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NEW YORK CITY'S SPECIAL DRUG COURTS: RECIDIVISM PATTERNS AND PROCESSING COSTS

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LONG TERM IMPACTS OF SPECIAL DRUG COURTS PROJECT

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I. INTRODUCTION AND BACKGROUND

A. DESCRIPTION OF THE STUDY

Dramatic changes have occurred in the composition of the criminal defendant population over the past decade. Both the absolute number of drug arrests and the percentage of all arrestees that are charged with drug offenses have increased substantially since 1980, causing enormous management and policy problems for State and Federal court systems (Belenko, 1990; Goerdt and Martin, 1989). Between 1980 and 1989 drug arrests in the United States rose by 134% while the number of total arrests increased by only 37% (U.S. Department of Justice, 1982, 1990). In large measure these changes reflect shifts in police anti-drug strategy to emphasize control of street drug markets through street sweeps and undercover buy-and-bust arrests. These strategies tend to produce large numbers of relatively serious arrests: For example, 75% of the felony drug arrests in New York State in 1987 were B-level felonies, compared with 52% in 1983.[1]

The resultant strains on court systems have led to a continuing search for more effective ways to absorb the increase in drug arrests. Prior to 1986, for example, it was common practice in New York City to treat leniently felony drug arrestees who had no prior arrests or convictions. Since that time, however, conviction and sentence trends in the State courts indicate an increasingly punitive response to drug arrests. Felony conviction rates for drug arrests increased in New York State from 42% in 1983 to 63% in 1987 (Division of Criminal Justice Services, 1988). Among felony convictions, 70% were sentenced to jail or prison, compared with only 50% in 1983. In contrast, conviction and incarceration rates for nondrug felony arrests decreased between 1983 and 1987, and were generally much lower than for drug felonies. The emergence of crack cocaine in the mid-1980s, and the policy response that it evoked, was an important basis for the increasingly punitive criminal justice reaction to drug crime (Belenko, 1993).

In addition to this more punitive ethos, the court's other response to the drug case surge has largely focused on processing cases as quickly as possible to clear calendars and

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[1]Under the New York State Penal Law, felonies are classified into five categories (A, B, C, D, E in descending order of severity). Most felony drug arrests are for a B-felony, charged where there is an alleged sale of any amount of a preparation containing a "narcotic" drug (including heroin or cocaine and its derivatives). Typically, this involves a $10-$20 transaction. B-felony possession is charged for the possession of any amount of a "narcotic" drug with intent to sell, or one-half ounce or more (aggregate weight) of a substance containing "narcotics". It is thus clear that drug arrests are classified relatively severely within the stream of cases -- the most common felony charge, B-felony sale, is the same penal law severity as armed robbery, first

reduce pending felony caseloads. However, with the trend in recent years toward legislative initiatives to increase penalties for drug offenders or drug-related crime, and the existence of mandatory sentencing laws for repeat offenders in most States, there are competing pressures on the system at all phases of case processing not to treat these cases too leniently.

Judges and prosecutors faced with non-violent drug offenders are thus in a bind: there are few jail or detention alternatives, limited treatment options, and overloaded probation departments that are perceived as largely ineffective. Judges may be placed in the difficult position of simultaneously trying to expeditiously move cases through the system, while at the same time maintaining the defendant's legal and constitutional rights and being responsive to legislative and public pressures to treat drug cases seriously.

B. DRUG COURTROOMS

Recent research by the American Bar Association (ABA) documented the various methods courts are employing to cope with these drug caseload pressures, ranging from improved management techniques to increased commitment to drug treatment (Smith, Davis, and Goretsky, 1991; 1992). The ABA study found that one of the most common, and potentially most useful, responses of the courts has been to create special drug courtrooms or "parts". These parts are designed to handle only felony drug cases and to achieve quick felony pleas, sometimes through offers of more lenient sanctions. There are several reasons for believing that segregating narcotics cases is a reasonable case management tactic. First, judges, prosecutors, and public defenders assigned to narcotics courtrooms rapidly become specialists and therefore may be able to process cases more efficiently. These efficiencies are often bolstered by new rules for these courtrooms (e.g., early and complete discovery; firm trial dates) that encourage early plea negotiation and settlement. Second, when drug cases processed through standard routes are forced to compete for the court's attention with violent felonies, narcotics cases are usually the losers. The result may be that hearing and trial dates for drug cases are repeatedly postponed, as the court deals with higher priority cases. Segregating narcotics cases eliminates this "unfair" competition.

Third, the nature of the street-level anti-drug enforcement that characterizes many of the police responses to drug-related crime results in large numbers of relatively standardized cases with strong evidence and reliable witnesses (Zimmer, 1987; Belenko et al., 1990). This factor reduces the likelihood that defendants will seek a trial, streamlines the case preparation and investigation process for prosecutors, and can lead to the establishment of mutually understood and accepted "going rates" for felony drug cases.

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degree rape, or first degree manslaughter.

New York City was the first jurisdiction to use special narcotics courts. In April 1987, in response to the growing concern over the impact of the flood of crack and other felony drug cases on the court's caseload, the Administrative Judge of the Manhattan Supreme Court, with the cooperation of the District Attorney, established a special narcotics ("N") part in Manhattan. The mechanism for achieving a fast resolution of the case is through a "waiver" process, by which the defendant agrees to waive his or her rights to a grand jury hearing and plead guilty to an accusatory instrument called a "Superior Court Information" (SCI).[2] Modeled after the "felony waiver" court parts that had been in operation in other boroughs for several years, the N Part was established to receive all felony drug cases following the initial arraignment in Criminal Court (usually within six days of arrest). The new part combined the functions of the superior and lower courts in allowing the judge to accept pleas to misdemeanors or felonies. In theory, defendants were given an incentive to accept a quick plea by being offered misdemeanor convictions with short jail terms, reduced felony charges with a probation sentence, or lower prison sentences.[3] In New York City, nearly all drug felonies are initially adjourned to an N Part following the lower court arraignment. Thus most cases are given their first opportunity for an early disposition in the N Part.

Evidence is mounting that specialized narcotics courtrooms can indeed dramatically lower case processing time. Our analyses of the processing of drug felonies in New York City during 1989 demonstrate the substantial savings in processing time and court resources that can accrue through the use of N Parts (Belenko, Davis, and Dumanovsky, 1992). Felony dispositions were reached in an average of 13.6 days in the N Parts, compared with 151.5 days for similar cases processed through regular courts. This quicker case resolution was observed in all boroughs and across all disposition types. Since there were no gross or obvious differences between the defendants or cases disposed in N or non-N Parts, these data suggest that procedural differences accounted for most of the savings in disposition time. Our multivariate analyses of the factors that affect lower and upper court processing time confirmed the strong independent effect of N Part processing. The differences in sentences imposed in N and regular court parts suggested that the

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[2]In New York's two-tiered court system, the Criminal Court is equivalent to a municipal or lower court. Nearly all initial arraignments and hearings occur here, and cases initiated as misdemeanors or reduced from felonies to misdemeanors are adjudicated. The Supreme Court is the court of general jurisdiction; most of its caseload consists of cases transferred there following an indictment on felony charges by the grand jury or the filing of a Superior Court (Prosecutor's) Information charging a felony complaint.

[3]In New York, once a defendant is indicted on a B felony drug charge, plea bargaining restrictions and mandatory sentencing laws make it more likely that defendants will receive a prison sentence.

quicker pleas are achieved by offering somewhat more lenient sentences than would be received through standard case processing mechanisms, with higher rates of probation sentences and shorter sentences for those receiving prison terms. The ABA study on special drug courts also documented sharp reductions in processing time in the four jurisdictions studied (Smith et al., 1991).

But there has also been some concern that despite the gains in processing efficiency, special drug court parts can result in inappropriate case outcomes: prosecutors worry that dispositions will be too lenient, and the defense bar is concerned that defendants will be pressured into accepting inappropriate pleas, and that there is insufficient time to meet with the defendant, review the prosecutor's evidence, file motions, and prepare an adequate defense. In addition, the pressure to speed cases through these special courtrooms raises the question of whether an "assembly line" mentality will lead to such routinized processing that individual aspects of a case or defendant relevant to the disposition of a case will be ignored or discounted. Will defendants quickly processed through narcotics courts soon be back in front of the bench with a new drug arrest? What will the response of the courts be at that point: Is the system just building up a large pool of second felony offenders who must -- under mandatory sentencing laws -- be sentenced to lengthy prison terms on the second felony conviction?

C. GOALS OF THE PROJECT

This project was designed to further our understanding about how N Parts operate in practice, to clarify the factors and decision processes that operate to enable the quick resolution of cases, to ascertain why cases are or are not disposed in these Parts, and to determine the long-term impacts of these special courtrooms on felony drug case processing. The central policy questions about the N Parts revolve around the hidden costs and effects of such processing, and whether rational and fair dispositions can be achieved in a relatively brief time under such an organizational structure.

For example, our findings indicated that probation sentences were more likely in the N Parts (Belenko et al., 1992). If recidivism rates are higher under probation sentences than following a jail or prison sentence, then use of the N Parts might raise public safety concerns. On the other hand, reduced recidivism under probation supervision (especially if drug treatment or intensive supervision is mandated) can reduce system costs up front, and lessen the future impact since fewer offenders will be returning to court -- this would also save money through reduced incarceration costs,.

Second, the pressure to speed cases through these Parts limits the opportunity to identify and impose alternative sanctions or processing options. Further, if defendants receive a felony conviction in the N Part then they will often be ineligible for subsequent

alternative sanctions, due to mandatory second felony sentencing laws. Accordingly, if one result of N Part processing is an increased rate of felony conviction through the offer of probation or short incarceration sentences, then the pool of second felony offenders may increase, with implications for future prison populations and the use of alternative sanctions.

The above considerations suggest several basic research questions, which were addressed in our first project report (Belenko et al., 1992):

(1) How is processing time affected by the N Part mechanism?
(2) Do N Parts have unanticipated effects on dispositional patterns, which might affect public safety or the administration of justice? Are there unanticipated or hidden effects of faster case processing or isolating felony drug cases in special courtrooms?
(3) How do sentences differ in the N Parts? What are the long-term implications for these sanctioning decisions?

Aside from the substantially reduced processing time in the N Parts, our research found significant differences in case disposition patterns in the different court types. The much higher dismissal rates in the N Parts (37.2 percent of all cases disposed in N Parts, 18.5 percent of those disposed in non-N Parts) suggests two possibilities. The first is that N Parts are used as "dumping grounds" for weak drug felonies, and that these cases would have been quickly dismissed even if handled through regular procedures. However, the close congruence in case and defendant characteristics between N and regular part cases make this somewhat unlikely. The second, more plausible reason is that since all drug felonies are initially adjourned to the N Part after arraignment, the first opportunity for dismissal of a weak case occurs in that court part.

We also found substantial variations in disposition and sentencing patterns among New York City's four boroughs, which illustrate the different ways in which N Parts can be used. However, it seems fairly clear that rapid felony convictions are achieved in the N Parts by offering defendants pleas with probation sentences or shorter prison sentences than might be obtained in regular court parts. For example, Queens County, which had the highest N Part felony conviction rate, also showed a high rate of probation sentences and the largest difference in minimum prison sentence length. In contrast, the two boroughs with the lowest rate of N Part felony convictions (Manhattan and the Bronx), had relatively low percentages of superior court probation sentences, and less of a spread between N and non-N Part minimum sentences. Of course, since only about one quarter

of all felony convictions occurred in the N Parts (Belenko et al., 1992), many defendants are apparently still not perceiving these offers as particularly attractive at the time they are presented. There was no clear evidence that N Parts were increasing the pool of second felony offenders.

Our second report was a case study of the Queens County N Part (Davis, 1993a). This N Part has been successful in securing pleas from defendants with greatly reduced processing time, and for this reason can provide further insights into the workings of a successful drug courtroom. The Queens case study uncovered some possible explanations for its success. First, sentence offers are highly uniform and predictable, and are generally more lenient than offers that will be made later (after a grand jury hearing). Second, the judge plays an active and central role in trying to persuade both prosecution and defense to come to a plea agreement. Significantly, the Queens N Part stresses drug treatment for defendants receiving a probationary sentence, suggesting that an emphasis on quick disposition is not necessarily incompatible with an emphasis on drug treatment, as some critics of N Parts have maintained.

D. RECIDIVISM ANALYSIS: BACKGROUND

Special drug courts have been established in various jurisdictions with a number of different goals. In some cases, these courts have been initiated purely as a case management technique to reduce disposition time. In other instances, the drug courts have attempted to change defendants' behavior through court-ordered treatment, drug testing, and community supervision, as well as through traditional sanctioning. Implicit in the latter strategies is the hope that broader interventions, by helping to reduce drug use, may have consequent effects on reducing recidivism. Even for drug courts whose primary objective is to speed case processing, rearrest is important as a measure of program impact. A court intervention which saves processing time, but results in increased recidivism rates, may not receive much public or criminal justice system support. Further, both deterrence and incapacitation theory suggest that a criminal justice policy initiative such as the N Part, which resulted in changes in sanctioning behavior, might have an important impact on future offending.

The available information on recidivism rates of drug offenders, although limited, suggests that these rates are fairly high. For example, a national study of state prisoners from eleven states released during 1983 (Bureau of Justice Statistics, 1989), found that released drug offenders had a 50.4% rearrest rate within 3 years of release, a reconviction rate of 35.3%, and a reincarceration rate of 30.3%. Among those who had been incarcerated on a drug offense, 24.8% were rearrested for a subsequent drug offense within

3 years. In an earlier study of state prison releases, the median time to prison return for recidivists was 26.0 months overall, and 37.0 months for drug rearrests (Bureau of Justice Statistics, 1985). Among those who were rearrested for a drug offense, 21.5% were rearrested within one year after release.

Similar rearrest rates have been found among felony probationers. A study of 12,370 felony probationers during 1986-1989 reported that among drug felons receiving probation sentences, 48.9% were rearrested within 3 years, and 26.7% were rearrested on a drug offense (Bureau of Justice Statistics, 1992).

To further our knowledge about the long-term or hidden effects of special drug court processing, this third Project report investigates patterns of recidivism and reconviction between the court parts, and compares case processing costs for both sample arrest and rearrests. We address the following research questions:

(1) How do recidivism rates differ among defendants receiving different sanctions in the N Parts and regular court parts?
(2) How do violation of probation rates differ among drug offenders convicted in N Parts and regular court parts?
(3) What are the differences in case processing costs between court parts? How do recidivism rates affect overall processing costs?

We compare N Part recidivism rates across several dimensions, among defendants receiving various sanctions and those processed through other court parts. We calculate rearrest and reconviction rates for a two year period after the sample arrest in 1989 (post-release for those incarcerated) and investigate temporal patterns of rearrest. These analyses enable us to determine the relative effect of sanction type on recidivism rates under different types of court processing.

In addition to rearrest and reconviction measures, we obtained data from the New York City Department of Probation on violations of probation (VOP) to compare violation rates among N Part and other offenders. VOP's consume court and detention resources and also often result in remand to prison.

Finally, we used recidivism measures to develop estimates of the expected costs to the courts in expected number of future cases and appearances per case (within two years of the initial N Part case). By constructing measures of expected rearrest rates for various defendant subgroups, and factoring in data on average cost per case type, we determined the expected value of future criminal justice system resources used after N and regular court part processing and following various sanctions. The cost effectiveness of N Parts

must be examined not just in the context of a single case, but over a longer term given the generally high recidivism rates of drug offenders.

E. THE COSTS OF N PART PROCESSING: BACKGROUND

We are unaware of any previous efforts to estimate the actual dollar costs of adjudicating felony drug cases through special drug courts. But, prudent public policy (especially in a time of severe fiscal constraints) suggests that it is important to assess the real costs of any new court management initiative. Changes in system structures or procedures that appear on face to save resources, may sometimes carry hidden or unanticipated short- or long-term costs which dilute the program effects. For example, a diversion program for drug offenders may result in fewer court appearances, but require additional staff to do case screening and treatment referral, staff to monitor treatment performance, and increased incarceration as a result of program violations. Accordingly, it is important to consider, to the extent possible, potential hidden and long-term costs of N Part processing in order to develop a more accurate assessment of the relative costs of this intervention.

We reviewed the relatively few existing efforts to quantify the costs of criminal case processing. Although no existing study or methodology was directly applicable to the goals of our N Part cost analysis, the cost literature was helpful in identifying important cost centers, types of costs, and data sources. Our cost analysis thus was built upon these previous efforts to determine court processing costs. Even though the previous cost estimates cannot be directly applied or compared to the costs of N Part processing, the wide range of these cost estimates illustrate the difficulties of comparing criminal justice system costs across different jurisdictions, using different definitions and methodologies. Accordingly, any cost analysis must be viewed with some caution and the results limited to assessing costs in that particular jurisdiction at that time, using specific cost definitions.

Appendix A presents an annotated bibliography of previous analyses of criminal justice processing costs. Previous estimates of these costs range from $86 per *case* (1985 dollars) in Colorado, $3,791 per *court day* in Los Angeles, and $852 per lower court disposition in the Bronx, (NY) in 1977-78.

The remainder of this report describes (1) the methods and findings from our analyses of recidivism patterns of N Part defendants, and (2) the methods and findings from our analyses of the long-term costs of N Part adjudication.

II. RECIDIVISM ANALYSES

METHODS

A. SAMPLINC DESIGN

The comparison of case outcomes and recidivism patterns between N Parts and regular court parts required the development of a sampling design that would provide sufficient numbers of cases for analysis and satisfy statistical requirements for randomness and an appropriate comparison group, allowing the results to be generalized to the full population of felony drug cases in New York City. The ideal project design would have allowed us to prospectively assign felony drug cases randomly to N Parts and other parts -- through that method, we could be assured that any observed differences in outcomes would be attributable to the type of processing and not to external factors such as defendant or case characteristics. This type of random assignment, however, was not feasible for this study. Instead, we utilized a retrospective matched comparison groups design.

We selected a stratified random sample of cases arraigned on B felony drug charges in New York City during 1989. Roughly equal numbers of cases disposed in N and regular court parts were selected. The procedures for defining and selecting the N and non-N cases for the research samples, and the data collection strategies, are described in detail in the first project report (Belenko et al., 1992). All data were collected from the offender database maintained by the New York City Criminal Justice Agency.

The analyses of recidivism rates were limited to the 6,000 N and non-N Part cases in the original sample. After calculating time at risk for rearrest and the adjusted rearrest rate per year (these calculations are discussed in the following section), a few cases were excluded from the sample. These cases had very low values for time at risk (1 or 2 days) and at least one rearrest. This inflated their adjusted yearly rearrest rates to a very high number, which skewed the sample means. After these exclusions, the final sample sizes for the recidivism analyses were as follows:

N Part	2,758
Non-N Part	3,225
Total	5,983

B. MEASURES

1. Rearrest Indicators

We created a series of aggregate measures to summarize various dimensions of the sample members' criminal careers before and after the sample arrest. Each arrest was categorized by charge type and severity (non-marijuana drug, felony drug, felony nondrug, misdemeanor drug, misdemeanor nondrug, violent, weapon, property, drug sale, and drug possession).[4] Three types of measures were constructed for each charge type: the absolute frequency of arrests, a dichotomous variable indicating whether the defendant had an arrest for that charge, and the mean number of arrests per year. The latter measures were adjusted for time at risk by subtracting out from the observation period the number of days sentenced to jail or prison (see below).

The sample arrest date in 1989 for each defendant was defined as time zero. Two time frames were established, and summary arrest measures calculated for each:

(1) the period from age 16 to the sample arrest ("total prior arrests" -- those age 16 or above are defined as adults by the New York State Penal Law),

(2) two years after the sample arrest (the post-sample or follow up observation period).

2. Lag Time, Time at Risk, and Adjusted Annual Arrest Rates (μ)

Several distinct variables were constructed to allow more accurate measures of rearrest prevalence. These include total time at risk for rearrest and, inversely, total incarceration time, total number of rearrests, lag time between sample arrest and first rearrest, different types of rearrest by arrest charge, and average number of rearrests per year adjusted for time at risk.

Total street time, or number of days at risk for rearrest, was measured in two distinct ways. First we calculated the total number of days at risk for rearrest across all arrests occurring during a two year post-sample arrest period. Total incarceration time in days (both prison/jail time and any detention time) was summed across all arrests, including the sample arrest and any rearrests, and the total subtracted from the observation period (730 days). Total time at risk for rearrest reflected the total number of days that a defendant was not incarcerated or detained -- in other words, total street time during the two year follow up.

A second measure of street time, called the *lag time*, was the total number of days to a defendant's first rearrest. For defendants with at least one rearrest, lag time was the

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[4]Violent offenses were primarily felonies, property and drug possession crimes included felonies and misdemeanors, and drug sales included only felonies.

total number of days from sample arrest to first rearrest, minus any incarceration or detention time for sample arrest.[5]

In addition to calculating the lag time to first rearrest of any type, we constructed separate lag time measures for different types of rearrest charges: first drug felony arrest (separate measures for possession and sale charge), first misdemeanor drug arrest, first violent arrest, first property arrest, and first weapons arrest.

These lag time variables only measure the time to first arrest, and do not reflect the total number of rearrests for each defendant within the two-year post-sample follow-up period. Therefore, in order to accurately measure the total number of rearrests for each defendant, a separate set of variables was calculated to determine the total number of rearrests, controlling for time at risk. The result was an *average number of rearrests per year, adjusted for time at risk for rearrest*, (the "adjusted arrest rate", or μ -- see Blumstein et al., 1986). For example, if a defendant served 6 months for the sample arrest, and was rearrested three more times within the two-year follow-up period, serving another six months for two of the rearrests, and no time for the third, the total time at risk would be two years minus three six month sentences, or six months at risk. The adjusted rearrest rate for this defendant would be 3 rearrests during 6 months of street time, or 6 per year. The total number of arrests per year, adjusted for time at risk for rearrest, was calculated for any rearrest, and by specific category of rearrest: any felony, felony drug, felony non-drug, misdemeanor drug, violent, and weapons charges.

To assist the reader, Figure 1 summarizes these somewhat complex variable constructions with illustrations of the calculation of the rearrest parameters under two different recidivism scenarios.

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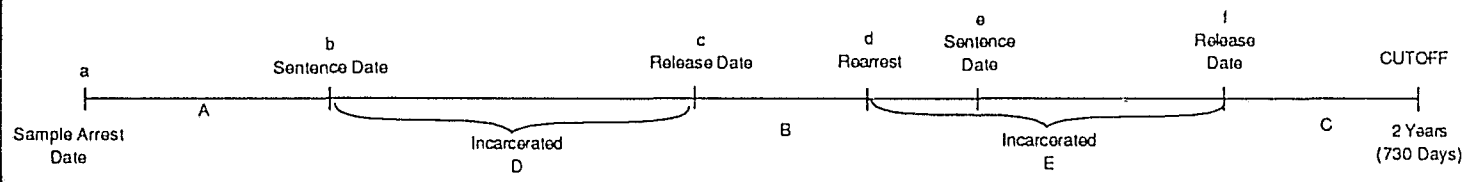
[5]In order to accurately measure incarceration time for sample arrests, a sentence length variable was calculated for each sample arrest to reflect any of the following conditions: a sentence of prison, a jail sentence, a sentence of time served, and/or detention time. For prison sentences, the sentence length variable was set equal to the minimum sentence length, in days. For defendants sentenced to jail for the sample arrest, the sentence length variable was equal to the imposed sentence, in days, multiplied by .67, because most defendants in New York City are released from jail after serving two-thirds of their sentence. If the sentence was "time served", the sentence length was the number of days from arrest to final case disposition date (or sentencing date). Next, the release date for sample arrest was determined for each defendant. If the defendant was detained at lower court arraignment, the release date was equal to the arrest date plus the sentence length; if not detained, the release date was the sentencing date plus the sentence length. For defendants not receiving an incarcerative sentence, and not detained at arraignment, sentence length was set equal to zero, and release date equal to arrest date. Because all cases had values for sentence length and release date, the lag time to first rearrest was then simply calculated as the number of days from the release date to the first rearrest date. For defendants not rearrested, lag time was set equal to the follow-up cutoff date (two years or 730 days after the arrest date) minus the sample arrest release date.

FIGURE 1
CALCULATION OF REARREST PARAMETERS: EXAMPLES

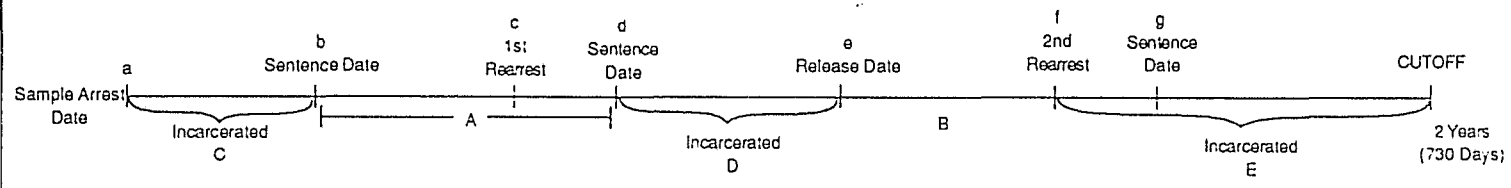
I. Defendant not detained at sample arrest arraignment, sentenced to incarceration at a later date, and released. Rearrested, detained at arraignment, sentenced to incarceration and released within the two year observation period.



Time At Risk (TAR) = A+B+C
Lag Time = d-c
Sentence Length (Sample Arrest) = c-b
Sentence Length (Rearrest) = f-d
Rearrest Rate = $\frac{1(730)}{A+B+C}$

Release Date (Sample Arrest) = b+D
Release Date (Rearrest) = d+E

II. Defendant detained at sample arrest arraignment, sentenced to time served. At first rearrest, defendant not detained, sentenced to incarceration at a later date. At second rearrest, detained at arraignment, sentenced to incarceration, length of sentence exceeding observation period.



Time At Risk (TAR) = A+B
Lag Time = c-b
Sentence Length (Sample Arrest) = b-a
Sentence Length (1st Rearrest) = e-d
Sentence Length (2nd Rearrest) = Cutoff-f
Rearrest Rate = $\frac{2(730)}{A+B}$

Release Date (Sample Arrest) = a+C
Release Date (1st Rearrest) = d+D
Release Date (2nd Rearrest) = f+E

3. Limitations of Official Arrest Records

These analyses relied on computerized, fingerprint-based official arrest records to assess the recidivism patterns of felony drug offenders following adjudication through the N Parts. There are, however, a number of possible methodological problems with the use of official arrest records to characterize criminal behavior (see, for example: Blumstein et al., 1986; Cohen, 1986; Weis, 1986). The most obvious potential source of bias is that official records only count crimes that result in an arrest, and thus estimates of offending rates will be artificially low since only a subset of crimes result in an arrest. This underestimate will vary by factors that may not be related to actual crime commission rates, such as the probability of arrest for a particular offense type (Blumstein et al., 1986), law enforcement policies and priorities (Weis, 1986), or changes in the penal law. For example, changes in policing strategy which place additional emphasis on street-level undercover buy-and-bust operations may increase the number of drug arrests when the underlying amount of drug selling remains the same. On the other hand, there are also methodological problems with the use of self-report data to define and characterize criminal career patterns (Blumstein et al., 1986; Osgood et al., 1989).

In addition, the use of an arrest cohort to measure offending patterns in a population may result in sampling bias because higher-rate offenders have a greater likelihood of arrest within a fixed time window, especially if that period is relatively short (Blumstein et al., 1986). This would result in artificially high estimates of offending rates. However, the vigorous anti-drug enforcement efforts that characterized the period covered by this study, resulting in large numbers of drug arrests and the saturation of many neighborhoods with police officers, increases the probability that the arrestee samples include offenders with fairly wide variations in offending patterns.

Keeping these potential limitations in mind, there is still value in analyzing official arrest records to estimate offending rates for felony drug defendants. Since the potential errors are likely to be reasonably consistent over time, estimates of changes in arrest rates over time should reflect actual increases or decreases even if the absolute rate is an underestimate of actual crime commission rates. The use of samples from a single jurisdiction minimizes cross-jurisdictional definitional and record-keeping biases (Weis, 1986). We can also assume that any measurement errors are consistent across samples, thus increasing our confidence in the comparisons between the N Part and non-N samples. Other researchers have reported that the relationships among defendant characteristics such as sex, race, and age and criminal behavior are similar whether official or self-reported data are used (Hindelang, 1981; Elliott and Ageton, 1980). Further, Osgood et al. (1989) found a correspondence in time trends for assaultive and other crime rates between both measurement methods.

C. ANALYTICAL STRATEGY

Several assumptions guided our analysis of recidivism. First, the procedures to construct the samples of N Part and other non-N Part cases used stratification to produce samples of equivalent sizes. This in turn required weighting the samples to support inferences about the populations within each group and the hypothesis tests, and to develop unbiased coefficients and parameter estimates for the multivariate models. Accordingly, a weighting scheme was developed and weights attached to the cases according to the population parameters in the full samples. All analyses, except those where we developed separate models for N and non-N cases, were conducted on the weighted sample.

Second, the truncation of cases from the recidivism analyses, due to sentences that preclude or limit risk time following incarceration, necessitated computation of "hazard functions" (Berk, 1983) to adjust for the intrinsic sample selection bias in the estimation of recidivism parameters. In preliminary analyses, we estimated the parameters with and without these transformations to assess the effects of selection biases on our parameter estimates for large samples. In general, we found that the computed hazard functions for conviction and incarceration were not significant predictors, indicating that selection bias did not appear to have much effect on our model coefficients.

Recidivism rates for several types of non-drug and drug offenses were computed. All measures were based on rearrests occurring within two years of the original sample arrest. The *prevalence* of rearrest indicates the percentage of offenders who had at least one rearrest during the follow-up period. The *rate* of rearrest was calculated as the average number of arrests per year at risk. Descriptive analyses examine both the prevalence of rearrest and the rates of reoffending controlling for sanction and court part. These indicators were computed for total arrests and disaggregated for several specific crime types: any felony offense, drug felony, non-drug felony, violent offense, and misdemeanors. For rearrest *prevalence,* bivariate analyses compared the effects of court parts overall and the effects of sanctions controlling for court parts. Thus, for example, we were able to determine if prison sentences result in lower rearrest prevalence when imposed in a special drug court compared to one with a general felony calendar.

For arrest *rates,* descriptive analyses compared rearrest (offending) rates (for those rearrested at least once) for N Parts and non-N Part cases overall, and again for specific sanctions within each court type. Overall rearrest rates and rates for specific crime types were examined, and difference of means tests used to determine statistical significance.

Although many case and defendant characteristics might have a significant simple correlation with rearrest, some of the relationships might not hold when other factors are simultaneously taken into account. Multivariate analysis allows the testing of the unique

significance of the association between an independent or predictor variable and a dependent or outcome variable when all other independent variables are held constant. To estimate the simultaneous effects of court parts and offense/offender characteristics on recidivism, the models were constructed using sets of predictor variables related to prior record, sample case, and offender characteristics, with the addition of variables to represent the sanction conditions and court type. Appendix B summarizes the coding procedures used to define the key background and case variables.

In the case of a dichotomous dependent variable such as rearrest prevalence, logistic regression (or "logit") analysis (Aldrich and Nelson, 1984) identifies significant factors and assigns coefficients (or weights) to them. When these weights are multiplied by the particular values of the independent variables, we obtain a predicted likelihood of rearrest. One of the ways we test the adequacy of the models is to compare the predicted rearrest outcome to the actual outcome, and calculate the percentage of outcomes correctly predicted (termed a "classification matrix"). The logistic regression coefficients represent the log odds of an observation being in one category of the dependent variable (versus the reference category), given a unit change in the independent variable when other factors are held constant. To facilitate the interpretation of the results of a logistic model, however, we also transform the log odds into an "odds ratio" by taking the antilog of the logit coefficient. The result is then interpreted as the degree of change in the odds of an outcome (e.g., a rearrest), given a unit change in the value of the independent variable when all other factors are held constant. Odds ratios of close to one indicate that the independent variable has relatively little effect on the likelihood of an outcome. An odds ratio of greater than one increases the odds of an event occurring, and an odds ratio of less than one decreases the likelihood.

In the case of analysis of the determinants of rearrest *rates*, however, there are additional complications. Namely, there is the problem of censoring, whereby the values of a particular variable (i.e., rearrest rate) are not observed for a large number of cases in the sample (Tobin, 1958). Hence, defendants with no rearrests will not have observations for offending rates. Analysis of these data therefore requires that we use models which accommodate for "left-hand" censoring of zero values for rearrest rate, and thereby avoid bias in parameter estimates from large numbers of excluded cases (Berk, 1983). Tobit analysis handles this problem by modeling censored and non-censored cases separately. First an index is made of the vector of independent variables and their coefficients. Then the model is split based on the scores of this new variable. The dependent variable is observed only for cases in which the expected value of the index is greater than zero. The unstandardized tobit coefficient represents the effects of the independent variable on the

latent (unobserved) value of the dependent variable. Interpretation of the tobit model coefficients, however, is much less straightforward than in OLS or logistic regression (Maddala, 1983; McDonald and Moffit, 1980; Roncek and Maier, 1991). In part, this difficulty occurs because the coefficients measure two aspects of the independent variables: their effect on the likelihood of having at least one rearrest, and the effect on having a higher rate of rearrest given at least one rearrest (McDonald and Moffit, 1980).

The development of the multivariate models proceeded in several stages. The first step was to identify potential predictors from prior research, preliminary bivariate analyses, and the availability of data.

We examined zero-order correlation matrices of all potential predictor variables and the dependent variables (dichotomous measures of rearrest coded as 0 if no rearrest, and 1 if the defendant had at least one rearrest). Those variables that had a correlation that was significant at $p \leq .05$ were selected for testing in the models. Those factors found to be significantly correlated with rearrest were then examined to identify variables that were highly correlated with each other. In order to avoid potential problems of multicollinearity[6], we eliminated redundant variables and selected those predictor variables measuring unique aspects of the case or defendant, and for which the correlations with other independent variables were .40 or less, for testing in the multivariate models. When there were two or more such variables, the choice of which to retain was based on the relative skewness of the distributions of each variable, the numbers of missing observations, or theoretical or policy considerations. However, we did retain extralegal factors such as age and employment status, even if their simple correlations with rearrest were not statistically significant, if there were strong theoretical or policy reasons to include them in the models.

Several sets of models were estimated, testing different dimensions of recidivism, and to assess the stability of predictor variables across models. In addition to testing for the effects of court type, interaction terms were introduced in several of the analyses to test the effects of sentences by court type. The models included:

(1) A general offending model for any type of rearrest, and separate crime-specific models.

(2) Separate models for N and non-N Parts, as well as weighted models which include court part as a predictor. This strategy highlights interactions be-

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[6]When two variables are highly intercorrelated, this indicates that the variables are most likely measuring much the same thing, and only one should be used for analysis. Because there were several variables that were highly intercorrelated, alternative models were tested to see if one performed better than another. Only the best models of all the alternatives tested were presented in this report.

tween court context and sanctions, and examines whether specific sanctions are more effective in one context or the other.

(3) Separate weighted models for those incarcerated on the sample case and those not incarcerated, as a test of the interaction between sanction and recidivism prevalence.

(4) A test of the effects of different amounts of street time, using weighted models disaggregated by length of time at risk -- at least 90, 180, 270, or 360 consecutive days at risk.

The analyses were designed to explore the factors which predict reoffending among felony drug arrestees. Because our descriptive analyses did not indicate any substantial or systematic differences in rearrest prevalence between N and non-N Part cases, and because the type of court part in which a case is disposed does not appear to relate to any obvious defendant or case characteristics (Belenko et al., 1992), we did not anticipate that court part would be a significant predictor of rearrest after controlling for other legal and extralegal factors. The logistic regression analyses confirmed this lack of effect.

The general analytic model examined the effects of court type on recidivism, controlling for legal and social variables that were correlated with sentencing and recidivism. The procedure specified the order of entry of the independent variables and thereby controlled for the effects of variables entered earlier in estimating the effects of the variables entered last. Accordingly, in the recidivism models, predictors for court type and sanction severity were entered last. Their effects are adjusted for the effects of the variables entered previously. The order of entry was (1) the constant (where appropriate for the procedure), (2) social and demographic variables, (3) current charges, (4) sanctions, and (5) court type and court-sanction interactions.

A 60% random sample of the 6000 cases was used for these analyses. Univariate means and crosstabulations showed no differences between the full and analysis samples.

FINDINGS

A. DESCRIPTIVE ANALYSES

In general there were no systematic differences in recidivism patterns between defendants processed through the N Parts on the sample arrest and those processed through other court parts. In this section we present our main findings on patterns of rearrest over the two-year follow-up period.

TABLE 1

REARREST PREVALENCE AND ADJUSTED REARREST RATES,
BY SANCTION, CRIME, AND COURT TYPE,
WITHIN TWO YEARS OF SAMPLE ARREST

	Percent Rearrested		Number of Arrests Per Year, Adjusted*	
SANCTION TYPE -- SAMPLE ARREST	N Part	Non-N Part	N Part	Non-N Part
ALL CASES				
Any Rearrest	53.5	50.9**	3.3	5.6**
Any Felony	45.9	43.5	2.2	4.1**
Drug Felony	37.0	33.5**	1.6	3.9**
Non-Drug Felony	17.2	17.9	0.7	1.2**
Misdemeanor	24.0	20.0**	1.2	1.5
Violent	11.8	12.4	0.3	0.9**
(N)	(2757)	(3221)	(2758)	(3225)
SENTENCED TO PRISON				
Any Rearrest	49.8	46.9	4.7	11.0**
Any Felony	42.9	40.1	3.1	8.2**
Drug Felony	35.1	31.7	2.6	5.5**
Non-Drug Felony	11.9	13.6	0.7	2.1**
Misdemeanor	18.3	15.8	1.6	2.7
Violent	7.0	10.3**	0.2	1.9**
(N)	(687)	(1208)	(687)	(1205)
SENTENCED TO JAIL				
Any Rearrest	65.3	73.0	6.1	4.6
Any Felony	59.5	61.7	5.0	2.7
Drug Felony	50.7	47.2	3.0	1.4**
Non-Drug Felony	20.1	28.2**	2.0	1.0
Misdemeanor	28.1	34.3	1.2	2.0
Violent	13.9	19.0	1.1	0.6
(N)	(274)	(248)	(274)	(248)
TIME SERVED				
Any Rearrest	50.6	59.6	2.9	5.0
Any Felony	44.3	52.2	1.6	3.0
Drug Felony	34.8	40.4	1.5	1.7
Non-Drug Felony	17.7	25.7	0.5	1.3
Misdemeanor	27.8	31.6	1.3	2.0
Violent	11.4	16.9	0.2	0.8
(N)	(158)	(136)	(158)	(136)
SENTENCED TO PROBATION				
Any Rearrest	56.3	50.0	1.3	1.6
Any Felony	42.0	41.3	0.7	1.3**
Drug Felony	26.7	28.8	0.4	8.4
Non-Drug Felony	21.6	21.2	0.3	0.6
Misdemeanor	25.0	20.7	0.6	0.3
Violent	14.8	11.4	0.2	0.2
(N)	(176)	(184)	(176)	(185)

SANCTION TYPE -- SAMPLE ARREST	Percent Rearrested		Number of Arrests Per Year, Adjusted*	
	N Part	Non-N Part	N Part	Non-N Part
OTHER				
Any Rearrest	52.2	58.0	4.2	2.4
Any Felony	42.1	47.1	2.1	1.7
Drug Felony	32.6	37.5	1.6	0.9
Non-Drug Felony	19.7	20.4	0.6	0.8
Misdemeanor	27.0	27.5	2.1	0.6
Violent	11.2	14.6	0.2	0.4
(N)	(178)	(357)	(178)	(357)
NOT CONVICTED				
Any Rearrest	60.0	59.6	2.6	2.7
Any Felony	52.5	54.5	1.6	2.0
Drug Felony	42.7	42.5	1.1	1.0
Non-Drug Felony	22.3	24.6	0.5	0.7
Misdemeanor	29.6	22.2**	1.0	0.7
Violent	16.3	16.5	0.3	0.4
(N)	(937)	(492)	(937)	(492)
NON-INCARCERATIVE SENTENCE				
Any Rearrest	53.1	56.1	2.8	2.7
Any Felony	42.8	46.5	1.5	1.9
Drug Felony	31.3	35.7	1.2	3.1
Non-Drug Felony	19.7	21.7	0.5	0.8
Misdemeanor	26.6	26.4	1.3	0.8
Violent	12.5	14.2	0.2	0.4
(N)	(512)	(677)	(512)	(678)
PRIOR FELONY CONVICTIONS				
Any Rearrest	54.6	46.6**	4.9	9.4**
Any Felony	47.6	39.8**	2.8	6.6**
Drug Felony	38.9	31.0**	2.3	5.5**
Non-Drug Felony	17.7	14.3**	0.5	1.8**
Misdemeanor	25.1	16.5**	2.0	2.8
Violent	11.6	10.5	0.3	1.6**
(N)	(764)	(1044)	(764)	(1049)
NO PRIOR FELONY CONVICTIONS				
Any Rearrest	53.7	53.5	2.8	3.8
Any Felony	45.8	45.7	2.0	3.0**
Drug Felony	36.9	34.9	1.4	3.2**
Non-Drug Felony	17.3	19.8**	0.7	0.9
Misdemeanor	23.7	21.9	0.8	0.8
Violent	12.0	13.4	0.4	0.6
(N)	(1927)	(2089)	(1928)	(2088)

* Adjusted for time at risk.

** $p < .05$.

1. Basic Prevalence and Annualized Rearrest Rates

o N Part processing had little impact on the prevalence of rearrests within two years (Table 1; top left).

Within two years of the sample arrest date, 53.5% of N Part defendants were rearrested, as were 50.9% of those processed through other parts. There was a higher rate of drug felony rearrests in the N Parts (37.0% compared to 33.5% in other parts [p=.004]). Misdemeaor rearrests were also somewhat more prevalent in N Part cases: 24.0% of N Part defendants were rearrested on misdemeanor charges, compared with 20.0% of non-N Part defendants (p=.000). Non-drug felony rearrest rates, however, were similar in N and non-N court Parts. Our previous analyses had shown that prior arrest records also were similar for N and non-N defendants: 66.9% of N Part and 70.2% of the non-N Part defendants had a prior arrest record at the time of the sample arrest.

o However, controlling for time at risk, non-N defendants had significantly higher annualized arrest rates than N Part defendants. This probably reflected lower amounts of street time for the non-N defendants (Table 1; top right).

If one merely compares the percentages of defendants rearrested during a given time period, this can mask differences in the frequency of rearrest due to variations in time incarcerated during the observation period. By calculating the average number of rearrests per year of "street time", we can obtain a different perspective on offending rates. Thus, non-N Part cases showed a much higher rearrest rate than N Part cases after adjusting for time at risk for rearrest. The mean adjusted rearrest rate for non-N Part cases was 5.6, while for N Part cases the number was 3.3 (p= .000). Drug felony rearrests averaged 1.6 per year at risk for N Part cases, and 3.9 (p=.000) for other court parts. Similar patterns were evident for any felony rearrest (2.2 for N Part cases, 4.1 for non-N cases [p= .000]), and for non-drug felony, misdemeanor and violent rearrests.

o In general, rearrest prevalence rates did not differ much between N and non-N defendants, after controlling for the type of sanction imposed in the sample case. However, annualized arrest rates tended to be higher for non-N cases even after controlling for sanction (Table 1; columns 3, 4).

Controlling for type of sanction received on the sample arrest may identify differences between rearrest prevalence rates for defendants processed through N Parts and

those processed through other court parts. Three categories of sanction type were considered: prison, jail and probation sentences.

Among defendants sentenced to one year or more (prison sentence) for the sample arrest, the percentage of rearrests was comparable between N and other court part cases. However, the mean number of rearrests, controlling for time at risk, was significantly higher among defendants initially processed through non-N court Parts (11.0), than for N Part cases (4.7; p=.000). The average number of felony rearrests for non-N Part defendants was 8.2, and for N Part defendants, 3.1 (p=.000). The same pattern occurred for drug felonies, 2.6 for N Part cases, 5.5 for non-N Part cases (p=.002), and non-drug felonies (0.7 for N Parts, 1.6 for other court parts).

For defendants sentenced to a jail term of less than one year for the sample arrest, the rearrest prevalence was higher for non-N court Parts (73.0%) than N Parts (65.3%; p.=.059). Drug felony rearrest prevalence, however, was slightly higher among N Part cases (50.7%) compared with other court parts (47.2%), but this difference was not significant. There was a significant difference between N Part and other court part cases in the percentage of non-drug felony rearrests: 28.2% of non-N Part cases were rearrested on non-drug felony charges, while the rate for N Part cases was 20.1% (p=.029). For jail sentence cases, the mean number of drug felony rearrests was significantly higher for N Part cases (3.0) compared with other court parts (1.4; p=.032).

Among those sentenced to probation for their sample arrest, the percentage rearrested within two years was slightly higher for cases processed through N Parts, although the difference was not significant (56.3% of N Part defendants, compared with 50.0% of non-N part cases [p = .235]). Felony rearrest rates, for both drug and non-drug charges, were similar for N and other court parts.

Finally, defendants not convicted for the sample arrest showed comparable patterns of rearrest rates between N Part and other court part cases: 22.3% of N Part defendants were rearrested within two years on a non-drug felony charge, as were 24.6% of non-N Part defendants. Drug felony rearrest rates were almost identical between N Parts and other court parts (42.7% and 42.5%, respectively), but the N Part offenders had higher rates of misdemeanor rearrests.

2. Case Outcomes for Rearrests

In this section we describe the case outcomes for rearrests. There were two issues we wished to investigate. First, we were interested in how the courts handled rearrests for felony drug offenders: were cases treated more severely in general? Were N Part cases

TABLE 2

PERCENTAGE OF REARRESTS PROCESSED THROUGH N PART,
BY SAMPLE ARREST COURT PART,
FELONY DRUG REARRESTS ONLY

	N Part	Non-N Part
All Cases	28.7%	15.7%
PRIOR CONVICTION RECORD		
No Prior Felony Convictions	28.7	14.9
Prior Felony Convictions	29.0	17.1
SAMPLE ARREST SANCTION		
Imprisonment	28.0	13.7
Other/No Conviction	28.9	15.8
REARREST DISPOSITION		
Felony Conviction	13.4	6.8
Misdemeanor Conviction	22.7	10.6
CC Dismissed/Acquitted	52.7	31.6
SC Dismissed/Acquitted	—	—
	(987)	(1058)

TABLE 3

CASE OUTCOMES OF REARRESTS, BY COURT TYPE AND REARREST CHARGE

A. FINAL CASE DISPOSITION OF REARREST

DISPOSITION	All Rearrests		Misdemeanor Rearrest		Felony Rearrest		Drug Felony Rearrest	
	N Part	Non-N Part	N Part	Non-N Part	N Part	Non-N Part	N Part	Non-N Part
Felony Conviction	30.8	33.7	——	——	51.7	53.6	58.6	62.4
Misdemeanor Conviction	42.3	36.0	77.8	64.6	18.2	19.0	16.2	14.7
Criminal Court Dismissal/Acquittal	24.2	28.1	22.2	35.4	25.8	24.1	21.1	19.5
Supreme Court Dismissal/Acquittal	2.6	2.1	——	——	4.4	3.3	4.1	3.4
(N)	(1271)	(1402)	(505)	(517)	(753)	(877)	(536)	(591)
	p=.005		p=.000		p=.542		p=.602	

B. MOST SEVERE SENTENCE

SENTENCE	Misdemeanor Rearrest			Felony Rearrest			Drug Felony Rearrest		
	N Part	Non-N Part	Citywide	N Part	Non-N Part	Citywide	N Part	Non-N Part	Citywide
Imprisonment	55.2	50.3	53.0	77.2	77.4	77.3	78.1	80.0	79.1
Imprisonment and Probation	——	——	——	3.6	4.4	4.0	4.0	5.9	5.0
Probation	.5	1.2	.8	6.7	4.4	5.4	6.5	4.2	5.3
Fine or Imprisonment	15.0	15.6	15.3	2.7	2.0	2.3	2.5	1.5	2.0
Discharge	28.5	32.0	30.1	6.5	9.1	7.9	5.2	5.9	5.6
Missing	.8	.9	.8	3.4	2.7	3.0	3.7	2.4	3.0
(N)	(393)	(334)	(727)	(526)	(637)	(1163)	(401)	(456)	(857)
	p=.611			p=.243			p=.280		

TABLE 4

SENTENCE LENGTH FOR FIRST REARREST, BY COURT TYPE

A. LOWER COURT JAIL SENTENCE
(IN DAYS)

	N Part	Non-N Part
Mean	74.0	65.5
Median	30	30
(N)	(199)	(167)
Significance		p=.394
Time Served*	34.8%	36.5%

* Sentences of time served not included in mean sentence length calculations.

B. SUPERIOR COURT PRISON SENTENCE
(IN MONTHS)

	N Part	Non-N Part
Mean	27.9	25.4
Median	24	24
(N)	(232)	(309)
Significance		p=.211

C. SUPERIOR COURT PRISON SENTENCE,
WHERE FIRST REARREST IS FELONY DRUG CHARGE

	N Part	Non-N Part
Convicted in Lower Court (in days)		
Mean	291.0	383.4
Median	105	90
(N)	(54)	(53)
Significance		p=.232
Convicted in Superior Court (in months)		
Mean	24.0	25.0
Median	24	24
(N)	(187)	(240)
Significance		p=.397

TABLE 5

AVERAGE NUMBER OF COURT APPEARANCES
FOR FIRST REARREST

A. ANY REARREST TYPE, BY SAMPLE ARREST COURT PART

	N Part	Non-N Part
MISDEMEANOR REARREST		
Mean	3.5	3.6
Median	2	3
(N)	(503)	(514)
Significance		p=.386
FELONY REARREST		
Disposed in Lower Court		
Mean	4.4	4.9
Median	4	4
(N)	(331)	(378)
Significance		p=.050
Disposed in Superior Court		
Mean	10.0	11.6
Median	7	9
(N)	(422)	(499)
Significance		p=.003

B. DRUG FELONY REARREST, BY SAMPLE ARREST COURT PART

	N Part	Non-N Part
Disposed in Lower Court		
Mean	4.0	4.6
Median	3	4
(N)	(200)	(202)
Significance		p=.038
Disposed in Superior Court		
Mean	8.8	10.9
Median	7	9
(N)	(336)	(389)
Significance		p=.000

C. DRUG FELONY REARREST, BY REARREST COURT PART

	N Part	Non-N Part
Disposed in Lower Court		
Mean	3.1	6.1
Median	3	6
(N)	(218)	(164)
Significance		p=.000
Disposed in Superior Court		
Mean	4.8	10.5
Median	4	8
(N)	(69)	(656)
Significance		p=.000

treated more or less severely upon rearrest than non-N cases, controlling for rearrest type and severity? Second, we wanted to examine the consistency of processing type: that is, were defendants whose sample case was adjudicated in an N Part more or less likely to be disposed in an N Part for the rearrest case? Was that likelihood affected by the type of sentence originally imposed in the N Part?

- **Although most rearrests were processed through non-N court Parts, defendants whose sample arrest was processed through an N Part are more likely to appear in an N Part for a drug felony rearrest (Table 2).**

Among defendants who were rearrested on a felony drug charge within two years of the sample arrest (37.0% of N Part cases, 33.5% of non-N Part), 28.7% of sample N Part cases are processed through N Parts, while only 15.7% of sample non-N Part cases have first rearrest processed through an N Part. This difference held even after controlling for prior conviction record, the sanction type imposed on the sample arrest, or the disposition of the rearrest. These data suggest that defendants (and perhaps their lawyers) are "satisfied" with the handling of their cases in the N Part, or at least that they perceive that there are advantages to such processing.

- **There were only small differences between N and non-N cases in the dispositions received on the rearrest (Table 3A).**

Comparing the final dispositions for the first felony rearrest, there was no difference in the percentage convicted of a felony (51.7% for N Part cases and 53.6% for non-N). Defendants rearrested on a felony drug charge and initially processed in an N Part had a non-significantly lower felony conviction rate (58.6%) compared with those initially processed through other court parts (62.4%). This difference was only slightly offset by a higher rate of rearrest misdemeanor convictions for sample N Part cases (16.2% vs. 14.7% for non-N). For misdemeanor rearrests, the conviction rate was higher among defendants whose sample arrest was processed in an N Part (77.8%, compared with 64.6% for those processed through other court parts).

- **Sentence types and lengths imposed on the first rearrest did not significantly differ for N and non-N sample cases (Tables 3B and 4).**

Defendants initially processed through an N Part and subsequently rearrested on a misdemeanor charge had a slightly higher rate of imprisonment sentences compared with

defendants whose sample arrest was not processed through an N Part (55.2% vs. 50.3% sentenced to imprisonment). There was little difference in sentence type between N Parts and other court parts for defendants rearrested on any felony charge or on a drug felony.

Only slight differences in sentence length for first rearrest were evident when comparing sample arrest N Part and non-N Part defendants. None of these differences were statistically significant. Sample arrest N Part defendants sentenced in Criminal Court on the first rearrest (Table 4A) had longer jail times (74.0 days) compared with sample arrest non-N Part defendants (65.5 days). Sample arrest non-N Part defendants rearrested on felony drug charges and disposed in Criminal Court (Table 4C) had longer sentences (383.4 days) compared with those initially processed through an N Part (291.0 days). There was little difference in sentence length for drug felony rearrests disposed in Supreme Court.

- **The average number of court appearances for drug felony rearrests was lower for N Part sample cases. This reflects their greater likelihood of having their rearrests processed through the N Part (Table 5).**

Drug felony rearrests with sample arrests processed through an N Part had fewer court appearances compared with those initially processed in non-N court Parts. Among those disposed in Criminal Court, N Part cases averaged 4.0 appearances while non-N Part cases averaged 4.6 ($p=.04$). Drug felony rearrests disposed in Supreme Court and initially processed in an N Part averaged 8.8 court appearances (Table 5B) compared with 10.9 for non-N Part cases ($p=.000$).

A comparison of the average number of court appearances by the court type through which drug felony rearrests were disposed provides further evidence that N Part processing is considerably more efficient. The data in Table 5C indicate the average number of court appearances by the rearrest court part. Felony drug cases disposed through an N Part on the rearrest averaged 3.1 appearances for a lower court disposition and 4.8 when disposed in superior court. Comparable averages for non-N Parts were 6.1 and 10.5. All these means are consistent with the data for the sample arrest.

3. Comparative Findings from Chicago and Milwaukee

A major limitation of conducting a study in a single jurisdiction is that the results may not be applicable to other locales. Therefore, we collected data on rearrests in other drug courts to contrast with our findings in New York City. In particular, we wanted to know if rearrest rates for drug offenders in New York were comparable to rates else-

TABLE 6

FELONY REARRESTS IN CHICAGO AND MILWAUKEE
TWO YEARS FROM SAMPLE ARREST

A. PERCENTAGE REARRESTED

Cumulative percent rearrested within:	CHICAGO (n=84)			MILWAUKEE (n=134)		
	Drug	Non-Drug	Any	Drug	Non-Drug	Any
6 Months	16%	2%	18%	3%	8%	10%
12 Months	21%	6%	26%	5%	11%	13%
18 Months	27%	10%	35%	8%	16%	21%
24 Months	29%	12%	37%	11%	21%	29%

B. DISPOSITIONS OF ORIGINAL SAMPLE CASES
AND REARRESTS

DISPOSITION	CHICAGO		MILWAUKEE	
	Original Case	Rearrest Case	Original Case	Rearrest Case
Dismissed/not guilty	16%	14%	3%	29%
Probation/fine	60%	25%	16%	6%
< 1 year incarceration	4%	0%	45%	29%
> 1 year incarceration	20%	61%	36%	37%
	100% (n=95)	100% (n=28)	100% (n=126)	100% (n=35)

C. PERCENTAGE REARRESTED BY
DISPOSITION OF ORIGINAL CASE

DISPOSITION	CHICAGO		MILWAUKEE	
Dismissed/not guilty	29%	(n=14)	75%	(n=5)
Probation/fine	33%	(n=45)	25%	(n=20)
< 1 year incarceration	20%	(n=5)	28%	(n=57)
> 1 year incarceration	56%	(n=16)	29%	(n=45)

where. We also wanted to ascertain in what ways New York's processing of repeat drug offenders compared to treatment of similar defendants in other cities.

For these comparisons, we capitalized on a study recently conducted by the American Bar Association (Smith et al., 1991). That project examined innovative strategies developed by courts in five cities to process narcotics cases. Two of the cities -- Chicago and Milwaukee -- had established special felony drug courts designed to cut processing time, just as New York's N Parts are intended to do. In each city in the American Bar Association study, samples of 100 cases processed through the specialized courts were drawn, and rearrests were tracked over a one year period.

For our current work, we returned to Chicago and Milwaukee and updated those samples to include rearrests over a two-year period following the filing date in felony court of the original sample offense. In addition, we collected disposition and sentence information for any new arrests.

The databases we constructed were not nearly as comprehensive as that available for the New York sample. For example, in Milwaukee or Chicago we were unable to calculate time at risk for rearrest because it was not possible to determine when offenders were at liberty versus in pretrial detention, jail, or prison. Further, we could collect information only on the first felony drug rearrest and the first felony non-drug rearrest. Because of these limitations, we could not construct time-at-risk measures as we were able to do in New York, nor could we compare overall rearrest rates.

Our Milwaukee and Chicago data allowed us to examine the percentages of offenders rearrested during six-month intervals up to two years after the filing date of the originally-sampled offense. Second, we compared dispositions and sentences for the originally-sampled case with dispositions and sentences for the rearrests. Last, we disaggregated rearrests by the outcome of the original case to determine whether the type of original sentence affected recidivism.

a. Rearrest Rates. Drug rearrest rates differed markedly between Chicago and Milwaukee (see Table 6A). In Chicago, 16% of the offenders in the sample had been rearrested within six months of the filing date in the originally-sampled case. By the end of two years, the percentage had nearly doubled to 29%. In contrast, only 3% of Milwaukee drug court offenders had been rearrested within six months of the original filing date. At the end of two years, the rearrest rate had risen to just 11%. Given the higher rearrest prevalence in Chicago, it is not surprising that the mean time to a new drug arrest in that city was 214 days compared to 360 days in Milwaukee.

The pattern was reversed for arrests for non-drug felonies. In Chicago, only 2% were rearrested for a non-drug felony within six months, and 12% within 24 months. In

contrast, 8% of Milwaukee offenders were rearrested for non-drug offenses within the first six months after the sampled case was filed, and 21% were rearrested within 24 months. Mean time to the first non-drug rearrest in Chicago was 478 days, and 334 days in Milwaukee.

Combining drug and non-drug felony rearrests, the prevalence rate was higher for Chicago drug court cases: 18% of Chicago offenders were rearrested within 6 months (9% for Milwaukee) and 37% within 24 months (29% for Milwaukee). Most of the Chicago rearrests occurred during the first year after the filing of the sampled case, while in Milwaukee most rearrests occurred during the second year. This difference likely reflects the higher incarceration rate for Milwaukee drug offenders (Smith et al., 1991), reducing their time at risk during the early months following their sampled arrest. Latency to the first felony rearrest of any kind was 237 days in Chicago and 328 days in Milwaukee.

Generally, the two-year felony rearrest rates for drug court cases were somewhat lower in Chicago (37%) and Milwaukee (29%) than in New York City (46%; compare Tables 6A and 1). Concomitantly, the average times to rearrest were longer. Whether these differences were a function of different times at risk across the jurisdictions, relative deterrent effects of the sanctions imposed, more intensive anti-drug enforcement in New York, or specific defendant or case factors, could not be determined given the limited available data from Chicago and Milwaukee.

b. Dispositions of the Rearrests. Table 6B compares the dispositions in the original drug court case against the rearrest dispositions. For the Chicago sample, there was an apparent tendency to deal with rearrest cases more harshly than the original case. For the sample case, 60% of offenders were sentenced to probation and just 20% to terms of incarceration of one year or greater. In the rearrest cases, this was reversed: Only 25% of offenders were sentenced to probation, while 61% were sentenced to state prison terms of one year or more.

The Milwaukee sample data followed a different pattern. Dismissals and acquittals in the Milwaukee sample increased substantially on the first rearrest, from 3% in the originally-sampled case to 29% in rearrest cases. This high dismissal rate in rearrest cases resulted from the extensive use of ***nolle prosequis*** in Milwaukee. Correspondingly, jail terms of less than one year dropped from 45% in the original case to 29% in rearrest cases and probation sentences dropped from 16% to 6%. The percentage of defendants sentenced to prison terms of one year or more remained constant at 36-37%. The available data did not explain why dismissals increased so dramatically in rearrest cases.

Rearrest dispositions for New York N Part cases more closely paralleled those for Milwaukee: 30.1% were dismissed or acquitted, 54.7% resulted in jail (17.4%) or prison

adapted from Table 3). The low probation rates for New York drug offenders probably reflects that State laws require a prison term for a second felony conviction.

c. Rearrests by Disposition of Sample Case. Finally, we analyzed rearrests according to the type of disposition in the originally-sampled case. The results are presented in Table 6C. We expected that rearrest rates would be higher among those sentenced to probation or short jail terms than those sentenced to prison, because the former group had more time at risk. However, with two exceptions, the proportions rearrested within two years were quite consistent across disposition type in both cities, ranging from 20 - 33%. One exception was for cases dismissed or acquitted in Milwaukee, with a 75% rearrest rate. Because there were very few cases in the original sample, however, this result is likely due to sampling artifact. The other exception is more difficult to explain. Fifty-six percent of Chicago offenders sentenced to one year or more incarceration were rearrested within two years. This result seems anomalous, since these offenders clearly have less time at risk than others. The explanation may lie in the fact that rearrest rates presented are calculated from the original case filing date. Offenders sentenced to prison may have received those sentences <u>because</u> they had been rearrested prior to sentencing in the original case, and the stiff sentence may have been imposed to cover both the original case and the rearrest case.

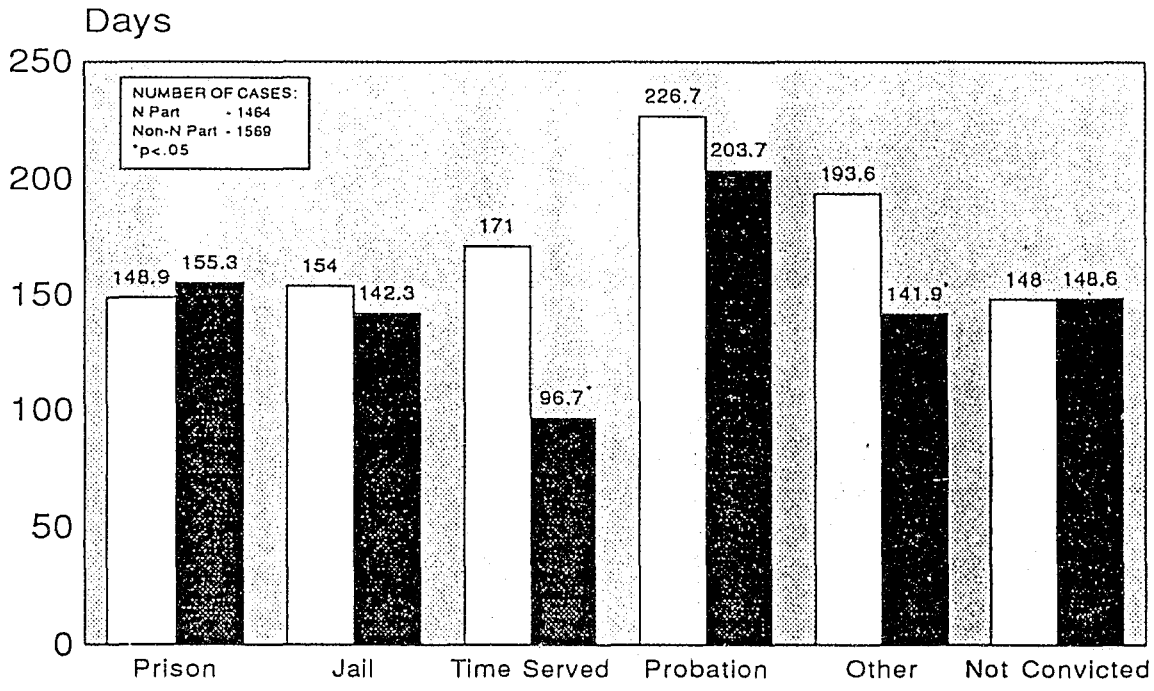
As in Chicago and Milwaukee, comparable data for New York City N Part defendants revealed that rearrest prevalence rates did not differ substantially by the sample case disposition (Table 1, column 1). Defendants sentenced to probation or prison had similar rearrest prevalence (about 42 percent); rearrest percentages were 59.5% and 52.5% for those receiving jail terms and dismissed/acquitted respectively. However, the similar prevalence rates mask fairly substantial differences in annual arrest rates after adjusting for time at risk: adjusted annual felony arrest rates for those sentenced to prison (3.1) or jail (5.0) were much higher than for N Part defendants receiving probation (0.7) or having the sample case dismissed (1.6). It is likely that had time at risk data been available for Chicago and Milwaukee, similar differences would have been observed.

<u>4. Time to Rearrest (Lag Time)</u>

Another important measure of recidivism is the length of time to rearrest. An intervention which has no effect on the prevalence or number of rearrests may still delay a new rearrest. Figure 2 summarizes the length of time to the first rearrest of any type, and the first drug rearrest. Because the lag time is directly affected by time at risk, and N Part cases tended to have more street time, we compared these times by the sanction imposed

FIGURE 2
MEAN NUMBER OF DAYS TO REARREST, BY SAMPLE ARREST SANCTION

A. TO FIRST REARREST



B. TO FIRST DRUG REARREST

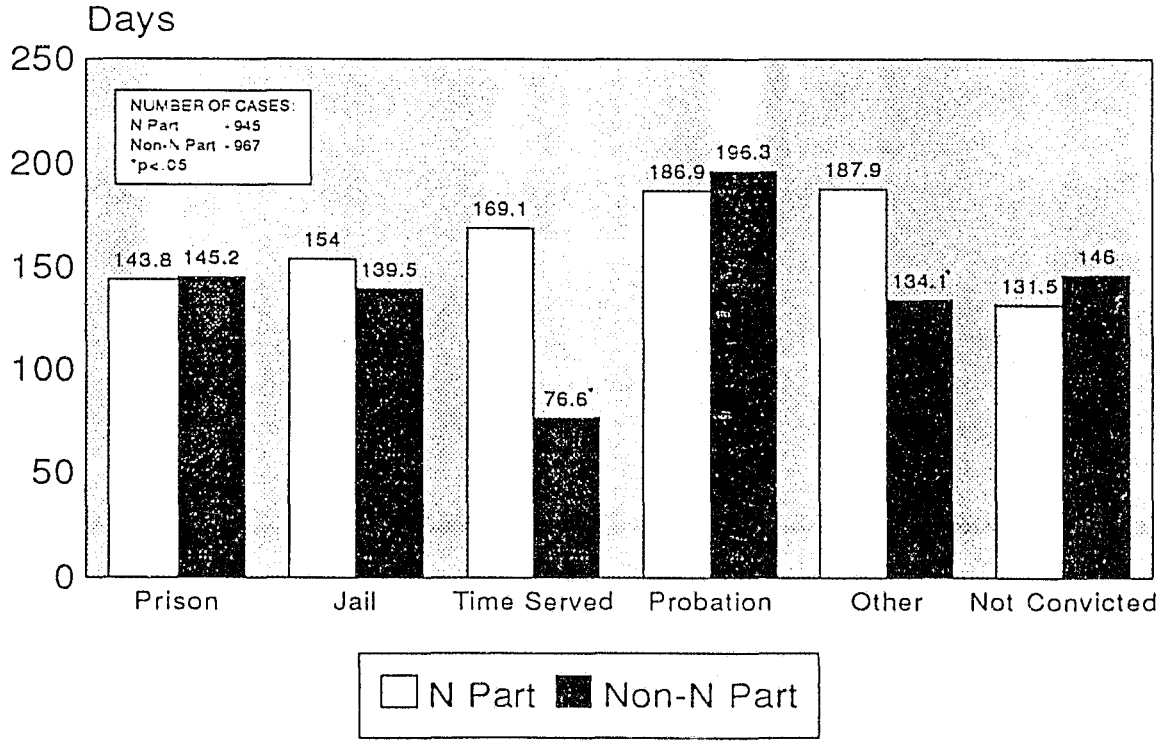
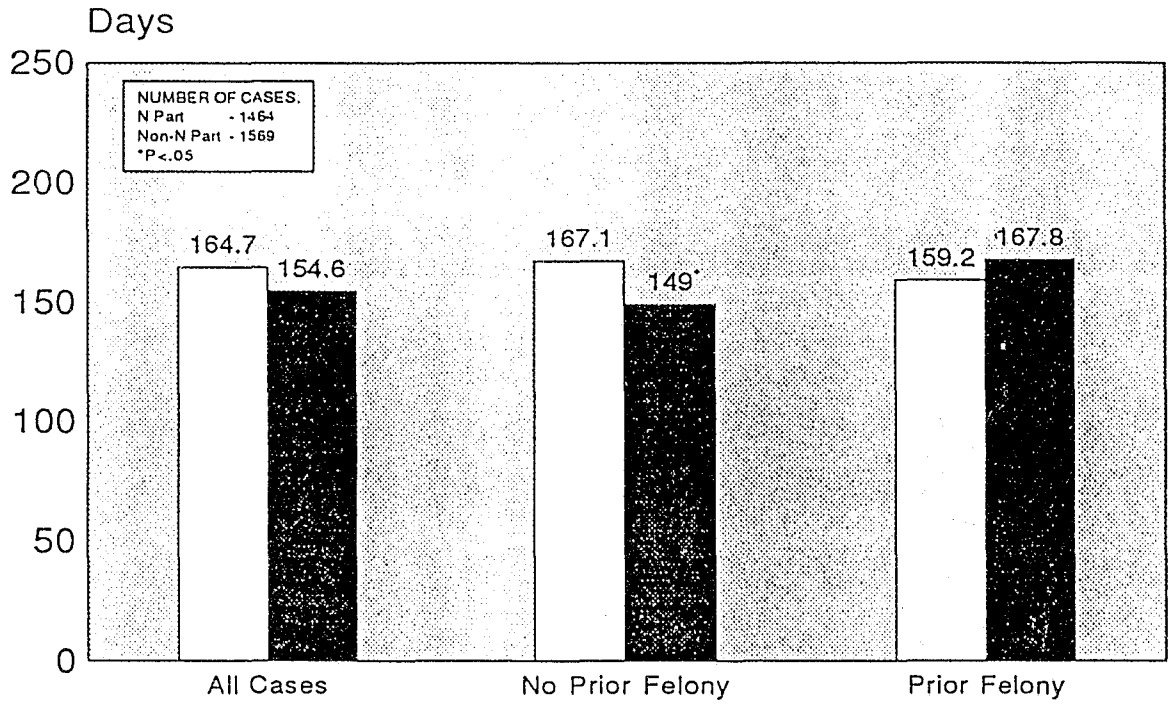
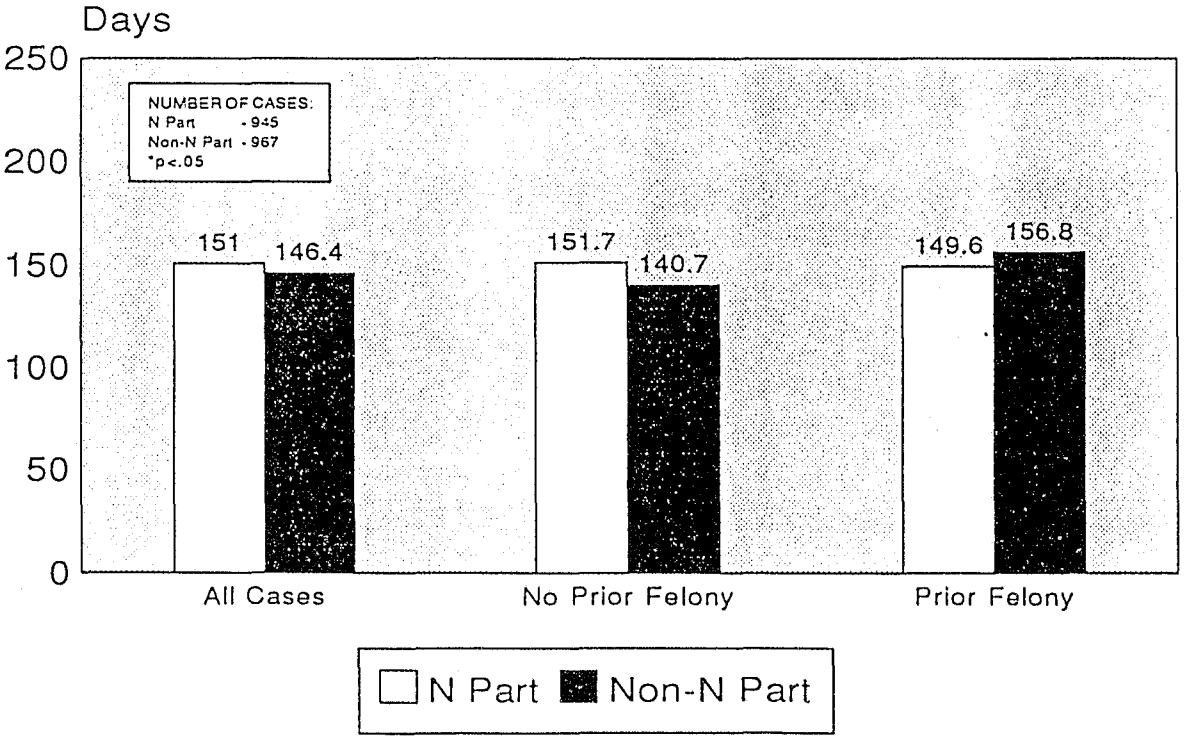


FIGURE 2
MEAN NUMBER OF DAYS TO REARREST, BY PRIOR CONVICTIONS

C: TO FIRST REARREST



D. TO FIRST DRUG REARREST



on the sample case. In general, lag times did not differ by court type. Where significant differences occurred (those sentenced to time served or "other" sentences), N Part defendants had longer times to rearrest. The numbers of cases in these categories were fairly small, however, so these findings may not be reliable. In sum, there is no evidence here which suggests that the more rapid processing in N Parts has an effect on the time to rearrest; this was confirmed by multivariate analyses of "survival" time (see below and page 31).

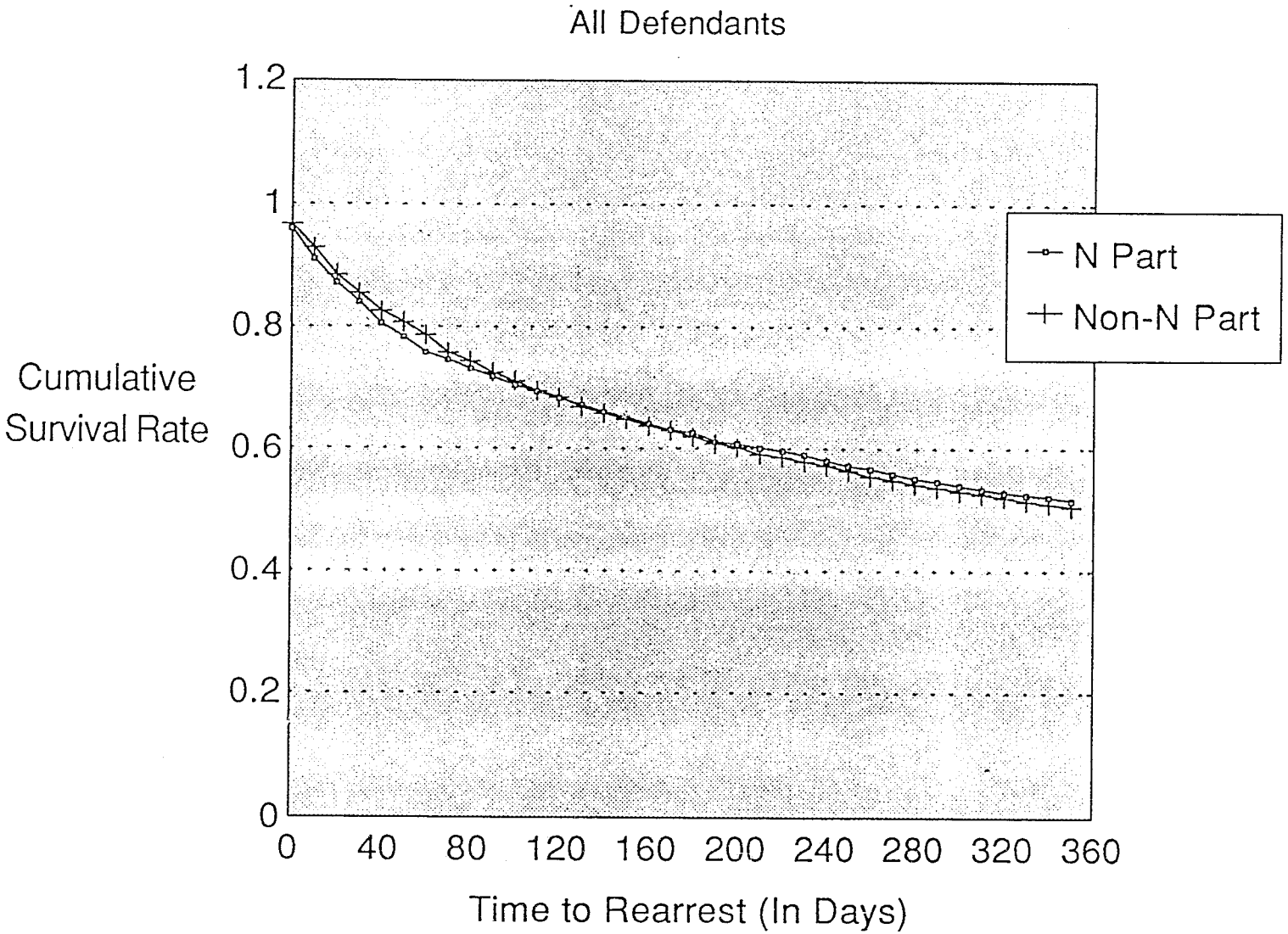
a. Survival Analyses. We then conducted survival analyses on the time to rearrest, for defendants who had at least 360 consecutive days of street time during the two-year follow-up period. Survival analysis is used to analyze the change over time in the percentage of sample members who avoid rearrest. The "survival function" thus indicates the cumulative proportion of individuals who have not been rearrested as of each time interval, and allows statistical comparisons between various subgroups of offenders. Survival curves were constructed to compare N and non-N cases both in general, and by the type of sanction imposed on the sample case (Figures 3A - 3D). By controlling on sanction, we eliminate, at least in part, any confounding effects of differential amounts of time at risk.

These analyses indicated that the pattern of times to rearrest only differed for cases convicted on the sample offense and sentenced to other than incarceration. Non-N cases in that sanction category had lower cumulative survival times (that is, they were rearrested at a faster pace) than N Part cases. In a subsequent section, we analyze survival times using proportional hazards models (Cox regression), which allow the simultaneous control of independent factors in assessing time to rearrest. Those analyses found no independent effect of court type on survival times.

5. Violations of Probation

For defendants sentenced to probation on the original sample case, we obtained data from the New York City Department of Probation on the incidence of violations of probation (VOP). Violations are issued for several reasons: the defendant is rearrested, he or she fails to appear for scheduled appointments ("abscond"), or otherwise violates a condition of probation ("other"). Because N Part defendants were significantly more likely to be sentenced to probation terms upon conviction, it was important to assess whether VOPs were more prevalent among N Part cases. Differences might occur because of the particular characteristics of those cases sentenced to probation in the N Part, because the more rapid processing in the N Part has a stronger deterrent effect, or because the imposition of probation sentences in the N Part is accompanied by specific warnings from

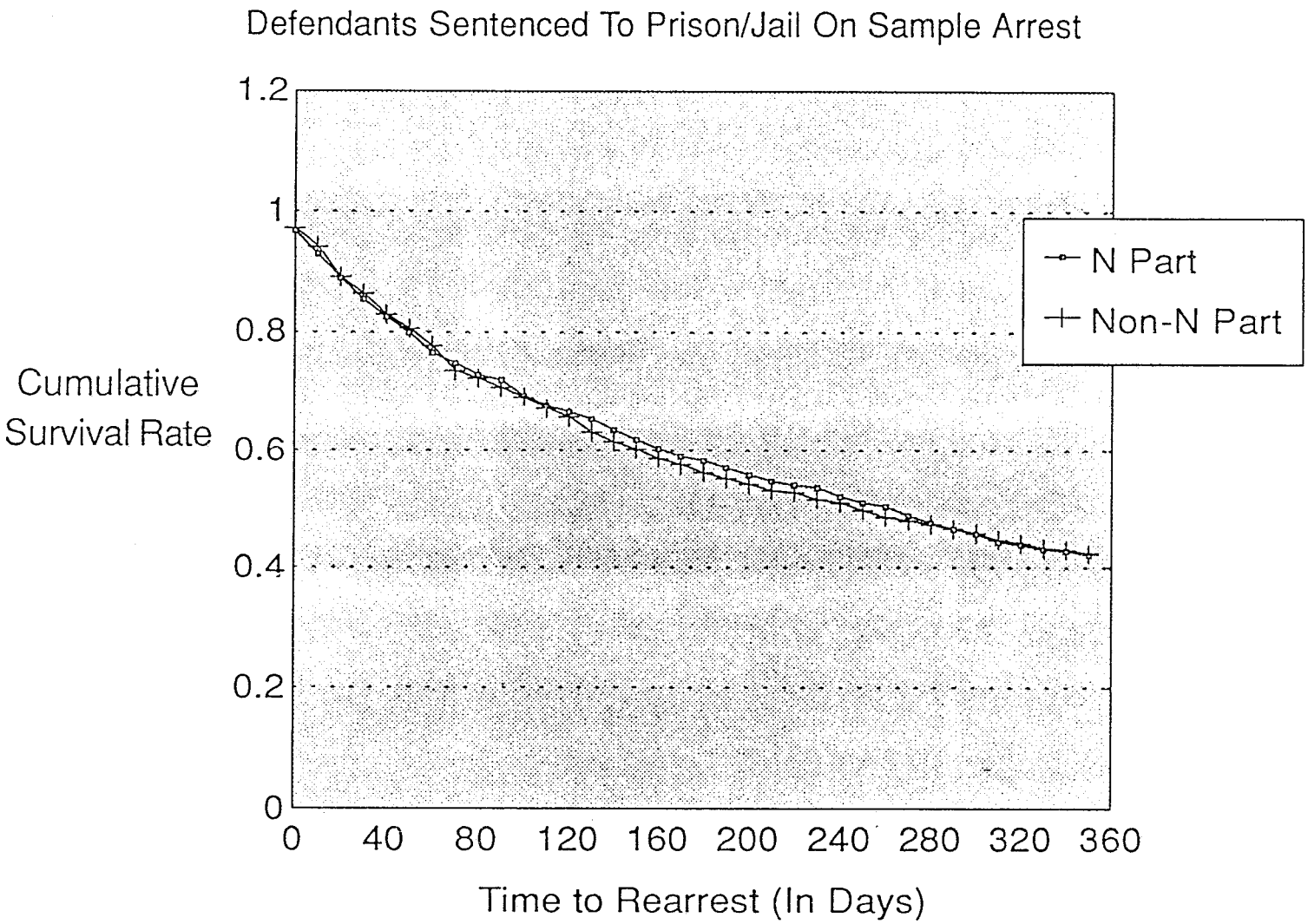
FIGURE 3-A
SURVIVAL RATES:
TIME TO REARREST BY COURT PART
(For defendants with at least 360 days at risk for rearrest)



(N)
N Part = 2375
Non-N = 2036

Lee-Desu Statistic = 2.51
Probability = .113

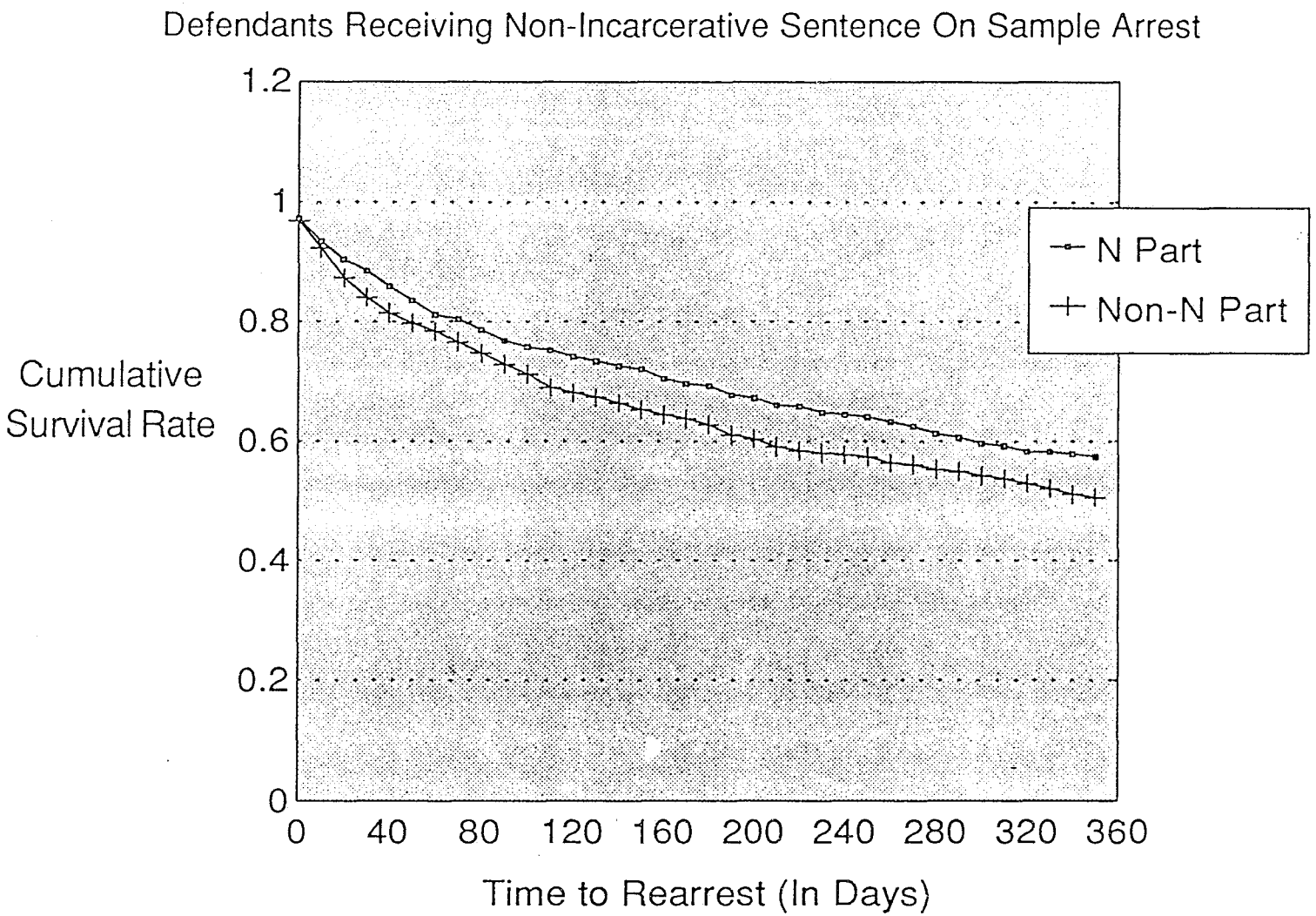
FIGURE 3-B
SURVIVAL RATES:
TIME TO REARREST BY COURT PART
(For defendants with at least 360 days at risk for rearrest)



(N)
N Part = 649
Non-N = 653

Lee-Desu Statistic = 1.17
Probability = .279

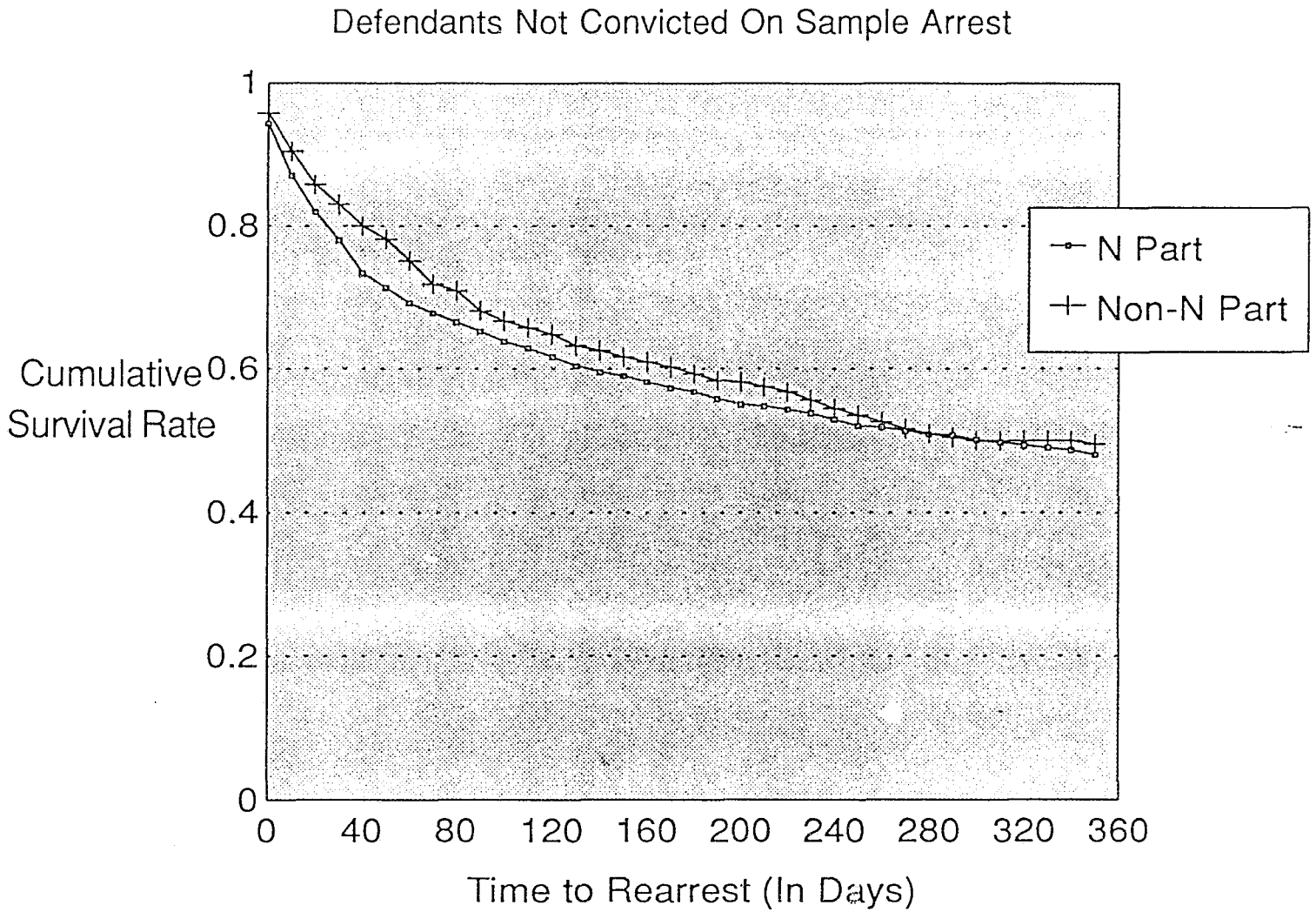
FIGURE 3-C
SURVIVAL RATES:
TIME TO REARREST BY COURT PART
(For defendants with at least 360 days at risk for rearrest)



(N)
N Part = 505
Non-N = 603

Lee-Desu Statistic = 10.78
Probabilty = .001

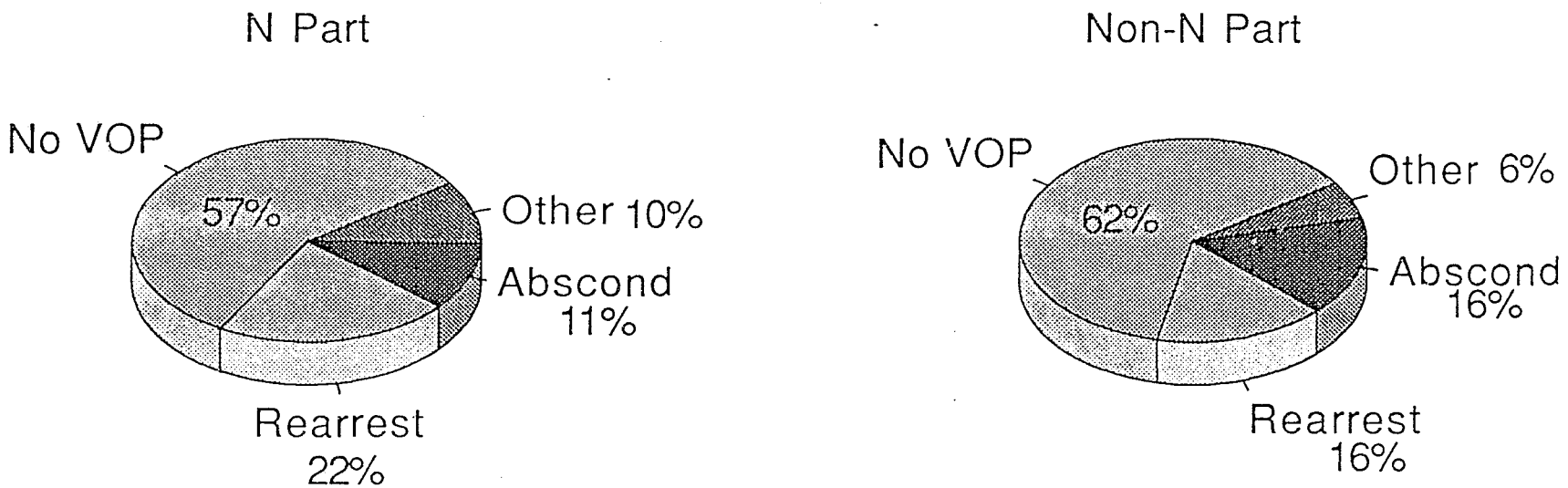
FIGURE 3-D
SURVIVAL RATES:
TIME TO REARREST BY COURT PART
(For defendants with at least 360 days at risk for rearrest)



(N)
N Part = 932

Lee-Desu Statistic = .851

FIGURE 4
VIOLATION OF PROBATION (VOP) RATES
FOR DEFENDANTS SENTENCED TO PROBATION ON SAMPLE ARREST



	N Part	Non-N Part
	N=454	N=390
Time to VOP (days):		
Mean*	468	404
Median	417	353

* $p<.05$

Source: NYC Dept. of Probation

the judge about the consequences of violating probation terms. That is, the offering of a "deal" in the N Parts may come with more serious consequences (real or threatened) for not living up to the terms of that deal. Figure 4 summarizes the data.

The Department of Probation data identified 844 cases from the original sample that had received probation sentences and had information on violations. Of these, 40.6% had a record of a violation. Although VOP rates were slightly higher among N Part defendants sentenced to probation (43% vs. 38% for non-N cases), the difference was not statistically significant. This difference reflected higher rates of VOP among N Part defendants due to rearrest or other type. However, among those who did have a VOP, the number of days from sentence to VOP was significantly longer for N Part defendants (mean of 468 vs. 404 days for non-N probationers).[7]

Several logistic regression models were tested to predict the probability of violation. These models were run independently for N Part cases and for non-N Part cases; other models included a weighted court part independent variable. Among the prior arrest and conviction variables used in the models were prior arrests, prior felony drug convictions, and prior non-drug felony convictions. Other variables tested were total number of prior probation sentences, total number of months of probation served in the past, and whether the defendant had verifiable employment or a NYC address. Although these variables had significant correlations with violation of probation, taken together they contributed very little toward predicting the likelihood of a violation. With classification tables adjusted to reflect the base rate of 40% (cases with violations of probation), the models did not exceed 60% correct classification (model results not shown).

In part because the data on time to violation of probation were not normally distributed, regression models of these data were not statistically significant. Similarly, a survival analysis of the time to the first violation showed no significant difference in lag time between N Part and non-N Part cases, although the difference in mean lag time between the two groups was significant.

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[7]The rearrest data obtained from the Department of Probation indicate lower rearrest rates and longer lag times to rearrest than the data obtained from the Criminal Justice Agency database for all sample defendants (cf. Table 1 and Figure 4). There are several possible explanations for these discrepancies. The follow-up period for the Probation Department data was not necessarily uniform across cases, and it may have been shorter than two years for some defendants. The Probation computer may not have recorded all rearrests, or it may be that not all rearrests result in issuance of a VOP. Finally, our lag time calculations discounted any time incarcerated, whereas the Probation data simply calculated the overall time from sentence to rearrest; this would tend to yield longer lag times for the latter data.

B. MULTIVARIATE ANALYSES OF RECIDIVISM

1. Rearrest Prevalence

The first analyses assessed the relative effect of N Part processing on the likelihood of a rearrest during the two year period following the 1989 sample arrest, using the analytic strategy outlined in Section IIC above. Here we summarize the final results of those analyses, which generally confirmed our descriptive findings that there was little interaction between type of court processing and rearrest prevalence.

Overview

Table 7 displays the means for the variables tested in the logistic regression models, and Tables 8 through 10 summarize the final model results. In general, the models were not terribly powerful -- the case and defendant measures available for analysis did not provide a very good fit to the rearrest data. This is evidenced by the high log likelihood values, significant model chi-squares, pseudo-R^2 values around .2, and relative-improvement-over-chance (RIOC) values ranging from .274 to .362.[8] All of the models were better at predicting rearrest than at predicting "no rearrest." The models correctly classified up to 74.2% of rearrests, with the overall correct classification rates ranging from 63.5% to 67.9%. The major findings relevant to the project's main research questions were as follows:

- **The models were fairly consistent in suggesting that N Part processing had little independent effect of the likelihood of rearrest. The specialized, more rapid handling of felony drug cases in the N Parts, and more lenient sentences, did not apparently result in higher rearrest prevalence. The only exceptions to this were in the models for defendants with 90 or more days at risk, and 180 days, where N Part disposition lowered the odds of rearrest by factors of .83 and .84 respectively (see Table 10, columns 1 and 2)**

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[8]Two measures of the statistical adequacy of a logit model are the "pseudo-R^2" and the Relative Improvement Over Chance (RIOC). The first statistic (see Maddala, 1983) is roughly equivalent to the squared multiple correlation (R^2) used in ordinary least squares regression analysis, which is a measure of the proportion of variance in the dependent variable explained by the model. Pseudo-R^2 is calculated as

Chi-square (goodness-of-fit)/N + Chi-square

The RIOC (see, for example, Loeber and Dishion, 1983; Copas and Tarling, 1986) measures how well a logit model predicts an outcome relative to chance and the best possible prediction. Its value ranges from 0 (no improvement, or chance alone) to 1 (perfect prediction). Thus, a RIOC score of .30 indicates that the model improves prediction by 30% over chance.

- Generally, the most consistent predictors of rearrest were defendant age (younger offenders had a higher probability of rearrest), prior criminal arrests and convictions (a more extensive prior record was associated with greater likelihood of rearrest), and sentence length (the longer the sentence imposed on the sample case, the lower the rearrest probability. However, being sentenced to jail or prison on the sample case, in comparison to no incarcerative sentence or no conviction, increased the odds of rearrest by a factor of about 1.8 (Table 9). All these findings are consistent with previous research on predictors of criminal behavior (see, for example: Blumstein, Cohen and Nagin, 1978; Chaiken and Chaiken, 1990; Farrington, Ohlin, and Wilson, 1986; Maltz, 1984; Visher, Lattimore, and Linster, 1991).

In particular:

- Prior arrests significantly increased the chances for rearrest across all models (with the exception of the model limited to defendants receiving incarcerative sentences). The odds ratios were highest for the prior drug felony arrest variable (ranging from 1.51 to 1.93), lower for other prior felony arrests (ranging from 1.41 to 1.72), and lowest for prior misdemeanor arrests (ranging from 1.35 to 1.75).

- Having at least one prior misdemeanor conviction significantly increased the likelihood of rearrest across all models, with odds ratios ranging from 1.44 to 1.84.

- A prison or jail sentence imposed for the sample arrest significantly increased the chances for rearrest, with odds ratios ranging from 1.53 to 1.97 across the models. Perhaps the imposition of incarcerative sentences in part reflects an accurate assessment of the level of risk posed by such defendants.

- In all the models, the presence of a prior felony drug conviction reduced the likelihood of any rearrest by factors ranging from .54 to .69. This finding appears to contradict our more general results that prior arrests and convictions increase rearrest prevalence. In fact, our analyses of rearrest *rates* (Table 12) and *time to rearrest* (Table 13) do offer some evidence that prior drug convictions are associated with heightened

recidivism, although not for all types of crimes. This may reflect that because defendants with prior drug felony convictions were more likely to be sentenced to prison on the sample offense, they have relatively low time at risk; this could tend to reduce the prevalence of rearrest but yield higher rearrest rates.

- o Age at arrest was significant in all of the models, with a negative coefficient, indicating that rearrest is less likely among older defendants. However, in all models, the predictive effect of age on rearrest was substantively minimal.

- o Finally, sentence length and processing time, although significant in some of the models, contributed only marginally to the prediction of rearrest.

The following summarizes specific findings from each of the sets of models displayed in Tables 8 through 10:

a. Weighted model including all cases (60% sample -- 3561 cases): Table 8, column 1

- o All of the prior criminal record variables were significant. Prior arrest variables tended to increase the likelihood of rearrest, with odds ratios ranging from 1.35 to 1.65. Prior misdemeanor convictions also increased the chances for rearrest (odds ratio of 1.68), while having a prior drug felony conviction decreased the chances for rearrest (odds ratio of .61).

- o Receiving a jail/prison sentence for sample arrest also significantly increased the likelihood of rearrest by a factor of 1.78.

- o Other variables, although statistically significant, had little affect in predicting rearrest. These include age at arrest, arrest density, sentence length, and processing time.

b. Models controlling for sample arrest sanction -- incarcerative sentence (1448 cases) and non-incarcerative/no conviction (2113 cases): Table 8, columns 2 and 3

- o These two models were similar. Prior drug felony arrests were significant for defendants sentenced to prison/jail on the sample arrest, but non-drug felony and misdemeanor arrests were not. For those not sentenced to incarceration

or not convicted on the sample arrest, any type of prior arrest significantly increased the likelihood of rearrest. However, arrest density[9] increased the likelihood of rearrest only among those sentenced to incarceration on the sample arrest.

o The model limited to defendants not receiving incarcerative sentences had a slightly higher rate of correct prediction for both rearrest and no rearrest (70.0% and 65.2%, respectively). For defendants receiving incarcerative sentences for the sample arrest the model was weaker, predicting only 60.1% of cases with no rearrests correctly, and 66.6% of rearrests.

c. *N Part model (1627 cases) and non-N Part model (1934 cases): Table 9*

o Generally, these models were similar, providing further evidence that the factors affecting recidivism among drug offenders operate independently of court type. Prior conviction/arrest variables and sample sentence type tended to be the strongest significant predictors in both the N and non-N models. However, prior misdemeanor convictions was not significant in the N Part model, and prior misdemeanor arrests was not significant in the non-N Part model.

o As with the all-case model, having a prison/jail sentence imposed for the sample arrest increased the likelihood of rearrest in both models (the odds ratios were 1.97 in the non-N Part model, 1.67 in the N Part model).

o Arrest density was significant only in the non-N Part model, increasing the chances for rearrest by a factor of 1.35.

o The N Part model had a slightly higher rate of correctly classifying rearrests (71.6%) compared with the non-N Part model (67.6%). This is reflected in the higher RIOC value for the N Part model (.356) compared with the non-N Part model (.308).

---

[9]Arrest density was a measure of the average annual frequency of offending prior to the sample arrest. It was calculated by dividing the total number of pre-sample arrests by the defendant's curent age minus 16 (the age defined as "adult" by the New York State criminal justice system). Because we did not have complete data on the time spent on custody on prior offenses, we could not construct the equivalent of the adjusted arrest rate measure for the pre-sample period.

d. Models controlling for time at risk for rearrest (90, 180, 270, 360 days): Table 10

o The significant variables for predicting rearrest were consistent across these four models. However, the odds ratios for prior arrest variables tended to increase across models as the time at risk for rearrest increases. In other words, prior arrest variables have more predictive weight among defendants with more time at risk for rearrest. Prior conviction variables reflect the patterns already discussed, prior drug felony convictions reduced the odds of rearrest by a factor of about .67, while prior misdemeanor convictions increased the odds (by a factor of around 1.8).

o An incarcerative sentence imposed for the sample arrest increased the chances for rearrest, but the odds ratios were lower in models with longer time at risk for rearrest (reflecting shorter prison/jail sentences for these cases).

o The presence of a non-drug charge among arrest charges was significant in predicting rearrest only in those models limited to defendants with longer time at risk for rearrest. In all the models, the presence of a non-drug charge reduced the probability for rearrest.

o Limiting the model to defendants with longer time at risk for rearrest slightly improved the overall fit of the model. The total correctly classified increased from 66.1% (for model limited to defendants with at least 90 days at risk) to 67.9% (for model limited to defendants with at least 360 days at risk). This is also reflected in the RIOC values, which increased from .334 (for the 90 day model) to .362 (for the 360 day model).

e. Models disaggregated by crime type[10] (3,561 cases): Table 11

o These models were generally weak. Few variables were significantly related to the probability of rearrest, the log likelihoods were high, and the percentage of cases classified correctly low (data not shown in tables). Court type was significant only for *drug sales* and *violent crime*, but in opposite directions. Defendants sentenced in N Parts were more likely to be rearrested within two years for *drug sales*. Defendants sentenced in Non-N Parts were more likely to be rearrested for *violent crime*.

---

[10]The types of rearrests modeled were felony drug sale, felony drug possession, violent, and property.

- o In none of these specific crime type models were there significant effects for the interaction of court type and sentence length. Evidently, sentence lengths were equally ineffective in predicting recidivism regardless of court type where sentences were imposed.

2. Adjusted Annualized Rearrest Rates: Table 12

Tobit analysis (censored regression) was used to analyze rearrest rates over a two year period by type of offense. Rearrest rates were calculated by dividing the number of rearrests by the time at risk (excluding jail or prison time). Cases with no rearrests were censored from the model.

- o Overall, the models were not impressive. The coefficients for the standard errors (σ) were significant for all five models, as were the constants. Together with the high log likelihood ratios, these results suggest that the models were weak and that the results should be viewed with caution.

- o As with most of the logistic regression models of rearrest prevalence, there were no significant effects for court type. The interactions of sentence length with court type were significant only for rearrest rates for ***violent crime***. The positive coefficient suggested that higher rearrest rates were associated with the combination of longer sentences imposed in N Parts. Because the coefficient for ***sentence length*** was negative and significant for ***violent crime***, the model suggests that the interaction effect may be particularly strong. Obviously, this was not an intended effect of the specialized drug court.

3. Time to Rearrest -- Proportional Hazard Models, Table 13

Another important dimension of recidivism for assessing the impact of special drug courts is the temporal pattern of rearrests. Although a criminal justice intervention may not have a significant effect on overall rearrest rates, it is possible that rearrests may occur later in time, or rearrests may be spaced further apart. In a previous section of this report we used difference-of-means tests and survival analysis to compare average lag time to rearrest for N and non-N defendants, finding few significant differences between the groups on this measure, even after controlling for sanction type. Here, we use multivariate statistical techniques to assess the independent effects of N Part processing on time to rearrest, controlling simultaneously for other relevant case and defendant

covariates. Cox regression procedures were used to construct proportionate hazard models for time to rearrest (Allison, 1984; Cox, 1972). Models were constructed for time to rearrest for any offense within two years, first for all cases and then for defendants with at least 360 days of street time. The key findings were as follows:

- Results for the key test of court type and its interaction with sentence type were similar to the results of our analyses of rearrest prevalence. Defendants adjudicated in N Parts were no more likely to be rearrested sooner than defendants disposed in non-N Parts.[11] The interaction effects of court type and sanction were not significant in either rearrest model. No other interaction effects were significant.

- The positive coefficient for defendants detained pretrial for the sample arrest, in both proportional hazard models, indicates that they had a shorter time to rearrest following release than those not detained. Sentence type was also a significant predictor of rearrest -- the negative coefficients for sentence type indicates that non-incarcerative sentences were associated with a longer time to rearrest. Because the interaction term was not significant, however, it mattered little in which court type the sentences were imposed.

- The contributions of offender characteristics to the models were inconsistent. Different sets of prior record variables were significant for the overall rearrest model and for those with at least 360 days at risk. Prior felony convictions predicted later rearrest among all defendants but not among those with at least 360 days of street time, and prior misdemeanor convictions and jail sentences were associated with longer time to rearrest in both models. A higher "density" of prior arrests was predictive of longer times to rearrest only in the 360-day model. Current offense charges and demographic characteristics were generally not significant predictors of time to failure (data not shown).

Overall, our analyses of survival times provide little evidence that N Part processing has any general effect in accelerating or delaying recidivism. The key factors predicting time to rearrest were prior arrests and convictions, pretrial detention status, and sentence type on the sample case.

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[11]Other analyses of time to rearrest disaggregated by crime type indicated that defendants adjudicated in non-N Parts were more likely to be rearrested sooner for violent crimes, and N Part defendants arrested sooner for drug sales.

TABLE 7

MEANS FOR INDEPENDENT VARIABLES

IN LOGIT MODELS,

BY REARREST TYPE AND SAMPLE CASE COURT PART

	ANY FELONY REARREST				ANY DRUG FELONY REARREST			
	N		NON - N		N		NON -N	
	Yes	No	Yes	No	Yes	No	Yes	No
Age at Arrest	26.90	27.90*	26.70	28.70*	27.40	27.50	27.30	28.1*
Prior Drug Fel. Convictions	.61	.43*	.53	.57	.63	.45*	.59	.53
Prior Misd. Convictions	3.55	1.80*	3.02	2.14*	3.51	2.07*	3.04	2.26*
Prior Drug Fel. Arrests	.72	.39*	.62	.49*	.74	.42*	.68	.48*
Prior Non-Drug Fel. Arrests	1.20	.69*	1.40	.88*	1.11	.82*	1.27	1.03*
Prior Misd. Arrests	2.36	1.16*	1.77	1.34*	2.33	1.34*	1.83	1.38*
Arrest Density	.50	.26*	.50	.30*	.49	.30*	.48	.34*
Prison	.36	.34	.45	.45	.37	.33*	.46	.45
Prison/Jail Sentence	.17	.20	.23	.20	.16	.20*	.22	.20
No Conviction	.39	.29*	.19	.12*	.39	.31*	.19	.13*
Sentence Length (days)	90.30	128.80*	196.70	286.40*	92.50	122.0*	209.80	266.00*
Non-Drug Arrest Charge	.20	.20	.22	.23	.20	.21	.21	.23
Case Processing Time(days)	39.60	31.50*	147.50	130.90*	42.20	31.1*	144.90	134.70
N	(1265)	(1477)	(1404)	(1798)	(1020)	(1722)	(1078)	(2124)

* $p < .05$

TABLE 8

LOGISTIC REGRESSION MODEL RESULTS
PREDICTING REARREST, BY SAMPLE CASE SENTENCE
(Weighted By Court Part)

PREDICTOR VARIABLES	ALL CASES		INCARCERATIVE SENTENCE		NON-INCARCERATIVE SENTENCE/ NO CONVICTION	
	B	EXP (B)	B	EXP (B)	B	EXP (B)
DEMOGRAPHICS						
Age at Arrest	-.019*	.98	-.0003	.9997	-.022*	.978
PRIOR RECORD						
Prior Drug Felony Convictions	-.49*	.61	-.626*	.535	-.400*	.67
Prior Misdemeanor Convictions	.52*	1.68	.407*	1.50	.526*	1.69
Prior Drug Felony Arrests	.50*	1.65	.559*	1.75	.477*	1.61
Prior Non-Drug Felony Arrests	.42*	1.52	.223	1.25	.544*	1.72
Prior Misdemeanor Arrests	.30*	1.35	-.066	.936	.558*	1.75
Arrest Density	.02*	1.02	.288*	1.334	.019*	1.02
SAMPLE CASE						
Jail/Prison Sentence	.58*	1.78	—	—	—	—
Sentence Length	-.002*	.998	-.002*	.998	—	—
Non-Drug Arrest Charge	-.11	.898	-.008	.992	-.149	.862
Case Processing Time	.001*	1.001	.002*	1.000	.0001	1.0001
Court Part	-.039	.96	.071	1.074	-.027	.973
Log Likelihood	-2271.79		-923.85		-1326.64	
Model Chi-square	385.75		155.34		272.85	
Significance Level	.0000		.0000		.0000	
N	(3561)		(1448)		(2113)	
Percentage Correctly Classified						
No Rearrest	61.1%		60.1%		65.2%	
Rearrest	69.0%		66.6%		70.0%	
Total	65.2%		63.5%		67.7%	
pseudo R^2	.216		.216		.204	
RIOC	.314		.274		.357	

* $p < .05$

TABLE 9

LOGISTIC REGRESSION MODEL RESULTS
PREDICTING REARREST, BY SAMPLE COURT PART

PREDICTOR VARIABLES	N PART MODEL		NON-N PART MODEL	
	B	EXP (B)	B	EXP (B)
DEMOGRAPHICS				
Age at Arrest	-.013*	.987	-.022*	.978
PRIOR RECORD				
Prior Drug Felony Convictions	-.374*	.688	-.578*	.561
Prior Misdemeanor Convictions	.363	1.438	.592*	1.808
Prior Drug Felony Arrests	.606*	1.833	.414*	1.513
Prior Non-Drug Felony Arrests	.341*	1.406	.354*	1.425
Prior Misdemeanor Arrests	.429*	1.536	.152	1.164
Arrest Density	.009	1.009	.302*	1.353
SAMPLE CASE				
Jail/Prison Sentence	.511*	1.667	.677*	1.968
Sentence Length	-.003*	.997	-.002*	.998
Non-Drug Arrest Charge	-.148	.862	-.123	.884
Case Processing Time	.001	1.001	.001*	1.001
Log Likelihood	-1040.83		-1220.27	
Model Chi-square	169.41		237.24	
Significance Level	.0000		.0000	
N	(1627)		(1934)	
Percentage Correctly Classified				
No Rearrest	61.5%		62.5%	
Rearrest	71.6%		67.6%	
Total	66.8%		65.1%	
pseudo R^2	.218		.208	
RIOC	.356		.308	

* $p < .05$

TABLE 10

LOGISTIC REGRESSION MODEL RESULTS
PREDICTING REARREST, BY TIME AT RISK
(Weighted By Court Part)

PREDICTOR VARIABLES	TIME AT RISK GE 90 DAYS		TIME AT RISK GE 180 DAYS		TIME AT RISK GE 270 DAYS		TIME AT RISK GE 360 DAYS	
	B	EXP (B)	B	EXP (B)	B	EXP (B)	B	EXP (B)
DEMOGRAPHICS								
Age at Arrest	-.015*	.985	-.016*	.984	-.016*	.984	-.017*	.983
PRIOR RECORD								
Prior Drug Felony Convictions	-.393*	.675	-.403*	.668	-.413*	.662	-.410*	.664
Prior Misdemeanor Convictions	.589*	1.802	.609*	1.839	.547*	1.728	.528*	1.696
Prior Drug Felony Arrests	.537*	1.711	.569*	1.766	.628*	1.874	.657*	1.929
Prior Non-Drug Felony Arrests	.433*	1.542	.408*	1.504	.471*	1.602	.504*	1.655
Prior Misdemeanor Arrests	.370*	1.448	.391*	1.478	.465*	1.592	.505*	1.657
Arrest Density	.012	1.012	.013	1.013	.013	1.013	.013	1.013
SAMPLE CASE								
Jail/Prison Sentence	.638*	1.893	.651*	1.917	.440*	1.553	.425*	1.530
Sentence Length	-.002*	.998	-.003*	.997	-.001*	.999	-.002*	.998
Non-Drug Arrest Charge	-.137	.872	-.145	.865	-.220*	.803	-.216*	.806
Case Processing Time	.0003	1.0003	.0004	1.0004	.0002	1.0002	.0004	1.0004
Court Part	-.187*	.829	-.173*	.841	-.132	.876	-.149	.802
Log Likelihood	-1856.74		-1828.07		-1704.77		-1664.31	
Model Chi-square	344.37		355.31		361.55		372.20	
Significance Level	.0000		.0000		.0000		.0000	
N	(2964)		(2927)		(2759)		(2707)	
Percentage Correctly Classified								
No Rearrest	56.6%		57.5%		59.6%		59.7%	
Rearrest	73.5%		72.9%		73.8%		74.2%	
Total	66.1%		66.1%		67.7%		67.9%	
pseudo R^2	.202		.199		.191		.187	
RIOC	.334		.332		.358		.362	

* $p < .05$

TABLE 11

LOGISTIC REGRESSION ON REARRESTS BY COURT TYPE AND SANCTION SEVERITY FOR FOUR OFFENSE TYPES AND ANY REARREST

	Drug Sale			Drug Possession			Violent Crime			Property Crime			Any Rearrest		
PREDICTOR VARIABLES	B	EXP (B)	SE	B	EXP (B)	SE	B	EXP (B)	SE	B	EXP (B)	SE	B	EXP (B)	SE
Constant	-1.74*		.39	-2.75*		.62	-2.87*		.71	-1.74*		.69	-5.14*		.83
DEMOGRAPHICS															
Age	.01	1.01	.01	-.01	.99	.02	-.06*	.94	.02	-.05*	.95	.02	-.03	.97	.01
Female	.08	1.08	.12	-.16	.85	.16	.26	1.30	.21	-.14	.87	.18	-.01	.99	.15
African American	-.38	.68	.25	-.31	.73	.38	-.27	.76	.38	.50*	1.65	.25	-.03	.97	.24
Hispanic	-.40	.67	.25	-.35	.70	.37	-.06	.94	.38	.35	1.42	.24	-.14	.87	.24
In Labor Force or School	.02	1.02	.09	.19	1.21	.15	-.05	.95	.12	-.05	.95	.14	.002	1.002	.12
Same Address > 6 mos.	.09	1.09	.08	-.03	.97	.12	-.12	.89	.12	-.01	.99	.13	-.06	.94	.11
PRIOR RECORD															
Prior Prison Sentences	-.18	.84	.23	.003	1.003	.32	-.08	.92	.32	-.10	.90	.38	.20	1.22	.59
Prior Jail Sentences	.004	1.004	.04	.03	1.03	.05	-.28*	.76	.11	-.001	.999	.06	.14	1.15	.11
Prior Probation Sentences	-.07	.93	.23	.24	1.27	.33	-.09	.91	.29	-.30	.74	.35	-.55	.58	.45
Prior Drug Arrests	.06	1.06	.04	.09	1.09	.06	.04	1.04	.07	-.09	.91	.08	.18	1.20	.11
Prior Non-Drug Arrests	.01	1.01	.04	-.09	.91	.07	.20*	1.22	.06	.18*	1.2	.06	.02	1.02	.11
CURRENT CHARGES															
Drug Sale Charge	-.12	.89	.12	-.10	.90	.19	-.18	.84	.18	-.14	.87	.20	-.17	.84	.13
Cocaine Charge	-.05	.95	.13	-.25	.78	.18	.42	1.52	.27	.22	1.25	.25	.26	1.30	.17
Crack Charge	-.07	.93	.09	.05	1.05	.13	-.11	.90	.12	-.14	.87	.14	-.09	.91	.12
SANCTIONS															
Detained Pretrial	-.22	.80	.18	.32	1.38	.27	.66*	1.93	.28	-.09	.91	.29	5.31*	202.35	.72
Sentence Length	-.0002	.9998	.0003	-.001*	.999	.001	-.001	.999	.001	-.0001	.999	.0005	.02*	1.02	.004
Court Type															
N Part	.22*	1.25	.09	.05	1.05	.13	-.30*	.74	.14	-.06	.94	.15	-.07	.93	.11
N Part * Sentence	-.0001	.9999	.0003	-.001	.999	.001	-.0004	.9996	.0006	-.0004	.999	.0005	.0005	1.0005	.004
Log Likelihood	-530.57			-279.56			-285.87			-253.36			-260.43		
Model Chi-Square (p)	6.51	(.039)		1.05	(ns)		9.01	(.011)		1.29	(ns)		0.37	(ns)	

*p <.05

TABLE 12

TOBIT MODEL ON REARREST RATES BY COURT TYPE AND SANCTION SEVERITY FOR FOUR OFFENSE TYPES AND ALL REARRESTS

	Drug Sale		Drug Possession		Violent Crime		Property Crime		All Rearrest	
PREDICTOR VARIABLES	B	SE	B	SE	B	SE	B	SE	B	SE
Constant	-35.10*	9.80	-24.52*	6.41	-136.70*	22.63	-116.48*	20.78	-47.08*	17.45
DEMOGRAPHICS										
Age	.12	.18	.05	.09	-.10	.10	-.06	.09	.01	.12
Female	3.70	2.34	.40	1.56	16.97*	6.61	-1.26	5.05	.71	4.50
African American	-.10	3.92	-1.64	2.77	-12.53	10.22	8.64	7.66	.37	7.63
Hispanic	-.004	3.90	.57	2.76	-4.78	10.26	9.22	7.63	2.80	7.61
Working/in School	.43	1.73	.84	1.21	-2.64	3.81	-2.36	3.76	-2.54	3.43
Same Address > 6 mos.	.92	1.58	1.32	1.10	-4.18	3.67	-.15	3.49	-1.99	3.16
PRIOR RECORD										
Prior Prison Sentences	-7.90	4.44	-4.84	3.07	-14.10	10.37	-5.06	10.23	14.34	8.77
Prior Jail Sentences	.05	.77	.06	.53	-2.30	1.85	-1.29	1.79	.43	1.51
Prior Probation Sentences	5.97	4.43	4.02	3.05	13.11	9.25	-8.53	9.68	7.58	8.76
Prior Drug Arrests	2.59*	.86	1.55*	.56	-.98	2.10	-2.50	2.02	1.67	1.74
Prior Non-Drug Arrests	-.36	.85	-.43	.56	5.34*	1.71	7.17*	1.64	2.18	1.60
CURRENT CHARGES										
Drug Sale Charge	-4.57	2.42	-1.26	1.62	-8.40	5.73	-2.83	5.16	-5.32	4.63
Cocaine Charge	1.82	2.61	2.70	1.85	11.75	7.03	2.61	6.26	7.69	5.31
Crack Charge	1.50	1.70	2.09	1.17	4.71	3.81	-8.36*	3.75	-.08	3.35
SANCTIONS										
Detained Pretrial	-5.79	3.53	-2.88	2.45	6.11	8.14	1.53	7.82	-7.83	7.04
Sentence Length	-.001	.02	.003	.02	-0.28*	.08	-.009	.05	.03	.04
Court Type										
N Part	-1.95	3.60	-.54	2.49	2.35	8.15	12.96	7.97	.41	7.15
N Part * Sentence	.004	.01	.004	.008	0.16*	.04	-.002	.03	.007	.02
σ	40.50*	1.67	27.71*	1.20	71.56*	4.35	72.64*	4.24	92.62*	2.79
Log Likelihood	-1975.71		-1749.14		-1068.36		-1171.19		-3790.22	

*$p < .05$

TABLE 13

Proportional Hazard Models for Time to Any Rearrest
within Two Years of Sample Arrest**

PREDICTOR VARIABLES	All Cases		Cases with time at risk ≥ 360 days	
	B	SE	B	SE
DEMOGRAPHICS				
Age	-.0006	.0009	-.0001	.0006
PRIOR RECORD				
Non-Drug Felony Conviction	-.418*	.192	-.302	.194
Drug Felony Conviction	-.292*	.083	-.155	.085
Misdemeanor Conviction	-.340*	.083	-.260*	.080
Prior Jail Sentence	-.233*	.087	.322*	.083
Prior Prison Sentence	-.050	.120	-.005	.123
Prior Probation Sentence	.059	.109	.007	.109
Arrest Density	-.013	.063	.276*	.073
SAMPLE CASE				
Sanction Type	-.758*	.096	-.634*	.104
Detention Status	.128*	.029	.170*	.023
Court Type				
N Part	-.143	.084	-.065	.073
N Part * Sentence	.186	.132	-.050	.133
Log Likelihood	-6046.88		-6773.27	
Model Chi-Square (p)	242.82	(.000)	238.85	(.000)

*p <.05

**Includes defendants with no rearrests.

4. Conclusions

There is little evidence from our sample data that the more rapid processing and more lenient sentences received by felony drug offenders in N Parts altered either the likelihood or the temporal pattern of recidivism compared with defendants disposed in regular courts. Whatever deterrent or incapacitative effects were possible from longer incarceration sentences imposed in regular parts seemed to be offset by the special drug courts. Or, it may be that factors not associated with the probability of recidivism determined in which court type a felony drug case would be disposed. If disposition in an N Part were determined by a random process, or by case/defendant attributes not related to recidivism, then we would not expect to find any impact of court type on rearrest. Even after controlling for prior drug charges and prior punishment, there appeared to be no strong or consistent effects associated with case processing or punishment imposed within a specialized drug court.

III. THE COSTS OF N PART PROCESSING

METHODS

In this section we analyze the dollar costs of N Part processing, both for the initial sample case and after factoring in rearrest processing costs. The overall goal is to compare the costs of processing N Part cases with regular processing. Although the initial N Part cases were processed much faster than non-N cases, there may have been differences in the way their rearrests were handled, or staffing levels for N Parts may be higher than for regular court parts. It was also possible that following rearrest, N Part defendants in the sample were adjudicated more slowly than regular defendants, such that over time any differences in court processing costs are eliminated. By taking sanctioning and staffing differences into account, we can further estimate whether, over the long term, N Part adjudication is really cheaper.

A. COST CENTERS

Cost data for the following agencies were included in our calculations of court processing costs: Judiciary and support staff (including clerks and court officers), District Attorney, public defender, New York City Department of Correction (pretrial detention and

local jail sentence costs), New York City Department of Probation (probation sentence costs), and the New York State Department of Correctional Services (state prison sentence costs). The cost of maintaining an offender on parole was not included in this analysis.[12] In addition, we assumed that the arrest and pre-arraignment processing costs for N and non-N cases were the same, so these costs (police, central booking, pretrial interview, lockup, etc.) were ignored for purposes of comparing the two types of court rooms.

B. ANALYTICAL ASSUMPTIONS

The types of available cost components drove the analytical strategy. We were able to obtain annual cost figures for the judiciary, prosecutor, and public defender for the following categories: personnel salaries, fringe benefits, non-personnel costs, and indirect cost rates. Adequate data on capital and non-personnel operating costs were generally not available, but it is reasonable to assume that these are relatively fixed and do not vary by N and non-N processing. Further, since 80-90% of court costs are personnel-related, our analyses cover the bulk of the system costs. Finally, since there were so few trials in this sample of cases, we ignored trial jury costs.

To estimate pretrial detention and sentencing costs, a study by the Correctional Association of New York provided data on the annual costs of maintaining an offender in detention, jail, or prison in New York City (Correctional Association, 1992). These costs do not include capital construction costs or debt service, but include all operating costs. We divided by 365 to get the daily cost, and multiplied by the average detention or sentence length to calculate the detention/sentence cost per case. Defendants not in pretrial detention or not receiving any of these sentences were averaged in at a cost of $0. We also obtained from the New York City Department of Probation the cost of maintaining a felony drug offender on probation ($1.25 per day).

C. COST MEASURES

Our aim was to calculate the average costs associated with processing and sentencing each felony drug case. We assumed that each case costs the same for any appearance transaction or case disposition type. This is not quite accurate since different types of cases may take different amounts of time per court appearance and may require different

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[12]Defendants sentenced to prison in New York State receive an indeterminate sentence with a minimum of one year or more and a maximum of two to three times the minimum. They are eligible for parole after serving the minimum term, and if released are under the supervision of the New York Division of Parole until the end of the maximum term. About two-thirds of imprisoned offenders are released upon serving their minimum terms.

staffing levels (Mott-McDonald Associates, 1979; Jacoby, Link, and Ratledge, 1986). But given the limitations of the available data it seemed reasonable to simply use an overall average cost per case.

Calculations were fairly straightforward for the sentence costs. For jail or prison we determined the cost per day incarcerated. We had two choices here: one was to just use the marginal operating cost per day, the second was to include capital construction and debt service costs. We selected the first option because in the absence of new prison or jail construction it more accurately reflects the additional costs of housing each new inmate. For probation sentences we calculated the cost per day on probation. With both sentence types, more accurate analyses would require different calculations depending upon the conditions of confinement or probation. Thus, incarceration at a minimum security prison may be less expensive than a maximum security prison, and participation in various prison treatment or training programs adds to incarceration costs. Also, more intensive levels of probation are presumably more costly than traditional probation. Because we were not able to obtain any data on sentencing conditions or conditions of confinement, however, we could not incorporate these refinements into our analysis.

For the initial sample arrest, we calculated the cost of each court appearance, and the cost of the sentence (i.e. cost per day of sentence). We also calculated similar costs for the first rearrest only, and added those figures to the initial arrest processing cost. For defendants with no rearrests, this cost was defined as $0; our follow-up period was two years from the sample arrest.

D. COST COMPONENTS

In the introduction to this section, we outlined the basic methodology for estimating case processing and sentencing costs. The strategy was to identify all discrete stages of adjudication and sentencing, assign average dollar values per stage, and sum the results. As explained above, we ignored the costs of arrest, pre-arraignment processing, and the initial lower court arraignment, since these costs are the same for N or non-N processing. Beginning with the first post-arraignment appearance in an N Part, then, the specific possible stages of processing were as follows:

First lower court appearance in an N Part (all cases)
Subsequent lower court appearances in N Part
Subsequent lower court appearances in non-N Part
Grand jury hearing
Superior court appearances in N Part
Superior court appearances in non-N Part
Time in pretrial detention

Length of jail sentence
Length of prison sentence
Length of probation sentence

For each of these stages, we constructed estimates of the per-case costs of each of the key components of the court system: the judiciary, the prosecutor, and the defense attorney. The methodology for estimating these costs differed somewhat by agency. However, the basic strategy for estimating the court processing costs was to take the annual costs of staffing each type of courtroom, multiply by the number of courtrooms, and divide by the number of cases filed per year. We used staffing and caseload data from Queens County to make our estimates.

Because cases are disposed at different points and in different courtrooms, not all cases had costs incurred at each of the above stages. Thus there were four possible exit points for a case: in the lower court N Part, lower court non-N Part, superior court N Part, or superior court non-N Part. Figure 5 summarizes the cost components that were included for each of these types.

1. Judiciary

Estimates of judicial costs of case processing were fairly straightforward. We were able to obtain from the budget office of the New York State Office of Court Administration (OCA) their projected annual costs for operating different types of courtrooms: arraignment, "all-purpose", lower, and superior court (Office of Court Administration, 1993). These cost estimates were based upon fairly detailed analyses by OCA of the operating costs of each courtroom, including support staff (clerks, court officers, law clerks and secretaries, bailiffs) and supplies. We excluded capital costs in order to obtain an operating cost figure.

The annual costs, based on 1992 figures, were similar for each court type: $720,962 for a lower court "all-purpose" courtroom, $731,449 for a superior court arraignment part, and $727,480 for a superior court trial part. We assumed that the judicial costs for the N Part were the same as an all-purpose or trial part, because these judicial staffing levels are the same as for any courtroom.

In estimating the grand jury costs, we factored in the salary, fringe, other-than-personal-services (OTPS), and indirect costs of non-DA staff, based on interviews with the Queens County District Attorney. These include four court officers, one senior court officer, two clerks, two stenographers, and one court reporter. In addition, we included the costs of police witnesses ($739,475 per year per grand jury, based on a study by the New York City Victim Services Agency, Davis 1993b) and juror costs ($345,000 per grand jury per year[13]).

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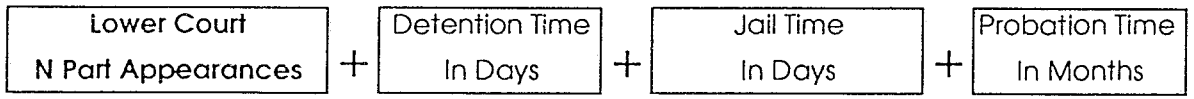
[13]Based on three grand juries in Queens County, 23 jurors per panel, meeting 200 days per year, at $25 per day per juror.

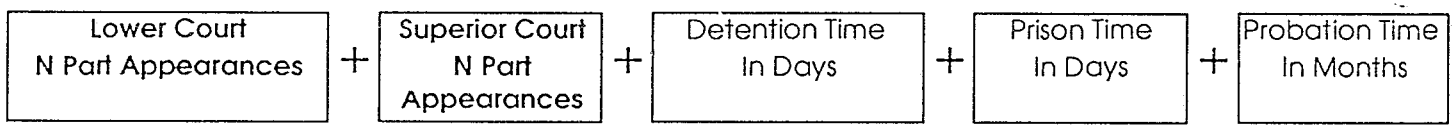
FIGURE 5

COMPONENTS OF COST CALCULATIONS
BY CASE DISPOSITION STAGE

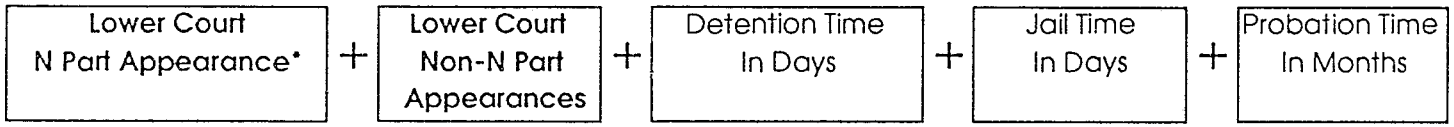
A. DISPOSED IN LOWER COURT N PART



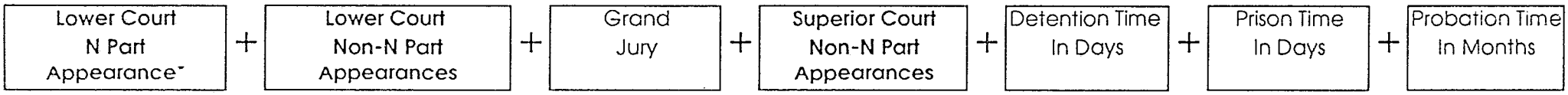
B. DISPOSED IN SUPERIOR COURT N PART



C. DISPOSED IN LOWER COURT NON-N PART



D. DISPOSED IN SUPERIOR COURT NON-N PART



* Every drug felony is initially adjourned to an N Part following lower court arraignment.

2. Prosecutor

These cost estimates were based on interviews with officials of the Queens County District Attorney's office, and examination of official budget figures submitted to the Office of Management and Budget of the City of New York.

For the superior court, grand jury, and N Part, we determined the assigned number of assistant district attorneys, supervisors, bureau chiefs, and support staff (e.g. investigators, paralegals, clerks, secretaries) and multiplied by the average salaries for each position type. The OTPS cost was estimated as a percentage of personnel costs from district attorney budgets submitted to the New York City Office of Management and Budget (16%). Fringe benefits and indirect costs (at 24.5%) were added to salary and direct costs respectively.

3. Defense Attorney

Defense costs were estimated from interviews with representatives of the Queens County division of the Legal Aid Society, the public defender for New York City. Although some felony drug defendants are represented by private or court-appointed attorneys, the majority (an estimated 71%; see NYC Criminal Justice Agency, 1993), are represented by the public defender. Because the public defender in New York City uses a vertical representation system, it was not feasible, as with prosecution costs, to assign specific staffing levels for each court type. Therefore, we took the total annual public defender budget, (including attorneys and support staff, OTPS, fringe benefits, and indirect) and apportioned costs to the lower court, superior court, grand jury, and N Part according to the relative proportions of the prosecutor's budget allocated to each of those components.

4. Other Costs

For pretrial detention and sentencing costs, we used the daily average operating costs per defendant, excluding capital construction and debt service costs but including administrative overhead and indirect costs. These daily costs were $97 for pretrial detention or jail, $96 for prison, and $1.25 for probation. We then multiplied the average number of days sentenced to jail, prison, or probation, and served in pretrial detention, to obtain an average cost per case. Defendants not receiving any of these sentences or not serving any time in detention were averaged in as $0.

FINDINGS

The goal of the comparative cost analyses was to quantify the criminal justice system costs of processing cases through N Parts, relative to the costs of standard adjudication procedures. While the much more rapid processing of N Part cases clearly suggests that N Part adjudication is cheaper, it is possible that more intensive staffing levels or sentencing differences might attenuate some of the cost savings. Further, given the strong interest in alternative processing for drug felonies, it would be quite useful to estimate the real dollar savings which an intervention such as the N Parts might accomplish. In this section we present our analyses of the N Part processing costs, both for the initial case and factoring in the costs of processing the first rearrest within two years of the sample arrest.

Table 14 shows the results of our cost calculations for the original sample case and the first rearrest.

A. SAMPLE CASE COSTS

The top left quadrant of Table 14 shows that the average cost per sample case in the N Parts was only one-third the cost of standard processing ($9,705 vs. $26,227). Excluding the costs of detention time or sentence costs, the difference was even more dramatic: the average court, prosecution, and defense costs were only $453 per N Part disposition, compared with $4,618 in non-N Parts, a tenfold difference. The cost differences tended to be greater for cases adjudicated in superior court; this is because of the greater differential in the number of appearances between N and non-N cases at that level, and the added costs of the grand jury hearing for non-N cases.

B. REARREST COSTS

The upper right quadrant of Table 14 shows the average cost per case for the first rearrest, by court type of the rearrest case. The average costs in the lower court and for all cases combined were quite similar to those for the sample case. The superior court costs on the rearrest were higher than the sample case for both N and non-N cases, reflecting a greater likelihood of pretrial detention and prison sentence on the rearrest. Defendants rearrested on a felony offense are subject to mandatory prison time, and are therefore more likely to be detained pretrial.

C. TOTAL PROCESSING COSTS, INCLUDING REARREST

The lower left section of Table 14 shows the average rearrest cost and the total cost by court type of the sample arrest. These data indicate that average rearrest costs

TABLE 14

CRIMINAL JUSTICE SYSTEM COSTS PER FILED CASE FROM FIRST POST-ARRAIGNMENT COURT APPEARANCE THROUGH COMPLETION OF SENTENCE, BY COURT PART AND DISPOSITION TYPE

	SAMPLE CASE		FIRST REARREST	
	N	Non-N	N	Non-N
Cases Reaching Final Disposition in Lower Court (Excluding Detention or Sentence Costs)	$2,884 (168)	$5,181 (428)	$2,939 (233)	$3,813 (546)
Cases Reaching Final Disposition in Superior Court (Excluding Detention or Sentence Costs)	$18,178 (808)	$38,429 (7,048)	$34,546 (1,672)	$56,743 (10,825)
Combined Average Cost, all dispositions	$9,705 (453)	$26,227 (4,618)	$9,106 (369)	$23,799 (2,267)
Average Cost, first rearrest within 2 years*	$2,662 (1,666)	$10,337 (1,991)		
TOTAL CRIMINAL JUSTICE SYSTEM COSTS	$12,367 (2,119)	$36,564 (6,609)		

* Defendants with no rearrests counted as $0.

were substantially lower for N Part cases (although the prevalence of rearrest was similar for N and non-N cases, the former were much more likely to be adjudicated at rearrest through an N Part -- see page 19). Total costs for the sample case plus the first rearrest within two years for N Part cases remained about one-third the amount of non-N cases ($12,367 vs. $36,564 including detention and sentence costs).

IV. DISCUSSION

This report has examined several dimensions of the long-term impacts of New York City's N Parts. With respect to recidivism rates for felony drug offenders and case processing costs, our findings offer an encouraging picture of some of the benefits of processing felony drug offenders through special drug courts. As a case management innovation to speed the processing of felony drug cases, New York City's N Parts offer substantial cost savings over standard case processing methods, with no deleterious effects on public safety. The average cost of processing a case in the N Part, including sentencing and pretrial detention costs, was one-third the cost of standard processing. In terms of court processing costs alone, N Parts were *one-tenth* as costly.

Overall rearrest rates among New York City felony drug offenders, over 50% within two years, are generally higher than among other samples of drug offenders in other jurisdictions. The average time to rearrest was a little over five months. However, our analyses of recidivism patterns indicated little difference in the overall probability of rearrest between N and non-N Part defendants. There were also no significant differences in reconviction or reincarceration rates between N and non-N defendants. Adjusted arrest *rates* were lower in the N Parts, even after controlling for sanction type, but this effect probably was not due to N Part processing in and of itself. There was no interaction between sentence type and N Part processing in terms of recidivism. That is, sanction effects on recidivism did not vary by court type.

We also examined the time lag between the sample arrest and rearrests. For some types of cases, N Part processing seems to "delay" rearrest. Thus, the more rapid case dispositions, with more lenient sentencing, that are characteristic of New York's special drug courts, do not appear to increase the risk to the community in any way. This may be a function of the types of offenders willing to accept N Part pleas, but these patterns held even where we were controlled for case and defendant factors. In any event, as the N Parts currently operate, they seem to offer substantial long-term cost savings and some evidence of deterrent effects on certain dimensions of recidivism. Although prevailing

political wisdom, and some theory, suggest that any deterrent effects are due to the model of "swift and sure" punishment offered by the N Parts, it is not clear from our research that this is the case. Our prediction models for rearrest were not particularly powerful, and our ability to correctly classify defendants according to whether they were rearrested was somewhat limited. Other system, defendant, or case factors not measured in our study are presumably also predictive of recidivism patterns.

One interesting finding was that defendants processed through N Parts were significantly more likely to accept N Part pleas upon rearrest, suggesting that strategies to increase the disposition rate in N Parts (Davis, 1993a) may have compounding effects on future cost savings as defendants return to court on rearrests. Whether this "repeat customer" phenomenon reflects some degree of defendant "satisfaction" with N Part processing, the behavior of their attorneys, prosecution plea policies, or some other process, is not entirely clear. This result certainly deserves further study.

The data analyzed in this report do not address the important issue of the quality of justice in N Parts. Although it is fairly clear that sentences received in the N Parts are more lenient than those imposed in regular courts, there remain concerns, especially among defense attorneys, that the N Parts do not allow the defendant sufficient time to consider a plea offer or prepare an adequate defense. This may be particularly problematic in a jurisdiction such as New York, where full and early discovery is not the norm. Accordingly, some defendants may feel pressured to accept such a "lenient" plea offer in order to dispose of their case, when it might be in their best interests to seek a trial or contest the prosecution's evidence. Although the extent of this problem is difficult to evaluate statistically, it is important that judges in special drug courts be sure that defendants are not pressured into accepting inappropriate plea offers, and that the court is structured to assure the defense adequate information about the prosecution's case as early as possible in the process.

Given these due process safeguards, a system of full and early discovery, and realistic timelines for filing of motions and trial dates, the evidence thus far is that special drug courts can offer a cost-effective way to adjudicate felony drug offenders. The relative efficiencies of these courts, however, do not address important policy questions about the appropriateness of a jurisdiction's anti-drug laws, local law enforcement policies, or the "fairness" of the prosecutor's plea offer policies. Such issues should and will continue to be debated within the criminal justice community and in state and local legislatures.

APPENDIX A

ANNOTATED BIBLIOGRAPHY: ANALYSES OF COURT PROCESSING COSTS

Chabotar, Kent John. 1987. *Analyzing Costs in the Courts.* Washington, D.C.: National Institute of Justice.

In *Analyzing Costs in the Courts*, Chabotar outlines the specific components of cost analysis and details the calculation of court costs. Recognizing that courts across the country use very different methods for determining cost, Chabotar's model is based on interviews with officials of state and local courts systems, and field research in Pennsylvania, Colorado and Los Angeles. Cost analysis may focus either on how courts operate. or on what courts achieve. The former will seek to determine the overall operating costs of a court system, while the latter will arrive at a unit cost per case.

Chabotar separates direct costs, which include personnel salaries/wages, fringe benefits and equipment/supplies (non-personnel), from indirect costs (administration and facility costs). He considers that cost analysis is most effective when used to compare costs over time within a specific court. Since courts have different expenses, and are of varying sizes and location, they will have different methods for defining costs. For this reason, comparisons of court costs between courts must first ensure comparability between courts.

In detailing the components of court costs, Chabotar distinguishes between inputs (products/services), process (administration/adjudication) and output (case disposition). Input costs include personnel, facilities, administrative services, arbitration costs, juror costs, and witness costs. Generally input costs are costs associated with the ongoing operation of the court. Process costs vary with court level and case type, and are separated into administrative and adjudicative costs. Calendar management, courtroom support, case processing, and records management are among the costs associated with court process. Finally, output costs are directly related to case disposition, and are a measurement of cost per case. These may be calculated for all cases, for cases in a specific court, or for a particular disposition type. Both direct and indirect costs must be included in calculating input, process and output costs.

Based on information from the court systems considered in this study, Chabotar presents cost figures for certain jurisdictions. For example, the overall cost per case in Colorado ranged from $74.45 in 1981 to $86.30 in 1985. To clarify these figures, he also

presents separate cost numbers by district and county, and for urban and rural areas. Similarly, he shows how cost figures are derived by program category and by agency for Los Angeles Superior Court, arriving at a total average court cost per day of $2,318 in 1980-81 dollars. Chabotar also presents figures for the cost of criminal courts in Los Angeles. This includes both the direct and indirect costs incurred by various agencies including the superior court, the county clerk, district attorney, public defender, probation department, and sheriff. This figure totals $3,791 total per court day for criminal court.

Gainey, J.A., D.E. Hardenbergh, R.W. Tobin, and S.D. Conti. 1982. *Pennsylvania Court of Common Pleas Unit Cost Procedures Manual, Executive Summary.* Williamsburg, VA: National Center for State Courts.

The purpose of the *Pennsylvania Court of Common Pleas Unit Cost Procedures Manual* was to outline a method for reporting judicial expenditures and personnel information in order to evaluate the allocation and use of trial court resources. This report presents a method for calculating unit costs by case disposition, allowing for comparisons between disposition types.

The report delineates the components of trial court expenditure and personnel time by focusing on major court programs (civil, criminal, family, orphan courts, and administration) and "subprogram areas" of court management (calendar, jury management, adjudication, case processing, etc.). Cost items are divided into direct operational costs and indirect administrative costs. Resource allocation is calculated on several bases: personnel allocation, distribution of employee time by program and subprogram, distribution of employee time by program and department, distribution of employee time between court and non-court time, and distribution of annual court expenditures by program and cost item. Examples of cost items include salary, benefits, facilities, computer costs, arbitration, jury costs, equipment, and training. A method of calculating unit cost for case dispositions by program type is also presented. In addition, the report lists and defines the organizational structure of the courts, including personnel and departments, program and subprogram types, specific item costs, and disposition categories.

Jacoby, J.E., C.R. Link, and E.C. Ratledge. 1986. *Some Costs of Continuances: A Multi-Jurisdictional Model.* Washington, D.C.: Jefferson Institute for Justice Studies.

The focus of this project is the cost associated with continuances (scheduled court hearings which do not result in any action). Rather than measuring continuances as a ratio of the number of continuances to the number of cases scheduled for action, this

study weights cases by "the total amount of attorney effort spent out of court on case preparation and time spent in court until the case was continued." Attorney effort (self-reported) is used to measure the time and cost of continuances and of cases reaching some action. Attorney effort includes salary, fringe benefits, salaries and benefits of support staff and administrative costs.

This report focuses on determining where continuances were likely to occur, and their impact on court resources and costs. It also compares rates and costs among four jurisdictions (Alexandria, VA, Charlotte, NC, Ventura County, CA, and Pittsburgh, PA), to determine the impact of specific court policies or procedures. Civilian witnesses were interviewed to estimate the cost associated with their court appearances. Finally, the methodology used in process-flow and decision-making is evaluated, with specific comparisons of statistical methods such as production functions and Markov chains.

Jacoby et al. (1986) also analyze the cost of court delay through continuances with respect to attorney effort and costs to victims and witnesses. Prosecuting and defense attorney effort is defined to capture the direct and indirect costs associated with redundant work. The costs by appearance incurred by victims and witnesses for continuances adds to unnecessary expenditures. This study does not consider costs associated with pre-trial detention, nor does it provide a comprehensive calculation of total adjudication costs.

Labor costs are estimated for both attorneys and for staff based on the amount of time spent on adult criminal case processing. Labor costs include salary, benefits, and administrative costs, reflecting both direct and indirect labor costs. Capital and building costs are excluded, as are travel costs, rent, utilities, equipment, etc. Victim and witness costs are estimated by considering loss of work, transportation, food, and special arrangements.

Mott-McDonald Associates, Inc. 1979. *The Cost of Justice: An Analysis of Case Processing Costs in the Bronx Criminal Justice System.* The Association of the Bar of the City of New York.

A response to concerns about the backlog of cases in the criminal court system, Mott-McDonald's case study of the Bronx (NY) court system focuses on the calculation of system-wide case processing costs, based on type of offense. This study incorporates the effects of alternatives and modifications to the criminal justice system in order to evaluate any financial implications of such changes, and their impact on case processing costs. Interviews with individuals involved in the criminal justice system were conducted in order to identify perceived problems in case processing and to discuss recommendations for possible solutions.

This study is limited to lower court processing. The Bronx Criminal Court was

selected for ease of data collection and cooperation, recognizing that although the findings would not be generalizable to the city as a whole, neither were they less representative than another city borough.

In calculating lower court case processing costs, this study excludes the costs associated with law enforcement and any personnel costs incurred after lower court case disposition. Therefore, costs associated with superior court processing of felony cases, probation, incarceration, and post-sentence appearances, which may be considerable, are not included in this analysis.

Data were collected from the New York State Office of Court Administration (OCA) for the following: case type, average number of court appearances, costs associated with conducting such appearances, and costs related to the relative proportion of time used for each type of court appearance for different case type. In order to determine appearance types and appearance lengths, observations of court-room proceedings were conducted.

In addition to case processing costs, this study also includes system-wide processing costs. The budgets of the judiciary, the district attorney, public defender, Department of Correction, Department of Probation, pretrial services agency, state criminal history database, and the police department, comprise the bulk of system-wide costs. This study calculates the unit cost for each agency, and these costs are then used as the basis for computing individual court hearing costs. Total system-wide cost by hearing type is also calculated, as is cost by offense type. For each case type, data were collected on the number of such cases, the average processing time from arraignment to disposition, the average number of appearances and the average processing cost. The authors conclude that the only differences in processing costs of different offense types is related to the number of court appearances, rather than to disposition type.

Applying this method of cost calculation, Mott-McDonald derived the following processing cost figures for the Bronx Criminal Court in 1977-78. The average cost of a case disposed at arraignment was $390.51, and for cases disposed after arraignment, the average cost was $968.98. The overall average cost was $851.52. Average cost per case was also calculated for disposition type and offense type. For example, whereas the overall lower court cost of a case transferred to superior court was $730.47, the cost was only $240.17 if the transfer occurred at arraignment.

APPENDIX B

VARIABLE CONSTRUCTION

In this Appendix, we describe the derivation and coding of the key variables and measures used in our analyses of recidivism.

Social and Demographic Characteristics. Dummy variables were constructed for ethnicity (AFRICAN AMERICAN, HISPANIC) and gender (FEMALE). Non-white Hispanics were coded as African Americans. To represent social ties, measures were developed from the verified pretrial services interview questions for employment (labor force participation) and residential mobility/stability. A composite dichotomous measure was developed for labor force participation and student status. For residential status, the highly skewed distribution of length of address suggested that a simplified measure of stable residence be constructed. A log transformation was not used to avoid censoring of cases with no verified address. Instead, the modal frequency of six months for verified addresses was used as the cutoff for a dichotomous measure. Accordingly, the variable for residential stability is a dichotomous measure of residence at the same address for at least six months.

Prior Record. A series of variables were developed for two dimensions of prior record: prior offending and prior sanctions. Prior offending was represented by various measures of prior arrests and convictions, based on the severity (felony or misdemeanor) and type of crime (drug, non-drug). Where distributions were highly skewed (such as for prior felony convictions, with few values over two), the variable was dichotomized with the values 0 and 1+. To determine if there were subgroups or dimensions of prior offending based on offense specialization, a factor analysis was completed for the prior arrest and conviction frequencies for each specific offense category. Using principle components analysis with varimax rotation, three factors were identified explaining 72% of the variance. The factors represented both arrests and convictions for three offense types. The first factor included felony and misdemeanor drug offenses. The second factor included violent and property offenses. The third factor explained a small percentage of the variance and did not yield a dimension for including as a predictor. No single variable achieved a factor loading of greater than .6, the threshold for inclusion in identifying constructs from factors. Thus, two predictors were identified based on prior arrests and convictions. Both prior arrests and prior convictions were tested in the various models, although the conviction measures had lower factor coefficients lower base rates. Rather than use factor scores as predictors, scales were constructed from the variables in each

factor with the highest factor coefficient. Measures of prior drug crimes were constructed by adding prior drug possession and prior drug sale arrests or convictions. Measures of prior nondrug crimes were constructed by summing prior arrests or convictions for violent crime, property crimes, and weapon offenses.

Summary measures of prior sanctions were developed based on similar procedures. Factor analyses were completed with prior jail and prison terms and prior number of days in prison and jail. Probation terms were included in the model but not prior months on probation (due to missing data). Three factors were identified, explaining 67% of the variance. The first factor was described by prior prison terms and months in prison. The second factor was described by prior jail terms and days in jail. The final factor was described by probation terms. Thus, three predictors were selected: PRIOR PRISON SENTENCES, PRIOR JAIL SENTENCES, and PRIOR PROBATION SENTENCES. Sentence lengths were not selected because the variables were highly skewed and correlated with the other measures of prior sanctions.

Current Charges. Several dimensions of the current offense were included as predictors. Whether the drug charge was a SALE charge was coded as a dichotomous variable. Sale charges were given special emphasis based on the severity attached to drug selling in legislative responses to the cocaine and crack crises of the 1980s (Belenko, Fagan, and Chin, 1991; Belenko, 1993). Crack arrests in particular have been treated more harshly in legal responses to drug crises (Belenko et al., 1991). Dummy variables were created to represent the type of drug: COCAINE or CRACK. Also, the special properties of crack also suggest that recidivism may be differentially affected by involvement in crack (Fagan and Chin, 1989).

Sanctions. Sanctions included pretrial detention, sentence type, and sentence severity for the sample offense. Detention was a dichotomous variable constructed from the pretrial release status across appearances for the sample case. Any detention during the adjudication of the current case resulted in a positive value for this variable.

The imposition a jail or prison sentence was represented by a dichotomous variable. Sentence length was a ratio scale of sentence severity, measuring the length of incarceration sentences (in days).

Court Type. Whether the case was adjudicated and sentenced in an N Part was represented by a dichotomous variable. For multivariate models, a contrast variable was created where N Part cases were recoded to 1 and Non-N Part cases were recoded to 0. Interaction terms were included for N Part with sentence length, and N Part with the imposition of incarceration on the sample offense.

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