



# The Impact of Prior Criminal History On Recidivism in Illinois

## Summary of Findings

□ The best indicator of whether or not an offender will be arrested again after being released from prison appears to be the extent of his or her prior criminal history. The relationship between prior criminal activity and recidivism by arrest is very strong, and is not explained by other factors such as race, age, or type of crime.

□ Releasees with several prior arrests were more likely than those with fewer arrests to be arrested again during the 27- to 29-month follow-up period. Among those offenders whose records included 11 or more prior arrests, more than three-quarters were arrested again since being released from prison in 1983.

□ Similarly, as the number of prior incarcerations an offender had increased, so did the likelihood of that person being rearrested. Among releasees with three or more prior state prison incarcerations, more than 75 percent were arrested again following their 1983 release.

□ In all, more than 60 percent of the 539 former inmates in the sample were rearrested during the 27 to 29 months following their release from prison.

□ These 324 offenders were responsible for nearly 800 post-release arrests. More than half of

*The Illinois Criminal Justice Information Authority designed the Repeat Offender Project, or ROP, to provide public officials in Illinois with more detailed information than was previously available about recidivism in the state. This research bulletin is the third report associated with the ROP study.*

*Early on in the ROP study, one finding became evident: The extent of a former prison inmate's prior criminal history — that is, the number of prior arrests and state prison incarcerations — is probably the best indicator of that person's future criminal activity. This finding was documented in the first ROP research bulletin, which found that offenders with a relatively high number of prior arrests or incarcerations were most likely to be rearrested or reincarcerated within 18 to 20 months following their release from prison. The second ROP report uncovered the same situation among various subgroups of the ROP sample.*

*This bulletin explores this finding even further by testing whether the relationship between prior criminal activity and recidivism is a direct one, or whether it is explained by some other factor, such as the offender's age, race, or the type of offenses committed. The results of this investigation should provide Illinois officials with a better understanding not only of the overall nature of recidivism in the state, but also of what factors are likely to indicate that a particular offender will resume a criminal career after being released from prison.*

*This bulletin also updates the findings of the first ROP report by analyzing an additional nine months of data. The findings presented here cover the 27 to 29 months following the release of the ROP sample from prison. Moreover, this bulletin explores other issues not addressed in the two previous reports, including a more detailed analysis of the effects of prior criminal activity and a comparison of individuals who were arrested during the follow-up period with those who were not.*

the 324 repeat offenders were arrested more than once during the follow-up period.

□ More than half of all post-release arrests involved property crimes.

□ Forty-one percent of the releasees in the sample were incarcerated again in state prison in the 27 to 29 months since their 1983

release from prison. These 222 reincarcerated offenders accounted for 273 new state prison admissions.

□ More than 200 offenders in the ROP sample recorded neither an arrest nor a state prison incarceration during the follow-up period.

□ The youngest group of releasees, those age 17 to 20 at

release, were rearrested more often than any other age group in the sample. More than three-quarters of the offenders in the youngest age group were arrested again during the 27- to 29-month follow-up period.

□ Property offenders were more likely than violent offenders to be arrested following their release from prison.

## The ROP Study

*"Jack" began his officially-recorded adult criminal career at the age of 17 with an arrest for burglary. Two and one-half years later he was arrested for unlawful use of a weapon, and two years after that, at the age of 22, he was arrested for theft. Following this arrest, barely a year elapsed before Jack was arrested again — this time for murder and armed robbery. Between the time he was arrested and incarcerated on the murder charge, Jack was arrested four more times — twice for attempted murder and once each for armed robbery and attempted armed robbery. Just 16 months after completing his sentence for murder, Jack was arrested for armed robbery, kidnapping, and armed violence. He was subsequently convicted and is now serving a 40-year prison sentence.*

Criminal justice officials throughout the nation have singled out repeat offenders such as "Jack" as a top concern of our justice system. The idea that proportionally few criminals are responsible for much of the crime in our communities has gained

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prominence among federal, state, and local authorities. Unfortunately, many of these officials lack up-to-date information about the characteristics of repeat offenders and the patterns of their criminal activities. Without this basic information, criminal justice practitioners and government policy makers have little chance of effectively addressing the problem of repeat offenders.

In response to the need for more information on this topic, the Illinois Criminal Justice Information Authority launched its Repeat Offender Project (ROP), a detailed, multi-faceted study of recidivism in Illinois. The ROP study is designed to produce one of the most complete summaries of recidivistic activity ever documented for a cohort of prison releasees in Illinois.

## The ROP Sample

The ROP study is tracking the criminal activity of 769 inmates released from Illinois prisons between April 1 and June 30 of 1983. This sample contains releasees with various release dates and different release types, such as parole, other types of conditional release, and unconditional release.

So far, the Authority has analyzed the activity of 539 of the 769 releasees in the total sample. The 230 releasees who have not been analyzed were already on parole before April 1, 1983, but received their final discharge status during the three months when the sample was drawn. These individuals have not been examined because, theoretically, they could have been at risk in the community prior to their official discharge. A subsequent report will analyze the criminal activity of this group.

## Data Sources

The Computerized Criminal History (CCH) system maintained by the Illinois Department of State Police (DSP) is the source of criminal his-

tory record information used in the ROP study. The CCH transcript (or *rap sheet*) is meant to be a cumulative record of a person's dealings with Illinois' criminal justice system. The Authority tracked the criminal activity of the releasees by periodically asking the DSP to search through the CCH database for additions to the offenders' rap sheets. Thus, only criminal history events that were posted to the CCH system were included in the Authority's analysis.

In addition, the Authority obtained general demographic data about each releasee in the sample from the Illinois Department of Corrections (IDOC). This information was self-reported by the inmates.

## Criminal Justice Policies And the ROP Sample

Crime affects various components of the criminal justice system in different ways. At every level (law enforcement, prosecution, courts, and corrections), decision makers continually face a unique array of problems. The policies they implement reflect the need to respond to these problems in a timely and effective manner.

When considering the criminal activity of the ROP sample, it is important to remember that there will always be historical events within the criminal justice system that affect the composition of both the general prison population and the population of prison releasees. Correctional policies in effect at the time the ROP sample was drawn could have affected the overall makeup of the sample. Two policies are particularly important:

□ The *forced-release* program, in effect from June 1980 until July 1983; and

□ The detention of misdemeanants in state prisons.

Under the forced-release program, a response to severe prison crowd-

ing, the IDOC awarded multiple increments of meritorious good time to certain inmates. This policy generally allowed offenders to be released sooner and at a faster rate than would be the case under prior or current correctional policies. During the time the policy was in effect, not only were more offenders released, but those who would have been held under normal conditions of their sentences were allowed to go free. The result is that the ROP sample of releasees could have included more serious offenders than if the sample were drawn today.

The ROP sample could also have been affected by the inclusion of misdemeanants in the state's general prison population. In July 1983, a change in state law required persons sentenced to less than one year to serve their time in local jails instead of state prisons. The presence of misdemeanants in the state prison population between April and June of 1983 could have resulted in a larger number of less-serious offenders being included in the ROP sample than if a similar sample were drawn now.

## Defining and Measuring Recidivism

*Recidivism* has been defined in many ways by many different researchers, and each definition can produce substantially different results. The ROP study 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 (the 1983 release date in this case). An individual is considered an *arrest recidivist* after his or her first arrest following release from prison for the base incarceration.

□ *Incarceration after release*, which includes any CCH-reported incarceration in state prison occurring after the 1983 prison release date. Similarly, an individual is considered an *incarceration recidivist* at the date of

## Some Common Terms

Here are definitions of some common terms used throughout the ROP study:

**Base incarceration.** The imprisonment from which the inmate was released during the three-month sampling period in 1983.

**Holding offense.** The conviction charge for which the base incarceration occurred. In cases where offenders were sentenced on multiple charges, the Illinois Department of Corrections determined the holding offense to be the one that carried the longest sentence (this was generally the most serious charge).

**Post-release recidivism (either arrest recidivism or incarceration recidivism).** Refers to all CCH-reported events (arrests and incarcerations) following each inmate's release for the *base incarceration*. An individual is considered a *recidivist* at the time of the first post-

the first incarceration after being released from prison for the base incarceration.

*Conviction after release* was not used as a definition of recidivism in the ROP study because past audits of the CCH system have indicated that many arrest events on the system lack final dispositions. Consequently, the Authority decided that *conviction after release* was not a reliable measure of recidivism in Illinois. (For a more complete discussion of missing CCH dispositions, see the Authority's audit reports for 1982-83 and 1984-85.)

## Post-Release Criminal Activity: A 27- to 29-Month Update

*Since her release from prison in June 1983, "Alice" has been arrested 14 times, mostly on charges of theft and shoplifting. The first of*

release arrest or the first post-release incarceration, depending on the definition.

**Prior criminal history.** All arrests and incarcerations associated with an offender, up to and including the base incarceration.

**Previous arrest history.** Used to classify releasees as either violent, property, drug, or *other* offenders, based on their entire arrest history (including the *holding offense*). This classification was based on each offender's predominant crime type — the type of crime for which the offender was arrested most frequently.

**Statistical significance.** For purposes of the ROP study, the level of significance of the *chi-square* statistic. A chi-square test indicates whether the distribution of values produced by the variables under observation could have happened by chance when no relationship between the two variables exists.

*these arrests — for theft, reckless conduct, and aggravated assault — came only two months after her release. Alice began her officially-recorded adult criminal career at age 23 with an arrest for theft. Shortly thereafter, she was arrested for prostitution. Using 27 different assumed names, Alice has been arrested a total of 67 times. Her prior arrest record includes theft (31 times), prostitution and shoplifting (10 times each), illegal possession and use of credit cards (7 times), and various other offenses. Alice was incarcerated in state prison twice prior to her 1983 release. Now, at the age of 38, she has the highest number of arrests among the 539 releasees analyzed thus far, although she is not currently in an IDOC institution.*

The Authority's first ROP publication analyzed the criminal activity of the sample during the first 18 to 20 months following their release from prison. This section of the current report updates the previous findings

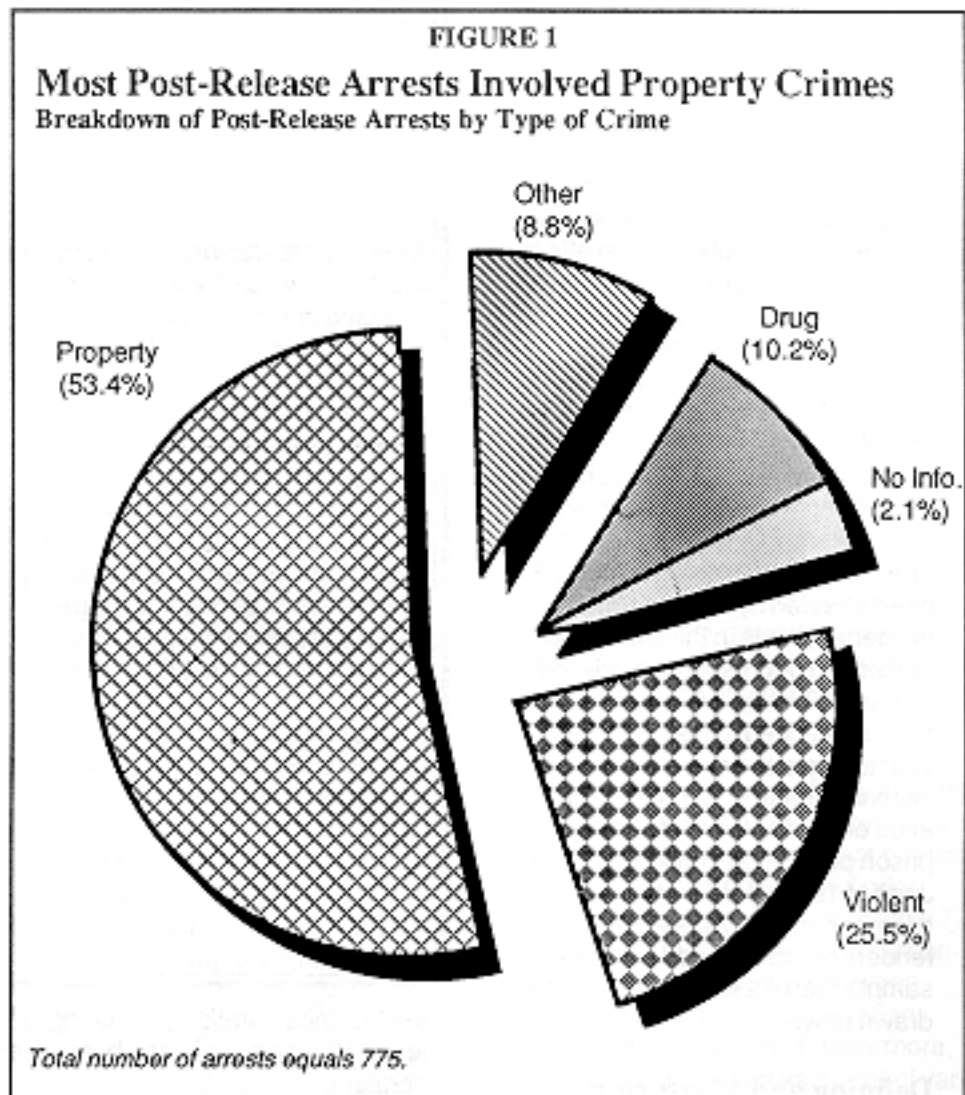
for an additional nine months, or a 27- to 29-month follow-up period. This update examines both post-release arrests and incarcerations.

### Post-Release Arrests

Table 1 compares the post-release arrest activity of the sample after 18 to 20 months with the arrest activity after 27 to 29 months. Among other things, this analysis found that:

- Roughly 60 percent (324 of 539) of the sample have now recorded at least one post-release arrest.
- Sixty-six releasees experienced their first post-release arrest during the last nine-month period. These offenders represent a 26 percent increase in the number of offenders arrested since their 1983 release from prison.
- The 324 offenders were responsible for 775 post-release arrests recorded on the CCH system (see figure 1 for a breakdown of these arrests by different crime types). These 775 arrests represent a growth of 56 percent in the number of post-release arrests in the last nine months.

	18-20 Months	27-29 Months
<b>Post-Release Arrests</b>		
No. Rearrested	258	324
• % of Sample	48%	60%
No. Arrest Events	496	775
No. Arrest Counts	715	972
• % Property Off.	53%	48%
• % Violent Off.	21%	23%
• % Drug Off.	7%	10%
<b>Arrests per Offender</b>		
Range	1-13	1-14
Average No.	2.1	2.4
<b>Distribution of Arrests Among Recidivists</b>		
1	53%	43%
2-3	37%	38%
4+	10%	19%



- The 775 arrests included 972 arrest counts, or an increase of 36 percent in the last nine months. (The total number of arrest counts is greater than the number of arrests because an offender could be charged with more than one arrest 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. These arrest counts have no direct correspondence with actual counts filed by a state's attorney.)
- Over the last nine months, the proportion of arrest recidivists with only one post-release arrest decreased 10 percent. The proportion having two or three post-release arrests increased minimally (1 percent), while the proportion having

four or more post-release arrests increased 9 percent.

- In the last nine months, there has been little change in the breakdown of the post-release arrest counts by type of crime. Table 2 shows that property crimes still account for approximately half of the arrest counts.

### Post-Release Incarcerations

Table 3 illustrates how the post-release incarceration activity of the sample changed between the 18- to 20-month and the 27- to 29-month follow-up periods. (Keep in mind that releasees in the sample could be incarcerated again for either a new offense or a violation of their conditional release. Since there is no accurate recording on the CCH

	18-20 Months	27-29 Months
<b>Violent Offenses</b>		
Murder*	7	11
Kidnapping	1	1
Unlawful Restraint	3	3
Rape	1	1
Deviate Sex. Assault	1	1
Armed Violence	1	3
Armed Robbery	14	16
Robbery*	15	27
Home Invasion	1	1
Aggravated Assault	22	27
Aggravated Battery	17	22
Assault/Battery	62	102
Arson	1	1
Other	4	9
Total Violent	150 (21%)	225 (23%)
<b>Property Offenses</b>		
Burglary*	69	75
Residential Burglary	11	18
Theft*	137	175
Shoplifting	56	65
Other	108	145
Total Property	381 (53%)	478 (49%)
<b>Drug Offenses</b>		
Total Drug	49 (7%)	94 (10%)
<b>Other Offenses</b>		
Contempt of Court	7	21
Unlawful Use of Weapon	21	25
Disorderly Conduct	8	8
Other	95	104
Total Other	131 (18%)	158 (16%)
No Information	4 (<1%)	17 (2%)
Total Counts	715	972

\* Includes attempts

system of new offenses vs. release violations, the Authority could not distinguish between the two in this bulletin.)

Over the last nine months:

□ The number of offenders experiencing their first state prison incarceration following their base incarceration increased 28 percent, from 173 to 222 offenders. (*Incarceration*, as defined in the ROP study,

refers only to imprisonment in Illinois state correctional facilities; it excludes commitments to county jails.)

□ The highest number of post-release incarcerations for any one offender increased from two to four.

□ The proportion of incarceration recidivists with only one post-release incarceration decreased 15 percent; the proportion having two post-release incarcerations increased 12 percent.

□ Two percent of the incarceration recidivists had three or more post-release incarcerations.

## Recidivism Among Different Subgroups Of Releasees

Various groupings of offenders can display different behavioral tendencies toward recidivism. Previous ROP reports, for example, found variations in recidivism levels among different age groups and among people with different numbers of prior offenses. Analyses such as these help identify those characteristics most likely to be associated with recidivism. If policy makers and other criminal justice officials are to be successful in identifying serious, repeat offenders, they must focus some of their attention on these characteristics.

With this idea in mind, the Authority examined the relationship between arrest recidivism and a number of demographic and criminal history variables. Each relationship was tested for statistical significance using the *chi-square* statistic. A *chi-square* test indicates whether the distribution of values produced by the variables being observed could have happened by chance when no relationship between the two variables actually exists. The statistical significance of a relationship is expressed in terms of probabilities.

	18-20 Months	27-29 Months
<b>Post-Release Incarcerations</b>		
No. Reincarcerated	173	222
% of Sample	33%	41%
Range	1-2	1-4
<b>Distribution of Incarcerations Among Recidivists</b>		
1	95%	80%
2	5%	17%
3	—	1%
4	—	1%

Significance at the .05 level ( $p < .05$ ) means that the probability of the relationship being attributable to chance is no more than 5 in 100. In this report, relationships were accepted as *statistically significant* if they were significant at the .05 level or higher.

A second statistical measure, *gamma*, was used to test both the strength and direction of the relationships between variables. Gamma values range between 0 and 1, and the higher the gamma (that is, the closer to 1), the stronger the relationship. A positive or negative gamma indicates the direction of the relationship.

The *chi-square* and gamma statistics are presented in tables 4 through 8 for all of the relationships discussed in this bulletin. However, unless otherwise noted, *statistical significance* in this report refers to the significance level of the *chi-square* statistic.

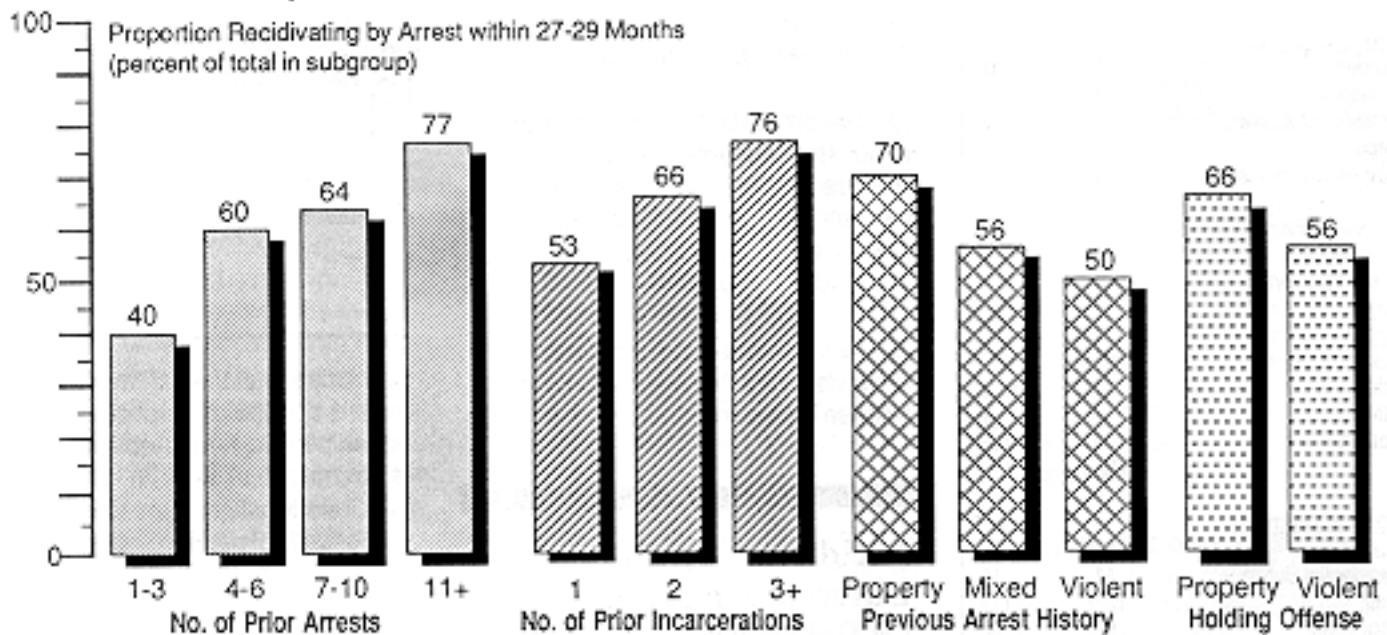
## Criminal History Variables

"Carl" was arrested for his first offense, a theft, at the age of 20. Over the next 19 years, he was imprisoned twice and arrested 30 times—mostly for theft (12 times), drug-related activities (eight), the unlawful use of weapons (three), and a few other property crimes. Just four months after being released from prison in 1983, Carl was arrested again for burglary. He is now 52 years old, and in the last three years, has been arrested twice and impris-

FIGURE 2

**Property Offenders and Those with Extensive Criminal Histories  
Were Most Likely to be Arrested Following Release from Prison**

Arrest Recidivism Comparisons Based on Different Criminal History Variables



oned three times. Carl, who is currently in state prison, is an excellent example of a career property criminal — an offender who has a long criminal history characterized by a high number of arrests and relatively few incarcerations, mainly related to property crimes.

"Pete" has been arrested and imprisoned many times, mainly for property crimes. Since his release from prison in May 1983, Pete has been arrested again twice, once each for shoplifting and theft. The first arrest for shoplifting came less than one month after he was released from state prison. Pete has been incarcerated once since his release, but is not currently in an Illinois prison. His adult criminal history goes back to age 22, when he was arrested, and subsequently incarcerated, for theft. By April 1983, Pete had been arrested 41 times for crimes such as shoplifting, theft, burglary, and possession of controlled substances and narcotic instruments. He has been in Illinois prisons nine times.

Previous ROP analyses have found that certain criminal history variables — namely the number of prior

arrests and incarcerations an offender has, the type of prior arrests, and the type of holding offense — are most likely to be associated with arrest recidivism. These analyses are helpful in studying releasees such as "Carl" and "Pete," who have extensive criminal histories.

Using these criminal history variables, figure 2 shows the proportion of offenders within various subgroups of the ROP sample who were arrested during the follow-up period. Table 4 uses the chi-square and gamma statistics to indicate the level of significance between each of these criminal history variables, as well as two demographic factors, and arrest recidivism. For example, this table shows that age at release was related to rearrest at the .01 level. This means that the probability of the relationship being attributable to chance is no more than 1 in 100.

**Number of prior arrests.** Releasees with a high number of prior arrests were more likely to be arrested again than those with fewer prior arrests. Approximately 40 percent of the releasees with 1 to 3 prior arrests experienced a CCH-reported arrest

during the 27- to 29-month follow-up period, and this proportion grew steadily as the number of prior arrests increased. By the end of the follow-up period, the percentage of releasees arrested again was 60 percent for those with 4 to 6 prior arrests, 64 percent for those with 7 to 10 prior arrests, and 77 percent for offenders having 11 or more prior arrests (see figure 2).

**Number of prior incarcerations.** Releasees with different incarceration histories displayed varying levels of

TABLE 4  
Relationships of Selected Criminal History and Demographic Variables To Arrest Recidivism

Variable	Chi-Square	Gamma
No. of Prior Arrests	p<.01	.42
No. of Prior Incar.	p<.01	.36
Previous Arrest History	p<.01	.39
Holding Offense	p<.05	.21
Age at Release	p<.01	-.16
Race	p<.01	.39

arrest recidivism as well. Three subgroups were compared: releasees with one prior incarceration (the base incarceration), those with two prior incarcerations, and those with three or more.

This analysis found that as the number of prior incarcerations increased, so did the proportion of offenders recidivating by arrest. Fifty-three percent of the releasees with one prior incarceration were arrested again during the follow-up period, compared with 66 percent of the offenders with two prior incarcerations and 76 percent of those with three or more (see figure 2).

**Previous arrest history.** All releasees in the ROP sample were classified by the type of criminal history exhibited in their previous arrests. Three subgroups were compared: property, violent, and *mixed* offenders (the latter includes offenders who did not exhibit a single crime type). Drug offenders, who constituted a low number of all releasees, were omitted.

The ROP data indicate there is generally a relationship between the type of prior criminal activity exhibited by an offender and the likelihood of his or her being arrested after release from prison. Offenders with a criminal history dominated by property crimes were far more likely to recidivate by arrest; 70 percent of those offenders were arrested during the 27- to 29-month follow-up time. By comparison, 56 percent of those classified as *mixed* and half of those classified as predominantly violent were arrested again (see figure 2).

**Holding offense.** Releasees were also classified based on their holding offense, as determined by the IDOC. (*Holding offense* refers to the single conviction charge, or the most serious of multiple charges, for which the offender was sentenced to prison for the base incarceration.) The drug and *other* categories were again so small that they were excluded from the analysis.

However, when releasees with property and violent holding offenses were compared, the Authority found that those who had been held for property offenses were more likely to recidivate by arrest than those who had been imprisoned for violent offenses. Sixty-six percent of the releasees who had property holding offenses, compared with 56 percent of those having violent holding offenses, experienced a CCH-recorded arrest during the follow-up period (see figure 2).

### Demographic Variables

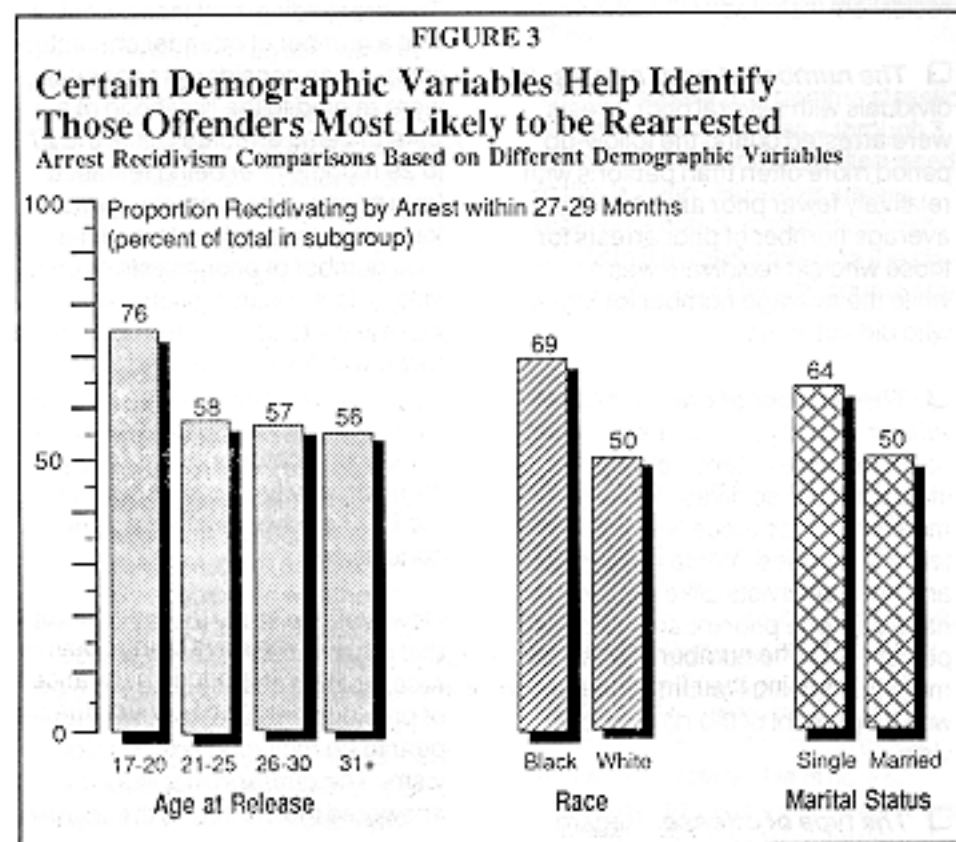
Just as there are relationships between certain criminal history variables and arrest recidivism, some demographic factors were found to be related to arrest recidivism as well. Figure 3 shows the proportion of offenders arrested during the follow-up period for three of these demographic variables: age at the time of release from prison, race, and marital status at the time of the base incarceration.

**Age at release.** For comparative purposes, the sample was divided into

four categories based on each offender's age at the time he or she was released from the base incarceration in 1983. The age categories used were 17 to 20, 21 to 25, 26 to 30, and 31 and older.

Among these four groups, the youngest ones — those age 17 to 20 at the time of their release — recidivated by arrest more often than any other age group. More than three-quarters of these releasees were arrested during the 27- to 29-month follow-up period. For each of the three older age groups, the proportion of offenders arrested again was much lower, and it remained fairly constant across age groups. Fifty-eight percent of the 21- to 25-year-olds, 57 percent of the 26- to 30-year-olds, and 56 percent of those releasees age 31 and older were arrested at least once during the follow-up time (see figure 3).

**Race.** Comparing the two major racial groups in the sample — blacks and whites — revealed a noticeable difference in arrest recidivism levels. (Only blacks and whites were included in this comparison because



of the low number of people categorized as being from other racial groups.) Black releasees recidivated by arrest more often than white releasees, with 69 percent of the blacks and 50 percent of the whites in the sample arrested at least once during the 27- to 29-month follow-up period (see figure 3).

**Marital status.** Two groups of releasees were compared here as well: those who reported being single when they entered prison for the base incarceration and those who said they were married. And, once again, a difference in arrest recidivism levels was uncovered. Nearly two-thirds of the single releasees, compared with about one-half of the married ones, were arrested during the follow-up period (see figure 3).

### Summary of Subgroup Comparisons

The analysis of recidivism patterns among various subgroups of the ROP sample found that some factors are clearly related to recidivism by arrest. Criminal history variables found to be associated with arrest recidivism included:

□ **The number of prior arrests.** Individuals with several prior arrests were arrested during the follow-up period more often than persons with relatively fewer prior arrests. The average number of prior arrests for those who did recidivate was 11, while the average number for those who did not was 6.

□ **The number of prior incarcerations.** As with prior arrests, individuals with more extensive histories of incarceration recidivated by arrest more often than those with less extensive histories. While recidivists and non-recidivists alike tended to have only one prior incarceration, 48 percent of the recidivists had two or more prior incarcerations, compared with 29 percent of the non-recidivists.

□ **The type of offense.** Regard-

less of whether the entire arrest history or only the most recent offense (the holding offense) was considered, offenders who were responsible for property offenses were arrested again more often than offenders who committed violent offenses. While 70 percent of offenders having a history of property crime — those with arrest histories indicating a pattern of property offenses — were arrested during the follow-up period, 50 percent of those with violent offense histories recidivated by arrest. Similarly, those having a property holding offense were more likely to be arrested again than those with a violent holding offense (66 percent vs. 56 percent).

These relationships between arrest recidivism and various criminal history and demographic factors are analyzed in more detail in the remainder of the bulletin.

## Prior Criminal History And Recidivism

The preceding analyses revealed that a number of offender characteristics, when considered separately, were related to the likelihood of a person being arrested within the 27 to 29 months after being released from prison. For example, it was found that those offenders with a high number of prior arrests or prior state prison incarcerations were more likely to be arrested again than those with fewer prior arrests or incarcerations. This finding — that the volume of past criminal behavior is the best indicator of possible future criminal activity — is thus far one of the ROP study's most important conclusions.

However, the study has also found that other variables, such as age, race, holding offense, and the type of previous arrest history, also appear to be related to arrest recidivism. The question that must be answered then is this: Is the relation-

ship between prior criminal history and recidivism explained by these other variables, or is there a direct relationship between the two?

To answer this question, three important methodological concerns regarding the original relationship between prior criminal history and arrest recidivism were addressed:

□ Does the original relationship disappear when a test (or control) variable is introduced? When race is used as a third factor, for example, are offenders with more prior arrests still more likely to be arrested after being released from prison than those offenders having fewer prior arrests?

□ Does the original relationship between prior criminal history and the likelihood of recidivism hold up across all categories of the control variable, or across only some? In other words, using race again as the control variable, does the relationship between prior arrests and arrest recidivism hold up for both blacks and whites?

□ Is the original relationship better explained using a combination of prior criminal history and the third variable (for example, race)? That is, do the two factors combine to explain arrest recidivism better than either factor individually?

Given this methodology, the following two analyses were performed for each control, or added, variable:

□ The relationship between the control variable (for example, race) and prior criminal history was examined first (see tables 5 and 7 for a summary of the statistical significance of these simple two-variable relationships).

□ Next, the effects of the third variable on the relationship between prior criminal history and recidivism by arrest was analyzed (see tables 6 and 8 for a summary of the statistical significance of these relationships).



## Prior Arrests

The criminal career of "William" illustrates the relationship between the number of prior arrests and arrest recidivism. At the age of 20, William started his adult criminal career with an arrest for theft. Over the next two and one-half years, he was arrested 43 times, or an average of three offenses every two months. These arrests were mainly for shoplifting (30 times) and theft (11 times), but also included possession of cannabis and possession of controlled substances. William's holding offense, while incarcerated by the IDOC, was theft. After being released from prison in June 1983, he was arrested eight months later for theft and two weeks after that for shoplifting. Hardly two weeks elapsed before he was arrested again for possession of controlled substances and two months later for shoplifting. William is not currently incarcerated in an Illinois prison.

**Race, prior arrests, and arrest recidivism.** As table 5 indicates, the two-variable relationship between the number of prior arrests and race was significant (that is, the chi-square statistic was  $p < .01$ ). Race was then introduced as a control variable, and the relationship between the number of prior arrests and arrest recidivism was examined. Findings were significant for both blacks and whites (see table 6). In other words, as the number of prior arrests increased, so did the proportion of offenders who were arrested during the follow-up period, regardless of their race.

For whites, the proportion rearrested increased gradually at first, from 35 percent for those with 1 to 3 prior arrests to 51 percent for those with 7 to 10 prior arrests. This figure then jumped dramatically, to 78 percent, for those white releasees with 11 or more prior arrests. For blacks, the proportion rearrested grew from 48 percent for those with 1 to 3 prior arrests to 71 percent for those with 4 to 6 prior arrests. But this number increased only slightly, to 78 percent, for black releasees with 11 or

**TABLE 5**  
Relationships of Criminal History  
And Demographic Variables  
To Number of Prior Arrests

Variable	Chi-Square	Gamma
Previous Arrest History	$p < .01$	.32
Holding Offense	$p < .01$	.17
Age at Release	$p < .01$	.46
Race	$p < .01$	.32

more prior arrests.

Because the proportion rearrested increased significantly for both races, the relationship between the number of prior arrests and arrest recidivism cannot be explained by race alone. Still, the influence of race was evident in the proportional differences. Comparing whites and blacks within each level of prior arrests revealed that for all but the highest level, blacks were more likely than whites to be rearrested during the follow-up period. This trend was particularly evident among offenders with 4 to 10 prior arrests.

In sum, then, race was not responsible for the relationship between the number of prior arrests and arrest recidivism. For both whites and blacks, as the number of prior arrests increased, so did the proportion of releasees in the sample who were rearrested. That is, the original relationship between prior arrests and arrest recidivism held up across the two racial groups. However, blacks with 4 to 10 prior arrests were nearly as likely to be rearrested as any offender, black or white, with 11 or more prior arrests.

**Age at release, prior arrests, and arrest recidivism.** The analysis revealed a significant relationship between age and the number of prior arrests (see table 5). Likewise, when the interaction of age at release, prior arrests, and arrest recidivism was examined, the number of prior arrests was significantly related to recidivism by arrest at every age

**TABLE 6**  
Relationship of Arrest Recidivism  
And Number of Prior Arrests when  
Controlling for Selected Variables

Control Variable	Chi-Square	Gamma
Previous Arrest History		
Violent	$p < .05$	.38
Property	$p < .05$	.40
Holding Offense		
Violent	$p < .05$	.28
Property	$p < .01$	.40
Age at Release		
17-20	$p < .01$	.77
21-25	$p < .01$	.54
26-30	$p < .05$	.29
31+	$p < .01$	.74
Race		
Black	$p < .01$	.33
White	$p < .01$	.41

level (see table 6). There is a very strong likelihood that offenders age 31 and older who have 11 or more prior arrests will recidivate by arrest. However, it was clear that releasees with 7 or more prior arrests, regardless of their age, were much more likely to be arrested after being released from prison than those releasees with fewer than 7 prior arrests.

Offenders age 26 and older were more likely than younger releasees to have 11 or more prior arrests. However, members of all age groups were likely to recidivate by arrest if they had 7 or more prior arrests. The conclusion, then, is that the original relationship between number of prior arrests and arrest recidivism was not affected by controlling for age, but remained strong for all age groups.

**Previous arrest history, prior arrests, and arrest recidivism.** The number of prior arrests was significantly related to the offender's previous arrest history classification, either violent or property (see table 5). And, when previous arrest history was used as the control variable, the association between the number of prior arrests and arrest recidivism remained for both violent and property offenders (see table 6).

For violent offenders, the proportion arrested during the follow-up period increased gradually from 33 percent for those with 1 to 3 prior arrests to 67 percent for those with 11 or more. For property offenders, the pattern was similar: The proportion rearrested climbed from 46 percent for those with 1 to 3 prior arrests to 82 percent for those with 11 or more.

Since the proportion of releasees who were rearrested increased significantly for both violent and property offenders, the relationship between the number of prior arrests and arrest recidivism cannot be explained solely by the type of previous criminal history exhibited by the offender. Still, for every level of prior arrests, property offenders were more likely than violent offenders to be arrested during the follow-up period. In fact, property offenders with 4 to 10 prior arrests were as likely to be rearrested as violent offenders with 11 or more prior arrests.

In summary, the relationship between the number of prior arrests and recidivism by arrest remained significant even when a variable for type of previous arrest history was introduced. For both violent and property offenders, as the number of prior arrests increased, so did the proportion of releasees who were rearrested. Property offenders with 4 to 10 prior arrests, however, were as likely to be rearrested as violent offenders with 11 or more prior arrests.

**Holding offense, prior arrests, and arrest recidivism.** The study found a significant relationship between the number of prior arrests and the type of holding offense for the offender (see table 5). In addition, when the number of prior arrests and arrest recidivism were examined controlling for the type of holding offense, the relationship still remained, regardless of whether the offender had been held for a property crime or a violent crime (see table 6). As the number of prior arrests increased, so did the proportion of of-

fenders rearrested during the 27 to 29 months following their release from prison, no matter what the holding offense was.

For releasees with a violent holding offense, the proportion rearrested increased from 42 percent for those with 1 to 3 prior arrests to 73 percent for those with 11 or more. For releasees with a property holding offense, the relationship was more consistent. The proportion rearrested was 48 percent for those with 1 to 3 prior arrests, but increased to 78 percent for those with 11 or more prior arrests. Because the proportion of releasees arrested during the follow-up period increased significantly for those who had been held for both violent and property holding offenses, the relationship between the number of prior arrests and arrest recidivism cannot be explained by the type of holding offense.

To summarize, the relationship between the number of prior arrests and arrest recidivism did not disappear when the type of holding offense was introduced as a control variable. For both the violent and property classifications, the proportion of releasees who were rearrested increased as the number of prior arrests grew. Offenders having a violent holding offense and 4 to 6 prior arrests were nearly as likely, and offenders with a property holding offense and 7 to 10 prior arrests were just as likely, to be rearrested as any offender with 11 or more prior arrests.

**Conclusion.** Taken as a whole, these analyses contribute to a better understanding of the relationship between prior arrests and arrest recidivism among the ROP sample. The analyses show that there is a direct relationship between the number of prior arrests and the likelihood of an offender being arrested again after leaving prison. As the number of prior arrests increased, so did the proportion of releasees rearrested, regardless of the control variable used (see table 6 for summary statistics). In fact, releasees with 11 or

more prior arrests consistently displayed very high levels of arrest recidivism, regardless of the control variable.

## Prior Incarcerations

The same analyses used to evaluate the relationship between the number of prior arrests and arrest recidivism were also conducted for the relationship between prior incarcerations and arrest recidivism (see table 8 for summary statistics). The results here were strikingly similar to those found when the number of prior arrests was used. Therefore, the following discussion highlights only those findings that were not consistent with those for prior arrests.

**Race, prior incarcerations, and arrest recidivism.** Unlike prior arrests, there was no statistically significant relationship between the number of prior incarcerations and race (see table 7). Therefore, race could not be responsible for the relationship between the number of prior incarcerations and arrest recidivism. Furthermore, when race was used as a control variable, a significant relationship between the number of prior incarcerations and arrest recidivism was discovered for both blacks and whites (see table 8). For both races, as the number of prior incarcerations increased, so did the proportion of releasees who were arrested within 27 to 29 months following their release.

Since the proportion of offenders rearrested increased significantly for both blacks and whites as the number of prior incarcerations became larger, the relationship between prior incarcerations and arrest recidivism was not explained by race alone, although the influence of race was evident. There appears to be an interaction between prior incarcerations and race with regard to arrest recidivism. Still, the relationship between the number of prior incarcerations and arrest recidivism was not explained by race, nor did the relationship differ for blacks and whites.

### Previous arrest history, prior incarcerations, and arrest recidivism.

There was no significant relationship between the number of prior incarcerations an offender had and the offender's previous arrest history classification, either violent or property (see table 7). However, when previous arrest history was introduced as a control variable, a significant relationship was found, but for **violent offenders only** (see table 8).

A comparison of violent and property offenders within different levels of prior incarcerations further revealed the influence of arrest history type. Regardless of the number of prior incarcerations, property offenders were more likely than violent offenders to be arrested during the follow-up period. This pattern was particularly evident for releasees with one or two prior incarcerations. In fact, property offenders with only one prior incarceration were nearly as likely to be rearrested as violent offenders with three or more prior incarcerations.

The relationship between the number of prior incarcerations and arrest recidivism, then, cannot be explained by the type of prior criminal activity, but rather was dependent on it. There was a relationship between prior incarcerations and arrest recidivism for violent offenders only. For property offenders, no significant relationship was found. This finding is related to the tendency for property offenders, regardless

Variable	Chi-Square	Gamma
Previous Arrest History	n.s.	.21
Holding Offense	p<.01	.30
Age at Release	p<.01	.46
Race	n.s.	.07

n.s. means not significant

of the number of prior incarcerations, to be rearrested.

### Holding offense, prior incarcerations, and arrest recidivism.

A significant relationship was found between the number of prior incarcerations and the type of holding offense (see table 7). However, when holding offense was introduced as a control variable, the relationship between the number of prior incarcerations and arrest recidivism was significant **only for offenders who had violent holding offenses.**

Comparing releasees with violent and property holding offenses and different numbers of prior incarcerations further revealed the influence of the type of holding offense. Releasees with a property holding offense and one prior incarceration were more likely to be rearrested than those with a violent holding offense and one prior incarceration.

In summary, the relationship between the number of prior incarcerations and arrest recidivism was not explained by the type of holding offense, but was conditional upon it. The relationship clearly operated for

releasees with a violent holding offense, but not for those with a property holding offense. Offenders with a property holding offense and only one prior incarceration were as likely to be rearrested as any offender with two prior incarcerations.

**Conclusion.** The analyses of prior incarcerations and arrest recidivism produced results similar to those found when prior arrests and arrest recidivism were examined. However, the relationship between prior incarcerations and arrest recidivism was not as clear as that of prior arrests and arrest recidivism.

Introducing race as a control variable revealed a significant relationship between the number of prior incarcerations and recidivism by arrest (see table 8). However, the introduction of age at release, type of criminal history, and type of holding offense revealed *conditional* relationships. In other words, significance levels and the subsequent importance of prior incarcerations on rearrest varied with age and crime type. There was a significant relationship between prior incarcerations and arrest recidivism for releasees older than 26, for releasees having an arrest history typified by violent crimes, and for those with a violent holding offense.

Control Variable	Chi-Square	Gamma
Previous Arrest History		
Violent	p<.05	.40
Property	n.s.	.14
Holding Offense		
Violent	p<.05	.41
Property	n.s.	.27
Age at Release		
17-20	n.s.	.15
21-25	n.s.	.18
26-30	p<.05	.38
31+	p<.01	.69
Race		
Black	p<.05	.30
White	p<.01	.42

n.s. means not significant

## Conclusion

Three variables were found to be strongly related to the likelihood of an offender being arrested again following his or her release from prison: the number of prior arrests, number of prior state prison incarcerations, and the type of holding offense.

The Authority's initial analysis indicated some relationship between arrest recidivism and: the number of prior arrests, the number of prior incarcerations, the type of holding offense, the type of previous arrest history, race, and age at the time of

release from prison. In the secondary analysis, the same variables were included in a test of the original relationship between the number of prior arrests and arrest recidivism. This detailed analysis found that the relationship held up (that is, it remained statistically significant) for all of the control variables that were introduced. In other words, the relationship between prior arrests and arrest recidivism could not be attributed to these other variables.

These results could be summarized in another way:

❑ The relationship between the number of prior arrests and arrest recidivism was not explained by race alone. For both blacks and whites, the proportion of releasees arrested during the follow-up period increased as the number of prior arrests grew.

❑ The relationship between the number of prior arrests and arrest recidivism was not explained when age was controlled for; rather, the relationship remained significant across all age groups.

❑ The relationship between the number of prior arrests and arrest recidivism remained significant when the type of the offenders' previous arrest history was introduced as a control variable. For both property and violent offenders, as the num-

ber of prior arrests increased, so did the proportion of offenders who recidivated by arrest. However, this relationship was more pronounced for property offenders.

❑ The relationship between the number of prior arrests and arrest recidivism was not explained by the holding offense classification assigned by the IDOC. The proportion of releasees who were rearrested — regardless of their holding offense classification — increased as the number of prior arrests increased. Again, however, this relationship was more apparent for property offenders.

❑ As a whole, the Authority's analysis showed that there was a genuine relationship between the number of prior arrests and the likelihood of being arrested following release from prison.

❑ Regarding prior incarcerations and recidivism by arrest, the introduction of race as a control variable indicated that the relationship was not explained by race. For both blacks and whites, as the number of prior incarcerations increased, so did the proportion of offenders who were rearrested.

❑ The relationship between the number of prior incarcerations and arrest recidivism was not explained solely by age.

❑ The relationship between the number of prior incarcerations and arrest recidivism was not explained by the type of previous criminal activity either. Again, however, prior criminal activity did affect the likelihood of an offender being rearrested. Overall, property offenders were more likely than violent offenders to be rearrested.

## Bibliography

Kitchner, Howard, Annesley K. Schmidt, and Daniel Glaser (1977). "How Persistent is Post-Prison Success?" *Federal Probation*, 41, 9-15.

Illinois Criminal Justice Information Authority (1985). *Repeat Offenders in Illinois*. Illinois Criminal Justice Information Authority, Chicago, Ill.

Maltz, Michael D. (1984). *Recidivism*. Academic Press, Orlando, Fla.

Markovic, John D. (1986). *The Pace of Recidivism in Illinois*. Illinois Criminal Justice Information Authority, Chicago, Ill.

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