experiment*, Police Foundation, Washington, DC, 1984. Currently, numerous research evaluations show that problem-solving efforts have been successful at reducing specific crimes, often with little evidence of displacement. See, for example, Lawrence W. Sherman and Dennis P. Rogan, “Effects of Gun Seizures on Gun Violence: ‘Hot Spots’ Patrol in Kansas City,” *Justice Quarterly*, 12, 4, 1995; Lawrence W. Sherman and David Weisburd, “General Deterrent Effect of Police Patrol in ‘Hot Spots’: A Random, Controlled Trial,” *Justice Quarterly*, 12, 4, 1995; David M. Kennedy, “Pulling Levers: Getting Deterrence Right,” *National Institute of Justice Journal*, July 1998; and, Anthony A. Braga, David M. Kennedy, Anne M. Piehl, and Elin J. Waring, “The Boston Gun Project: Impact Evaluation Findings,” Research Report to the US National Institute of Justice, John F. Kennedy School of Government, Harvard University, 2000. Gone, however, are the “grand” tactical experiments of the 1970s; nobody believes any longer that omnibus tactics could be used citywide. Police tactics have to be developed locally and in response to specific problems and research has followed this form.

11. James Q. Wilson and George L. Kelling, “Broken Windows: The Police and Neighborhood Safety,” *The Atlantic Monthly*, March, 1982, 29-38.

12. Eli B. Silverman, *NYPD Battles Crime: Innovative Strategies in Policing*, Northeastern University Press, Boston, MA, 1999.

13. James Fox, *Trends in Juvenile Violence: A Report to the United States Attorney General on Current and Future Rates of Juvenile Offending*, U.S. Department of Justice, Bureau of Justice Statistics, Washington, DC, 1996.

14. Bratton addressed the meeting; at least one plenary session was devoted to New York and one panel, comprised of faculty from John Jay College of Criminal Justice, focused solely on alternative explanations of the crime drops. During 1996, criminology and law scholars met at Northwestern School of Law in Chicago and conducted a similar debate. The papers drafted for the debate were published in the summer 1998 issue of *The Journal of Criminal Law and Criminology*—a professional journal of the Northwestern School of Law—an issue devoted entirely to explaining the New York phenomenon. Likewise, *The Fordham Urban Law Journal* devoted almost its entire December 2000 issue to the topic of explaining crime drops – now within the broader context of the nation-wide declines in crime. Case studies about the NYPD were prepared for teaching purposes in both the schools of government and business at Harvard University. Other scholarly articles have been published by the National Institute of Justice and in journals like *British Journal of Criminology* (Autumn 1999), *Annual Review of Sociology* (1999), the *Journal of Research in Crime and Delinquency* (August, 1998), and *Theoretical Criminology*, (2001).

15. See, for example, Alfred Blumstein, “Disaggregating the Violence Trends,” in Alfred Blumstein and Joel Wallman, *The Crime Drop in America*, Cambridge University Press, Cambridge, UK, 2000, pp. 13-44. This argument has also become a popular explanation for local news media. Marzulli and Saltonstall, for example, reported in the *New York Daily News* that the improved economy not only helped reduce crime, but it also led to the decrease in shootings by police officers. John Marzulli and Dave Saltonstall,

"Killings by Cops in 10 Year Decline. Why? Crime's Down & Economy is Good," *New York Daily News*, April 9, 2000, p. 7. Likewise, Fox Butterfield and Bob Herbert of the *New York Times* regularly give similar interpretations. Fox Butterfield, "Continuing a 7-Year Trend, Crime Fell 7% in 1998," *New York Times*, May 17, 1999, National Section; Bob Herbert, "The Crime Fighter," *New York Times*, July 20, 2000, Op-Ed.

16. The citations are examples and do not reflect the total literature or other authors who took similar positions.

17. See, for example, Benjamin Bowling "The Rise and Fall of New York Murder," *British Journal of Criminology*, Vol. 39, No. 4, Autumn 1999.

18. See, for example, Bernard E. Harcourt, *Illusion of Order: The False Promise of Broken Windows Policing*, Harvard University Press, Cambridge, MA, 2001.

19. Richard Curtis, "The Changing Drug Scene in Brooklyn Neighborhoods," in Andrew Karmen, ed., *Crime and Justice in New York City*, Chapter 7, Primis Custon Publishing, New York, NY, 1999.

20. John Eck and Edward Maguire, "Have Changes in Policing Reduced Violent Crime? An Assessment of the Evidence," in Alfred Blumstein and Joel Wallman, *The Crime Drop in America*, Cambridge University Press, Cambridge, UK, 2000, pp. 207-265.

21. Jeffrey Fagan, Franklin E. Zimring, and June Kim, "Declining Homicide in New York City: A Tale of Two Trends," *Journal of Criminal Law and Criminology*, Volume 88, No. 4, Summer 1998, pp. 1277-1323; and Jeffrey Fagan and Garth Davies, "Street Stops and Broken Windows: Terry, Race, and Disorder in New York City," *Fordham Urban Law Journal*, Vol. XXVIII, 2, December 2000, pp. 457-504.

22. Andrew Karmen, *New York Murder Mystery: The True Story Behind the Crime Crash of the 1990s*, New York University Press, New York, 2000, especially pages 263-265. This is probably the most thorough study of the issue yet. It certainly raises all the relevant issues, although some of the interpretations and conclusions are questionable.

23. Bruce Johnson, Andrew Golub, and Eloise Dunlap, "The Rise and Decline of Hard Drugs, Drug Markets, and Violence in Inner City New York," in Alfred Blumstein and Joel Wallman, *The Crime Drop in America*, Cambridge University Press, Cambridge, UK, 2000, pp. 164-206.

24. Gary LaFree, "Social Institutions and the Crime 'Bust' of the 1990s," *Journal of Criminal Law and Criminology*, Volume 88, No. 4, Summer 1998, pp. 1325-1368.

25. Peter K. Manning, "Theoretical Policing: The Drama and Myth of Crime Control in the NYPD," *Theoretical Criminology*, 5(3) 315-344, 2001.

26. See, for example, Benjamin Bowling, "The Rise and Fall of New York Murder: Zero Tolerance or Crack's Decline?," *British Journal of Criminology*, 39, 4, pp. 531-554, 1999; Andrew Karmen, "Murders in New York City," in Andrew Karmen, ed., *Crime and Justice in New York City*, Primis Custon Publishing, New York, NY, 1999; Alfred Blumstein and Richard Rosenfeld, "Explaining Recent Trends in U.S. Homicide Rates," *The Journal of Criminal Law & Criminology*, 88, 4, pp. 1175-1216, 1998; Jeffrey Fagan, Franklin E. Zimring, and June Kim, "Declining Homicide in New York City: a Tale of Two Trends," *The Journal of Criminal Law & Criminology*, 88, 4, pp. 1277-1323, 1998; John E. Eck and Edward R. Maguire, "Have Changes in Policing Reduced Violent Crime? An Assessment of the Evidence," in Alfred Blumstein and Joel Wallman (eds.) *The Crime Drop in America*, Cambridge University Press, Cambridge, UK, 2000; Richard Rosenfeld, "Patterns in Adult Homicide: 1980-1995," in Alfred Blumstein and Joel Wallman (eds.) *The Crime Drop in America*, Cambridge University Press, Cambridge, UK, 2000.

27. Although 76 precincts currently exist, only 75 precincts are used in the analysis. In 1994, the 34th precinct was divided in two, becoming the 33rd and 34th precincts. For analytical purposes, the 33rd and 34th have been merged together to maintain consistency over the ten-year study period.

28. Although we do not know how these precincts were selected, we were particularly impressed by the choices made by the NYPD. The six precincts represent different areas of the city and all have unique political and social problems. The NYPD did not avoid troubled areas: two of the selected precincts are traditionally among the leaders in violence in the city every year; a third precinct, the 43rd, was chosen for the sample shortly after becoming the location of the Diallo shooting—a politically charged incident involving the death of an unarmed man by 4 NYPD officers (in fact, researchers were in the field in the days surrounding the acquittal of the four officers on charges of murder).

29. We note the potential limitations with official NYPD data. In general, agency records are subject to possible validity and reliability flaws arising from a variety of factors, including clerical errors, changes in collection procedures, categorization changes, and manipulation of data. Although the New York data has

the potential for these problems as well, several reasons suggest that these flaws are minimized. First, although one may speculate that the sheer volume of a decade's worth of complaints and arrests in New York City naturally gives rise to clerical errors, no evidence suggests that these errors, to the extent that they exist, are in any way systematic. Second, discussions with NYPD personnel indicate that there were few significant changes in offense and coding definitions during the last decade. Further, if such changes in definitions did happen, they would be uniform across precincts—thus still allowing for across-precinct comparisons. Third, several checks and balances of data quality are in place at different levels of the NYPD. These checks and balances have strengthened in the last decade as the importance of information quality and management has been at the forefront of NYPD crime reduction efforts. Indeed, evidence suggests just how seriously the department takes quality control of data management—several precinct commanding officers have been disciplined or outright dismissed because they were caught “cooking the books” (intentionally misrepresenting or manipulating the crime data in their precincts).

30. NYPD's CASR does provide data on the number of arrests for drugs (including arrests for cocaine) over time. However, these data may be a function of changes in police activity over time, rather than changes in drug use over time.

31. These offenses are classified according to New York State Penal Law categories.

32. Several factors influenced our decision to use arrests for misdemeanors as our measure of “broken windows” enforcement. Misdemeanors are minor in comparison to felonies and afford officers a greater range of possible discretionary responses. The policies implemented under Giuliani/Bratton, known under the umbrella terms of “order maintenance,” “quality-of-life,” and “broken windows” policing, really reflect a change in discretionary practices toward minor offenses of varying degrees of seriousness: when faced with a decision concerning misdemeanors or quality-of-life violations, officers were allowed to enforce regulations when they believed it appropriate. Arrests for misdemeanors correlate highly with other measures of minor offense enforcement, such as arrests and summonses for violations.

33. Ray Pawson and Nick Tilley, *Realistic Evaluation*, Sage Publications, London, UK, 1997.

34. In their argument for “realistic cumulation,” Pawson and Tilley balance the views of two types of social science evaluators—the “constructivists,” who believe that all situations and programs are unique and therefore all problems and outcomes cannot be generalized, and the “experimentalists,” who believe that generalization of evaluation findings to other contexts can occur if all threats to internal validity are eliminated (a somewhat daunting task).

35. According to the 1990 Census, the mean population of a police precinct was 97,634—a figure that likely grew with the city's population increase throughout the decade. 1990 Census data at the precinct level were compiled for the police department by the New York City Department of City Planning.

36. The majority of precincts display the *order-maintenance increase—violent crime decrease* relationship similar to the citywide pattern. However, some notable exceptions do exist, particularly from the borough of Manhattan. While violent crime in every precinct decreased over the 90s, some precincts did not experience an increase in enforcement of misdemeanor offenses. The 10th precinct, for example, actually experienced a decrease in arrests for misdemeanor offenses. Other precincts, like the 13th, 14th, and 18th experienced little fluctuation in misdemeanor arrests over the ten-year period. To examine the trends for all precincts, see: <http://www.policeinstitute.org/>

37. See Anthony S. Bryk and Stephen W. Raudenbush, *Hierarchical Linear Models*, Sage, Newbury Park, CA, 1992.

38. The Level-1 unit is the time variable, represented by 10 years of observation for each precinct – thus a total of 750 observation points (10 years x 75 precincts). Our Level-2 unit is precinct, represented by the 75 police precincts in New York.

39. The number of males enrolled in public high schools in each precinct also serves as a control variable for precinct size.

40. The statistical software used for this analysis is HLM 5: Stephen Raudenbush, Anthony Bryk, Yuk Fai Cheong, and Richard Congdon, *Hierarchical Linear and Nonlinear Modeling*, SSI Scientific Software International, Lincolnwood, IL, 2000.

41. The P-value is the test of statistical significance. It indicates the probability of a finding being the result of chance alone. For example, a P-value of 0.001 indicates that there is a one in one thousand chance that the finding is due to chance. The smaller the P-value, the more likely the finding is a true observation. In social science, the standard for statistical significance is typically 0.05 or lower. In other words, for a

finding to be accepted as statistically significant, one must be at least 95% sure that the result is not due to chance alone.

42. Frankly, we are not certain what this finding means. As social scientists, our reflexive response is that it raises interesting questions and possibilities for future study. Marcus Felson has suggested that a criminal event occurs when a motivated offender, a suitable target, and an absence of a capable guardian occur at the same time and same place—his approach has been labeled as “routine activity analysis.” (See, for example, his first iteration of this approach with Lawrence Cohen: Lawrence E. Cohen and Marcus Felson, “Social Change and Crime Rate Trends: A Routine Activity Approach,” *American Sociological Review*, 44, 1979, pp. 588-608.) In the analysis at hand, rising levels of unemployment means that people who were formerly at work now spend more time in their homes and neighborhoods—in effect providing increased care taking. This would include care taking of young people, their own spaces, and public places: that is, the increased time that recently unemployed persons spend in neighborhoods, adds to the total social control that operates in neighborhoods. To be sure, one would more likely surmise that offenses like burglary might be affected—people are guardians of their own homes—but it is not out of the question that a similar presence might have an impact on violence in public spaces as well. While somewhat surprising, the finding of a negative relationship between violent crime and unemployment is not unprecedented. One recent study examining youth homicide trends, for example, found a negative relationship between youth homicide arrest rates and unemployment. See, Steven F. Messner, Lawrence E. Raffalovich, and Richard McMillan, “Economic Deprivation and Changes in Homicide Arrest Rates for White and Black Youths, 1967-1998: A National Time-Series Analysis,” *Criminology*, 39 (3), 2001, pp. 591-613.

43. We also explored how well the predictor variables explain the variance in 1) the intercept for violent crime and in 2) the time slope. This was done by: 1) subtracting the variance component of the conditional model from the variance component of the unconditional model, and 2) dividing the difference by the variance of the unconditional model. After performing this procedure, it was determined that the four predictor variables explain 25.5% of the parameter variance in the initial measure of violent crime and 54.4% of the parameter variance in violent crime over time. The remainder of the variance in the parameters is explained by variables that have not been identified by this model.

44. Malcolm Gladwell, *The Tipping Point: How Little Things Can Make a Big Difference*, Little, Brown, and Company, New York, 2000.

45. First, the mean z-score for the two variables was obtained. A one-way ANOVA was then performed to obtain the mean z-score for each precinct. Only two precincts had a mean z-score that exceeded 1.96 (Alpha = .05): the 14th (3.74) and the 75th (2.03).

46. Although a visual examination reveals other precincts that appear to differ from the larger group, it may be that their trends are too unstable and/or their overall numbers are too small to indicate statistical difference. The 14th and 75th have relatively stable trends over the ten year period, and they both have large numbers of both violent crime and misdemeanor arrests. To examine the trends for all precincts, see: <http://www.policeinstitute.org/>

47. George Kelling, “Measuring What Matters: A New Way of Thinking about Crime and Disorder,” *City Journal*, Spring 1992; George L. Kelling and Catherine M. Coles, *Fixing Broken Windows: Restoring Order and Reducing Crime in Our Communities*, The Free Press, New York, NY, 1996 (see especially Chapter 4).

48. See also William J. Bratton, *Turnaround: How America's Top Cop Reversed the Crime Epidemic*, Random House, New York, NY, 1998; Jack Maple, *The Crime Fighter*, Doubleday, New York, NY, 1999.

49. This model is both a statement of policy and a visible tool within the NYPD. For instance, the terms themselves – Accurate and Timely Intelligence, Rapid Deployment, Effective Tactics, Relentless Follow-up and Assessment – are prominently projected on one of several overhead screens during Compstat meetings. It is not unusual to hear these terms repeated, either as reference to or as reminder of, the steps to police problem-solving.

50. Compstat meetings have been described elsewhere in some detail (with perhaps the most thorough analysis provided in Eli Silverman's *NYPD Battles Crime*). See also, Jack Maple, *The Crime Fighter*, Doubleday, New York, p. 33 about the confusion regarding the original meaning of Compstat.

51. Although less visible, Compstat also exists at the borough level. In this case, Borough Chiefs assume the roles of lead inquisitors in a way similar to that of Department Chiefs at citywide level Compstat.

52. Although the trend line in Figure 2B increased slightly throughout 2000, precinct strategists were

not overly concerned: the general trend line for the percent change from 1999 to 2000 remained negative for the entire year.

53. Many of these initiatives were first announced by the precinct at a Compstat meeting in early April, although most efforts had started several weeks earlier.

54. BAT is a small, precinct-based patrol unit made up of officers trained in burglary investigations, including, in some cases, latent print recovery.

55. On February 25, 2000, the four officers involved in the shooting death of Amadou Diallo were found not guilty of any wrongdoing. The Soundview section of the 43rd precinct was the location of both the shooting and the protests following the verdict. The days and weeks following the Diallo verdict represented an often-tumultuous time for communities in the 43rd.

56. See, for example, Bernard E. Harcourt, *Illusion of Order: The False Promise of Broken Windows Policing*, Harvard University Press, Cambridge, MA, 2001.

57. See, for example, John Eck and Edward Maguire, "Have Changes in Policing Reduced Violent Crime? An Assessment of the Evidence," in Alfred Blumstein and Joel Wallman, *The Crime Drop in America*, Cambridge University Press, Cambridge, UK, 2000, pp. 207-265.

58. The special units we were placed with included: BAT (burglary apprehension team), Tracer (uniformed drug and quality-of-life enforcement), Conditions Unit (quality-of-life enforcement, sometimes with a specific specialty, i.e. prostitution, clubs, etc.), Anti-Crime Unit (plainclothes unit specializing in enforcement of serious offenses), CPU (Community Policing Unit), SNEU (street narcotics enforcement unit), GLA Unit (auto-theft). All the units we rode with fell operationally under the precinct, although some fell administratively under the borough.

59. Although officers never reported an official quota, many officers reported feeling pressure to "justify their existence" by issuing formal sanctions.

60. Of course, many police-citizen encounters did not involve a minor or quality of life offense—we also observed police-citizen interactions involving accident investigations, investigations/arrests of serious crime, conversations concerning crime prevention, and other conversations with citizens. It should also be noted that in many instances of a suspected minor or quality of life offense, officers did not take formal action because they later determined that the evidence was not strong enough against the individual.

61. Harold Takooshian and Richard H. Tashjian, "Citizen Attitudes Toward Police and Crime, 2001," in *Crime Police and the Community*, Citizens Crime Commission of New York City, July, 2001, p. 8.

62. *Ibid.*

63. See Civilian Complaint Review Board, *Status Report*, volumes VI, VII, New York, NY. It should also be noted that complaints where unnecessary use of force was the primary allegation against the officer declined from 3,510 in 1995 to 2,117 in 1999.

64. Richard Curtis, "The Changing Drug Scene in Brooklyn Neighborhoods," in Andrew Karmen, ed., *Crime and Justice in New York City*, Chapter 7, Primis Custon Publishing, New York, NY, 1999.

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