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# Repeat Offenders in Illinois

## Major Findings

The Repeat Offender Project is designed to track the criminal activity of a random sample of inmates who were released from Illinois State prison during a three-month period in 1983. This bulletin analyzes the criminal activity of 537 of these offenders during the first 18-to-20 months following their release. According to this initial analysis:

- Nearly half the releasees were arrested at least once during the follow-up period. 40 percent of the sample were arrested by the end of the 8th month.
- More than half the post-release offense counts were for property crimes and approximately one-quarter were for violent crimes; the remaining 25 percent involved drug-related or other offenses.
- One-third of the releasees were incarcerated again in State prison during the 18-to-20-month follow-up period.
- Approximately half the sample reported being unemployed upon their admission to prison, and more than two-thirds had not completed high school.
- The 537 releasees were responsible for nearly 5,000 prior arrests, which included more than 6,200 offense counts; the average number of prior arrests per releasee was 9.
- Property crimes accounted for half the releasees' prior arrests, while violent crimes accounted for about 20 percent.
- Forty percent of the releasees had at least one adult arrest recorded before age 18.

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November 1985

*Many criminal justice officials have singled out "repeat offenders" as a top concern of our nation's justice system. The idea that proportionally few criminals are responsible for much of the crime in our communities has gained prominence among Federal, state, and local authorities. However, many of these officials lack accurate, up-to-date information about the characteristics of repeat offenders and the patterns of their criminal activities. Without this basic information, public policy makers cannot possibly deal with the problem of repeat offenders effectively.*

*To establish useful data on repeat offenders in Illinois, the Illinois Criminal Justice Information Authority launched its Repeat Offender Project (ROP), a detailed, multifaceted study of recidivism in the State. This bulletin, the first in a series of ROP reports the Authority plans to publish in the coming months, analyzes the criminal activity of a sample of former State prison inmates during the 18-to-20 months following their release in 1983. The bulletin also describes the demographic characteristics of the ROP sample, and it explains the ROP methodology. Future reports will continue to document the criminal activity of the same offender sample, and will examine a variety of other issues related to repeat offenders in Illinois.*

- Releasees with 11-or-more prior arrests were much more likely than other offenders to be arrested after leaving prison.
- Following their release, offenders with extensive criminal histories not only were arrested at a higher rate than the other releasees, they also were arrested much sooner.

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## Introduction

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It is an unfortunate fact of American criminal justice that many people now in prison have been there before, and that many of those who are released today will soon be back in custody. It has always been important to identify those offenders most likely to resume their criminal careers after being released from prison. But various problems facing our criminal justice system make the need for information on "repeat offenders" even more compelling today.

One of these problems is prison crowding. With public concern about crime increasing, many of our nation's prisons are being strained beyond capacity. Criminal justice managers need an accurate evaluation of the impact of serious, repeat offenders on the allocation of scarce prison resources.

Unfortunately, Illinois (like most other states) has not had quality, up-to-date information about the characteristics of repeat offenders and the patterns of their criminal activities. Without this basic information, criminal justice policy makers and practitioners cannot possibly deal with the problem of repeat offenders in an effective, systematic way. Even though many laws aimed at "habitual offenders" and "career criminals" have been enacted in recent years, in many jurisdictions there are still no clear-cut means to assess whether these laws are achieving their intended goals.

Information on repeat offenders is crucial for accurately projecting the resources needed by various criminal justice agencies, including correctional facilities. Availability of quality data on repeat offenders also may generate new approaches to the problem of "hard-core" criminals. These approaches may include new sentencing practices targeted at those offenders who continue to threaten public safety and drain criminal justice resources through repeated criminal activity.

The data needed to create accurate profiles of repeat offenders are generated by a variety of criminal justice agencies in Illinois. These sources include the Illinois Department of State Police (DSP), which maintains the State central repository for criminal history record information; the Illinois Department of Corrections (IDOC);

clerks of the Circuit Courts; and local law enforcement agencies.

Because of the variety of these data sources, devising a method to select and analyze the most appropriate information on repeat offenders Statewide--and creating a vehicle to report the findings regularly--have not been accomplished in the past. In response to this need, the Illinois Criminal Justice Information Authority began its Repeat Offender Project (ROP). The Authority has developed a rich database of information on repeat offenders in Illinois. This database not only allows us to answer many questions about recidivism in Illinois, it also generates new questions and perspectives on the problem.

This bulletin, the first in a series of ROP reports the Authority plans to publish, analyzes the criminal activity of a sample of offenders during the 18-to-20 months following their release from prison in 1983. The bulletin examines the relationship between prior criminal history and the criminal behavior of the offenders after their release. It also describes the "pace" at which these offenders recidivate, and it looks at the demographic profile of the entire sample. Future reports will update at periodic intervals the criminal activity of this same sample of releasees, and will address a variety of other issues.

The entire ROP study is designed to produce one of the most complete summaries of recidivistic activity of a cohort of prison releasees ever documented in Illinois. In addition to descriptive analyses, the project provides a fertile testing ground for a number of different exploratory analyses, such as the "survival analysis" technique used in this bulletin. Thus, in addition to providing actual data on repeat offenders in Illinois, the project also serves to test some innovative methods for viewing recidivism in the State.

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## Methodology

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### The ROP Sample

The purpose of the ROP study is to track over time the criminal activity of a cohort of former State prison inmates. The total ROP sample consists of a randomly drawn group of 769 inmates who were released from the IDOC between April 1, 1983 and June 30, 1983. This time period

provided a three-month "window" of varying release dates. The ROP sample also contains inmates who received a variety of release types, including discharge, mandatory supervised release, parole, and work release.

This first ROP bulletin analyzes 537 of the 769 releasees. The analysis excludes 230 releasees who were on parole and received their final discharge status during the three-month period in which the sample was drawn. These individuals were excluded because theoretically they could have already been in the community and committing crimes prior to their official discharge and their inclusion in the ROP sample, analysis of this group will be addressed in a subsequent report. In addition, the records of two other releasees were not available at the time the analysis was performed, so they were excluded from the sample as well.

### Data Sources

The Computerized Criminal History (CCH) system maintained by the Department of State Police is the source of reported criminal history record information used in the ROP study. The DSP is the designated central repository and custodian of criminal history record information in Illinois.<sup>1</sup> By law, all policing bodies in the State are required daily to furnish the DSP with copies of fingerprints of all individuals they arrest for felonies and most misdemeanors.

The CCH transcript (or "rap sheet") is meant to be a cumulative record of a person's activities within the Illinois criminal justice system. The rap sheet also contains identification information, such as the person's race, sex, date of birth, physical descriptors, and fingerprint classification. The DSP can generate a "hard-copy" transcript of all record information entered onto the CCH database for an individual. These transcripts are the primary source of data used in this study.

The Authority tracked the criminal activity of the 537 releasees by periodically asking the DSP to search through the CCH database for additions to their rap sheets. Because this study depends solely on the CCH system for individual criminal records, only those arrests and incarcerations reported to the DSP are included in the analysis.

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<sup>1</sup> Illinois Revised Statutes, Chap. 38-206 *et seq.*, 1979.

In addition to the CCH arrest and incarceration information, general demographic data about the releasees were obtained from the IDOC. These demographic items were largely self-reported by offenders upon their admission to State prison. The demographic variables include age, race, sex, marital status, educational level, and income status prior to incarceration.

### Defining Recidivism

Establishing a precise definition of "recidivism" is a problem all researchers in this area have faced. Different definitions have produced substantially different results in past research studies. This bulletin uses two definitions of recidivism:

- Arrest after release, which refers to any arrest recorded on the CCH system after the date the offender was released from prison, and
- Incarceration after release, which includes any CCH-reported incarceration to State prison occurring after the initial prison release date.

[Another possible definition of recidivism would be based on conviction after release, as recorded by the CCH system. However, as previous audits of the system have indicated, approximately 50 percent of the CCH dispositions are missing. Consequently, convictions recorded on the CCH system are not a reliable measure of recidivism and have not been used in this analysis.]

It is important to use both measures--arrest and incarceration--when examining recidivism in Illinois. Each definition yields different results, and each set of results has unique policy implications for different criminal justice officials. For example, arrest as a measure of recidivism has direct implications for law enforcement and court personnel. Recidivism as measured by incarceration affects the decisions of State correctional planners.

### Criminal Justice Policies and the ROP Sample

Certain criminal justice policies that were in place when the ROP sample was drawn probably affected the makeup of the sample. In particular, several correctional policies influenced the type of offender subjected to the sampling methodology.

One of these policies was the IDOC's "forced-release" program. The program, which was in effect from June 1980 until July 12, 1983, allowed the director of corrections to award to selected inmates (usually non-violent, property offenders) additional increments of good time on top of their regular statutory good-time credits. This extra good time made the inmates eligible for supervised release sooner than they normally would have been. During the three years of the forced-release program approximately the same number of persons were released from the prison system as were admitted. The initial result of this policy was to keep the institutional population at or near capacity.

The forced-release program allowed offenders to be released sooner and at a faster rate than prior or current release policies. As a result, the program may have affected the ROP sample. For example, there was potentially a larger-than-usual number of inmates released during the three-month period in 1983. Also, offenders who would not have been released under the normal conditions of their sentences were released during this time period.

Another policy that may have influenced the ROP sample involved the inclusion of misdemeanants in the general prison population. Before July 1983, people convicted of misdemeanors could be sentenced to the IDOC. After that date, however, the law was changed, and misdemeanants were no longer admitted to State prison. Thus, if the ROP sample were drawn today, it would not include misdemeanants and could contain many more serious offenders than the 1983 sample.

It is difficult to assess the impact of these and other policies on the rate of recidivism among members of the ROP sample. While these are pertinent issues to keep in mind, it is also important to remember that the dynamics of the criminal justice system in Illinois and its effect on the prison population represent an ongoing process. As a result, there will always be historical events within the system that affect both the composition of the prison population and the population of prison releases.

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The rest of this bulletin presents detailed findings of the ROP study to date. These findings include:

- A demographic profile of the releaseses;

- An analysis of the releaseses' prior criminal histories;

- A study of their criminal behavior since release and a comparison of prior criminal history with post-release criminal activity and

- An exploratory analysis of recidivism using a methodology--survival analysis--seldom employed in criminal justice research.

### Demographic Profile of Releaseses

IDOC records are the source of the demographic data that were analyzed. These records yielded information on 535 of the 537 releaseses included in the sample. The elements examined were the releaseses' sex, race, marital status, educational level, age at release, and income status (see figure 1). The majority of this information was self-reported by the inmates.

According to IDOC records:

- Almost all of the releaseses in the sample were males (96 percent), females comprised only 4 percent of the total. This distribution reflects the makeup of prison populations in both Illinois and the United States.

- Blacks represented 56 percent of the sample followed by whites (39 percent) and Hispanics (4 percent). Again, this breakdown mirrors the racial distribution of Illinois' entire prison population.

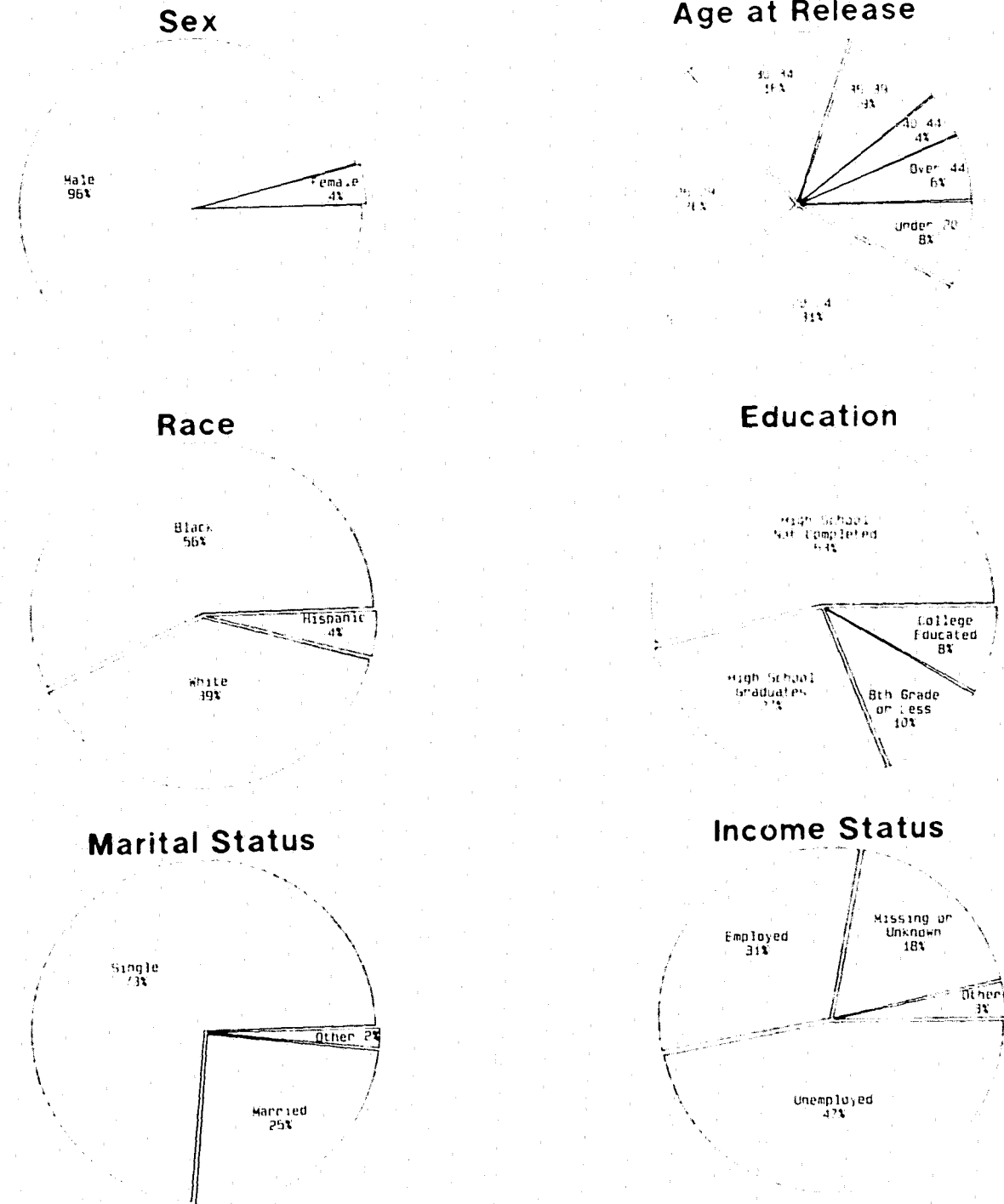
- Upon entering prison, a majority of the releaseses (73 percent) were reported to be single, approximately one-quarter were married (including "common-law" spouses).

- The educational level of the releaseses, defined as the highest grade completed, varied. The majority of the sample (63 percent) had not finished high school at the time of their release. The mean number of years of formal education was 10.6. High school graduates constituted 27 percent of the sample, college-educated inmates accounted for 8 percent.

- Although nearly 80 percent of the sample were between the ages of 18 and 34 when they were

### Most Releaseses Were Male, Black, Single, Unemployed, and 18-to-34 Years Old

Figure 1: A Demographic Profile of the ROP Sample



Source: Illinois Department of Corrections

Because of rounding, not all percents add to 100.

released there was a wide range of ages--from 18 to 80. The mean age at release was 28.6 and the majority of the releasees (57 percent) were between 20 and 29.

• Almost half the releasees (47 percent) reported being unemployed upon admission to prison. Thirty-one percent reported being employed (including self-employed) while another 3 percent reported some other source of income (including social security, public aid, and pensions). The remaining 19 percent of the releasees did not have a recorded source of income.<sup>2</sup>

### Prior Criminal History

All information on the "prior criminal history" of the releasees refers to arrests and incarcerations that occurred up to and including the "base incarceration." The base incarceration is the imprisonment from which the inmate was released during the three-month ROP sampling period in 1983.

#### Prior Arrests

All but two of the 537 releasees had CCH records available for analysis of prior arrests. Among these 535 offenders, the average number of prior arrests per releasee was nine. The number for each person, however, varied greatly. The vast majority of the releasees had more than one prior arrest and roughly one-third had 10 or more. The combined prior criminal history of the releasees included 4,747 arrests and 6,223 offense counts.

These offense counts were broken down into four categories: violent, property, drug-related, and other crimes. Violent offenses constituted nearly one-fifth of the total (19 percent), and property crimes equalled nearly one-half (47 percent). Drug offenses accounted for a relatively small portion of the prior offenses (8 percent), while other crimes made up one-quarter of the total. Table 1 presents a detailed breakdown of these pre-release offense counts.

Releasees also were classified as "violent offenders" and "drug offenders." Offenders were classified as "violent" if their CCH records contained

<sup>2</sup> Includes missing records and records that could not be found.

## Property Offenses Accounted for Half the Prior Arrests

Table 1: A Breakdown Of Pre-Release Offense Counts

<b>VIOLENT CRIMES:</b>		
Murder*	55	
Voluntary Manslaughter	2	
Involuntary Manslaughter	2	
Kidnapping	7	
Unlawful Restraint	10	
Rape*	44	
Deviate Sexual Assault	11	
Armed Violence	10	
Armed Robbery*	262	
Robbery*	190	
Home Invasion	4	
Aggravated Assault	80	
Aggravated Battery	109	
Assault/Battery	334	
Arson*	14	
Solicitation to Commit Murder	3	
Other Violent Crimes	21	
<b>TOTAL VIOLENT OFFENSE COUNTS</b>	<b>1,158</b>	<b>19%</b>
<b>PROPERTY CRIMES:</b>		
Burglary*	739	
Residential Burglary	26	
Theft*	1,287	
Shoplifting	229	
Forgery*	94	
Deceptive Practices*	110	
Other Property Crimes	446	
<b>TOTAL PROPERTY OFFENSE COUNTS</b>	<b>2,931</b>	<b>47%</b>
<b>TOTAL DRUG-RELATED OFFENSE COUNTS</b>		
	505	8%
<b>OTHER CRIMES:</b>		
Unlawful Use of Weapon	229	
Disorderly Conduct	143	
Contempt of Court	29	
Prostitution	55	
Pandering	7	
Pimping	4	
FOID Card Violation*	54	
Other Crimes	1,311	
<b>TOTAL OTHER OFFENSE COUNTS</b>	<b>1,532</b>	<b>25%</b>
<b>NO ARREST INFORMATION</b>	<b>97</b>	<b>1%</b>
<b>TOTAL PRE-RELEASE OFFENSE COUNTS</b>	<b>6,223</b>	<b>100%</b>

\* Includes Attempts.

1-or-more prior violent offense counts. Releasees were classified as "drug offenders" if their criminal history records contained 1-or-more previous drug-related offense counts. Based on these definitions, the majority of the releasees (70 percent) were violent offenders, and 30 percent were drug offenders. These classifications, however, are not mutually exclusive. A releasee could be classified as both a violent offender and a drug offender if his or her prior criminal history included at least one violent offense and at least one drug-related offense.

### Age at First Arrest

The average age of the releasees at the time of their first arrest was 20, and about 40 percent of the sample had at least one recorded adult arrest before reaching age 18. In other words, a large portion of the releasees had begun recording adult arrests within one year of reaching 17, the age at which a person is no longer a juvenile in Illinois. Although juvenile arrests are not recorded on the CCH system, records indicate several of the releasees were arrested when they were juveniles and were prosecuted as adults.

### Prior Incarcerations

Most of the releasees had just completed their first State imprisonment when they were included in the ROP sample. Still, there were several offenders who had a more extensive history of State prison incarcerations. About 40 percent of the releasees, for example, had more than one prior State commitment, while 5 percent had 5-or-more prior imprisonments. The average

number of prior incarcerations per releasee was two.

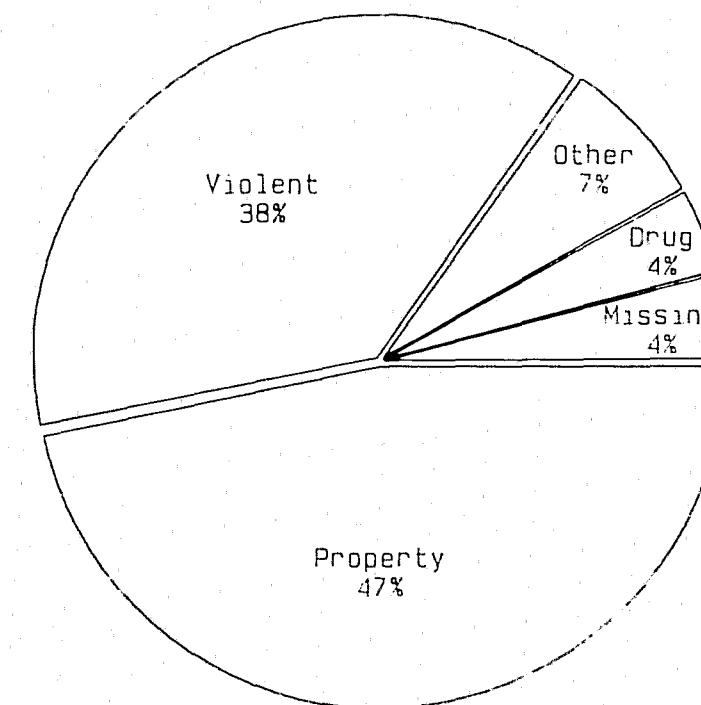
### Holding Offense

The "holding offense" refers to the single offense or the most serious of multiple offenses for which the offender was sentenced to prison for the base incarceration. In accordance with IDOC practices when there were multiple charges that resulted in the conviction, the holding offense was the one that carried the latest release date. If multiple conviction counts resulted in sentences of equal length, the statutory class of the offense (the legislative ranking of seriousness) was used to determine the holding offense.

In this sample, violent crimes accounted for 38 percent of the holding offenses and property crimes made up 47 percent. The remaining offenses involved either drug-related (4 percent) or other crimes (7 percent), in 4 percent of the cases information was missing (see figure 2).

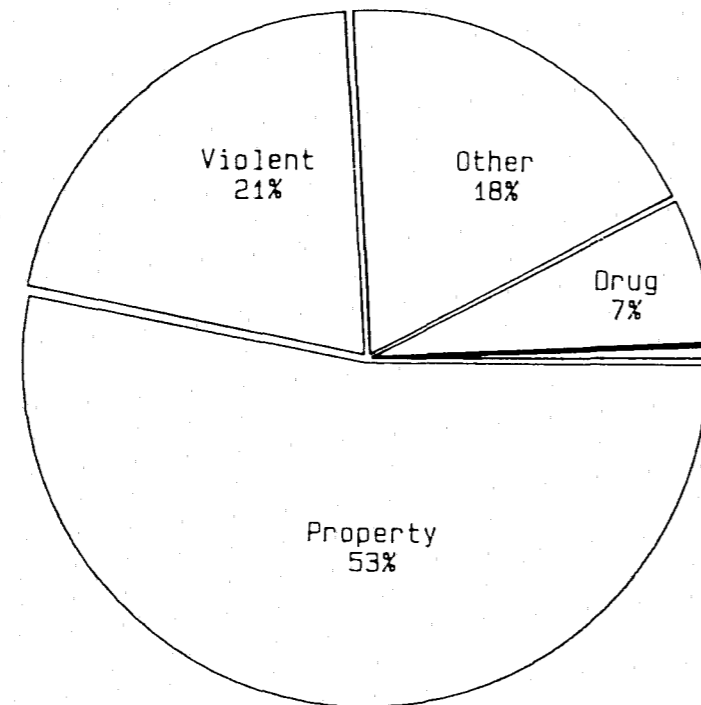
## Nearly Half the Releasees Were Being Held for Property Crimes

Figure 2: Holding Offenses, by Type of Crime



## Most Post-Release Arrests Were for Property Crimes

Figure 3: Post-Release Offense Counts, by Type of Crime



### Recidivism among the Sample Of Releasees

Described below are the post-release criminal activities of the 537 offenders who were tracked during the 18-to-20 months following their release from prison.

#### Post-Release Arrests

Almost half (48 percent) the releasees were arrested at least once during the follow-up period, and many were arrested more than once. These 258 repeat offenders were responsible for nearly 500 reported arrests. Although 53 percent of these offenders were arrested only once during the follow-up period, 37 percent were arrested 2-or-3 times. One person was even arrested 13 times during the 18-to-20-month period.

The 258 repeat offenders in the sample were responsible for 496 post-release arrests consisting of 715 offense counts. The total number of of-

fense counts is greater than the number of arrests because an offender could be charged with more than one offense count for each arrest. For example, someone could be arrested for multiple counts of the same offense or for one count of each of many different offenses.<sup>3</sup>

As figure 3 indicates, a majority of the post-release offense counts (53 percent) were for property crimes. The number of offense counts was much lower for violent, drug-related, and other crimes. Still, almost one-quarter of the post-release offense counts involved violent crimes. Table 2 presents a detailed breakdown of these post-release offense counts.

#### Post-Release Incarcerations

During the 18-to-20-month follow-up period nearly one-third of the releasees (173 of 537) were incarcerated again in State prison for new

<sup>3</sup> These arrest counts have no direct correspondence with counts filed by the State's Attorney's Office.

## Violent Offenses Accounted for One-Quarter Of the Post-Release Arrests

Table 2: A Breakdown Of Post-Release Offense Counts

<b>VIOLENT CRIMES:</b>		
Murder*	7	
Kidnapping	1	
Unlawful Restraint	3	
Rape*	1	
Deviate Sexual Assault	1	
Armed Violence	1	
Armed Robbery*	14	
Robbery*	15	
Home Invasion	1	
Aggravated Assault	22	
Aggravated Battery	17	
Assault/Battery	62	
Arson*	1	
Other Violent Crimes	4	
<b>TOTAL VIOLENT OFFENSE COUNTS</b>	<b>150</b>	<b>21%</b>
<b>PROPERTY CRIMES:</b>		
Burglary*	69	
Residential Burglary	11	
Theft*	137	
Shoplifting	56	
Other Property Crimes	108	
<b>TOTAL PROPERTY OFFENSE COUNTS</b>	<b>381</b>	<b>53%</b>
<b>TOTAL DRUG-RELATED OFFENSE COUNTS</b>	<b>49</b>	<b>7%</b>
<b>OTHER CRIMES:</b>		
Unlawful Use of Weapon	21	
Disorderly Conduct	8	
Contempt of Court	7	
Prostitution	2	
Pandering	2	
Resisting a Police Officer	17	
FOID Card Violation*	5	
Other Crimes	69	
<b>TOTAL OTHER OFFENSE COUNTS</b>	<b>131</b>	<b>18%</b>
<b>NO ARREST INFORMATION</b>	<b>4</b>	<b>&lt;1%</b>
<b>TOTAL POST-RELEASE OFFENSE COUNTS</b>	<b>715</b>	<b>100%</b>

\* Includes Attempts.

offenses or for violating their conditional release.<sup>4</sup> These 173 offenders were responsible for 181 new State prison incarcerations. While a few of the 173 releasees (5 percent) were imprisoned twice during the follow-up period, most (95 percent) were incarcerated only once.

<sup>4</sup> There is no accurate recording on the CCH system of parole violations vs. new offenses. Subsequent research will address this issue.

## Prior Criminal History and Post-Release Criminal Activity

Much of the contemporary literature on criminology suggests that a relatively small portion of offenders is responsible for a disproportionately high volume of criminal activity.<sup>5</sup> If this is also the case with the offender population used in the ROP study, it would be useful for policy makers and other criminal justice officials to be able to identify this high-crime group.

For the ROP study, the relationship between the volume of prior criminal activity and arrest or incarceration during the post-release period was examined in a variety of ways. The following four comparisons were made:

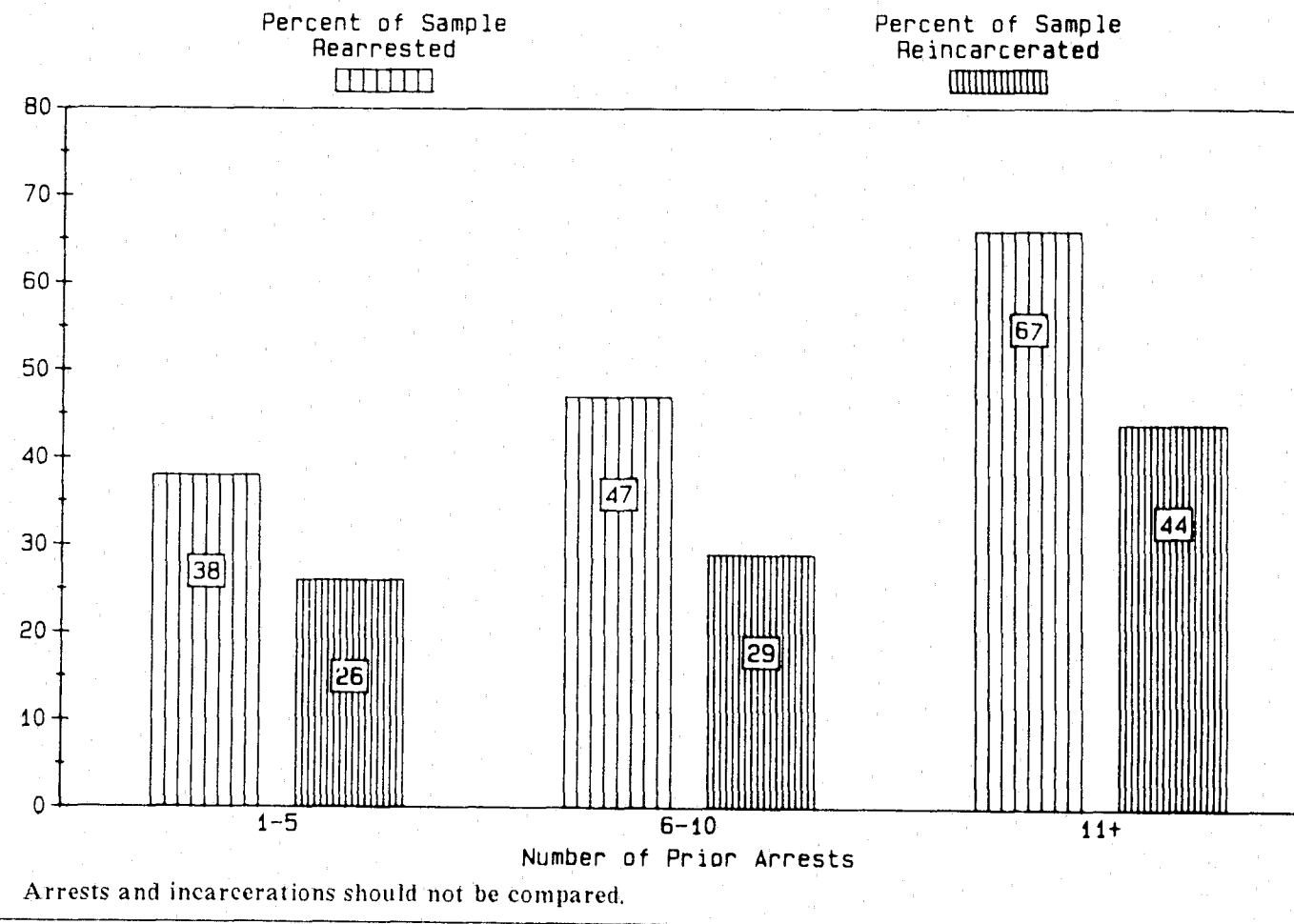
- Number of prior arrests vs. arrests after release from prison;
- Number of prior arrests vs. post-release incarcerations;
- Number of prior incarcerations vs. post-release arrests; and
- Number of prior incarcerations vs. post-release incarcerations.

For purposes of comparison, offenders were divided into three categories representing a progressively higher number of previous arrests: 1) those with 5-or-less prior arrests; 2) those with 6-to-10 prior arrests; and 3) those with 11-or-more prior arrests. Offenders were categorized similarly in terms of prior incarcerations: 1) those with 2-or-less prior incarcerations (including the base incarceration); 2) those with 3-or-4 prior incarcerations; and 3) those with 5-or-more prior incarcerations. Incarceration refers only to sentences served under IDOC supervision, and excludes instances in which offenders were sentenced to county jails.

<sup>5</sup> See, for example, Petersilia, J. (1980), *Criminal Career Research: A View of Recent Evidence* in N. Morris and M. Tonry (eds.), *Crime and Justice: An Annual Review of Research*. University of Chicago Press. Also see *Returning to Prison*, Bureau of Justice Statistics, NCJ-87066 (Washington, D.C.: USGPO, November 1984).

### Offenders with Many Prior Arrests Were Most Likely to Recidivate

Figure 4: Percent of Sample Arrested and Incarcerated,  
By Number of Prior Arrests



#### Findings

The number of prior arrests is related to the likelihood of arrest after release. Offenders with 5-or-less prior arrests had the lowest proportion of arrests after release (38 percent). The proportion increased to 47 percent for offenders with 6-to-10 prior arrests and to 67 percent for those with 11-or-more prior arrests.

There is also a relationship between the number of prior arrests and the likelihood of incarceration after release. Again, this relationship was strongest for the highest-volume group--those with 11-or-more previous arrests. Forty-four percent of the offenders in this group were incarcerated within

the 18-to-20 months following their release. The group with 5-or-less prior arrests had the lowest rate of post-release incarceration (26 percent), while those with 6-to-10 previous arrests had a slightly higher incarceration rate (29 percent).

Figure 4 summarizes the relationship between post-release criminal activity (both arrests and incarcerations) and prior arrests. These data clearly support the conclusion that those offenders with the highest number of previous arrests are much more likely to be arrested after their initial release and to be incarcerated again.

Examining the relationship between the number of prior incarcerations and the likelihood of post-

release arrest did not produce as clear-cut results, however. As might be expected, offenders with 2-or-less prior incarcerations had the lowest rate of post-release arrest (46 percent). But the middle group, those with 3-or-4 prior incarcerations, had the highest percentage of post-release arrests (65 percent). The highest-volume group (5-or-more prior incarcerations) had a post-release arrest rate of 54 percent. There are several possible explanations for this finding. Offenders who had been incarcerated 5-or-more times tended to be older than those with less extensive incarceration histories, and may simply be less inclined to engage in subsequent criminal activity. Also, it may be possible that a deterrent effect emerges after repeated incarcerations.

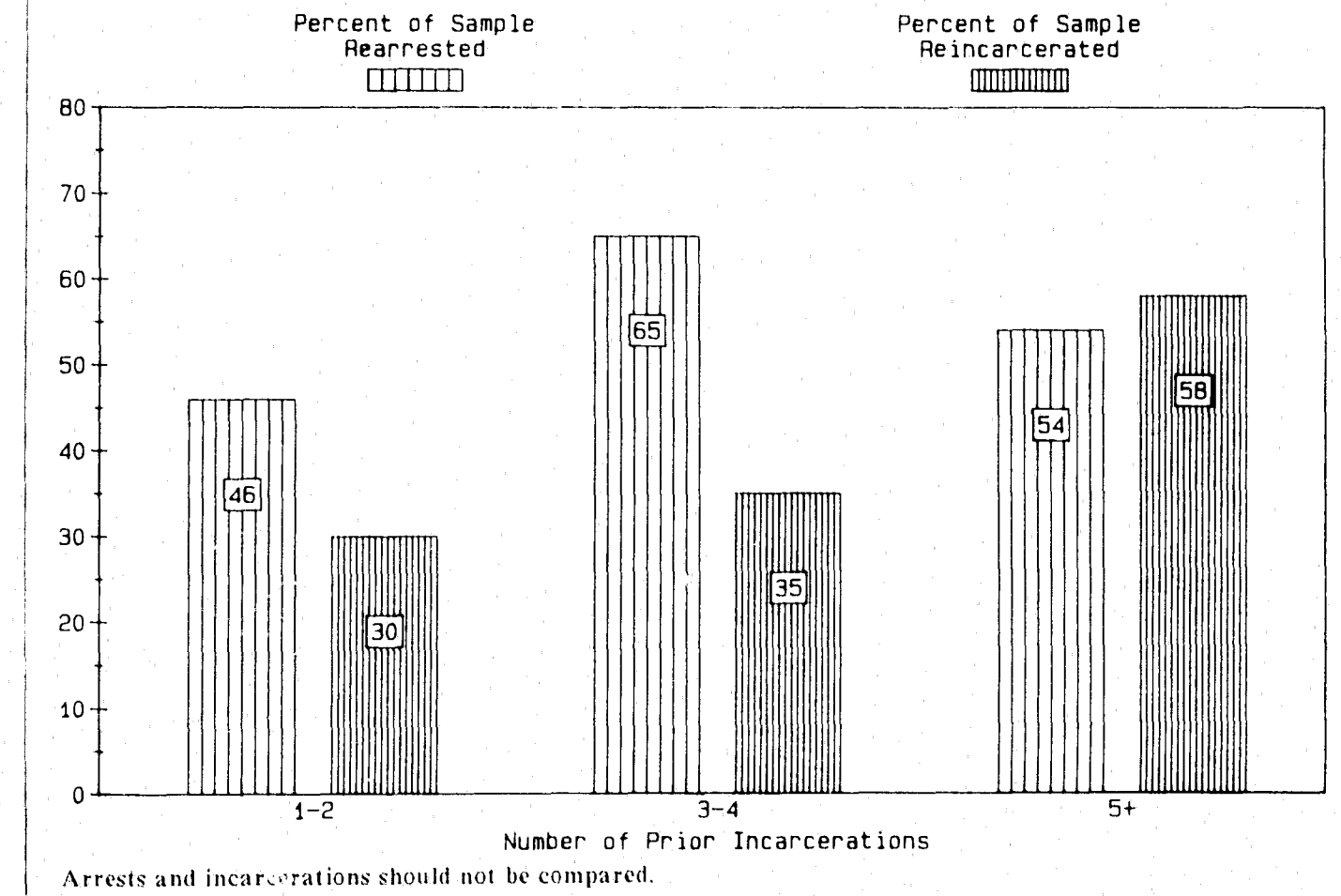
Nevertheless, any explanation requires further research.

The number of previous incarcerations is related to the likelihood of incarceration after release. Thirty percent of the offenders with 2-or-less previous incarcerations were incarcerated again after release. For those offenders with 3-or-4 prior incarcerations, the proportion was slightly higher (35 percent). And for the highest-volume group, those with 5-or-more prior incarcerations, the proportion incarcerated after release jumped to 58 percent.

Figure 5 summarizes the relationship between post-release criminal activity and prior incarceration

### Offenders with Several Incarcerations Also Were More Likely to Recidivate

Figure 5: Percent of Sample Arrested and Incarcerated,  
By Number of Prior Incarcerations



tions. Both this figure and figure 4 support the contention that offenders with the highest volume of prior criminal activity generally exhibit the most post-release criminal activity as well. In other words, a small portion of offenders is indeed responsible for a disproportionately high number of crimes.

#### "High-Volume" Offenders

To explore further the relationship between the prior criminal history of our sample and the likelihood of arrest or incarceration after release, two groups of releasees were compared: 1) a special "high-volume" group; and 2) the rest of the sample. The former included 51 offenders who had 11-or-more prior arrests and 3-or-more prior State incarcerations.

This comparison found that 77 percent of the offenders in the high-volume group were arrested during the follow-up period, vs. 46 percent of the rest of the sample. In addition, 46 percent of the high-volume offenders were incarcerated during the follow-up period, compared with 31 percent of the other releasees. Again, these findings support the contention that the volume of prior criminal activity is related to the incidence of recidivism, whether it is measured by arrest or incarceration.

### Survival Analysis and Recidivism

In most studies, recidivism is reported merely as the percentage of former prison inmates who return to crime within a predetermined follow-up period. In this study, for example, we found that nearly half the releasees in our sample were arrested within 18-to-20 months and about one-third were back in prison within that time period.

An alternative to this type of presentation is called "survival analysis," a technique that has been used most frequently in medical and engineering research. The survival method has been used to evaluate "survival curves" for cancer patients following various forms of treatment, for example.

In contrast to other methods of reporting recidivism, survival analysis examines the pace at which offenders recidivate. That is, it looks at the rate at which offenders return to crime at the end of each of a set of time intervals, usually months.

The survival method provides a different way of viewing recidivism, and allows comparison among various groups of releasees. For example, survival analysis can compare two groups with different criminal histories to determine which group recidivates at a quicker pace. Survival analysis also can determine the months in which the probability of recidivating is greatest.

Keep in mind, however, that survival analysis calculates the time period only up to the first occurrence of a criminal act. At that point, the releasee has "failed," and thus drops out of the analysis. In other words, this method examines the pace until the first recorded act of recidivism (either arrest or incarceration in this study), but does not analyze any subsequent activity.

#### Survival Analysis of the Entire Sample

Figure 6 depicts the pace of post-release arrests and incarcerations by showing the proportion of releasees who were arrested or incarcerated during each month of the follow-up period. For arrests, the first 8-to-9 months following release were found to be the most critical time period; the relative flatness of the curve after this period illustrates the point. The distribution of incarcerations over time is much smoother, with a more gradual decline from the first to the last interval.

While most arrests occurred during the first 8-to-9 months following release, the pattern indicates that the first 3-or-4 months of this time period were actually the most critical. Survival analysis shows that by the end of the 2nd month, about 20 percent of the sample had been arrested. During months 3 through 6, an additional 15 percent were arrested. By the end of the 8-to-9-month period, 40 percent of the sample had been arrested. After that time, the pace of arrests leveled off.

By contrast, the pace of incarcerations after release reveals a markedly different pattern. The largest number of incarcerations occurred between the 5th and 15th months following release. To the extent that incarcerations follow arrests in time, the difference between the critical periods for arrests and incarcerations is logical: It generally reflects the natural flow through the criminal justice system of those cases where an arrest results in an incarceration.

#### Survival Analysis of the "High-Volume" Group

Survival analysis also lends itself to analyzing subgroups of the total sample. As was done previously, a special "high-volume" group (those offenders with 11-or-more prior arrests and 3-or-more prior incarcerations) was identified and analyzed. The pace of recidivism within this group was compared with that of the rest of the sample.

The survival method pointed up clear differences between the two groups. The pace of post-release arrests for the high-volume group was much faster than the pace for the rest of the sample (see figure 7). The recidivism probability

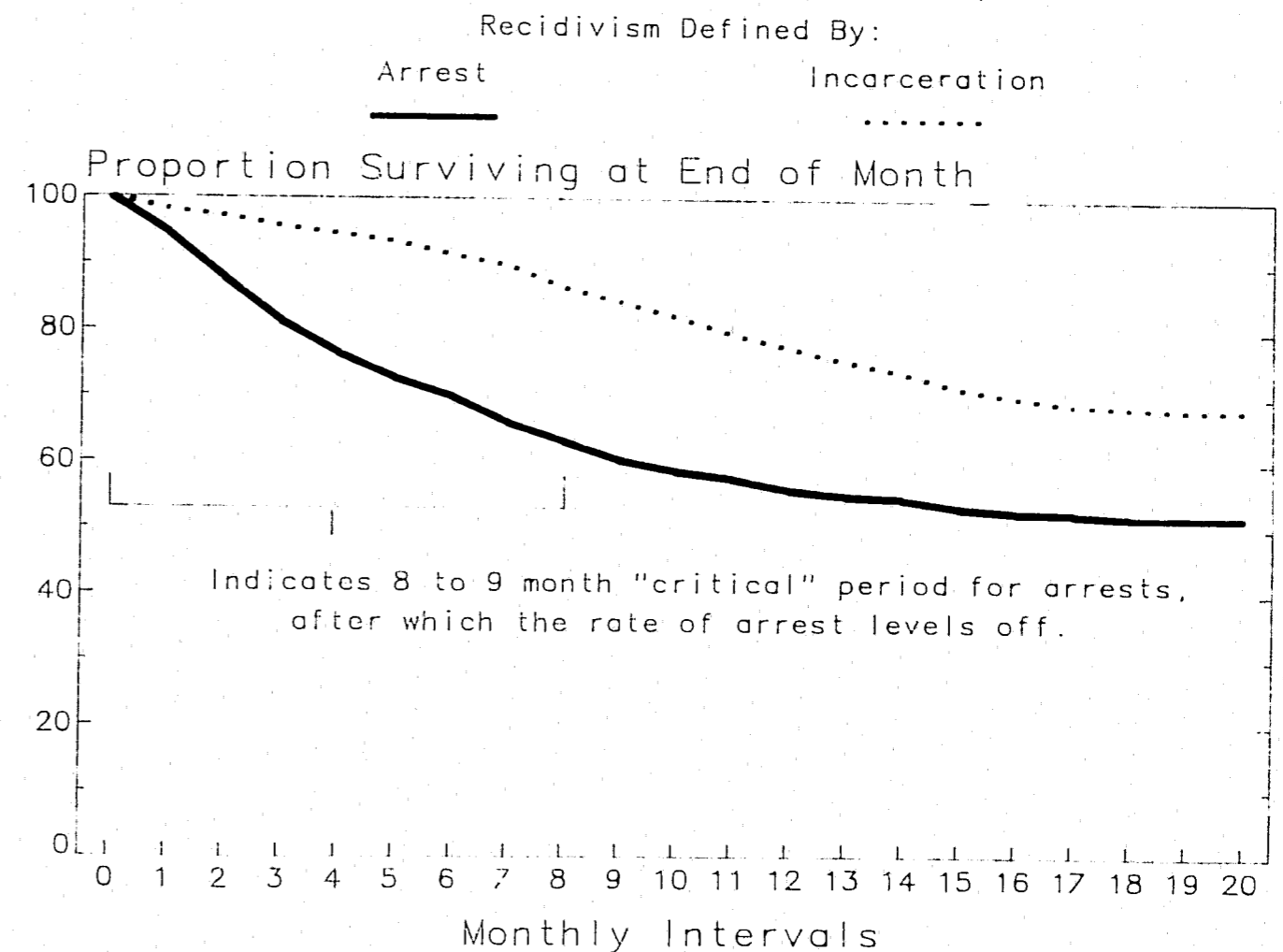
rates for the high-volume offenders revealed much steeper levels throughout the first 10 months after release, while the rates for the total sample were much more constant throughout the same period.

The distribution of post-release incarcerations did not reveal as clear a distinction between the groups as the arrest distribution did. When graphed, the proportion of offenders within each group who were incarcerated at various time intervals showed little difference.

Survival analysis is clearly useful for illustrating the pace of post-release arrests and incarcerations. The survival method showed the critical

### Most Post-Release Arrests Occurred in the First 8-to-9 Months

Figure 6: The Pace of Recidivism of the Entire Sample





period for arrest to be 8-to-9 months following release. It also found that the largest portion of incarcerations occurred between the 5th and 15th months of the follow-up period. A more detailed use of survival analysis will be the topic of a future ROP bulletin.

### Summary and Conclusion

This bulletin is the first in a series of reports associated with the Authority's Repeat Offender Project, a detailed study of the arrests and incarcerations of a sample of 769 offenders who were released from the Illinois Department of Corrections during a three-month period of 1983. Rely-

ing on periodic reports from the State's Computerized Criminal History system, the project is tracking this group of releasees to analyze subsequent arrests and incarcerations.

This first report analyzed a group of 537 releasees from the total sample (offenders who were already on parole during the three-month period in which the sample was drawn were excluded from this analysis--see "Methodology"). Among the conclusions of this report are the following:

- Most offenders have a long history of arrests, and many start their criminal careers early. The majority of the 537 offenders in the ROP sample had more than one previous arrest, and roughly

one-third had 10 or more. Forty percent of the releasees had recorded an adult arrest within one year of their 17th birthday (the age after which a person is no longer a juvenile in Illinois).

- Nearly half the former inmates are arrested within 18-to-20 months following their release, and most arrests occur in the first 8-to-9 months. Forty-eight percent (258) of the 537 releasees that were studied were arrested at least once in the 18-to-20-month follow-up period. These 258 offenders were responsible for nearly 500 recorded arrests. Almost 40 percent of these repeat offenders were arrested 2-or-3 times since their 1983 release. The majority of the first arrests following release occurred within the first 8-to-9 months of the follow-up period, with the first 3-or-4 months being the most critical.

- Nearly one-third of former inmates are incarcerated within 18-to-20 months after their release. About one-third (173) of the 537 releasees in the ROP sample were incarcerated again in State prison by the end of the follow-up period. These releasees were responsible for 181 additional State incarcerations.

- There is a relationship between prior criminal history and post-release criminal activity. The number of prior arrests an offender has is related to the likelihood of arrest after release, the ROP study found; those offenders with the highest number of prior arrests were much more likely to

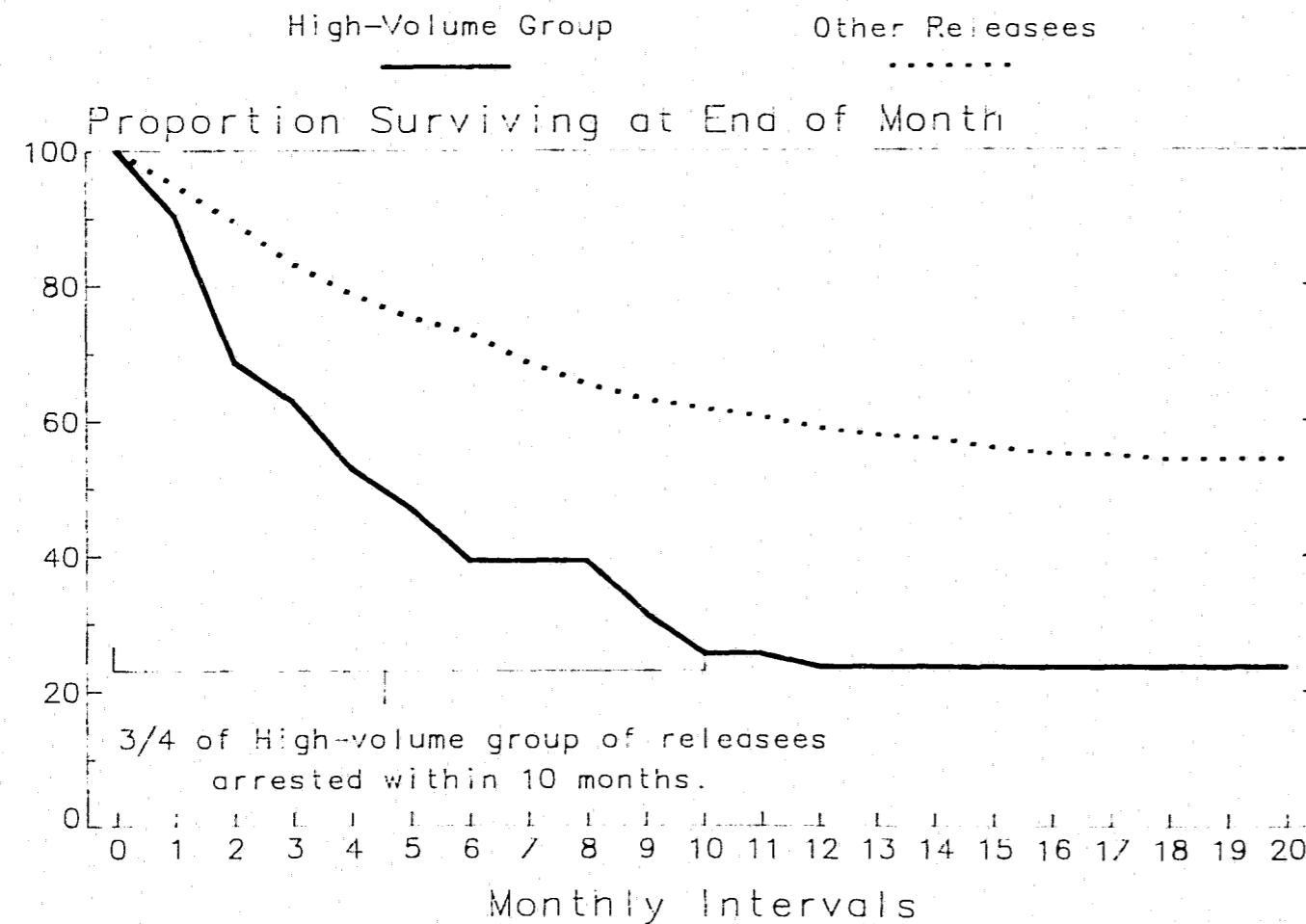
be arrested or incarcerated again than were offenders with less extensive criminal histories. The same holds true for prior incarcerations: offenders with several State imprisonments were generally more likely to be arrested or incarcerated again. In other words, the volume of prior criminal activity is related to the incidence of recidivism, whether it is defined as arrest or incarceration.

\* \* \* \*

To gain further insight into recidivism in Illinois, future ROP reports will move beyond descriptive analysis. Such strategies as survival analysis and discriminant analysis will be used so that innovative perspectives on the problem of repeat offenders can be uncovered and reported.

### Serious Repeat Offenders Recidivated Even More Quickly

Figure 7: The Pace of Recidivism of the "High-Volume" Offenders



*Initial phases of the Repeat Offender Project were funded in part by a grant from the Bureau of Justice Statistics, U.S. Department of Justice (Grant No. 83-BJ-CX-K029).*

Printed by authority of the State of Illinois  
October 1985 2,500 copies

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