

*Draft*

**Preliminary Findings:  
Estimating the Effect of Targeted Enforcement  
Strategies  
on Conviction and Imprisonment Rates  
for New York City**

**Sharon E. Lansing**

**School of Public Administration & Policy  
Nelson Rockefeller College of Public Affairs and Policy  
University at Albany  
State University of New York  
135 Western Avenue  
Milne Hall  
Albany, NY 12222**

**Phone: (518) 457-7301**

**Fax: (518) 457-9700**

**E-Mail: [lansing@dcjs.state.ny.us](mailto:lansing@dcjs.state.ny.us)**

**Paper submitted for presentation at the  
Nineteenth International Conference of the System Dynamics Society  
July 23-27, 2001 in Atlanta, Georgia, USA**

**Draft Paper Submitted on March 15, 2001**

## **ABSTRACT**

The growth in prison populations since the seventies has become an increasingly important area of study in the social sciences. Explanations for this growth have largely focused on the extent to which criminal justice policies and social forces. Interestingly, little attention has been paid to the role of system resources and the dynamics of criminal justice system behavior in prison population growth. This paper will argue that decision making in the criminal justice system following arrest is shaped largely by the dynamics of system behavior, more so than law, policy or individual discretion. It contends that it is the allocation of a system's case processing capacity between the upper and lower courts that largely determines the amount of growth in new prison admissions. Furthermore, the allocation of this capacity can be affected by policing strategies that produce substantial and protracted increases in the volume of arrests. System Dynamics is among the analytical techniques used to develop this argument.

# Contents

<i>Section 1</i>	<b>The Scale of Imprisonment .....</b>	<b>1</b>
<i>Section 2</i>	<b>Understanding the Dynamics of Criminal Justice System Behavior .....</b>	<b>1</b>
	• An Exploratory Study of Dynamic System Behavior	
	– Penal Philosophy and System Capacity	
	– Arrest Volume and Thresholds for Upper Court Prosecution	
	– Prosecutorial Decision Making	
	– Shifting Conviction Capacity	
	• An Summary of Preliminary Findings and Conclusions	
<i>Section 3</i>	<b>A Theory and Hypotheses of Criminal Justice System Behavior .....</b>	<b>8</b>
<i>Section 4</i>	<b>System Dynamics Model .....</b>	<b>10</b>
<i>Section 5</i>	<b>Possible Policy Implications .....</b>	<b>10</b>
	 <b>Appendix (NOT ATTACHED – see cover memorandum)</b>	
	<b>Figures 1 - 5 .....</b>	<b>6</b>

# Estimating the Effect of Targeted Enforcement Strategies on Conviction and Imprisonment Rates for New York City

## Section 1 The Scale of Imprisonment

The growth in prison populations since the seventies has become an increasingly important area of study in the social sciences (Tonry and Petersilia 1999). Research concerned with seeking explanations for this growth has largely focused on understanding the extent to which criminal justice policies and social forces have influenced this growth.

Interestingly, little attention has been paid to the role of system resources and the dynamics of criminal justice system behavior in prison population growth. One important exception is a study conducted by Paul McCold (1993). Using a system dynamics modeling, McCold showed that changes in police, prosecutor and court resources were sufficient to explain the growth in new prison admissions in New York State regardless of changes in the crime rate or other exogenous factors (i.e., demographic changes in age groups, unemployment, prison crowding, and sentencing policy) (1993:90-93).

This study will argue that decision making in the criminal justice system following arrest is shaped largely by the dynamics of system behavior, more so than law, policy or individual discretion. In doing so, it contends that it is the allocation of a system's case processing capacity between the upper and lower courts that largely determines the amount of growth in new prison admissions. Furthermore, it contends that the allocation of this capacity can be affected by policing strategies that produce substantial and protracted increases in the volume of arrests. System Dynamics is among the analytical techniques used to develop this argument.

## Section 2 Understanding the Dynamics of Criminal Justice System Behavior

This study is an outgrowth of research that was concerned with understanding why conviction rates for juveniles prosecuted as adults for serious violent offenses in the upper (felony) courts of four New York City counties – Bronx, Kings, New York and Queens – had fluctuated, sometimes by as much as 15 percent, over the past two decades.<sup>1</sup> During the course of that research, trends in upper court conviction rates for juveniles were compared to those for adults who were arrested for comparable crimes. The analysis showed that trends were the same for both groups. Because the instability of conviction rates appeared to be a systemwide phenomenon, it became clear it would not be possible to understand, in isolation from the larger system, why juvenile conviction rates were fluctuating.

An exploratory study was subsequently undertaken to identify factors that could have contributed to the substantial changes in upper court conviction rates for violent felony arrests. *System Dynamics*(SD) methodology was used to develop a simulation model to explore criminal justice system

---

<sup>1</sup> In New York State, the crimes for which juveniles can be prosecuted as adults are defined in New York State Penal Law § 10.00(18); these crimes are a subset of serious violent crimes defined as *violent felony offenses* in PL § 70.02.

dynamics that might explain this behavior.<sup>2</sup> A discussion of the analytical approach taken and findings from this exploratory study follows.

### **An Exploratory Study of Dynamic System Behavior**

The exploratory System Dynamics (SD) analysis examined – from a systemic perspective – how the targeted enforcement of drug offenses in the eighties and, in the mid-1990s, a broader spectrum of quality of life crimes affected the prosecution of offenders arrested for non-targeted offenses, particularly violent offenses. New York City’s four most populous counties – Bronx, Kings, New York, and Queens were the jurisdictions studied. Two research questions guided the exploratory analysis:

- To what extent did the growth in conviction capacity in the upper and lower courts in each of the four counties studied keep pace over the past two decades with the growing number of arrests for drug and quality of life offenses?
- If the growth in conviction capacity did not keep pace with the growth in arrests, to what extent were case outcomes effected? That is, how were the resulting losses in conviction capacity distributed across arrests offenses by offense type and seriousness with respect to the likelihood of conviction and incarceration?

SD model parameters were calibrated with data from the New York State Computerized Criminal History (CCH) data base maintained by the State’s Division of Criminal Justice Services. The police, prosecutors and courts are required under State law to report all fingerprintable arrests to the State, as well as the subsequent dispositions of these cases.

Initially, widely held assumptions about criminal justice system behavior were relied upon to build the model’s structure. When an assumption did not generate the observed behavior, it became necessary to return to the data base to conduct descriptive analyses that would help to explain the unexpected system behavior. Several iterations of movement back and forth between the data and the model were necessary to separate assumption from fact for model construction. The hypotheses guiding the current study (and presented later in this section) evolved during the course of this iterative, model-fitting process. A summary of the findings from which the hypotheses flow follows. Figures cited below are presented in the Appendix which is not attached to this paper; please see cover memorandum.

### **Penal Philosophy and System Capacity**

The number of defendants sentenced to prison in New York City’s upper courts has largely been a function of the number of cases forwarded to the upper courts for felony prosecution.<sup>3</sup> This relationship is illustrated in Figure 1. The knowledge that this behavior has been relatively consistent over time, along with the fact that only defendants prosecuted in an upper court *and* convicted of

---

<sup>2</sup> The SD model is still undergoing revisions. It is not presented in this draft paper, but will be included in the final paper.

<sup>3</sup> Although reported crime has witnessed a substantial decline during the latter half of the nineties, the overall number of arrests for felony offenses has not declined. Thus, the decline in reported crime, alone, does not explain the substantial decline in new prison admissions that began in the mid-nineties.

committing a felony offense can be sentenced to prison, is the key to unraveling the dynamics that underlay fluctuations in the number of persons sentenced to prison in New York City jurisdictions. To understand why the number of new admissions to prison fluctuates over time, one must first understand the dynamics of criminal justice system behavior that affect changes in thresholds for upper court prosecution. These are dynamics that are largely shaped by penal philosophy and a system's capacity to prosecute cases in the upper court.

***Penal philosophy.*** During the seventies, a number of laws were passed in New York State that provided for harsher penalties, largely mandatory prison sentences, in cases involving drug offenses (early seventies) and serious and repeat offenders (late seventies). New York State did not act alone; many other states enacted similar statutes during the seventies.

Public support for these harsher penalties was evident in the additional federal, state, and local monies allocated to prosecutors and courts to support the enforcement of these new laws. The additional monies allowed systems to increase their capacity for upper court prosecutions (achieved through reductions in thresholds for upper court prosecution) in order to promote the imposition of prison sentences under the new laws. Figure 1 illustrates the growth in the number upper court convictions in the four New York City jurisdictions studied. As a consequence, the number of defendants sentenced to prison began to increase in New York State.

In the mid-nineties, New York State demonstrated its continued support for the enforcement of these harsher sanctions with the passage of determinate sentencing laws. These laws targeted defendants convicted of violent felony offenses. However, despite this reaffirmation of penal policy and the absence of any substantial decline in arrests for serious offenses, the number and percentage of defendants sentenced to prison in New York City's criminal justice system has been declining since the early to mid-nineties.<sup>4</sup>

***Conviction capacity.*** The capacity of a system to enforce laws is essential if the intent of the laws is to be realized. When the growth in a system's capacity to prosecute cases lags behind the growth in arrests, the capacity to convict is strained. In such an instance, the number and percentage of persons convicted can decline irrespective of penal philosophy.

The mechanism through which conviction rates are adjusted is the threshold for upper court prosecution. Thresholds, which vary based largely on offense type and seriousness, are determined by prosecutors and achieved through the creation of guidelines (generally informal) that specify the legal criteria that must be met for a case to be prosecuted in the upper court. When capacity is strained, thresholds are raised to reduce the number of cases prosecuted. Conversely, when there is excess capacity thresholds are lowered. The exploratory analysis tracked changes in prosecutorial thresholds by examining changes over time in the number of convictions in a given jurisdiction relative to the number of arrests.

---

<sup>4</sup> Must address the possibility of judicial back lash – would only be evident if the proportion of upper court convictions resulting in prison sentences declined. This did not happen.

## Arrest Volume and Thresholds for Upper Court Prosecution

Over the past two decades, the number of arrests in New York City surged upward. This growth is largely attributable to targeted enforcement strategies implemented by the New York City Police Department (NYPD) during the eighties against drug offenses and in the nineties against a broader spectrum of quality of life offenses. It was during the initial phase of this growth, in the mid-eighties, that conviction rates for felony offenses began to decline.

In Bronx County, for example, there was a sudden and permanent decline in the number of felony convictions in 1990 (Figure 2). This pattern of decline (i.e., a sudden downward decline that then stabilizes) suggests that there may have been a change in the prosecutorial screening criteria that, in effect, raised the threshold for upper court prosecutions. Kings and New York counties witnessed similar declines in felony conviction rates during the later half of the eighties, although these declines were less stable over time than in Bronx County. Only in Queens County was the decline in the number of felony convictions limited to a two-year period spanning 1989 and 1990.

One possible explanation for a decline in conviction rates is a change in the mix of arrest case characteristics (e.g., offense type and seriousness and prior record). When controls were added for court type (i.e., upper and lower) and arrest offense type (i.e., violent, drug, and other), little support was found for this explanation. Graphs that track the percent change in the number of arrests (the heavy solid line); upper court convictions (the thin line with the square marker); and lower court convictions (the thin solid line) are displayed in Figure 4 for Bronx County.

Recall, the graph for Bronx County in Figure 2 shows that the number of convictions for felony arrests overall declined in 1990. Controlling for upper and lower court convictions, though, Figure 3A shows that upper court convictions (the line with the square marker) began to decline several years earlier (1987). The fact that this decline was offset by an increase in lower court convictions (the solid thin line) from 1987 through 1989 explains why Figure 2 does not show an overall decline until 1990 for Bronx County.

Figures 3B-D control for both court and offense type. The important comparison across the graphs presented in these three figures is the percent change in the number of upper court convictions (the line with the square marker) relative to the percent change in arrests (the heavy solid line). Collectively, the graphs show that the overall decline in upper court convictions (Figure 3A) was due largely to the decline in the number of convictions for violent felony arrests. In contrast, the percent change in upper court convictions for drug and other felony arrests kept pace with, and sometimes exceeded, the growth in their respective arrest categories.

Though not presented in this paper, analyses found somewhat similar patterns for felony case processing behavior in Kings and New York County and, to a lesser degree, in Queens County. The fact that the temporal occurrences of the shifts in percent changes differ across counties despite the fact that arrest trends were similar across counties, suggests that these shifts are more likely due to changes in prosecutorial thresholds than changes in the mix of case characteristics. Further undermining the “case mix” hypothesis is the fact that the average seriousness of the top charge in violent felony arrest cases did not decline during the latter half of the nineties in any of the four counties.

The role that case processing constraints play in the unraveling of this dynamic puzzle is far more clear. The graphs presented in Figure 4 contrast annual trends spanning 1983-1999 in the number

of arrests (in thousands) for all felony and all misdemeanor arrests with upper court conviction rates for violent felony arrests. These graphs show the strong, inverse correlation of arrest volume and conviction rates for violent felony offenses. In the eighties, when arrests were increasing for both felony and misdemeanor offenses, it is highly probable that the increase in felony arrests during that period contributed to the decline in felony convictions. It is less clear to what degree, if any, the growth misdemeanor arrests effected upper court conviction capacity during the eighties. In the nineties, though, when felony arrests were relatively stable, felony conviction rates declined further. Given this fact, it is reasonable to conclude that the post-1990 decline in upper court convictions may be related to the increases in misdemeanor “quality of life” offenses during that period.

These findings pointed the way to the next question to be answered in this puzzle of dynamic system behavior – Why was the narrowing of prosecutorial thresholds largely constrained to cases involving violent felony arrest offenses? This finding is counterintuitive to assumptions about the role that offense seriousness and type play in case processing behavior.

### **Prosecutorial Decision Making**

The purpose of targeted enforcement is to deter crime. Because deterrence can sometimes be achieved through arrest alone, targeted enforcement is not always undertaken by the police with the expectation that convictions will follow. However, statistics from the exploratory analysis showed that upper and lower court conviction rates declined for non-targeted offenses rather than targeted offenses in all four study sites. Thus, the problem became one of identifying the mechanisms within the system that would explain the unexpected patterns of divergence in conviction rates. Attention was turned to understanding the dynamics of the prosecutorial screening process.

*Ethically bounded prosecutorial decision making.* Michael and Don Gottfredson (1988) conducted an extensive review of research concerned with decision making in the criminal justice system. This work provided important insights in the search for the systemic mechanism. They found that the body of research pertaining to prosecutorial decision making had consistently identified the principal legal correlates for the decision to prosecute as (1) a prosecutor’s belief in an offender’s guilt, (2) the belief that an offense warrants prosecution (i.e., the punishment fits the seriousness of the crime), (3) the seriousness of the offense, and the (4) strength of evidence<sup>5</sup> (not in order of importance). Findings regarding the importance of an offender’s prior record in the decision to prosecute were mixed. With respect to judicial decisions at sentencing, research has consistently found that the likelihood imprisonment is highly correlated with the seriousness of the crime committed and the defendant’s prior criminal history (Blumstein, Cohen, Martin and Toner 1983; Gottfredson and Gottfredson 1988).<sup>6</sup>

From among these correlates, it was reasoned that strength of evidence was the most pivotal factor for successful prosecution. Factors that substantially contribute to the sufficiency of evidence include the evidence gathering ability of the police and the willingness and ability of witnesses to

---

<sup>5</sup> Once prosecution was undertaken, the principal reasons for prosecutors to request case dismissals were insufficient evidence and a defendant’s successful participation in a diversion program. To a lesser degree, some cases were not prosecuted or later dismissed at the prosecutor’s request because of due process problems with arrest procedures and the willingness of offenders to cooperate with law enforcement to advance the prosecution of other criminal cases.

<sup>6</sup> The extent to which prosecutorial plea-bargaining and probation pre-sentence reports help to shape judicial decisions has also been the focus of much research. Plea bargaining is among the most controversial of prosecutorial tools.



participate in the prosecution of an offender (Gottfredson and Gottfredson 1991). While prosecutors may have some influence over the quality of police evidence, they have little, if any, control over witnesses other than police officers. Furthermore, research has shown that the victim-offender relationship was the most often cited reason for the failure of witnesses to cooperate.

The concept of *ethically bounded prosecutorial decision making* is introduced at this point to help explain the unexpected divergence in conviction rates across offense types. The concept is grounded in the belief that the sufficiency of evidence, particularly the availability and willingness of witnesses to provide testimony, is pivotal for successful prosecution. It contends that, in systems where the capacity to prosecute cases is strained, prosecutors – who are ethically bound to prosecute cases where guilt can be proven – are compelled to direct their attention toward cases for which the sufficiency of evidence is high and away from cases, regardless of case seriousness, where the relative sufficiency of evidence is low.

The sufficiency of evidence, particularly the availability and willingness of witnesses to provide testimony, is generally much stronger in targeted arrest cases than in non-targeted arrest cases. This occurs because of the nature of these arrests and the fact that the police are the primary witnesses in such cases. Consequently, as targeted arrests increase as a proportion of all arrests, prosecutorial capacity for prosecution and conviction, absent intervention (e.g., increased efficiencies to expand system capacity for convictions), is slowly, and unwittingly, diverted from the prosecution of non-targeted offenses.

Based on this concept, the unexpected divergence in conviction rates in the four New York City counties can be explained, at least in part, as a systemic response to the enormous growth in arrests for targeted offenses. As their capacity to prosecute cases became increasingly strained, prosecutors were ethically compelled to shift their attention toward the prosecution of targeted arrests. As a consequence, conviction capacity was slowly, and unwittingly, diverted from the prosecution of non-targeted offenses, particularly violent offenses, in both the upper and lower courts.<sup>7</sup>

**Proportionality.** Findings from the exploratory analysis also indicated there were boundaries that prevented the percentage of violent arrests convicted in the upper court from dropping below a certain level. That is, there appeared to be a certain percentage of cases in which offense seriousness was perceived as so great, prosecutors were ethically bound to prosecute these cases in the upper court. Only once these “floors” in conviction rates were reached for violent and other non-targeted felony offenses, did upper court convictions rates for targeted offenses (i.e., felony drug arrests) begin to decline (Figure 5).

This observation lends further support the idea that there exists within legitimate systems of criminal justice an innate sense of proportionality (discussed in the previous section). Also, it suggests that the dynamics that structure the magnitude of a “going rate” may also be responsible for the determination of this floor. These concepts of dynamic system behavior help to explain why upper court conviction percentages for felony drug arrests began to decline in some counties in the latter half of the nineties, just as those for violent offenses were stabilizing.

---

<sup>7</sup> It is unknown at this time to what extent, if any, targeted enforcement strategies contributed to this problem by diverting police resources from the investigation of non-targeted arrests.

## **Shifting Conviction Capacity**

Finally, findings from the exploratory SD study showed that during periods when targeted enforcement caused arrests for misdemeanor offenses to grow exponentially, conviction capacity was diverted from the upper to the lower court. This not only caused the number of upper court convictions to fall, but also the number of cases in which prison sentences were imposed. This occurred because the number of defendants sentenced to prison by New York City's upper courts has largely been a function of the number of cases forwarded to the upper courts for felony prosecution.

This finding is supported by Paul McCold's (1993) work which showed that changes in police, prosecutor and court resources (summary measures for system capacity), alone, were sufficient for estimating changes in the number of observed prison admissions. The exploratory analysis, though, found that it was not only the amount of system capacity available for prosecuting cases,<sup>8</sup> but also the manner in which the "conviction" capacity was allocated between the upper and lower courts that determined the number of offenders sentenced to prison in New York City courts. The exploratory research also indicated that it was largely changes in arrest volume that determined how conviction capacity was distributed across the upper and lower courts. Together, the literature review and the exploratory analysis suggest that the "going" conviction rate is the mechanism through which an innate sense of proportionality is manifested within systems of criminal justice.

## **Summary of Preliminary Findings and Conclusions**

In summary, the key findings from the preliminary analysis include the following:<sup>9</sup>

- The number of defendants sentenced to prison in New York City's upper courts has largely been a function of the number of cases forwarded to the upper courts for felony prosecution. Given this knowledge, it may be possible to control the scale of imprisonment if the dynamics that underlie decisions to prosecute cases in the upper court can be better understood.
- There is evidence that a substantial and protracted increase in the volume of misdemeanor arrests can cause a decline in the number and percentage of felony arrests that result in upper court convictions.
- Changes over time in the percentage of upper court convictions for felony arrests were not proportionally distributed across offense types; conviction rates for violent felony arrests declined while those for drug (PL 220) felony arrests initially increased.

---

<sup>8</sup> The exploratory research conducted for this study used conviction capacity (i.e., a summary measure of all factors, including resources, that determine court capacity) rather than resources as summary measure of all efforts undertaken to effect case processing capacity

<sup>9</sup> These findings and conclusions are based on quantitative analyses only. To date I have had no opportunities to discuss my findings with practitioners. It is possible that such discussions could alter my interpretation of findings.

### **Section 3 A Theory and Hypotheses of Criminal Justice System Behavior**

The proposed theory of system behavior presented below is composed of six core tenets or hypotheses developed during the course of the exploratory analysis. The hypotheses assert that it is the dynamic systemic forces of arrest volume, conviction capacity, ethically bounded prosecutorial decision making, and the “going” rate, working in tandem – more so than law, policy or practitioner discretion – that largely control the magnitude of conviction and imprisonment rates. Practitioner discretion exists only to the extent it is allowed to operate within the boundaries established by these other systemic forces. (A causal loop diagram will be included in the final paper.)

The concept of system equilibrium is central to this theory. For the purposes of this study, equilibrium occurs in a criminal justice system or subsystem when the percent change in arrests is the same as the percent change in convictions. The system dynamics which control and disrupt this equilibrium are hypothesized below.

- **Hypothesis 1.** An innate sense of proportionality exists within legitimate systems of criminal justice.

It is this innate sense of proportionality that determines the amount of variance in conviction rates across offenses and offenders. It is operationalized through the dynamics underlying the evolution and maintenance of a “going” conviction rate for an offense.

- **Hypothesis 2.** In a system or subsystem with limited conviction capacity, the system or subsystem will be forced to seek a new equilibrium by adjusting conviction rates downward when a substantial growth in the number of arrests is not offset by a similar growth in the capacity to prosecute cases.

Thus, the stability and maintenance of “going” conviction rates is bounded by a system or subsystem’s capacity to prosecute arrest cases. At the same time, a decline in arrests does not always translate into an increase in conviction rates because there is no internal system mechanism controlling marginal slack.

- **Hypothesis 3.** Gains or losses in conviction capacity resulting from changes in arrest volume are not proportionally distributed across offense types in a system or subsystem because of the ethical boundaries that constrain decision making.

Specifically, gains in conviction capacity (i.e., the number of cases a system is able to prosecute/convict) flow naturally toward the prosecution of targeted arrest offenses and losses in conviction capacity flow naturally toward nontargeted arrest offenses. This occurs because there is a stronger likelihood of sufficient evidence in targeted arrest cases due to the nature of the arrest and the greater availability and willingness of witnesses (i.e., the arresting officer) to provide testimony in such cases.

- **Hypothesis 4.** In a system or subsystem with limited capacity, upper court conviction rates for targeted offenses decline only when the downward adjustment of going conviction rates for non-targeted offenses reach their lower limit or floor.

That is, there is a certain percentage of cases in which offense seriousness is so great, prosecutors are ethically bound to prosecute these cases. Only once these “floors” in conviction rates are reached for

violent and other non-targeted offenses, do upper court conviction rates for targeted offenses begin to decline.

- **Hypothesis 5.** In a system or subsystem with limited conviction capacity, conviction capacity will be shifted from the upper to the lower court when the conviction rate floors are reached for misdemeanor (targeted and non targeted) arrest cases.

This action is necessary to prevent misdemeanor conviction rates from declining below their baseline rates. The hypothesis assumes the availability of upper court conviction capacity.

- **Hypothesis 6.** A reduction in upper court capacity will cause the number of cases in which prison sentences are imposed to decrease.

This hypothesis, which contends it is relative – rather than absolute – case severity that determines the distribution of sanction types across convicted cases, is grounded in the work of Robert Emerson (1983). Emerson synthesized the major research findings about social-control decision making that emerged during the late sixties and through the early eighties in the field of criminal justice and, to a lesser degree, the fields of medicine, sociology, and organizational behavior. He argued that:

[U]nder a variety of circumstances, the individual case is not the sole or even the most important unity for categorizing and disposing of cases. Particular cases are in fact processed not independently of others but in ways that take into account the implications of other cases for the present one and vice versa. These wider *holistic* concerns and influences are an important organizationally-based factor that shapes decision outcomes. (1983:425-426)

Thus, a reduction in upper court conviction capacity will cause the number of cases in which prison sentences are imposed to decrease because the distribution of sanctions is proportional and this distribution is relatively stable over time.<sup>10</sup> Why the proportion of convictions in which prison sentences were imposed remains constant over time will not be examined in this study. Literature pertinent to the explanation of this behavior includes the work of Emerson (1983) and Heumann (1978).

This theory stops short of hypothesizing what happens when the floor in conviction rates for targeted (i.e., drug) felony offenses is reached. Traditional assumptions about the relationship between deterrence and punishment have been found wanting. It is a widely held assumption that crime increases when the deterrent and incapacitative effects of any law are diminished. So far, though, violent and other serious non-targeted crimes have continued to decline despite the decline in conviction and incarceration rates for these offenses. The possible policy implications of the co-occurrence of declining crime, conviction and incarceration rates are discussed in Section 5.

---

<sup>10</sup> Although reported crime has witnessed a substantial decline during the latter half of the nineties, the overall number of arrests for felony offenses has not declined. Thus, the decline in reported crime, alone, does not explain the substantial decline in new prison admissions that began in the mid-nineties.

## **Section 4 System Dynamics Model**

To be added.

## **Section 5 Possible Policy Implications**

Preliminary analyses suggest that this study may provide strong evidence that, since the early eighties, the targeted enforcement of drug and other quality of life offenses in New York City has compromised the prosecution of offenders arrested for violent and other non-targeted offenses. Certainly, the decline in conviction and incarceration rates for these offenses was an unintended consequence of targeted enforcement efforts. Nonetheless, such facts should evoke alarm.

It is a widely held assumption that crime increases when the deterrent and incapacitative effects of any law are diminished. In this instance, though, one must pause to consider the fact that reported crimes involving violent<sup>11</sup> and other non-targeted offenses have also declined during this same period. That these two trends are positively correlated is counterintuitive to our assumptions about crime prevention and control.

The mid-nineties decline in violent crime in New York City has been attributed to factors that are both deterrent and incapacitative in nature. Among these factors are the following:

- the enhanced enforcement of drug and other quality of life offenses;
- the enactment of laws enhancing sanctions for violent and repeat offenders; and
- the enactment of determinate sentencing laws which increased time served through the abolition of parole.

Targeted enforcement cannot continue to grow unrestrained indefinitely in the face of New York City's declining crime rates. A stabilization or decline in targeted enforcement could occur as a result of decreasing marginal returns for targeted enforcement; this occurs when cost of crime suppression begins to outweigh its benefits. It could also occur as a result of public outcry as the balance between personal rights and public safety tip in favor of the latter. In New York City, there has been some public outcry regarding police abuses, but it has not been sufficient to quell such police actions. And earlier this year arrests for targeted offenses began to climb once more as the police anticipated the possibility of another drug crisis.

Although violent crime has declined – whether as a result of targeted enforcement, tougher sanctions, the abolition of parole, or other complex social phenomena -- it is important that the concept of offender accountability not take a back seat to the concept of deterrence. Research has shown that it is the certainty rather than the severity of punishment that has the greater deterrent effect. Greater offender accountability can be achieved without increasing the scale of imprisonment.

Further research will be required to substantiate the findings reported in this study. Will the hypotheses of criminal justice system behavior presented in this study be able to explain system behavior

---

<sup>11</sup> Crimes of homicide, assault and robbery involving the use of guns peaked around 1991-92 in New York City and then began a steep descent in 1992 that has continued through 1999, while non-gun homicides, assaults and robberies began a more controlled descent two years earlier in 1990 (Zimring and Fagan).

in other jurisdictions across New York State and the nation? Is system size a factor that alters the applicability of the hypotheses? Whether substantiated in whole or part, it would seem that methodologies that help us to better understand the dynamics of criminal justice system behavior should take on a greater importance in research.

If findings are substantiated by subsequent research, the task before us become one of determining which policy levers to adjust to achieve the proper balance between deterrence (through targeted enforcement) and just deserts (through the scale of imprisonment). For example, what should the policy response be to a decline in offender accountability absent any apparent effect on crime rates? What if the deterrent effects of targeted enforcement offset the presumed negative effects of declining offender accountability? What about the principal of just deserts? Should the going conviction rates for violent and other serious crime be allowed to continue their downward adjustments? Or should targeted enforcement be reduced to allow conviction rates for non-targeted crimes to recover? Or should conviction capacity be increased to accomplish this recovery and sustain the current level of targeted enforcement?

If serious crime is declining despite the fact that the likelihood of conviction and incapacitation for both targeted and non-targeted offenses has declined, what does this imply about the scale of imprisonment in New York State where New York City jurisdictions account for around two thirds of new prison admissions annually? Certainly, the passage of tougher sentencing laws for serious and repeat offenders and the abolition of parole have enhanced the public's safety by keeping these offenders off the streets for longer period of time. At the same time, though, it suggests that use of incapacitation may have been unnecessarily excessive in past years for marginal offenders.

If trends in the number of offenders sentenced to prison closely parallel trends in the number of offenders convicted in the upper court, can we control the scale of imprisonment by exerting more control over the number and type of cases prosecuted in the upper court? The exploratory study found evidence of floors for upper court conviction rates that were remarkably similar for violent offenses across the four jurisdictions studied. Should we seek out these lower thresholds for all crimes? The fact that violent and other non-targeted offenses continued to decline under lower thresholds, suggests that upper court conviction rates could remain at these lower levels without posing a serious threat to public safety and, at the same time, reduce the scale of imprisonment in New York State. To sustain this trend, though, we need to understand why crime rates are declining. A draft report for exploratory analysis examining the impact of targeted enforcement on crime rates is presented in Appendix F. Preliminary findings suggest that it has largely been the increase in non-drug quality of life crimes that is responsible for this decline.

Finally, prison and jail populations increased during the seventies despite a federally supported nationwide moratorium on prison construction. To what extent did the increasing availability of federal monies funneled to states and localities through the now defunct Law Enforcement Assistance Administration (LEAA) during the seventies for system improvements contribute to the growth in upper court conviction capacity?<sup>12</sup> Zimring and Hawkins (1991:76) give little weight to the importance of LEAA monies and the growth in prison populations. Interestingly, though, the growth in LEAA disbursements parallels the growth in prison populations in New York State and nationwide. Is it

---

<sup>12</sup> In support of the national moratorium on prison construction, LEAA monies could not be used for the construction of new prisons during the program's early years.

possible that these monies contributed – indirectly – to the enormous growth in prison populations during the seventies as a result of the increased processing efficiencies made possible through LEAA funded initiatives? Comparable questions should be asked about the role played by federal drug enforcement monies during the eighties.

## Bibliography

- Albonetti, C. A. and Hepburn, J. R. (1996).<sup>1</sup> Prosecutorial discretion to defer criminalization: The effects of defendant's ascribed and achieved status characteristics. *Journal of Quantitative Criminology* 12:63-81.
- Albonetti, C. A. (1998).<sup>1</sup> Direct and indirect effects of case complexity, guilty pleas, and offender characteristics on sentencing for offenders convicted of a white-collar offense prior to sentencing guidelines. *Journal of Quantitative Criminology* 14:353-378.
- Ashworth, Andrew J. (1992). Sentencing reform structures. In *Crime and Justice: A Review of Research*, vol.16, edited by Michael Tonry. Chicago: University of Chicago Press.
- Alschuler, A. (1978).<sup>1</sup> Sentencing reform and prosecutorial power. *University of Pennsylvania Law Review* 126:550-77. From Griset 1995
- Berk, Richard A., David Rauma, Sheldon L. Messinger, and Thomas F. Cooley (1981). A test of the stability of punishment hypothesis: The case of California, 1851-1970. *American Sociological Review* 46:805-829. From Zimring and Hawkins 1991.
- Beha, James A. II (1977). "And nobody can get you out": The impact of a mandatory prison sentence for the illegal carrying of a firearm on the used of firearms and on the administration of criminal justice in Boston. *Boston University Law Review* 57:96-146 (pt.1), 289-333 (pt.2). From Tonry 1992.
- Blalock, Hubert M. Jr. (1979). *Social Statistics*. 2d ed. New York: McGraw-Hill Book Company.
- Blumestein, Alfred and Allen F. Beck (1999). Population growth in U.S. prisons, 1980-1996. In *Crime and Justice: A Review of Research*, vol.26, edited by Michael Tonry and Joan Petersilia. Chicago: University of Chicago Press.
- Blumestein, Alfred and Jacqueline Cohen (1973).<sup>1</sup> A theory of the stability of punishment. *Journal of Criminal Law and Criminology* 64:198-207.
- Blumestein, Alfred, Jacqueline Cohen, and Daniel Nagin (1976).<sup>1</sup> The dynamics of a homeostatic punishment process. *Journal of Criminal Law and Criminology*. 67:317-334.
- Blumestein, Alfred, Jacqueline Cohen, Susan E. Martin, and Michael H. Tonry, eds. (1983). *Research on sentencing: The search for reform*, vol.1. Washington, D.C.: National Academy Press.
- Blumestein, Alfred, Jacqueline Cohen, Soumyo Moitra, and Daniel Nagin (1981).<sup>1</sup> On testing the stability of punishment hypothesis: A reply. *Journal of Criminal Law and Criminology*. 72(4):1799-1808.



- Blumestein, Alfred and Soumyo Moitra (1979).<sup>1</sup> An analysis of time series of the imprisonment rate in the states of the United States: A further test of the stability of punishment hypothesis. *Journal of Criminal Law and Criminology*. 70:376-390.
- Blumestein, Alfred and Soumyo Moitra (1980).<sup>1</sup> Growing or stable incarceration rates: A comment on Calahan's "Trends in incarceration rates in the United States since 1880." *Crime and Delinquency*. 26:91-94.
- Cahalan, Margaret (1979).<sup>1</sup> Trends in incarceration in the United States since 1880. *Crime and Delinquency*. 25:9-41.
- Caplow, T. and Simon, J. (1999).<sup>1</sup> Understanding prison policy and population trends. In *Crime and Justice: A Review of Research*, vol.26, edited by Michael Tonry and Joan Petersilia. Chicago: University of Chicago Press.
- Cappell, Charles L. and Gresham Sykes (1991).<sup>1</sup> Prison commitments, crime and unemployment: A theoretical and empirical specification for the U.S., 1933-85. *Journal of Quantitative Criminology*. 7:155-200.
- Casper, J., Brereton, D. and D Neal (1982). *The implementation of the California determinate sentencing law*. Washington, DC: U.S. Department of Justice. From Gottfredson et al (1988)  
From Griset 1995
- Chaiken, J., T. Crabill, L. Holliday, M. Jaquette, M. Lawless, and E. Quade. (1976). *Criminal justice models: An overview*. National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, U.S. Department of Justice.
- Clear, T., J., Hewitt, and R. Regoli (1978).<sup>1</sup> Discretion and the determinate sentence: its distribution, control, and effect on time served. *Crime and Delinquency*. 24:428-45. From Griset 1995
- Crutchfield, Robert D., George S. Bridges, and Susan R. Pitchford (1994). Analytical and aggregation biases in analyses of imprisonment: Reconciling discrepancies in studies of racial disparity. *Journal of Research in Crime and Delinquency* 31:166-182.
- Davis, K. (1969).<sup>1</sup> *Discretionary justice: a preliminary inquiry*. Urbana: University of Illinois Press. From Griset 1995
- Emerson, Robert M. 1983. Holistic effects in social control decision-making. *Law and Society Review*. 17:425-455.
- Friedman, L. (1993).<sup>1</sup> *Crime and punishment in American history*. New York: Basic Books. From Griset 1995
- Gomme, I. M. and Hall, M. P. (1995).<sup>1</sup> Prosecutors at work: Role overload and strain. *Journal of Criminal Justice* 23:191-200.
- Gottfredson, Michael R. and Don M. Gottfredson. (1988). *Decision making in criminal justice: Toward a rational exercise of discretion*. New York: Plenum.

- Grabosky, Peter N. (1984).<sup>1</sup> The variability of punishment. In *Toward a General Theory of Social Control*, vol. 1, edited by Donald Black. Orlando, FL: Academic Press.
- Green, E. (1961).<sup>1</sup> *Judicial attitudes in sentencing*. London: MacMillian.
- Greenberg, David (1977). The dynamics of oscillatory punishment processes. *Journal of Criminal Law and Criminology* 68:643-651. From Zimring and Hawkins 1991.
- Griset, P. L. (1995). The politics and economics of increased discretion over time served: a New York case study. *Justice Quarterly* 12:307-323.
- Griset, P. L. (1996).<sup>1</sup> Discretion, disparity, and discrimination in sentencing: Where have all the critics gone? *Judges' Journal* 35:2-9
- Hill, G. D., S.S. Harris and J. L. Miller (1985).<sup>1</sup> The etiology of bias: Social heuristics and rational decision making in deviance process. *J Res Crime* 22:135-162. From Miller 1994
- Hudzik, John K. (1984). *Federal aide to criminal justice: Rhetoric, results, lessons*. Washington, DC: The National Criminal Justice Association.
- Huemann, Milton (1978). *Plea-bargaining: The experiences of prosecutors, judges, and defense attorneys*. Chicago: University of Chicago Press.
- Joint Committee on New York Drug Law Evaluation (1978). *The nation's toughest drug law: Evaluating the New York experience*. A project of the Association of the Bar of the City of New York and the Drug Abuse Council, Inc. Washington, D.C.: U.S. Government Printing Office. From Tonry 1992.
- Lagoy, Stephen P., Frederick A. Hussey and John H. Kramer (1978).<sup>1</sup> A comparative assessment of determinate sentencing in the four pioneer states. *Crime and Delinquency* 24:385-400.
- Lansing, Sharon (1999). *Youth discounts and sentencing equity in New York State*. Paper presented at the American Society of Criminology Annual Meeting, Toronto, Canada, November 18, 1999.
- Loftin, Colin, Milton Heumann, and David McDowell (1983). Mandatory sentencing and firearms violence: Evaluating an alternative to gun control. *Law and Society Review* 17:287-318. From Tonry 1992.
- Loftin, Colin, and David McDowell (1981). "One with a gun gets you two": Mandatory sentencing and firearms violence in Detroit. *Annals of the American Academy of Political and Social Science* 455:150. From Tonry 1992.
- Luhman, Niklas (1985).<sup>1</sup> *Ecological communication*. Translated by John Bednarz, Jr. Chicago: University of Chicago Press. (Discusses feedback loops in institutional behavior.)
- Newman, D. (1966).<sup>1</sup> Sociologists and the administration of justice. In *Sociologists at Work.*, edited by A. Shostak. Homewood, Illinois: Dorsey. 177-87 From Griset 1995

- McAllister, William, James Atchinson and Nancy Jacobs (1991).<sup>1</sup> A simulation model of pretrial felony case processing: a queuing system analysis. *Journal of Quantitative Criminology* 7:291-314.
- McCold, P.E. (1993). *The role of fiscal policy in producing prison population dynamics: a trend analysis and dynamic simulation of felony offender processing in New York State, 1975-1988*. Ph.D. dissertation. State University of New York at Albany, Rockefeller College of Public Affairs and Policy, School of Criminal Justice.
- Mieth, Terrence D. and Charles A. Moore (1985).<sup>1</sup> Socioeconomic disparities under determinate sentencing system: a comparison of preguideline and postguideline practices in Minnesota. *Criminology* 23:337-363.
- Mieth, Terrence D. and Charles A. Moore (1989).<sup>1</sup> *Sentencing guidelines: Their effect in Minnesota*. Washington, D.C.: National Institute of Justice.
- Miller, J. Langley and John J. Sloan, III (1994). A study of criminal justice discretion. *Journal of Criminal Justice* 22:107-123.
- Morgenthau, Robert (1984).<sup>1</sup> LEAA and prosecution. In *Federal Aide to Criminal Justice: Rhetoric, Results, Lessons*, by John K. Hudzik. Washington, DC: The National Criminal Justice Association. 281-292
- Myers, Laura and Sue Titus Reid (1995). The importance of county context in the measurement of sentence disparity: the search for routinization. *Journal of Criminal Justice* 23:223-241. From Griset 1995
- Rauma, David (1981a). A concluding note on the stability of punishment: Reply to Blumestein, Cohen, Moitra and Nagin. *Journal of Criminal Law and Criminology* 72(4):1809-1812. From Zimring and Hawkins 1991?
- Rauma, David. (1981b). Crime and punishment reconsidered: Some comments on Blumestein's stability of punishment hypothesis. *Journal of Criminal Law and Criminology*. 72(4):1772-1798. From Zimring and Hawkins 1991?
- Richardson, George P. 1991. *Feedback thought in social science and systems theory*. Philadelphia: University of Pennsylvania Press.
- Rossmann, David, Paul Froyd, Glen L. Pierce, John MacDevitt, and William J. Bowers (1979).<sup>1</sup> *The impact of the mandatory gun law in Massachusetts*. Report to the National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, U.S. Department of Justice, Washington, D.C. From Tonry 1992.
- Rausche, Georg and Kirchheimer, Otto (1939). *Punishment and social structure*. New York: Columbia University Press.
- Sorokin, Pitirim (1937).<sup>1</sup> *Social and cultural dynamics*, vol.2. New York: American Book Company.
- Spader, D. J. (1984). Rule of law vs. rule of man: The search for the golden zigzag between conflicting

- fundamental values. *Journal of Criminal Justice* 12:379-394.
- Stolzenberg, Lisa and Steward J. D'Alessio (1994).<sup>1</sup> Sentencing and unwarranted disparity: An empirical assessment of the long-term impact of sentencing guidelines in Minnesota. *Criminology* 32:301-310.
- Tonry, Michael (1987).<sup>1</sup> Sentencing guidelines and their effects. In *The Sentencing Commission and its Guidelines*, edited by Andrew von Hirsh, Kay A. Knapp and Michael Tonry. Boston: Northeastern University Press.
- Tonry, Michael (1987b).<sup>1</sup> *Sentencing reform impacts*. Washington: National Institute of Justice.
- Tonry, M. (1988).<sup>1</sup> Structuring sentencing. In *Crime and Justice: A Review of Research*, vol. \_\_, edited by Michael Tonry and Norval Morris. Chicago: University of Chicago Press..
- Tonry, Michael (1992). Mandatory penalties. In *Crime and Justice: A Review of Research*, vol.16, edited by Michael Tonry. Chicago: University of Chicago Press.
- Tonry, Michael (1993). Sentencing commissions and their guidelines. In *Crime and Justice: A Review of Research*, vol.17, edited by Michael Tonry. Chicago: University of Chicago Press.
- Tonry, Michael and Joan Petersilia (1999). American prisons at the beginning of the twenty-first century. In *Crime and Justice: A Review of Research*, vol.26, edited by Michael Tonry and Joan Petersilia. Chicago: University of Chicago Press.
- Triplett, R. and Miller, S.L. (1994).<sup>1</sup> Case processing in the Harris County, Texas criminal justice system: a comparison across crime types. *Journal of Criminal Justice* 22:13-26.
- U.S. Sentencing Commission (1991). *Special report to the Congress: Mandatory minimum penalties in the federal criminal justice system..* Washington, D.C.: U.S. Sentencing Commission..  
From Tonry 1992.
- U.S. Sentencing Commission (199\_). 1996 Sourcebook of Federal Sentencing Statistics. Washington, D.C.: U.S. Sentencing Commission.
- U.S. Sentencing Commission (199\_). 1999 Sourcebook of Federal Sentencing Statistics. Washington, D.C.: U.S. Sentencing Commission.
- Utz, P. Determinate Sentencing in Two California Courts. Cited by J. Cohen and M. Tonry, Sentencing reforms and their impacts, in A. Blumstein, ed., *Research on Sentencing: The Search for Reform*, ch.7. Washington: D.C.: National Academy Press, 1983. From Gottfredson et al (1988)
- Vera Institute of Justice (1977).<sup>1</sup> *Felony arrests: Their prosecution and disposition in New York City's courts*. A Vera Institute of Justice Monograph. New York, New York.
- Walker, S. (1992). Origins of the contemporary criminal justices paradigm: The American Bar Association survey, 1953-1969. *Justice Quarterly*. 9:201-30. From Griset 1995

- Walker, S. (1993).<sup>1</sup> *Taming the system: The control of discretion in criminal justice 1950-1990*. New York: Oxford University Press.
- Waller, Irwin and Chan, Janet (1974). Prison use: a Canadian and international comparison. *Criminal Law Quarterly* 17:47-71. From Zimring and Hawkins 1991.
- Weibush, Richard G., Christopher Barid, Barry Krisberg, and David Onek (1995). Risk assessment and classification for serious, violent, and chronic juvenile offenders. In *A Sourcebook: Serious, Violent & Chronic Juvenile Offenders*, edited by James C. Howell, Barry Krisberg, J. David Hawkins, and John J. Wilson. Thousand Oaks: Sage Publications.
- Wooldredge, J. D. (1998). Analytical rigor in studies of disparities in criminal case processing. *Journal of Quantitative Criminology*. 14:155-179.
- Worden, A.P. (1995).<sup>1</sup> The judge's role in plea bargaining: an analysis of judges' agreement with prosecutors' sentencing recommendations. *Justice Quarterly* 12:257-278.
- Zatz, Majorie S. and Alan J. Lizotte (1985).<sup>1</sup> The timing of court processing: towards linking theory and method. *Criminology* 23:313-335.
- Zimring, Franklin E. and Gordon Hawkins (1991). *The scale of imprisonment*. Chicago: University of Chicago Press.
- Zimring, Franklin E. and Jeffrey Fagan (1999).