



Cook County Pretrial
Release Study



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I. Executive summary

The Cook County Pretrial Release Study looks at a criminal justice population that has received extensive publicity but little research scrutiny--those individuals released to the community pending trial in Cook County. The activity of this large and diverse group has an impact on public safety, criminal justice spending, and the workloads of individual agencies. Of particular concern in Cook County are the dozens of defendants who are released each week from the county jail on their own recognizance in order to ease crowding in the jail.

The study focuses on the three types of pretrial releasees that account for the vast majority of defendants released on bond prior to trial in Cook County: those released on court deposit bonds, those receiving court recognizance bonds (court I-bonds), and those receiving Administrative Mandatory Furlough (AMF or "jail I-bonds") from the Cook County Department of Corrections.

The jail I-bond, or AMF, group is the most interesting because these defendants initially had a standard deposit bond level set by the Circuit Court of Cook County, and when unable to meet that bond amount, were *not* given a court recognizance bond. Rather, due to a federal court cap on the jail population, they were subsequently released through the AMF program (Myrent, 1989). As with other types of pretrial releasees, the behavior of defendants released on jail I-bonds affects public safety and criminal justice workloads. But, the pretrial behavior of these defendants also provides valuable clues to the efficiency of one continually important strategy for dealing with jail crowding.

The study tracks a sample of more than 2,000 releasees in the three release groups and documents the criminal activity of those releasees from the time of their initial pretrial release until the disposition of the case associated with that release. Three specific negative performance measures were used: the declaration of a bond as forfeited, rearrest in Illinois on a new charge, and reincarceration at the Cook County Jail. The study also disaggregates the data to look at these releasees by age, gender, race/ethnicity, nature of the holding offense, and arrest history.

Summary of findings

All three releasee groups had relatively high failure levels. Figure 1 shows the bond forfeiture, rearrest, and reincarceration levels for all three groups by gender.

Figure 1: Comparison of pretrial outcomes across bond types

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
Bond Forfeiture	54%	31%	21%	52%	34%	30%
Rearrest	34%	19%	17%	47%	33%	39%
Re-incarceration	25%	16%	11%	36%	24%	26%

Looking at the national picture, male Cook County releasees on court deposit bonds and court I-bonds failed at a level near the lower range of the national average, using data from 75 large U.S. cities (Figure 2). While specific bond types and criteria are not directly comparable, the national data give a frame of reference for Cook County results. Looking at rearrest, the Cook County court recognizance and deposit bond male releasees failed at levels equivalent to, and even beyond, the upper range of the national average.

Figure 2: National and Cook County Pretrial Study outcomes

	MEN			MEN AND WOMEN*	
	COOK COUNTY PRETRIAL RELEASE STUDY FINDINGS			United States (PSRC Cities)	
	Jail I-bond	Court I-bond	Deposit Bond	75 largest U.S. cities Average	Large cities**
FAILURE TO APPEAR	52%	34%	30%	24%	30% - 45%
REARREST	47%	33%	39%	18%	20% - 35%

* All types of release, men and women.

** See Fig 44 for detail of selected large cities.

Source: Pretrial Service Resource Center, and Illinois Criminal Justice Information Authority Cook County Pretrial Release Study.

Clearly, the jail I-bond group had the worst performance record of all three releasee groups. This was expected, since those released on jail I-bonds have already been turned down for court I-bonds. Further, there are fewer risk or stability criteria applied to the jail I-bond group than to the other pretrial groups. The jail I-bond defendants are released based on overcrowding at the jail. The criteria for their release is therefore less stringent than it would be for a court ordered recognizance bond. The characteristics of jail I-bond defendants are different from the characteristics of the defendants released on judicially structured, court-issued bonds. For both failure to appear and rearrest, the Cook County jail I-bond males failed at levels well beyond the highest end of the national range.

As releasees fail, their actions have a direct impact on criminal justice expenditures, workload, and, most importantly, public safety. From the time of their original release on bond through the disposition of their original cases, the 2,127 defendants tracked in the study accounted for an additional 1,112 bond forfeitures, 1,696 new arrests, and 818 new incarcerations. When the sample is "weighted" to reflect the entire population of defendants released during the 70-day period in 1988 from which the sample was drawn, 5,816 defendants accounted for an estimated 3,493 bond forfeitures, 5,320 arrests, and 2,639 incarcerations. Looking at the transactions of the weighted sample group (5,816), it is estimated that the pretrial failures of this group alone amounted to \$12.6 million in law enforcement costs, nearly \$5.7 million in court costs, and more than \$1.9 million in correctional costs. The total additional cost of all pretrial failures among the group studied is estimated in excess of \$20.2 million. The total cost to process (and then reprocess) the weighted sample population was an estimated \$39 million. Finally, it is likely that the actions of these releasees accounted for the additional victimization of at least 1,670 people (527 before weighting).

On a positive note, the performance of releasees supervised by the recently implemented Circuit Court of Cook County Pretrial Services Department (CCPS) had a much lower failure level than the other bond groups tracked in this study. While this study did not track CCPS releasees, information provided by that agency indicates a much better chance of success for those releasees receiving more structured and staff supervised pretrial release services. CCPS reported an overall failure to appear rate of 22 percent¹ during a study conducted in July 1991.

¹Information obtained from the Circuit Court of Cook County, Pretrial Services Department, Stephen McGuire, Director.

Summary of recommendations

Pretrial release funds in Cook County must be spent more effectively, and must address public safety issues aggressively. The Authority recommends that the following actions be carefully considered in light of this study's findings.

In the area of court managed pretrial programs:

- ▶ Examine and continue to refine the selection criteria for pretrial release.
- ▶ Develop additional programs to supervise and support defendants released through court-issued deposit or recognizance bonds.
- ▶ Increase resources for the Cook County Pretrial Services Program, to permit more defendants to enter the program.
- ▶ Accommodate high-risk defendants with high levels of failure by expanding the Cook County Pretrial Services Program or creating a special focus in the program for high-risk defendants.

In the area of jail-based recognizance release:

- ▶ Reduce the number of pretrial defendants released through the jail I-bond program through development and use of other, more structured, alternatives.
- ▶ If the jail I-bond program continues, expand the resources available to the Cook County Department of Corrections to improve pretrial release programs, such as pretrial electronic monitoring and other enhanced pretrial supervision efforts.

Project history

This study began in early 1989 when the Authority was approached by the John Howard Association (JHA), which is responsible for monitoring the federal court order capping the population at the Cook County Jail. JHA was particularly concerned about the jail I-bond release program and its impact on public safety. Further, JHA staff felt that previous estimates of pretrial failure levels were poorly documented and, for the most part, inaccurate. Responding to these concerns, the Authority developed a pretrial study concept paper and subsequent proposal for a Cook County Pretrial Release Study.

The study was funded through a primary grant from the State Justice Institute (SJI) in Alexandria, Virginia. SJI provides funding to a variety of court-related management and policy projects. Staff at SJI thought that scrutiny of Cook County's pretrial release population could be of value not only to the county, but to other jurisdictions in Illinois and across the nation.

Once the project was funded, the Authority sought input and data support from the following agencies and organizations in order to successfully complete the study:

- Cook County Circuit Court (court activity data)
- Illinois State Police (rearrest data/statewide)
- Chicago Police Department (rearrest data/Chicago)
- Cook County Department of Corrections (reincarceration data)
- Administrative Office of the Illinois Courts (pretrial program information)
- University of Illinois at Chicago (methodology review)
- John Howard Association (jail crowding information)
- Cook County Public Defender's Office (reaction)
- Cook County State's Attorney's Office (reaction)
- Cook County Circuit Court Clerk's Office (court activity data)

Representatives from a number of these agencies served as the core membership for a project advisory committee that advised the project team over the full 28-month study period. The advice and relevant data supplied by these agencies were invaluable to the quality of the final product.

In order to accomplish the goals of the study, Authority staff created, in essence, a releasee-based tracking system, combining data from each of the cooperating agencies. Once a comprehensive releasee database was developed, a pilot study on a subset of the database was conducted to test the methodology.

After the pilot was successfully completed, the full sample of 2,127 releasees was selected. These releasees were then tracked from the time of pretrial release on bond to disposition of the original release offense. Using various analytical methods, staff identified key areas of investigation for the sample, including survival analysis (length of time to failure) and root causes of failure.

Originally funded in October 1989, project work began in December 1989. The tracking period selected for the inmate sample was a 70-day period from September 13-30, 1988, and

continuing from November 10 through December 31, 1988, during which the defendants were released on bond. The tracking period ended on the date of disposition for the holding offense. Data collection was completed in February 1992. Final data analysis was completed in March 1992, and work began on the preparation of this final report. All project work was conducted at the Authority, with the exception of selected visits to cooperating agencies for data collection purposes.

Results of this study have already been presented to, and approved by, the project advisory committee. The final report will be presented to Cook County Circuit Court officials and the State Justice Institute. In addition to the full final report, the Authority will summarize findings in a future research bulletin, and in a feature piece on pretrial programs and issues in the summer edition of the Authority's quarterly magazine, *The Compiler*. Secondary distribution of results will be accomplished through the cooperation of the members of the project advisory committee.

II. Introduction

In 1982, a U.S. District Court consent decree was issued requiring the jail to provide each inmate with a bed in a cell (in other words, inmates could not be required to sleep on mattresses on the floor). In 1983, the jail was found to have violated the consent decree, and was ordered to release on their own recognizance inmates with the lowest bond amounts when the jail population reached its court-ordered limit. Jail officials responded by issuing administrative mandatory furlough releases-called jail I-bonds-to certain misdemeanor offenders, and, as the jail population continued to climb, eventually to accused felons (*Trends and Issues 91*).

Under the Administrative Mandatory Furlough release program (jail I-bond), as many as 3,424 inmates have been released in one month. From January to August 1990, an average of 2,598 inmates were released every month (Block and Matos 1991, p. 1). During fiscal year 1991 a total of 22,807 defendants were released on a jail I-bond. For criminal justice officials in Cook County and Illinois to assess the impact of jail I-bonds on court caseloads and crime rates, rearrests and failures to appear for defendants released on jail I-bonds must be compared with defendants released on other types of bonds.

Research question

The main focus of the Cook County Pretrial Release Study is to determine whether defendants released on jail I-bonds are rearrested more often for new crimes, or fail to appear for scheduled court dates more often than defendants released on other types of bonds. Failure to appear is measured by whether a defendant had a bond that was declared forfeited. Rearrest is measured by whether the released defendant was arrested for a new crime while out on bond.

Differences in demographic characteristics, such as race, age, and case information (number of court dates and conviction status), were identified and compared across bond groups. These variables can affect rearrest and failure to appear outcomes. Taking these factors into account, the study attempted to determine what characteristics in pretrial behavior are most influential in understanding whether a defendant will be rearrested for a new crime, or fail to appear in court.

To comprehensively investigate pretrial activity, it is necessary to examine the released defendant's activity as he or she comes into contact with each component of the criminal

justice system. Therefore, it is necessary to track an individual throughout the criminal justice system from the date of release on bond until the date of the disposition of the case. In Cook County, there is no comprehensive database that records information about released defendants and their activity--in court, or out of court--while on bond. To conduct this study, therefore, a database containing the pre-disposition release activity of defendants had to be created. This database consists of information pertaining to court case activity, reincarceration activity, rearrest activity, and bond changes within the duration of a case. This task was accomplished through the collaborative efforts of each component of the Cook County criminal justice system. The combined resources of law enforcement, the courts (including prosecution and defense), and corrections were made available and used to create the defendant tracking system used in this study.

III. Study approach

To describe and compare the differences in rearrest and failure to appear behavior among bond groups, two tasks were necessary: locate existing data in Cook County that would permit such a comparison and select a sample that would provide adequate representative information to answer the research question.

Pretrial data in Cook County

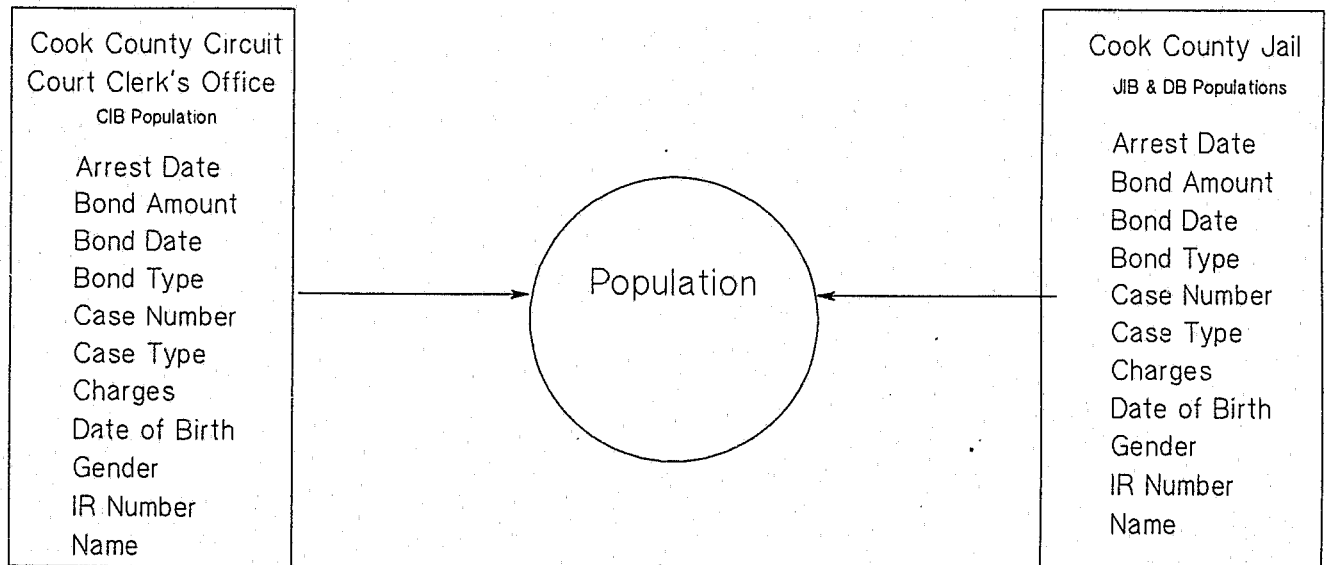
The first step in answering the research question was to locate data in Cook County that would permit a comparison between jail I-bonds and different court-issued bonds.

While not contained in a single database, data do exist in Cook County that provide the necessary information to answer the research question (Figure 3). Identifying information about a released defendant--bond type, name, gender, and date of birth--is necessary to determine what bond group the releasee belongs in. This identifying information is then used to collect more specific data about defendant behavior during the follow-up period from release on bond to the disposition of the case.

In Cook County, there are two sources from which preliminary identifying data on jail I-bond, court I-bond, and deposit bond defendants can be collected (Figure 4). One source, the Cook County Circuit Court Clerk's Office, has many separate data sets and stores the basic identifying information about court I-bond defendants both manually, on hard-copy documents, and in automated format. This information is contained within four different data sets including the Bond Information System, the municipal suburban district's system, Chicago branch courts, and the criminal court division database. The other source is the Cook County Department of Corrections (Cook County Jail). Jail I-bond and deposit bond data from the jail are stored in the Correctional Institution Management Information System (CIMIS), a computerized information system developed by the Authority and in operation at Cook County and more than a dozen county jails around Illinois.

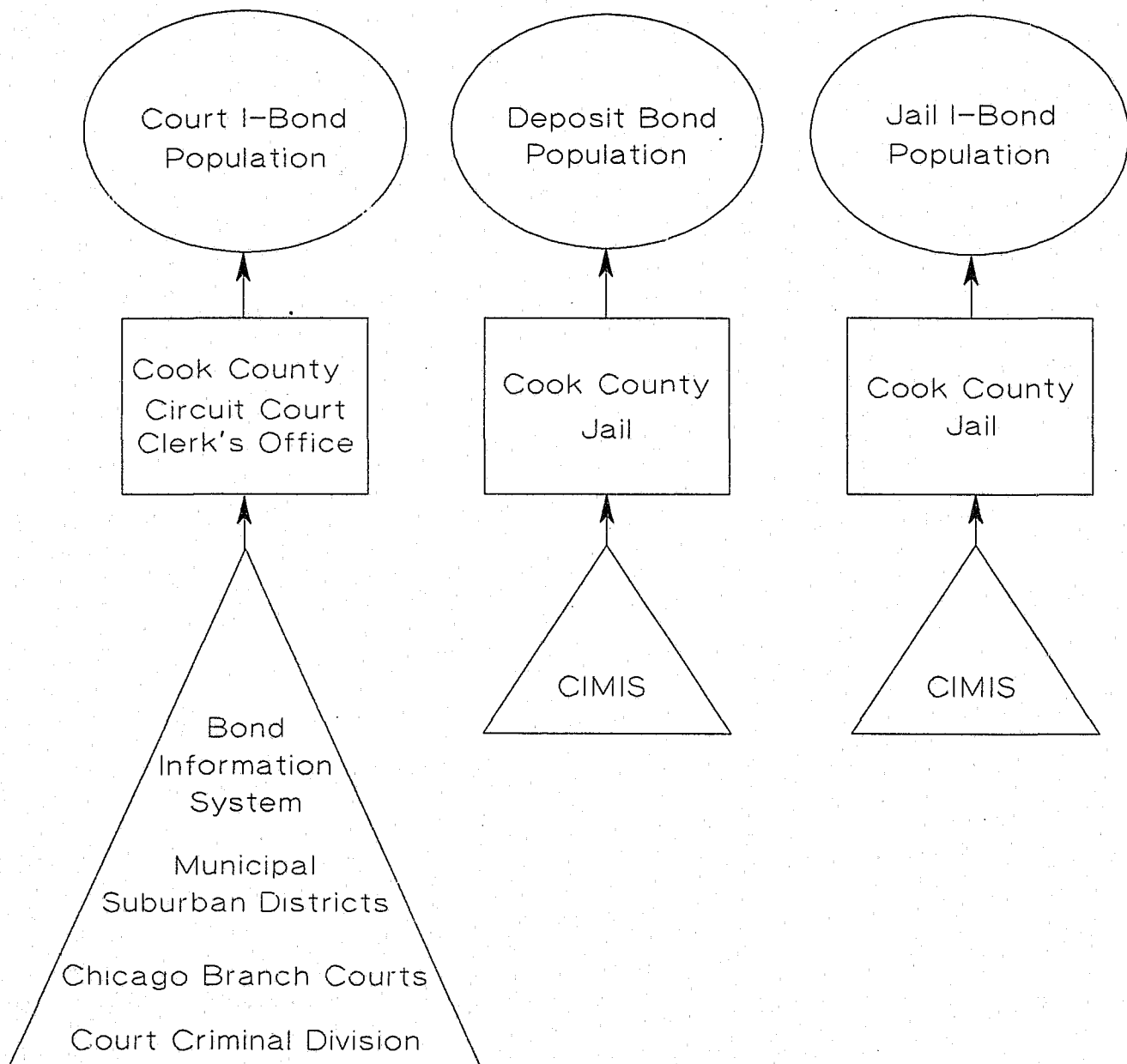
Contained within nearly all of the data sets maintained by the Cook County Circuit Court Clerk's Office and the Cook County Department of Corrections is the Individual Record (IR) number. The IR number, which is issued by the Chicago Police Department as an identification of the defendant's fingerprints, is the most reliable tracking variable available, because it is used by each component of the criminal justice system. However, IR numbers were not readily available across all of the court clerk's data systems used in collecting

Figure 3: Preliminary data providers & variables



Note: "CIB" refers to court I-bond, "JIB" refers to jail I-bond,
and "DB" refers to Deposit Bond

Figure 4: Preliminary identifying data sources



primary identifying information for this study. The municipal suburban district database, for example, did not contain IR numbers because IR numbers are specific to Chicago. As a result, a separate court database was accessed, using other tracking variables such as date of birth and name, to generate the needed IR numbers for cases outside Chicago.

Another important identifier, the court case number, is also contained in the data sets maintained by the Cook County Circuit Court Clerk's Office and the Cook County Department of Corrections. However, the court case numbers in the circuit court clerk's data sets containing preliminary identifying information and in the corrections data are both in a format that is not consistent with that used when tracking the releasee during the follow-up period. The court data set used to track follow-up activity has an 11-digit case number, while the preliminary data sources provide a 9-digit case number. In order to trace defendants through the court, it was necessary to insert additional numbers that transform the 9-digit case number into a usable format.

After the defendants were identified as members of either the jail I-bond, court I-bond, or deposit bond group, a sample was selected.

Finding comparable people released under different bond types

The second step in answering the research question was to select a sample that would provide adequate representation of defendants released on jail I-bonds and defendants released under other bond types who were otherwise comparable to jail I-bond defendants. Even though defendants released under jail-issued bonds and those released under court-issued bonds are not subjected to the same decision process, placing identical constraints as a selection criteria on each bond group yields an overall sample with fundamental similarities.

The Illinois Revised Statutes (ch. 38, par. 110-1 et seq.) define the legal requirements under which bond can be administered. Designed to ensure that people accused of a crime will appear for trial and later court proceedings, these bond requirements take two basic forms: bail bonds and recognizance bonds. Essentially, court-ordered bond release can be obtained in one of the following ways:

1. **Release on individual recognizance (court I-bond):** When the court is convinced that the accused will appear as required, the defendant is released on his or her own recognizance without having to deposit money, on the condition that he or she appears in court on the date set by the judge.

2. Deposit of bail security:

- a) *Deposit bond.* The defendant is released after depositing a sum of money equal to 10 percent of the bail, but not less than \$25. If the defendant is charged with a Class X felony under the Illinois Controlled Substances Act, the court may require the accused to deposit a sum equal to 100 percent of the bail (Ill.Rev.Stat., ch. 38, par. 110-7).
- b) *Stocks, bonds, and real estate as security for bail.* The defendant is released after depositing an amount, in stocks or bonds, equal to the required bail. Deposit of Illinois real estate worth double the amount of bail set in the bond also provides an acceptable means of release. This form of release is on the condition that the defendant appear in court on the set date (Ill.Rev.Stat., ch. 38, par. 110-8).

For both bail bonds and recognizance bonds, a money *obligation* is secured to the bond. (Although with court I-bonds, the defendant's promise to appear as required takes the place of an actual deposit.) It is discontinued later, at the end of the defendant's case, providing he or she complies with the terms of the bond release. In the event that the defendant fails to appear in court, the bail bond or recognizance bond is forfeited, and the defendant becomes liable in the stated bond amount. Failure to appear in court also may result in the issuance of a warrant for the arrest of the defendant on any of the above bonds.

Recognizance and bail bonds are the two court-issued forms of bond release available to defendants in Illinois. Defendants who are released on bail bond usually receive deposit bonds (*Trends and Issues 90*, p. 130, Devitt and Markovic, 1987, p. 5, *Illinois Judicial Conference 1980*, p. 28). Because deposit bonds are the most commonly issued bail bonds, theoretically, they should provide a representative group of people who are typically released on bond. Recognizance bond is the only other available court-issued bond option. Defendants released under these two types of court-issued bonds were the most logical choices for comparison to defendants released on jail I-bonds.

Making releasees comparable across bond types

Eligibility requirements for being included in the Pretrial Release Study sample were the following: released on a bond of \$50,000 or less, but not charged with a violent Class X felony, between September 13-30, 1988, and November 10 through December 31, 1988. Thus, although some releasees charged with a violent offense are included in the sample,

those charged with Class X violent offenses such as murder or criminal sexual assault are not included. Likewise, some people charged with Class X offenses, if they are nonviolent, are included. Because these eligibility requirements for jail I-bond release do not exist for court or deposit bond release, it was necessary to apply the same requirements to all three groups in order to make them comparable. In other words, to ensure comparability, the samples for the court I-bond and deposit bond groups had to be defined by the characteristics of the jail I-bond group.

The constraints placed on the release of defendants under the jail I-bond program have changed several times since the beginning of the program in March 1983 (Myrent, 1989). One consideration in conducting this study was to choose a time period when the constraints placed on jail I-bond release were constant. A second consideration was to choose a time period in which almost all of the defendants could be followed from pretrial release to final disposition. If the follow-up period had been too short, the most complex cases would have been systematically eliminated from the study. Taking both considerations into account, two time periods, September 13-30, 1988, and November 10 through December 31, 1988, were chosen. During these time periods, only those individuals with bond amounts not exceeding \$50,000, and who were not charged with a Class X violent offense, were released on jail I-bond.

In summary, the court I-bond and deposit bond groups chosen for comparison were released during the same time periods as the jail I-bond group, and also included only those who were not charged with a Class X violent offense and who had bond amounts not exceeding \$50,000.

Accounting for gender differences among released defendants

One goal of the Pretrial Release Study was to be able to draw conclusions about all of the bonded defendants in the represented population, including relatively rare groups, such as violent offenders or women. In addition to making the court I-bond and deposit bond groups comparable to the jail I-bond group, a representative sample was selected in order to provide enough information to draw conclusions about different types of offenses in relation to gender. Studies have indicated that the type and seriousness of offenses that women are charged with differ from those that men are charged with (Steury and Frank, 1990). Also, recidivism rates and recidivism by offense type differ by gender. Because the offense type plays a major role in determining the fate of the defendant as he or she is processed through the criminal justice system, the study also attempted to generate enough observations to accommodate even relatively rare categories.

Women consistently make up a small proportion of the pretrial population in Cook County, generally less than 10 percent (Devitt and Markovic, 1987, p. 35). Because of their small numbers in the pretrial population, some studies exclude women completely (Visser and Linster, 1990, p. 155). A pilot study initiated early in this project revealed that out of a total of 75 pretrial defendants (25 from each bond group: court I-bond, deposit bond, and jail I-bond), only five were women. In addition, because of the small numbers of female defendants, some offense types which are rare become even rarer for women. For example, of the 75 cases in the pilot study, 12 of the men and none of the women (across bond types) had been charged with a violent offense.

Offense rarity, coupled with a small number of women, led to the conclusion that in a random sample of the total pretrial population, women and violent offenders would appear in the sample so rarely that detailed analysis would not be possible. In response to this situation, the number of defendants sampled was increased well beyond the minimal number required for statistical representation of the whole group. The final sample included enough women and enough of the rare, but more serious, cases for a meaningful analysis.

Matching procedure

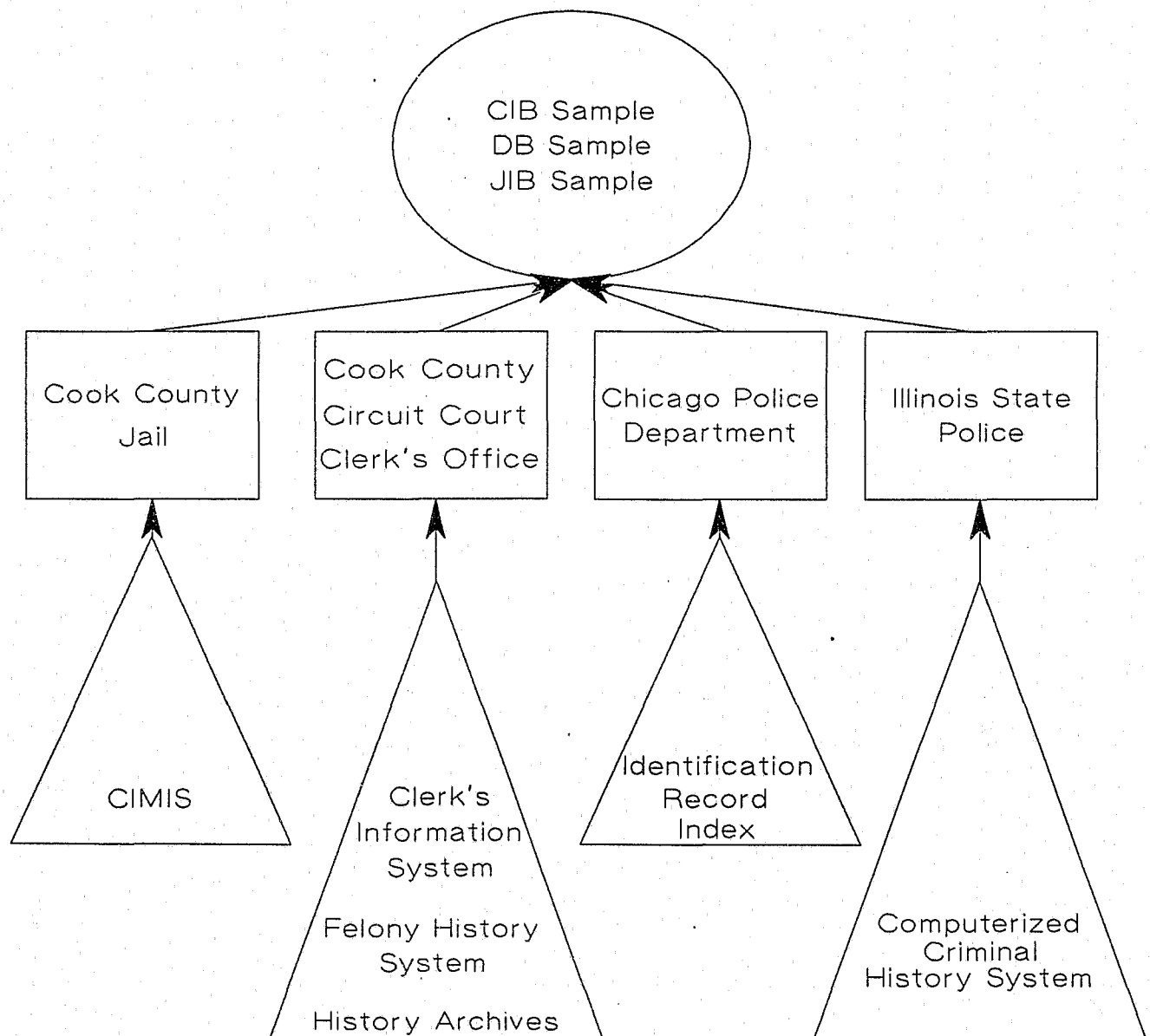
The primary information collected from the Cook County Circuit Court Clerk's Office and the Cook County Department of Corrections was used to identify and match defendants to activity occurring in the criminal justice system. In matching the defendants, a tracking process was initiated, and the defendants' activities were followed from one criminal justice component to another. To complete the task of tracking defendants through the criminal justice system, additional information describing in detail the defendants' pretrial activity had to be collected from different data sets in each criminal justice component (Figure 5).

The data collected for the sampled defendants consist of reincarceration records from the Cook County Jail, court activity records and final case disposition information from the Cook County Circuit Court Clerk's Office, local arrest history information (rap sheets) from the Chicago Police Department, and state arrest history information (rap sheets) from the Illinois State Police.

In summary, the following approach was taken to ensure the ability to compare data for defendants released on jail I-bond and those released on the two types of court bonds:

- ▶ Determine the existence of data in Cook County that would answer the research question.

Figure 5: Criminal justice components utilized in matching procedure



- ▶ Establish a reliable way to identify and track individuals throughout the Cook County criminal justice system in order to collect the information needed to compare the groups.
- ▶ Select a sample that would provide adequate representation of information needed to compare the bond groups, including important but relatively rare situations involving women and violent offenses.

IV. The sample, methods and data

Who is included in the study?

Defendants released under court I-bonds and deposit bonds were included in the study under the same constraints as defendants released on jail I-bonds. A complete list of defendants (names) released on jail I-bond, court I-bond, and deposit bond was supplied by the Cook County Circuit Court Clerk's Office and the Cook County Department of Corrections. Variables such as bond type, bond amount, release date, charge(s), and gender were used to place defendants in the appropriate bond group and to qualify defendants to be included in the study for possible inclusion in the sample. Those individuals who did not meet eligibility requirements (released on bonds of \$50,000 or less, but not charged with a Class X violent felony, between September 13-30, 1988, and November 10 through December 31, 1988) were eliminated from the study.

Keeping with the demands of the study design, the three bond groups (jail I-bond, court I-bond, and deposit bond) were further divided by gender. This division stratified the population into six groups: jail I-bond women, jail I-bond men, court I-bond women, court I-bond men, deposit bond women, and deposit bond men. A random sample was selected from each of these six strata. Figure 6 illustrates each sample's size and its proportion to the population from which it was taken. (For a detailed explanation of the sampling strategy, see "Sampling strategy" in Appendix A).

Because some of the groups were over-sampled to ensure that women and serious but rare offenses would be represented, it was necessary to "weight" the samples when the six subgroups were combined for analysis.

Figure 6: Sample size

Bond type/gender	Population size	Sample size	Percent of population	Weighting
Jail I-bond men	3,417	601	18	5.6855
Court I-bond men	1,450	577	40	2.5129
Deposit Bond men	442	442	100	1.0000
Jail I-bond women	187	187	100	1.0000
Court I-bond women	226	226	100	1.0000
Deposit Bond women	94	94	100	1.0000

The deposit bond men, deposit bond women, court I-bond women, and jail I-bond women were 100 percent samples, which means they represented their entire population stratum. The jail I-bond and court I-bond men were weighted when analyzed in combination with the other 100 percent samples. The jail I-bond weight factor for men was 5.6855, and the court I-bond weight factor for men was 2.5129.

With the sample selected, the next step was to collect the follow-up information, which provides the data necessary to compare the groups in terms of rearrests and failures to appear, and to identify any differences found in other factors. At this point in the research process, the complexities in case and defendant tracking, and in interpreting pretrial release activity, became most prevalent. Although the unit of analysis is the individual, each released defendant is capable of having multiple cases occurring simultaneously during the time frame established for the study. In an attempt to follow the sampled defendants through the court system, recording their pretrial behavior both in court and not in court while on bond, one court case is used as a tool around which court and releasee activity is contained and recorded.

Purpose of the qualifying case

Each case has a potential for high court activity, including multiple bond forfeitures, numerous continuances, and pretrial release activity such as bond status changes and rearrests. However, the qualifying case is the tool used to determine the time period within which the released defendant's activity is recorded. For example, if a released defendant had three cases occurring during the time frame of the study, but only one of them was for a felony offense with a bond amount of \$50,000 or less that was not a Class X violent offense, then this was the case which qualified the defendant for the study. When there were two cases which could have qualified a defendant for the study, the release dates were compared, and the one that occurred earlier within the time frame of the study became the qualifying case (see the discussion of dual status bond types in Appendix B, "Research methodology").

The qualifying case determines the beginning and the end of the follow-up period. Each person was followed from release on bond for the qualifying case to the final disposition date of that case (not including appeals). Follow-up information was recorded during the period of the qualifying case. Even though a defendant may have been charged in another case occurring before or after the qualifying case, only the case that qualified the individual for the study is used in the follow-up analysis to determine the time period for tracking and recording pretrial release activity.

Complexity of case tracking

Follow-up information recorded during the period of the qualifying case depicts the complexities involved when tracking a defendant's pretrial activity. For example, a defendant can be arrested for new offenses or violations,² be reincarcerated, and receive subsequent bonds.

A subsequent bond is a bond that is issued to a defendant after release on the original sample bond. Fifty-eight percent of the jail I-bond women did not receive a subsequent bond after release on their original bond, compared to 68 percent of the court I-bond women, and 78 percent of the deposit bond women (Figure 7). Forty-nine percent of the jail I-bond men did not receive subsequent bonds after release on their original bond, compared to 55 percent of the court I-bond men and 59 percent of the deposit bond men. Subsequent bonds

²Violations, as used in this report, include all types, including violations of probation, supervision, conditional discharge, or periodic imprisonment.

make tracking pretrial activity more difficult because each subsequent bond is associated with a new and entirely independent arrest. Each new arrest accounts for a new case with separate pretrial activity.

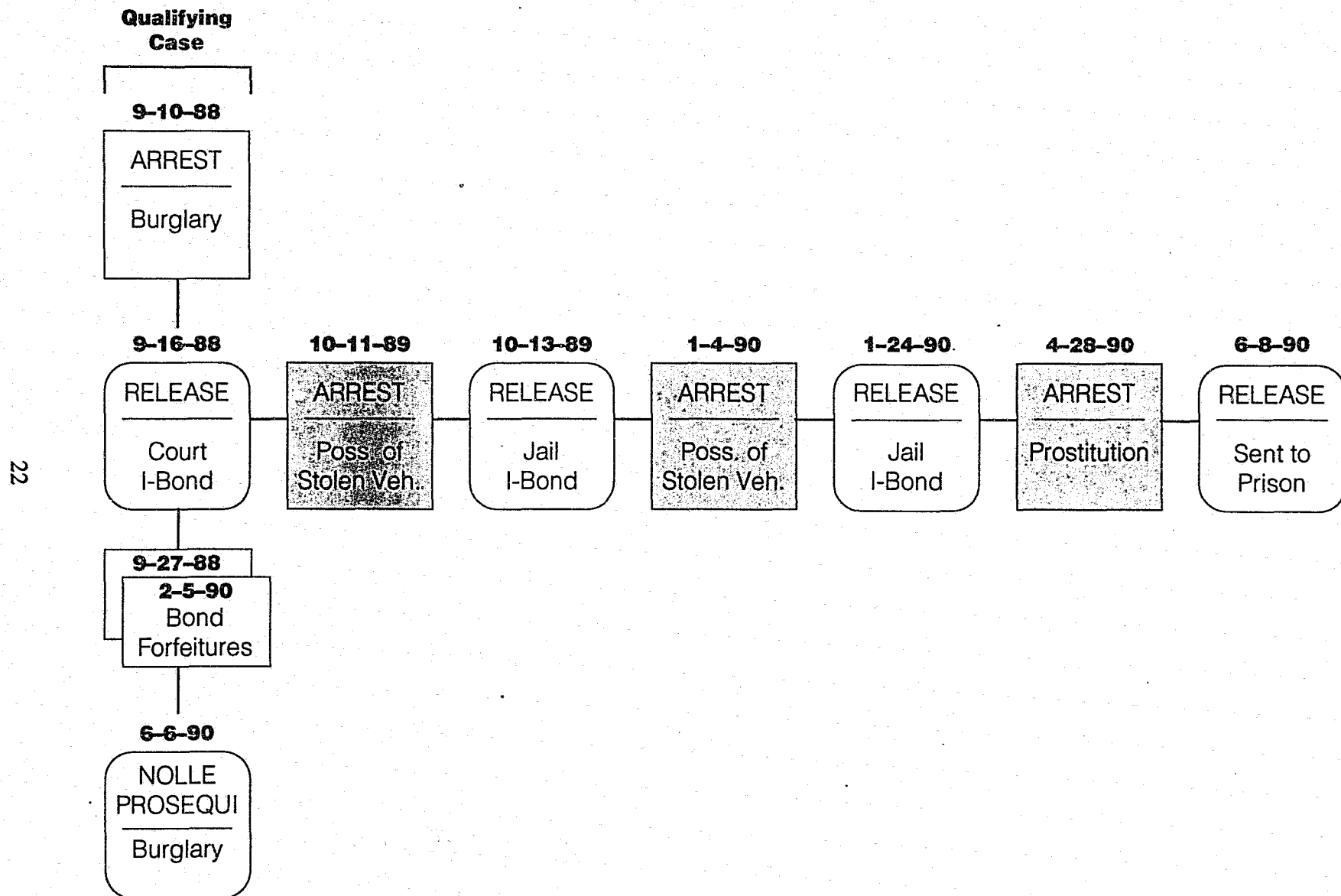
Figure 7: Defendants who received a subsequent bond, by type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
Yes	11.2%	7.5%	2.1%	12.0%	9.9%	8.8%
No	57.8%	68.1%	77.7%	49.3%	55.3%	59.3%
Missing	31.0%	24.3%	20.2%	38.8%	34.8%	31.9%
Total	100%	100%	100%	100%	100%	100%
N	187	226	94	601	577	442

The following case studies illustrate the complex nature of tracking a defendant from the date of release to the date of disposition while capturing additional activity that may occur while the qualifying case is being processed. The information presented vertically refers to the activity occurring in the qualifying case. The information presented horizontally describes defendant activity that occurred while the qualifying case was in progress. These case studies are not representative of the samples to which they belong; they are presented merely to show the complexities of defendant tracking.

The first case study involves a male offender who was arrested on September 10, 1988, for a burglary offense and released six days later on a court I-bond, marking his entrance into this study (Figure 8). After release, he failed to appear for a scheduled court date in the qualifying case, his bond was declared forfeited and a warrant was issued on September 27, 1988. On October 11, 1989, he was arrested for possession of a stolen vehicle and incarcerated in the county jail. Three days later, he was released on a jail I-bond. While out on the jail I-bond, he was again arrested for possession of a stolen vehicle on January 4, 1990, incarcerated, and released on January 24, 1990, on a second jail I-bond. While out on his second jail I-bond, he failed to appear on February 5, 1990, for another scheduled court

Figure 8: Case study event sequence court I-bond (male)

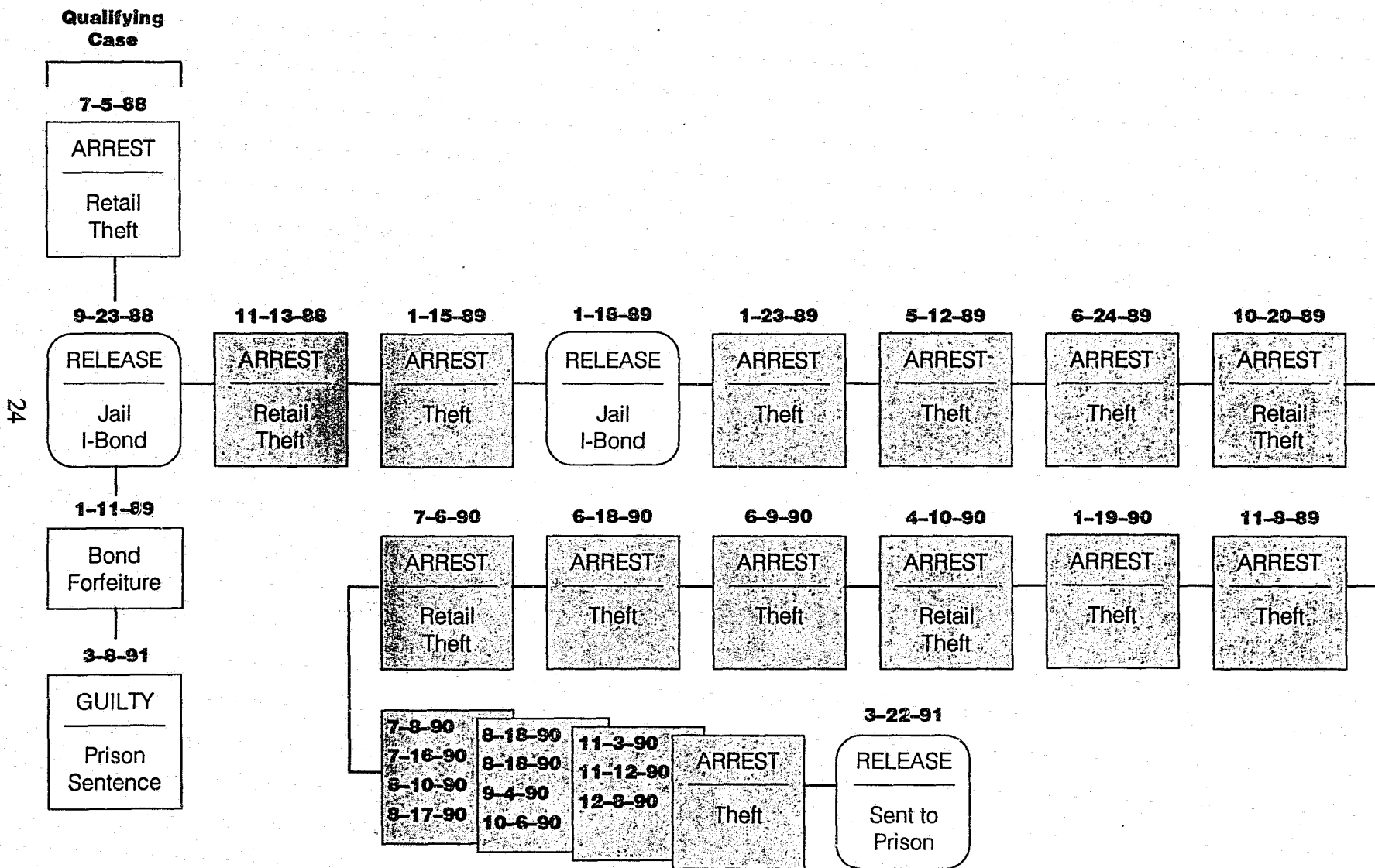


date in his qualifying case and received a second bond forfeiture. On April 28, 1990, he was arrested for prostitution and incarcerated. On June 6, 1990, his qualifying case ended in a nolle prosequi (a formal entry on the court record that indicates the prosecutor will not pursue the action against the defendant) on the burglary charge. Two days later, he was released from jail and sent to prison for a separate case.

The second case study (Figure 9) provides an example of the most complex kind of case. The defendant, released on a jail I-bond, was arrested 23 more times for 19 thefts and four retail thefts during the time of his qualifying case. He had one bond forfeiture in the qualifying case, and received one additional jail I-bond. All of this activity occurred within a follow-up period of two years and five months.

In summary, identifying releasees, collecting information describing them and their pretrial activity, and following their activity through the criminal justice system represent a very involved and complex procedure. The previous chapters describe the process by which this information is extracted and the complex nature of the data. With the sample determined and the approach to collecting the information established, the next step, explained in the following chapter, is to describe the characteristics of these pretrial releasees.

Figure 9: Case study event sequence, jail I-bond (male)



V. Characteristics of the six bond groups

In this chapter, demographic distributions and qualifying case activity are described and compared across the six bond groups. These characteristics are important not only for recognizing ways in which jail I-bond defendants differ from court I-bond defendants, but also for perceiving which characteristics may be influential factors in understanding rearrest and failure to appear.

Race/ethnicity, age, and gender

The proportion of total offenders arrested and released on bond in Cook County who are black has drastically increased since last reported in 1987 (Devitt and Markovic). That year, 51 percent of all released defendants, men and women, were black. What is alarming, and what makes the number of blacks arrested and released during this study irregular, is that blacks make-up far less than 50 percent of Cook County's population (about 39 percent, according to the 1990 U.S. Census).

The female bond groups did not differ significantly in the percentage of defendants who were black, white, or Latino ($t\text{-test} > .05$). Seventy-eight percent of the women released on jail I-bonds were black, compared to 80 percent of the deposit bond women and 71 percent of the court I-bond women (Figure 10).

In contrast, there were significant differences in the racial make-up of the male bond groups in the study (Figure 10). The jail I-bond male sample contained significantly more black men than the court I-bond or deposit bond samples ($t\text{-test} < .05$). Nearly 81 percent of the jail I-bond men were black, compared to 69 percent of the court I-bond men and 66 percent of the deposit bond men.³ Among male defendants, whites made-up significantly more of those released on deposit bonds (19 percent) than jail I-bonds (10 percent) or court I-bonds (11 percent; $t\text{-test} < .05$).

There were significantly more Latino male defendants released on jail I-bonds (9 percent),

³When controlling for cases where race/ethnicity is unknown--which are largest for the court I-bond samples (226-21=205 court I-bond women; 577-73=504 court I-bond men)--a re-calculation of the distribution of race categories shows that blacks account for 78 percent of the court I-bond female sample ($161 \div 205 = .785$), and 79 percent of the court I-bond male sample ($400 \div 504 = .793$).

court I-bonds (7 percent) and deposit bonds (14 percent) than there were Latino females (5 percent, 4 percent and 7 percent respectively; t-test <.05). There were significantly more black female defendants released on deposit bonds (80 percent) than black male defendants (66 percent; t-test <.05). And there were significantly more white male defendants released on deposit bonds (19 percent) than white female defendants (12 percent; t-test <.05).

Figure 10: Race/ethnicity and gender of released defendants, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
Black	78.1%	71.2%	79.8%	80.5%	69.3%	65.6%
White	15.0%	15.0%	11.7%	9.8%	11.1%	19.2%
Latino	4.8%	3.5%	7.4%	9.0%	6.8%	13.8%
Asian	0.5%	0.9%	0.0%	0.2%	0.0%	0.0%
Native American	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%
Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Unknown	1.6%	9.3%	1.1%	0.3%	12.8%	1.1%
Total	100%	100%	100%	100.0%	100%	100%
N	187	226	94	601	577	442

The great majority of the releasees in each of the sampled bond groups were under the age of 36 (Figure 11). On average, jail I-bond women do not differ in age from court I-bond and deposit bond women (t-test >.05). Similarly, jail I-bond men do not differ in mean age from court I-bond and deposit bond men (t-test >.05). However, the women in this sample are generally older than the men, with average ages for each bond category higher for women (t-test <.05).

Figure 11: Age of released defendants, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
15 to 20	15.0%	15.9%	18.1%	23.5%	26.9%	21.9%
21 to 25	19.8%	17.3%	22.3%	26.1%	20.3%	28.7%
26 to 30	26.2%	17.7%	14.9%	21.5%	14.9%	19.0%
31 to 35	23.5%	20.8%	21.3%	13.8%	10.9%	15.8%
36 and Over	14.4%	18.1%	22.3%	14.6%	14.7%	14.0%
Missing	1.1%	10.2%	1.1%	0.5%	12.3%	0.5%
Total	100%	100%	100%	100%	100%	100%
N	187	226	94	601	577	442
Mean	28.8	29.5	29.5	27.1	26.7	27.2

Prior Criminal History

In addition to demographic information about the released defendants, some measure of prior criminal behavior is necessary as a possible explanation of failure to appear or rearrest activity in the future (Figure 12).

The female bond groups did not differ significantly in the percent previously arrested (t-test $> .05$). When the defendants with missing arrest history information are not considered, 79 percent of the court I-bond women had prior arrests, and this difference is also statistically insignificant.⁴

⁴All t-tests in this report were calculated without the missing data.

Figure 12: Defendants previously arrested, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
Yes	81.3%	58.8%	74.5%	93.3%	68.6%	90.0%
No	15.0%	16.4%	10.6%	3.7%	15.9%	5.7%
Missing	3.7%	24.8%	14.9%	3.0%	15.4%	4.3%
Total	100%	100%	100%	100%	100%	100%
N	187	226	94	601	577	442

Almost all of the men in the jail I-bond and deposit bond samples had been previously arrested, and there were no significant differences in the percent previously arrested between men in these two bond groups ($t\text{-test} > .05$). However, there was a significant difference ($p < .05$) in prior arrests between jail I-bond and court I-bond men. Fewer than 69 percent of the court I-bond men had prior arrests, compared to more than 93 percent of the jail I-bond men. Controlling for the missing data in the court I-bond male group reveals that 81 percent of the court I-bond men were previously arrested; and this percentage is also significant.

Jail I-bond men were significantly more likely to have been previously arrested than jail I-bond women ($t\text{-test} < .05$). Among the other two bond groups differences between men and women were not significant.

In summary, the demographic characteristics of these sampled defendants released under very different procedures are surprisingly similar. For example, there is a disproportionately high number of blacks in not only the jail I-bond groups but also in each of the court-issued groups, regardless of gender. Although the women are older than the men, the age distribution for the jail I-bond groups is basically the same as that for the court-issued bond groups. And even though there was a significant difference between jail I-bond and court I-bond men in the percent previously arrested, the difference was small (93 percent of jail I-bond men were previously arrested, compared to 81 percent, excluding unknowns, of court I-bond men).

VI. Qualifying case analysis

The following tables describe the characteristics of the qualifying case (see page 20 for a description of the qualifying case), and the differences found between the jail I-bond groups and the court-issued bond groups. This comparative analysis is especially useful when addressing issues of criminal justice system workload and judicial decision making.

For all of the sampled bond groups, both male and female, drug offenses were the most common type of offense in the qualifying case (Figure 13). Jail I-bond women were charged more often with drug offenses than deposit bond women (t-test $<.05$). Jail I-bond women were also charged more often with property offenses, but less often with public order⁵ or probation violation offenses, than the court I-bond and deposit bond women (t-test $<.05$). Deposit bond women were not only charged more often with violent offenses than jail I-bond women (t-test $<.05$), but the difference was substantial (6 percent compared to 15 percent).

Jail I-bond men were charged more often with drug offenses than deposit bond men, but less often than court I-bond men (t-test $<.05$). Although the jail I-bond men were more often charged with violent offenses than court I-bond men, the difference is not large. However, when comparing jail I-bond men to deposit bond men, the deposit bond men were not only charged significantly more often with violent offenses (t-test $<.05$), but the difference was substantial (8 percent compared to 23 percent). Jail I-bond men were charged less often with probation violations and more often with property offenses than deposit and court I-bond men (t-test $<.05$).

The qualifying case of the deposit bond men and women was more likely to include a violent offense than the other two bond types. The jail I-bond men were charged more often with public order offenses than the jail I-bond women (t-test $<.05$). However, there were no significant differences between court I-bond and deposit bond men and women in the most serious offense charged in the qualifying case (t-test $>.05$).

⁵See "Offense Codebook", Appendix D, for a description of all offenses.

Figure 13: Most serious offense in qualifying case, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
Violent	6.4%	3.5%	14.9%	8.2%	3.3%	23.1%
Property	30.5%	19.0%	24.5%	32.4%	21.3%	16.5%
Drug Off.	58.3%	65.5%	42.6%	53.7%	63.6%	38.5%
Sex Off.	1.6%	0.9%	3.2%	0.2%	0.0%	1.1%
Public Order	0.0%	2.2%	5.3%	1.2%	1.4%	5.0%
Probation Violation	3.2%	8.8%	9.6%	4.3%	10.4%	15.2%
Missing	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%
Total	100%	100%	100%	100.0%	100%	100%
N	187	226	94	601	577	442

The bond amount accompanying a defendant's release is a reflection of judicial decisions regarding the possible effects of pretrial release on public safety and the likelihood that the defendant might fail to appear. Those defendants thought to be at a higher risk for both events should have higher bond amounts (Figure 14).

On average, jail I-bond men and women had significantly higher bond amounts than court I-bond men and women (t -test $< .05$). On the other hand, there were no significant differences in bond amounts between jail I-bond men and women and deposit bond men and women (t -test $> .05$).

Figure 14: Bond amounts, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
Up to \$2,500	18.7%	26.5%	12.8%	11.0%	30.2%	11.8%
\$2,501 to \$5,000	31.0%	30.1%	30.9%	24.6%	28.4%	24.9%
\$5,001 to \$10,000	20.3%	30.5%	26.6%	23.3%	25.7%	20.8%
\$10,001 to \$49,999	29.9%	12.4%	25.5%	40.8%	14.7%	36.0%
Missing	0.0%	0.4%	4.3%	0.3%	1.0%	6.6%
Total	100%	100%	100%	100%	100%	100%
N	187	226	94	601	577	442
Mean	\$11,845	\$7,602	\$11,350	\$14,884	\$8,268	\$14,175

Jail I-bond men and deposit bond men had higher average bond amounts than the women in those two bond groups (t-test $< .05$), although there were no significant differences in the average bond amounts between court I-bond men and women (t-test $> .05$). More court I-bond men and women receive bonds of \$2,500 or less, compared to deposit bond and jail I-bond men and women. It is clear from this analysis that jail I-bond and deposit bond men and women are considered at higher risk for failure than court I-bond men and women.

The number of court dates throughout the duration of the qualifying case can be used as a measure of court workload. Logically, as the number of court dates increases so does the demand on court resources (Figure 15). On average, jail I-bond women and men had more court dates than court I-bond women and men (t-test $< .05$). While there were no significant differences in the average number of court dates between jail I-bond women (7.3) and deposit bond women (7.5), the jail I-bond men averaged fewer court dates than the deposit bond men (t-test $< .05$).

Figure 15: Number of court dates throughout the duration of the qualifying case, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
Up to 2	17.6%	29.2%	27.7%	15.5%	29.1%	17.9%
3 to 5	31.6%	30.1%	20.2%	21.6%	25.1%	15.6%
6 to 10	21.9%	24.8%	29.8%	26.0%	19.4%	24.4%
11 to 14	16.6%	9.3%	9.6%	17.3%	10.9%	14.5%
15 +	9.6%	6.2%	10.6%	19.6%	15.3%	24.2%
Missing	2.7%	0.4%	2.1%	0.0%	0.2%	3.4%
Total	100%	100%	100%	100%	100%	100%
N	187	226	94	601	577	442
Mean	7.3	6.0	7.5	9.3	7.3	10.3

The men in each bond group averaged significantly more court dates than their female counterparts (t-test $< .05$). The jail I-bond men had an average of 9.3 court dates compared to 7.3 for jail I-bond women. The court I-bond men had an average of 7.3 court dates compared to 6 for court I-bond women, and the deposit bond men had an average of 10.3 court dates compared to 7.5 for deposit bond women. Based on this, it appears that generally, men are using more of the court's resources than women, and that court I-bond released defendants use fewer court resources than deposit and jail I-bond groups.

An additional measure of court workload is the number of continuances issued in a defendant's case. As the number of continuances increases so does the amount of court resources used. Figure 16 includes the distribution of all continuances issued in the defendants' qualifying cases, except those requested by the defense.⁶

⁶In this analysis only the number of continuances (including state and court-ordered continuances) are analyzed. Because continuances by the defense can delay the prosecution of the case, these are analyzed separately (see Figure 17).

Figure 16: Number of continuances, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
0	11.2%	4.9%	16.0%	8.0%	4.0%	12.2%
1	29.4%	37.2%	22.3%	22.1%	36.4%	11.3%
2 to 3	24.6%	27.0%	17.0%	20.8%	23.2%	14.9%
4 to 5	9.1%	14.6%	12.8%	15.1%	9.2%	12.0%
6 to 10	16.6%	11.1%	19.1%	19.6%	14.2%	20.6%
11 to 15	4.8%	3.1%	2.1%	7.8%	8.8%	13.6%
16 to 20	2.7%	1.8%	3.2%	4.7%	2.8%	5.4%
21 and Over	0.0%	0.4%	5.3%	1.8%	1.2%	6.6%
Missing	1.6%	0.0%	2.1%	0.0%	0.2%	3.4%
Total	100%	100%	100%	100%	100%	100%
N	187	226	94	601	577	442
Mean	3.7	3.3	5.0	5.2	4.3	7.1

Note: This figure does not include continuances requested by the defense (see Figure 17).

There are no significant differences among the women in the three bond groups in the average number of continuances in the qualifying case (t-test $< .05$). Among the men, jail I-bond defendants averaged more continuances than the court I-bond men but fewer continuances than the deposit bond men.

While men averaged significantly more continuances than women (t-test $< .05$), the deposit bond releasees, men and women, averaged the highest number of continuances. This suggests that, again, male defendants are using proportionally more of the court's resources than female defendants, and that the deposit bond groups are using more resources than the

court I-bond and jail I-bond groups.

Figure 17 presents the number of continuances requested by the defense in defendants' qualifying cases. Under Illinois law, a defendant must be brought to trial within 160 days after being released on bond, unless delays are caused by the defense (Ill.Rev.Stat., ch. 38, par. 103-5). An increase in the number of continuances requested by the defense increases the length of the case, which in turn increases the workload and the resources used by the court system. Most of the people in each of the six bond groups had no continuances by the defense. Seventy-four percent of the jail I-bond women, 72 percent of the court I-bond women, and 64 percent of the deposit bond women had no continuances by the defense. Sixty-nine percent of the jail I-bond men, 69 percent of the court I-bond men, and 53 percent of the deposit bond men had no continuances by the defense.

Figure 17: Number of continuances requested by the defense in the qualifying case, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
None	74.3%	72.1%	64.9%	69.1%	69.3%	53.8%
1	18.7%	20.4%	16.0%	16.5%	16.3%	19.2%
2 to 3	4.8%	6.2%	10.6%	11.0%	9.5%	14.9%
4 to 5	0.0%	1.3%	3.2%	2.3%	2.6%	4.3%
6 to 10	0.5%	0.0%	3.2%	0.8%	1.7%	3.6%
11 and Over	0.0%	0.0%	0.0%	0.3%	0.3%	0.7%
Missing	1.6%	0.0%	2.1%	0.0%	0.2%	3.4%
Total	100%	100%	100%	100%	100%	100%
N	187	226	94	601	577	442
Mean	0.3	0.4	1.7	1.3	1.6	1.1

On average, the deposit bond groups, both men and women, had more continuances by the defense than the jail I-bond men and women (t-test $<.05$). There were no significant differences between the jail I-bond groups, both men and women, and the court I-bond groups in the average number of continuances by the defense.

Jail I-bond and court I-bond men had more continuances by the defense than their female counterparts (t-test $<.05$). However, there were no significant differences between deposit bond women and men in the number of continuances by the defense (t-test $>.05$). This analysis suggests that court resources are not being substantially taxed by the defense in requests for continuances.

There were proportionally more women than men in each bond category who were not convicted in their qualifying case. Sixty percent of the jail I-bond females, 66 percent of the court I-bond females, and 53 percent of the deposit bond females were not convicted of the offense(s) charged in their qualifying cases (Figure 18). Nearly two-thirds of the court I-bond men were not convicted (64 percent), although a majority of the jail I-bond and deposit bond men were convicted in their qualifying cases.

Figure 18: Qualifying case convictions, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
No	60.4%	66.4%	53.2%	45.4%	64.3%	44.6%
Yes	38.0%	33.6%	45.7%	54.2%	35.4%	51.8%
Missing	1.6%	0.0%	1.1%	0.3%	0.3%	3.6%
Total	100%	100%	100%	100%	100%	100%
N	187	226	94	601	577	442

Among women who were convicted, there were no significant differences between the jail I-bond and the two court-issued bond groups in the percent convicted (t-test $>.05$). Jail I-bond men, on the other hand, were convicted significantly more often than court I-bond men (t-test $<.05$), although there were no differences in the percent convicted between jail I-

bond men and deposit bond men (t-test $>.05$).

In addition, there were no significant differences between court I-bond and deposit bond men and women in the percent convicted (t-test $>.05$). However, the jail I-bond men were convicted more often than the jail I-bond women (t-test $<.05$).

Although most of the people in each bond group who were convicted in their qualifying case were sentenced to probation, a substantial number of jail I-bond men and deposit bond men were sentenced to prison: 25 percent of the jail I-bond men and 19 percent of the deposit bond men (Figure 19).

While there were no significant differences between jail I-bond and deposit bond women in the percent sentenced to prison (t-test $>.05$), jail I-bond women were sentenced to prison more than court I-bond women (t-test $<.05$). Jail I-bond men were sentenced to prison more often than both court and deposit bond men. There were no significant differences between the jail I-bond groups and the court-issued bond groups, for both males and females, in the percent sentenced to jail (t-test $>.05$). There were also no differences between the jail I-bond groups and the court-issued bond groups in the percent sentenced to probation (t-test $>.05$).

In summary, the activity occurring in the qualifying case provides a basic indication of how the releasee is perceived by the court system, which releasees use more of the court's resources and account for increased workloads, and what ultimate decisions are made by the court as the releasee reaches the end of his or her case. The most common offense charged to the released defendants in this sample was a drug crime. Jail I-bond and deposit bond men and women are considered at higher risk for failure than court I-bond men and women because of the higher bond amounts associated with their bond release. In terms of increased use of court resources and workload, as measured by both higher numbers of court dates and continuances, men use proportionally more of the courts resources than women. Jail I-bond and deposit bond groups use more court resources because of their higher numbers of court dates than court I-bond groups. On the other hand, deposit bond groups, both men and women, use more of the court's resources because of their higher numbers of continuances than the other bond groups.

Figure 19: Sentence on the qualifying case, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
Prison	8.6%	1.8%	7.4%	24.6%	5.2%	19.2%
Jail	4.8%	2.7%	6.4%	5.3%	5.0%	6.1%
Probation	25.7%	22.6%	29.8%	25.8%	23.1%	28.7%
Supervision	1.1%	3.5%	4.3%	0.3%	3.1%	0.5%
Fine	1.1%	4.4%	4.3%	3.0%	3.3%	6.6%
Court Cost	1.1%	1.3%	1.1%	1.3%	1.6%	0.7%
Restitution	1.6%	4.0%	2.1%	1.7%	2.4%	1.4%
Community Service	3.2%	2.2%	2.1%	1.3%	1.0%	1.8%
Conditional Discharge	2.1%	1.3%	2.1%	1.7%	1.4%	3%
Work Release	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Drug Testing	0.0%	0.0%	0.0%	0.0%	0.5%	0.2%
Drug Program	0.0%	0.0%	0.0%	0.7%	0.5%	0.7%
Work Program	0.5%	0.0%	0.0%	0.0%	0.2%	0.2%
Intensive Probation	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%
Psychological Counseling	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%
No Contact w/ Plaintiff	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%
Periodic Imprisonment	1.1%	0.4%	1.1%	0.7%	0.9%	1.8%
Home Confinement	1.1%	0.4%	1.1%	0.0%	0.3%	0.7%
Missing	1.6%	0.0%	1.1%	1.3%	0.2%	0.5%

Total	*	*	*	*	*	*
N	72	68	41	322	192	222
Not convicted	115	158	53	279	385	220
Total N	187	226	94	601	557	442
Combination	22	32	15	74	75	72

* Note that these are combination variables and will not add up to 100%.

VII. Comparison of pretrial release activity

This chapter describes the differences in pretrial activity of the released defendants during the prosecution of the qualifying case. The two major types of activity examined are failure to appear (as measured by whether or not the releasee forfeited bond) and arrests for new charges. Often, these two types of behavior are related. For example, an arrest for a new charge may lead to bond forfeiture.

Failure to appear

Failure to appear is measured by whether or not a released defendant had a bond declared as forfeited during the time frame of the qualifying case. When a defendant does not appear for a scheduled court date, the judge will declare the defendant's bond forfeited and a warrant may be issued that day or at any time following the declaration of bond forfeiture. This is an important outcome measurement of bond failure.

Another measurement of failure to appear is the number of bond forfeiture "judgments." A judgment is entered on the defendant's court docket--making the defendant liable for the bond amount forfeited--if he or she fails to appear before the court within 30 days of the declared bond forfeiture. If a defendant, or a representative for the defendant, convinces the judge that the failure to appear was not willful or could not be helped, the judge will vacate the declared bond forfeiture and quash any warrant. However, there is no definitive way of measuring whether a defendant willfully failed to appear.

Jail I-bond men and women were more likely to have at least one bond declared forfeited during the prosecution of their qualifying cases than either deposit bond or court I-bond men and women (t-test $< .05$, Figure 20).

There were no significant differences between women and men in each bond group in the percent who had at least one bond declared forfeited (t-test $> .05$). This analysis suggests that defendants released on jail I-bonds, regardless of gender, are more likely to fail than those released on court-issued bonds.

Figure 20: Bond forfeitures declared, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
Yes	54.0%	31.4%	21.3%	51.7%	34.0%	30.1%
No	44.4%	68.6%	77.7%	47.9%	66.0%	67.6%
Missing	1.6%	0.0%	1.1%	0.3%	0.0%	2.3%
Total	100%	100%	100%	100%	100%	100%
N	187	226	94	601	577	442

Most of the defendants in each bond group had no bond forfeiture *judgments* (Figure 21). Sixty percent of the jail I-bond men, 76 percent of the court I-bond men, and 78 percent of the deposit bond men had no bond forfeiture judgments. Similarly, 60 percent of the jail I-bond women, 77 percent of the court I-bond women and 81 percent of the deposit bond women had no bond forfeiture judgments.

Jail I-bond men and women averaged more judgments of bond forfeitures than deposit bond and court I-bond men and women (t-test $<.05$). There were no significant differences between the men and women in each bond group, in the average number of bond forfeiture judgments (t-test $<.05$). Not only are jail I-bond men and women more likely to have at least one bond forfeiture declared (see Figure 20), they are also more likely to receive a bond forfeiture judgment (and be liable for the forfeited bond amount) than the other releasees.

In measuring failure to appear, it is first important to distinguish those who are more likely to fail from those who are not by determining whether or not the releasee had at least one bond forfeiture. In analyzing the percentage of releasees who had bond forfeiture judgments entered on their records, a more specific measure of failure to appear is applied.

Figure 21: Bond forfeiture judgments, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
0	59.9%	77.0%	80.9%	59.6%	75.7%	78.3%
1	25.1%	16.4%	13.8%	25.1%	14.9%	13.3%
2	2.7%	3.5%	1.1%	4.0%	2.4%	0.7%
3	0.5%	0.4%	0.0%	0.3%	0.5%	0.2%
4	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Unknown*	9.6%	2.7%	3.2%	10.6%	6.4%	4.3%
Missing**	1.6%	0.0%	1.1%	0.3%	0.0%	2.3%
Total	100%	100%	100%	100%	100%	100%
N	187	226	94	601	577	442
Mean	0.4	0.2	0.2	0.4	0.2	0.2

* Unknown applies to defendants who had a bond forfeiture but the outcome of the bond forfeiture is unknown.

** Missing applies to those defendants with missing bond forfeiture information.

The second step (or tier) in analyzing failure asks a different question and focuses exclusively on those who did fail to appear. The question is no longer just who failed, but of those who did, what is the rate at which they failed? In other words, how many times, within 100 days after release on bond, did they have bond forfeitures declared for failing to appear. This second-level analysis has implications on court workload, in that those releasees who have more bond forfeitures increase the court's workload and tap more of its resources.

Figure 22: Bond forfeitures declared per 100 days of release, by bond type

bond forfeitures per 100 days	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
.01-.19	5.1%	14.1%	10.5%	10.3%	11.3%	15.9%
.20-.24	4.0	5.6	0.0	5.8	9.3	8.7
.25-.29	1.0	11.3	0.0	5.8	6.7	9.5
.30-.39	7.1	9.8	0.0	13.6	10.3	19.1
.40-.49	11.1	5.7	26.3	14.5	4.2	15.1
.50-.69	12.1	8.4	15.8	11.6	18.0	8.7
.70-.89	10.1	14.1	5.3	12.6	14.9	10.3
.90-1.24	14.1	9.9	15.8	9.0	14.0	5.6
1.25-1.99	23.3	18.3	21.0	11.3	7.7	4.7
2.00 +	12.1	2.8	5.3	5.5	3.6	2.4
N	9	71	19	310	194	126
No Bond Forfeitures	83	155	73	286	378	296
Missing Data	5	0	2	5	5	20
Total N	187	226	94	601	577	442
Mean	1.18	0.74	0.91	0.79	0.69	0.54

Of the releasees who had at least one bond forfeiture, jail I-bond men had significantly higher rates of bond forfeitures per 100 days than deposit bond men (Figure 22), but did not have significantly different bond forfeiture rates per 100 days from court I-bond men (t-test $< .05$). Six percent of the jail I-bond men had two or more forfeitures declared per 100 days, compared to just 2 percent of the deposit bond men. Jail I-bond women also had a higher rate of bond forfeitures than the court and deposit bond women (t-test $< .05$). For example,

12 percent of the jail I-bond women had two or more bond forfeitures declared per 100 days, compared to 3 percent of the court I-bond females and 5 percent of the deposit bond females.

Interestingly, jail I-bond and deposit bond women had higher rates of bond forfeitures per 100 days than jail I-bond and deposit bond men (t -test $<.05$). Twelve percent of the jail I-bond women, compared to 5.5 percent of the jail I-bond men, had two or more bond forfeitures declared in 100 days. Five percent of the deposit bond women, compared to 2 percent of the deposit bond men, had two or more forfeitures in 100 days after release on bond.

In summary, a two-tiered approach is needed to analyze failure to appear. An initial distinction must be made between those who fail and those who don't, singling out releasees who are more likely not to fail. This analysis discovered that defendants released on jail I-bonds are more likely than the other bond groups to have at least one bond forfeiture declared and to receive a judgment of bond forfeiture for failing to appear in court (see Figures 20 and 21).

At the second level of analysis, the *frequency* at which a group of defendants forfeit their bonds within 100 days of release must be examined. The focus here is on those who fail, and the increase in court workload they cause. This second-level analysis revealed that jail I-bond women have rates of bond forfeiture higher than not only their female counterparts but also higher than men in all three bond groups. In addition, deposit bond women have higher rates of bond forfeiture than deposit bond men. While jail I-bond men have higher rates of forfeiture than deposit bond men, court I-bond men fail at basically the same rate as jail I-bond men (t -test $>.05$). On average, jail I-bond men have bond forfeiture rates of .79 per 100 days on release compared to .69 for court I-bond men. Based on this level of analysis some groups are using more of the court's resources and increasing court workload more than other groups. For example, jail I-bond and deposit bond women are using proportionally more court resources than jail I-bond and deposit bond men. And jail I-bond and court I-bond men are using court resources at about the same rate, with jail I-bond men using proportionally more than deposit bond men.

Recidivism

Recidivism in this study was measured by whether or not the defendant was arrested for a new crime after release on bond, during the time frame of the qualifying case. Fewer than half of the defendants in each bond group, and across gender categories, were arrested for

a new crime while out on bond (Figure 23).

Figure 23: Defendants arrested for a new crime, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-Bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
Yes	33.7%	18.6%	17.0%	47.1%	32.6%	38.9%
No	63.1%	70.8%	77.7%	51.6%	60.3%	57.9%
Missing	3.2%	10.6%	5.3%	1.3%	7.1%	3.2%
Total	100%	100%	100%	100%	100%	100%
N	187	226	94	601	577	442

The jail I-bond groups, both women and men, were arrested for a new crime significantly more often than the court-issued bond groups (t-test $<.05$). In all three bond groups men were arrested significantly more often than their female counterparts (t-test $<.05$). This is the first level in the analysis of failure; measured by whether or not a releasee was arrested for a new crime while out on bond. By separating those who were not arrested from those who were, it is clear that the majority of the releasees in each bond category were not rearrested after bond release for a new crime, although nearly half of the jail I-bond men, 47 percent, were rearrested.

The second level, or tier, of this analysis focuses on the extent of criminal activity among those who were rearrested for a new crime. Figure 24 presents by bond type and gender, the distribution of subsequent arrests among those defendants who were arrested for a new crime while out on bond.

The female bond groups did not significantly differ from one another in the number of arrests for new crimes (t-test $>.05$), nor did the male bond groups. Within each bond group, there were also no significant differences between men and women in the number of arrests for new crimes (t-test $>.05$). This observation suggests that once a person recidivates their pretrial behavior becomes similar, regardless of the type of bond they were originally released under.

Figure 24: Number of arrests for new crimes, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
1	54.0%	50.0%	50.0%	47.4%	54.37%	51.2%
2	14.3%	21.4%	31.3%	22.6%	20.2%	22.1%
3	14.3%	7.1%	18.8%	15.6%	12.8%	11.6
4	4.8%	4.8%	0.0%	6.0%	7.5%	7.6%
5	4.8%	4.8%	0.0%	3.5%	1.0%	4.1%
6	3.2%	2.3%	0.0%	1.8%	1.1%	0.0%
7	1.6%	0.0%	0.0%	1.1%	2.1%	0.0%
8	0.0%	9.5%	0.0%	0.0%	0.0%	1.2%
9	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%
10 +	3.2%	0.0%	0.0%	2.1%	1.1%	1.7%
Total	100%	100%	100%	100%	100%	100%
N	63	42	16	283	188	172
Missing	6	24	5	8	41	14
No Rearrests	118	160	73	310	348	256
Mean	2.35	2.48	1.69	2.29	2.07	2.21

Again focusing just on those who were rearrested at least once for a new crime, Figure 25 shows the differences between the three groups regarding the type of new crime the defendants were rearrested for (see Appendix D for the specific offenses included in each category).

Figure 25: Type of offense involved in rearrest for a new crime, of people rearrested at least once.

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
Violent	14.3%	14.3%	6.3%	25.8%	27.7%	39.0%
Property	54.0%	69.0%	56.3%	53.4%	44.7%	45.9%
Drug Off.	28.6%	28.6%	37.5%	45.7%	47.3%	42.4%
Sex Off.	11.1%	2.4%	0.0%	1.4%	2.1%	0.0%
Public Order	28.6%	19.0%	12.5%	10.3%	12.8%	14.0%
Unknown	1.6%	0.0%	0.0%	0.4%	1.6%	0.6%
N	63	42	16	282	288	172
Missing	6	24	5	8	41	16
Not Rearrested	118	160	73	310	348	254
Total N	187	226	94	601	577	442

Note: Columns add up to more than 100 percent because the first five offenses of the releasee were considered. For example, if the releasee was arrested for a violent offense three times and a property offense twice, he or she is counted once as having at least one violent offense, and once as having at least one property offense.

Of those rearrested at least once, there were very few differences across bond groups in the type of crime. For women, the differences between jail I-bond releasees and court I-bond releasees were not significant ($t\text{-test} > .05$). The only differences in the type of offense that were significant were between the jail I-bond and deposit bond women, with the jail I-bond women more likely to be arrested for a sexual offense.

Among men, there were no significant differences in the type of offense between jail I-bond

releasees and court I-bond releasees. However, jail I-bond men were less likely to be arrested for a violent offense than deposit bond men (t-test <.05).

For those releasees who were arrested for a new crime, Figure 26 shows the percent who were rearrested at least once for a felony offense.

Figure 26: Percent rearrested at least once for a felony offense, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-Bond	Deposit Bond
Yes	52.4%	45.2%	62.5%	66.8%	60.0%	68.0%
No	23.8%	12.8%	6.3	13.1%	18.0%	8.7%
Unknown	23.8%	38.5%	31.5	19.9%	22.0%	23.3%
Total	100%	100%	100%	100%	100%	100%
N	63	42	16	283	188	172
Missing	6	24	5	10	46	16
Not Rearrested	118	160	73	308	343	254
Total N	187	226	94	601	577	442

The female bond groups did not significantly differ from one another in the percent rearrested at least once for a felony offense (t-test >.05), nor did the male bond groups. Within the court-issued bond groups, there were no significant differences between men and women in the percent rearrested at least once for a felony offense (t-test >.05). However, in the jail I-bond groups, a significantly larger percentage of men than women were rearrested at least once for a felony (t-test <.05).

The two-tiered approach used to analyze failure to appear was also applied in analyzing recidivism. Up to this point, those who recidivated were separated out from those who did not, and a more focused analysis was conducted on those who did recidivate (see Figures 23 and 24). In Figure 27, the rate at which releasees recidivate as a group (within 100 days) is illustrated. As with failure to appear, the speed at which a group of releasees fails is an

indication of that group's effect on the system. Recidivism not only affects workload and court resources, but it also has an impact on public safety (particularly when the new arrests involve serious violent or property offenses).

Figure 27: Rearrest rates per 100 days of release, by bond type

Rearrests per 100 days	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
.01-.24	12.7%	16.7%	6.3%	10.7%	10.7%	15.5%
.25-.49	15.9	23.8	37.5	22.5	23.5	30.3
.50-.74	6.3	14.3	0.0	19.3	17.7	18.5
.75-.99	14.3	7.1	31.2	12.5	6.9	9.5
1.00-1.49	19.1	7.1	18.8	12.5	10.7	11.9
1.50-1.99	14.2	12.0	6.2	8.2	10.7	8.9
2.00-2.49	6.4	11.9	0.0	3.9	6.4	3.0
2.50-4.99	6.3	4.7	0.0	8.6	10.7	1.2
5.00-9.99	1.6	2.4	0.0	1.4	2.2	1.2
10.00 +	3.2	0.0	0.0	0.4	0.5	0.0
N	63	42	15	280	187	168
No Rearrest	116	160	72	311	343	250
Missing Data	8	24	7	10	47	24
Total N	187	226	94	601	577	442
Mean	1.77	1.12	0.78	1.12	1.27	0.79

Of releasees who were rearrested at least once, jail I-bond women were rearrested more often than deposit bond women (t-test <.05), an average of 1.8 times per 100 release days, compared to 0.8 for deposit bond women. There were no significant differences in the rate of rearrest between jail I-bond and court I-bond women (t-test >.05). Jail I-bond men were

rearrested more often than deposit bond men (t-test $<.05$), but not more often than court I-bond men (t-test $>.05$). There were no significant differences in the rate of rearrest per 100 days between men and women of the same bond group (t-test $>.05$).

The great majority of deposit bond men and women who were rearrested had fewer than 1.5 rearrests per 100 days. Only 6 percent of the deposit bond women and 14 percent of the deposit bond men had more. In contrast, 32 percent of the jail I-bond women and 31 percent of the court I-bond women had at least 1.5 arrests per 100 days, while 5 percent of the jail I-bond women had at least 5 arrests per 100 days. Among men, 23 percent of the jail I-bond group and nearly 31 percent of the court I-bond group had at least 1.5 arrests per 100 days, 2 percent of the jail I-bond and three percent of the court I-bond group had at least 5 rearrests.

This analysis suggests that once releasees recidivate, even though they were released under very different conditions, they exhibit behavior that is strikingly similar. For example, throughout the description of the bond groups, their court case outcomes, and pretrial behavior, we have seen that the jail I-bond groups have fared more than the court-issued bond groups. We have also seen that while court I-bond groups generally fared better than the jail I-bond groups, the court I-bond groups' pretrial behavior, such as percentage arrested for a new crime, was significantly different from the jail I-bond groups but this difference was small. In many instances, jail I-bond and deposit bond behavioral outcomes were not significantly different. Focusing on the rate at which they recidivate (see Figure 27) indicates that when court I-bond groups recidivate they do so as often as jail I-bond groups. In other words the court I-bond recidivists have the same impact on the resources and workload of the criminal justice system as the jail I-bond recidivists. On the other hand, deposit bond men and women recidivate at a much slower rate, and in terms of workload and resources, have a smaller impact on the criminal justice system.

Reincarceration is an additional measurement of failure. Figure 28 compares reincarceration failure during the length of the qualifying case for jail I-bond and court-issued bond groups. The majority of the defendants in each bond group were not reincarcerated after bond release, although more than a third of jail I-bond men were.⁷

⁷ Reincarceration occurs when a released defendant is incarcerated at the Cook County Jail after original bond release and during the qualifying case.

Figure 28: Reincarceration, by bond type

	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
Yes	24.6%	15.5%	10.6%	36.4%	24.1%	25.8%
No	61.0%	69.5%	81.9%	63.6%	60.5%	64.5%
Missing	14.4%	15.0%	7.4%	0.0%	15.4%	9.7%
Total	100%	100%	100%	100%	100%	100%
N	187	226	94	601	577	442

The jail I-bond groups, both women and men, were reincarcerated more than the court I-bond and deposit bond groups (t-test $< .05$). While there was no significant difference in the percent reincarcerated between jail I-bond women and men (t-test $> .05$), court I-bond and deposit bond men were reincarcerated more than court and deposit bond women (t-test $< .05$).

Analyzing recidivism at two separate levels produces different results. This study for example found that the majority of people in each bond group were *not* rearrested for a new crime, but that the jail I-bond group was more likely to recidivate than the court issued bond groups. Once releasees recidivate, regardless of their bond type, their behavior becomes strikingly similar. For example, there were few differences among the bond groups in the average number of offenses they were arrested for while out on bond. When considering the rate, or frequency, at which different bond groups recidivate, jail I-bond and court I-bond groups were found to be similar, while the deposit bond groups recidivated less frequently.

VIII. Time at risk and pretrial failure

The previous chapter measured pretrial failure by analyzing failure to appear, rearrest and reincarceration rates. Another way to measure pretrial failure is to measure pretrial success or the length of time during which a defendant on pretrial release is *not* rearrested or does *not* fail to appear in court (survival analysis). If the defendant's qualifying case is disposed of without one of these failures, the defendant is said to have survived.

Follow-up period

Studies have shown that time at risk is a good indicator of pretrial failure (Clarke and Saxon, 1987). Time at risk is defined as the time from the defendant's release on bond until his or her case is disposed of, or until he or she fails to appear in court or is arrested for a new crime which ever comes first. Knowing the length of time between release and case disposition (the follow-up period) provides basic information needed to measure time at risk. Defendants with a longer follow-up period are theoretically expected to recidivate or fail to appear in greater numbers than those with shorter follow-up periods (Clarke and Saxon, 1987, p. 19).

Figure 29 shows that among women there were no significant differences among the three bond groups in the length of time between release and case disposition (t-test $>.05$). However, jail I-bond men had significantly longer follow-up periods than court I-bond men (t-test, $<.05$), but significantly shorter follow-up periods than deposit bond men (t-test $<.05$). The average number of days from release on bond to disposition date for the jail I-bond men was 237 days compared to 197 days for the court I-bond men and 271 days for deposit bond men.

The jail I-bond and deposit bond men had significantly longer follow-up periods than their female counterparts (t-test, $<.05$). The average number of days from release on bond to disposition date for the jail I-bond men was 237 days compared to 179 days for jail I-bond women, and 271 days for the deposit bond men compared to 186 days for the deposit bond women.

Understanding that the length of the follow-up period for each bond group varies aids in our understanding of their likelihood of failing. Those defendants with longer follow-up periods have more time to fail than those with shorter follow-up periods. As a result jail I-bond and deposit bond men are at greatest risk for failure because they tend to have longer

periods of time in which to recidivate or fail to appear.

Figure 29: Length of the follow-up period, by bond type

DAYS	WOMEN			MEN		
	Jail I-bond	Court I-bond	Deposit Bond	Jail I-bond	Court I-bond	Deposit Bond
Up to 30	15.3%	9.7%	22.6%	11.2%	8.2%	11.8%
31-60	20.8%	29.2%	16.1%	13.9%	31.3%	8.8%
61-90	11.4%	9.8%	8.6%	7.2%	4.3%	6.7%
91-120	7.1%	10.1%	6.5%	7.0%	6.6%	6.3%
121-150	8.2%	3.1%	3.2%	5.7%	7.0%	5.4%
151-210	7.1%	11.6%	14.0%	11.1%	8.3%	9.1%
211-300	10.4%	7.9%	10.7%	14.1%	10.0%	13.8%
301-390	6.0%	7.5%	5.4%	9.9%	7.3%	12.1%
391-540	7.7%	4.0%	3.2%	11.0%	10.2%	11.8%
541 +	6.0%	7.1%	9.7%	8.9%	6.8%	14.2%
Total	100%	100%	100%	100%	100%	100%
N	183	226	93	596	572	422
Missing	4	0	1	3	2	19
Mean	178.4	174.1	186.1	236.8	197.2	270.1

Survival analysis

Looking only at the number of bonds declared forfeited or bond forfeiture judgments, and not how soon after release these events occurred, obscures the complete picture of pretrial failure. All defendants who had at least one bond forfeiture cannot be lumped into one

group and treated equally. One person may forfeit bond one month after release while another defendant may forfeit after five months. In the first case, the person did not appear for court proceedings within one month after release, while in the second case, the person did not fail to appear in court until five months after release. The preceding analyses, showed that jail I-bond defendants were more likely than other defendants to have a bond declared forfeited or receive a judgment of bond forfeiture. However, to determine whether or not jail I-bond defendants also had declarations of bond forfeiture or bond forfeiture judgments entered more quickly than defendants in other bond groups, a technique called survival analysis was used.

Survival analysis is a methodology that has been developed and applied mainly in medical and engineering research. By using rates over time, the rapidity with which "terminal events" or "failures" occur for a given population or group is analyzed (*The Pace of Recidivism in Illinois, 1986*). In this study, one of the ways in which "failure" was measured was by whether or not a defendant received a judgment of bond forfeiture. The first bond forfeiture judgment was determined to be the "terminating event" for the person. Next "survival rate", or the percentage of people who did not receive a bond forfeiture judgment within a given length of time after release on bond, were analyzed.

Time-at-risk analysis is a stepping stone to the understanding of survival analysis. The first look at time at risk determined if there were differences in the length of the follow-up periods among bond groups (see Figure 29). In Figure 30, the length of the follow-up period is used in the survival analysis calculations for all releasees in the study.

The "number entering" column in Figure 30 shows the total number of defendants still at risk or "surviving", at the beginning of each weekly interval for their release. (Note that the number entering week 1 is 2,094 and not the full sample size of 2,127. This is because 33 people had missing dates of release and were not included.) The "number withdrawing" column represents those people whose cases were disposed of, along with the few who died or for whom court data were cut off. The "number terminating" column shows the number of people who failed--who had a judgment entered on their first bond forfeiture. Once defendants have either withdrawn or terminated, they are no longer at risk of receiving their first bond forfeiture. As a result, they are subtracted from the number entering for the next week. For example, of the 2,094 defendants entering the first week, 33 withdrew and 73 were terminated leaving 1,988 who were still at risk entering week 2.

The "number at risk" column in Figure 30 consists of those defendants who are at risk of having a bond forfeiture. It is calculated by dividing the number withdrawing from that week

Figure 30: Survival analysis table: bond forfeiture

WEEKS	DAYS	NUMBER ENTERING	NUMBER WITH-DRAWING	NUMBER AT RISK	NUMBER TERMINATING	PROPORTION TERMINATING	PROPORTION SURVIVING	CUMULATIVE PROPORTION SURVIVING
1	0	2094	33	2077.5	73	0.0351	0.9649	0.9649
2	7	1988	37	1969.5	39	0.0198	0.9802	0.9458
3	14	1912	55	1884.5	61	0.0324	0.9676	0.9151
4	21	1796	63	1764.5	87	0.0493	0.9507	0.8700
5	28	1646	54	1619.0	47	0.0290	0.9710	0.8448
6	35	1545	62	1514.0	45	0.0297	0.9703	0.8197
7	42	1438	80	1398.0	41	0.0293	0.9707	0.7956
8	49	1317	125	1254.5	55	0.0438	0.9562	0.7607
9	56	1137	90	1092.0	52	0.0476	0.9524	0.7245
10	63	995	19	985.5	24	0.0244	0.9756	0.7069
11	70	952	17	943.5	25	0.0265	0.9735	0.6881
12	77	910	19	900.5	19	0.0211	0.9789	0.6736
13	84	872	15	864.5	13	0.0150	0.9850	0.6635
14	91	844	15	836.5	14	0.0167	0.9833	0.6524
15	98	815	21	804.5	10	0.0124	0.9876	0.6443
16	105	784	15	776.5	15	0.0193	0.9807	0.6318
17	112	754	21	743.5	12	0.0161	0.9839	0.6216
18	119	721	23	709.5	13	0.0183	0.9817	0.6102
19	126	685	21	674.5	7	0.0104	0.9896	0.6039
20	133	657	15	649.5	12	0.0185	0.9815	0.5927
21	140	630	7	626.5	9	0.0144	0.9856	0.5842
22	147	614	16	606.0	7	0.0116	0.9884	0.5775
23	154	591	19	581.5	11	0.0189	0.9811	0.5666
24	161	561	18	552.0	8	0.0145	0.9855	0.5584
25	168	535	13	528.5	6	0.0114	0.9886	0.5520
26	175	516	11	510.5	3	0.0059	0.9941	0.5488
27	182	502	7	498.5	10	0.0201	0.9799	0.5378
28	189	485	13	478.5	4	0.0084	0.9916	0.5333
29	196	468	12	462.0	6	0.0130	0.9870	0.5263
30	203	450	14	443.0	1	0.0023	0.9977	0.5251
31	210	435	14	428.0	4	0.0093	0.9907	0.5202
32	217	417	5	414.5	2	0.0048	0.9952	0.5177
33	224	410	14	403.0	6	0.0149	0.9851	0.5100
34	231	390	8	386.0	4	0.0104	0.9896	0.5047
35	238	378	3	378.5	1	0.0027	0.9973	0.5034
36	245	374	12	368.0	4	0.0109	0.9891	0.4979
37	252	358	10	353.0	6	0.0170	0.9830	0.4895
38	259	342	12	336.0	2	0.0060	0.9940	0.4865
39	266	328	9	323.5	5	0.0155	0.9845	0.4790
40	273	314	10	309.0	3	0.0097	0.9903	0.4744
41	280	301	6	298.0	1	0.0034	0.9966	0.4728
42	287	294	3	292.5	4	0.0137	0.9863	0.4663
43	294	287	8	283.0	4	0.0141	0.9859	0.4597
44	301	275	12	269.0	2	0.0074	0.9926	0.4563
45	308	261	8	257.0	3	0.0117	0.9883	0.4510
46	315	250	7	246.5	0	0.0000	1.0000	0.4510
47	322	243	4	241.0	4	0.0166	0.9834	0.4435
48	329	235	3	233.5	3	0.0128	0.9872	0.4378
49	336	229	6	226.0	4	0.0177	0.9823	0.4301
50	343	219	4	217.0	2	0.0092	0.9908	0.4261
51	350	213	5	210.5	2	0.0095	0.9905	0.4220
52	357	206	10	201.0	1	0.0050	0.9950	0.4199

by two, and subtracting that from the number entering. (Dividing by two assumes that the people were at risk for half of the week before they withdrew). The "proportion terminating" column is calculated by dividing the number terminating by the number at risk. The "proportion surviving" column is calculated by subtracting the proportion terminating from 1. The final column "cumulative proportion surviving" is calculated by multiplying the previous cumulative proportion surviving by the proportion surviving. The cumulative proportion surviving is the number which is ultimately used in the survival analysis.

For defendants released on different bond types, the period from release on bond to the first bond forfeiture differs. For each person in the pretrial sample, the number of days from date of release to date of first bond forfeiture was calculated. Figure 31 presents the cumulative proportion surviving for each week after release for each bond group. By the eighth week after release, 64 percent of the men released under a jail I-bond had not had a bond forfeiture, compared to 83 percent of the court I-bond men, and 89 percent of the deposit bond men. In other words, among the men 36 percent of the jail I-bond group, 17 percent of the court I-bond group and 11 percent of the deposit bond group had a bond forfeiture by the end of eight weeks. By the end of 52 weeks, only 29 percent of the jail I-bond men had still not had a bond forfeiture, compared to 42 percent of the court I-bond men and 58 percent of deposit bond men. Thus, the risk of having a bond forfeiture, and having it declared relatively soon after release, on bond, is greatest for defendants released on jail I-bonds. Lower survival rates among the jail I-bond group which includes men and women, are found in every time period after release (Figure 32).

The overall pattern of failure to appear, measured in length of time since release, can be summarized in the survival score.⁸ The mean survival score for the jail I-bond defendants, males and females combined, was 302 days less than the overall average for the total group; court I-bond defendants' score was 114 days more; and deposit bond defendants' score was 277 days more (Figure 33). When comparing any one group to the overall average, jail I-bond to court I-bond, or jail I-bond to deposit bond were significantly different (Lee-Desu .05 significance level).

⁸ A survival score is calculated for each observation by comparing its survival time to that of all other observations. The score starts at zero and is incremented by one for each observation whose survival time is known to be lower and decremented by one for each observation whose time is known to be greater. (SPSS-X Users Guide 1988.)

Figure 31: Failure to appear survival analysis, by gender and bond type

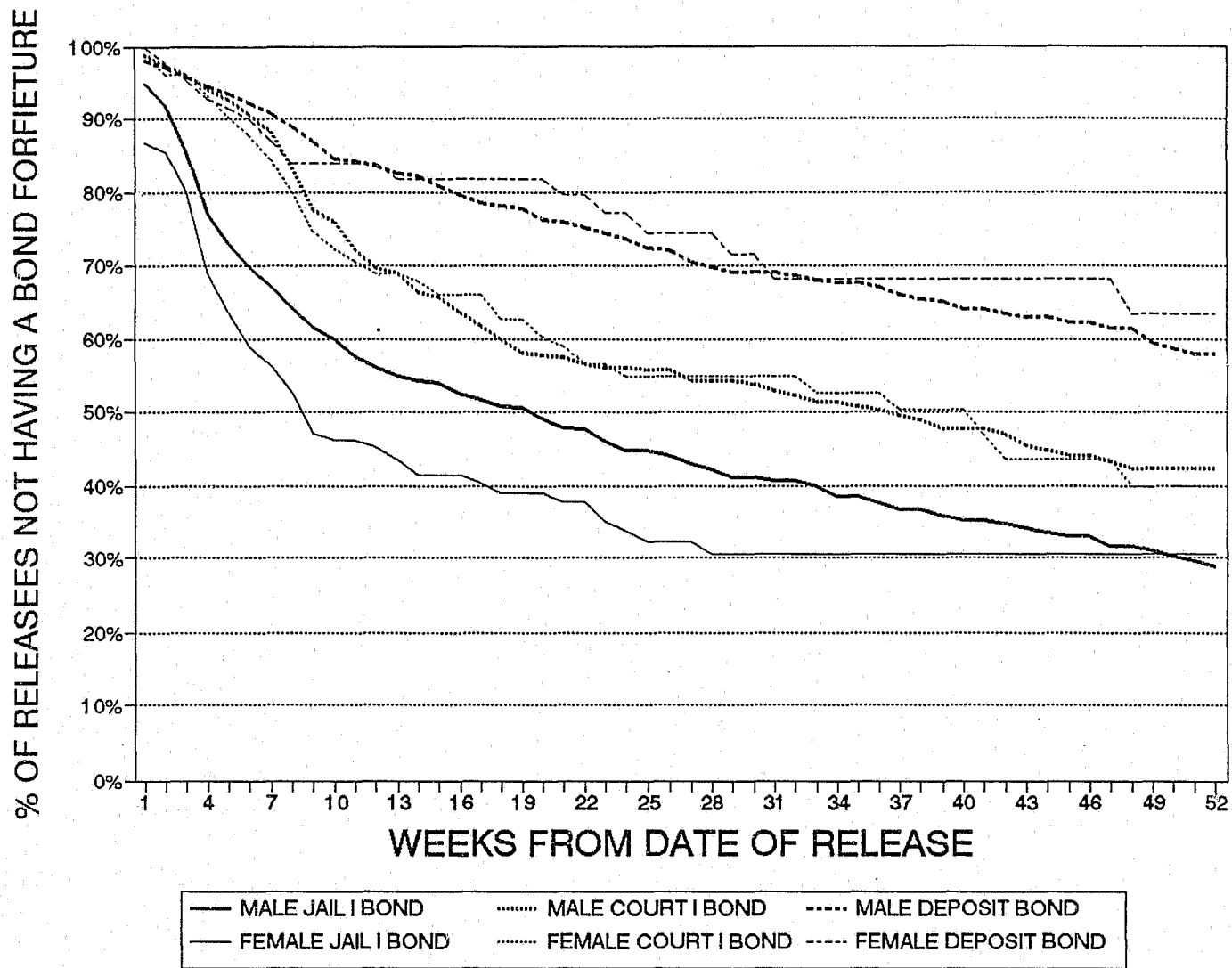


Figure 32: Failure to appear survival analysis, by bond type

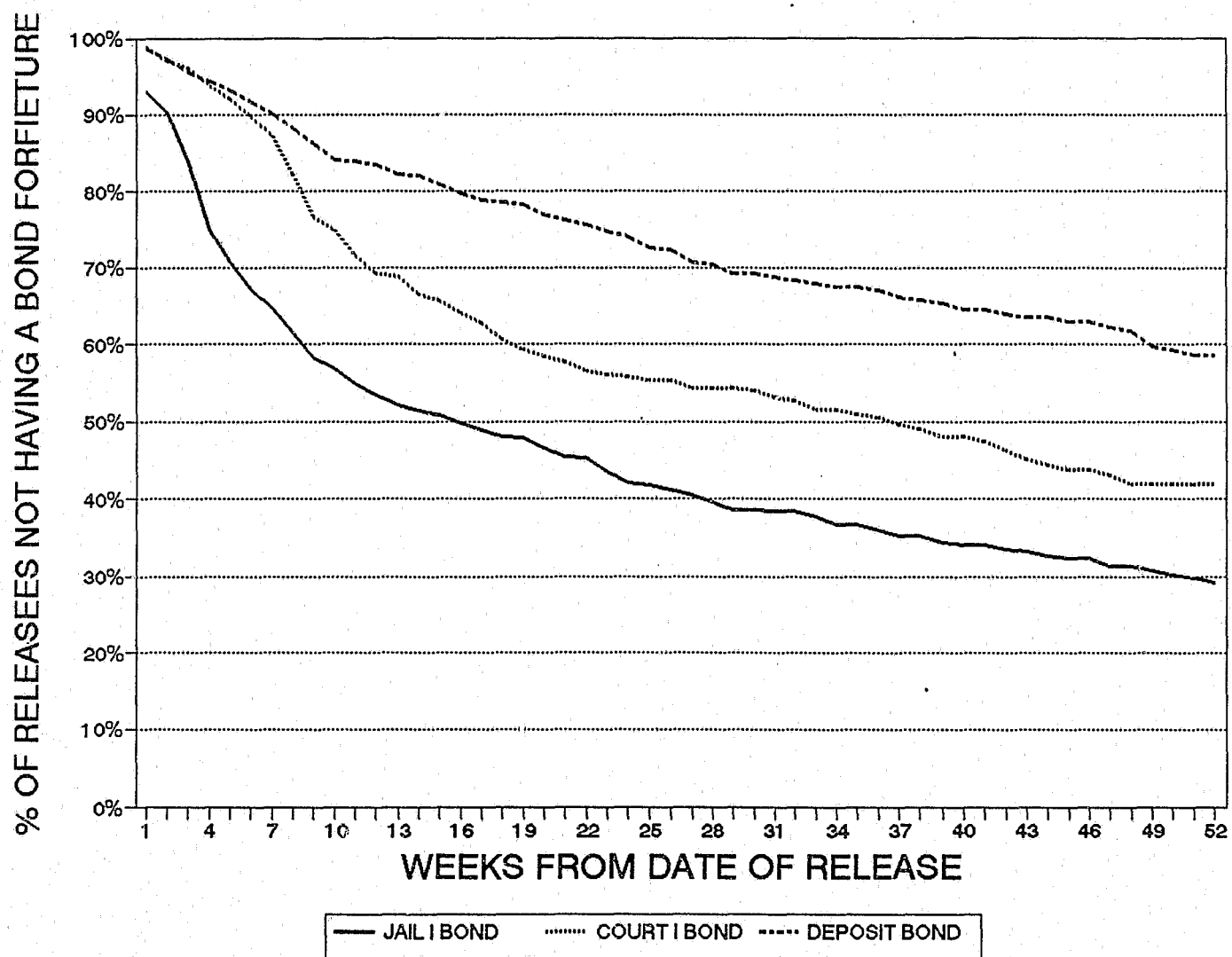


Figure 33: Mean survival scores, (failure to appear, bond forfeiture)
by bond type

BOND TYPE	TOTAL	MALE	FEMALE
Jail I-bond	-302.40	-212.70	-91.17
Court I-bond	114.40	72.08	43.53
Deposit bond	276.98	200.54	72.53

The differences between genders were significant only in the jail I-bond group, where the survival rate for women was much lower than for men for almost the entire time period (Figure 33). There were only slight differences between men and women in the court I-bond and deposit bond groups.

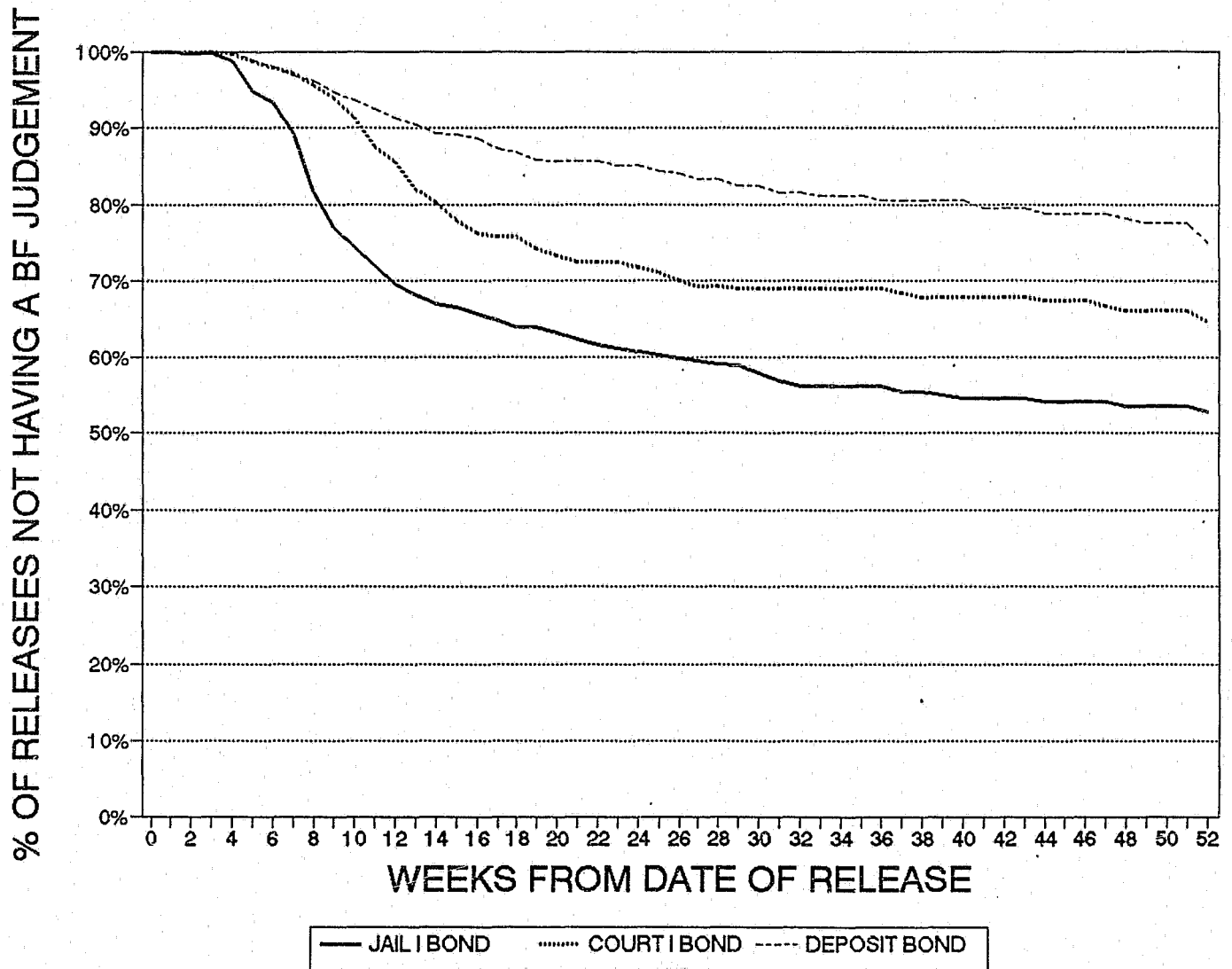
Looking at the survival scores for men and women separately, reveals that the patterns do not change for any of the three bond groups (Lee-Desu .05 significant level). For each gender, the survival score for jail I-bond was the lowest compared to the overall average (Lee-Desu .05 significance level).

Bond forfeiture judgment

Another way of applying survival analysis to failure to appear is to use bond forfeiture judgments rather than bonds declared as forfeited as the terminating event. For defendants released on different bond types, the period from release to bond forfeiture judgment differs. For each person in the pretrial sample, the number of days from date of release to date of first bond forfeiture judgment was calculated. (See the previous section for explanation of the methodology used.) By the eighth week after release, 89 percent of those released under a jail I-bond had not had a bond forfeiture judgment, compared to 97 percent of the court I-bond group, and 97 percent of the deposit bond group (Figure 34). In other words, 11 percent of the jail I-bond group, and 3 percent each of the court I-bond and deposit bond groups had a bond forfeiture judgment by eight weeks. By the end of (52 weeks), 53 percent of the jail I-bond group had still not had a bond forfeiture judgment, compared to 66 percent of the court I-bond group and 77 percent of the deposit bond group. As with bond forfeitures declared, the risk of receiving a bond forfeiture judgment is greatest for a jail I-bond defendant, within almost every time period after release.

The mean survival score for the jail I-bond defendants, men and women combined, was 144

Figure 34: Bond forfeiture judgment survival analysis, by bond type



days less than the overall average for the total group. For court I-bond defendants, it was 42 days more, and for deposit bond defendants almost 144 days more. The differences when comparing any one group to the overall average, jail I-bond to court I-bond, or jail I-bond to deposit bond, were significantly different (Lee-Desu .05 significance level).

Figure 35: Mean survival scores, (failure to appear, bond forfeiture judgment by bond type

BOND TYPE	TOTAL	MALE	FEMALE
Jail I-bond	-143.71	-116.44	-27.98
Court I-bond	40.90	35.74	9.26
Deposit bond	143.71	106.94	30.46

Although women tended to have bond forfeiture judgments sooner than men, these differences were not significant (Lee-Desu .05 significant level). In addition, the patterns do not change for any of the groups when men and women are analyzed separately. For each gender, the survival score for jail I-bond defendant was the lowest when compared to the overall average (Lee-Desu .05 significance level).

IX. Understanding pretrial failure through multivariate analysis

Multivariate analysis--looking at variables in relation to one another--provides a better understanding of pretrial failure and addresses many questions left unanswered by simpler bivariate data comparisons. For example, knowing that jail I-bond men are more likely to be rearrested than court I-bond men for crimes committed while free on bond is certainly important information. But, the difference between these arrest patterns could be due to many factors. For example, if people receiving jail I-bonds are more likely to have a prior arrest record, and if a prior arrest record is related to the likelihood of rearrest, then an apparent difference between the performance of jail I-bond and court I-bond defendants may have, in reality, nothing to do with the actual bond type. Therefore, it is important to determine what factors, other than bond type, influence the chances that a defendant will be rearrested for a new crime or fail to appear for a scheduled court date. To answer these more complex questions, all of the releasee's pretrial behavior needs to be taken into account at the same time. This is where multivariate analysis is needed.

Conditions influencing pretrial behavior are not limited to the defendant's interaction with the criminal justice system, but are also a result of factors such as economic and employment status, and family life characteristics (marital status, single family home, etc). Unfortunately, in this study, we are limited to basic demographic factors such as race and age--along with other factors relating to the defendant's contact with the criminal justice system--to explain pretrial failure. But even with this limited information, we will be better able to understand pretrial failure and develop useful policies to help resolve the problems of pretrial failure.

Multivariate analysis was used to answer the following questions:

1. What influences pretrial failure?
2. Of those factors that influence pretrial failure, which exert the most influence?
3. To what extent does the type of bond release influence pretrial failure?
4. What about gender differences? Do the same factors influence both men and women, and to the same degree?
5. Are the same factors that influence one type of failure also as influential in

explaining another type? In other words, do the same factors influencing rearrest for new crimes also influence failure to appear? If so, is there a common factor that is exerting the most influence on both forms of failure?

The models built to answer these questions were generated using logistic regression⁹. Logistic regression is appropriate when the dependent variable is nominal or categorical. The two outcome measurements of pretrial failure (dependant variables) ask: whether or not the releasee was rearrested for a new crime while out on bond, and whether or not the releasee had a bond declared forfeited for failing to appear in court. Each dependant variable has two values; 0 and 1, which means the defendant was never arrested for a new crime during the follow-up period (0) or he or she was (1).

Logistic regression was used to identify the variables that influence rearrest for a new crime in order to *explain* this type of pretrial failure rather than *predict* it (see "Multivariate analysis of pretrial failure" in Appendix C for a more detailed explanation).

Factors that influence the likelihood of rearrest

Of all the "systems" of variables entered into a logistic regression equation for rearrest, bond type contributes the least amount of improvement to the explanation of rearrest. The length of the follow-up period--that is, how long the defendant was on pretrial release status--was the most influential variable in determining the likelihood that a defendant will be rearrested for a new crime.

In addition to the length of the follow-up period, the following variables also had a measurable impact on the likelihood of rearrest:

- ▶ Age at bond release (in years)
- ▶ Race: white versus black
- ▶ Gender
- ▶ Prior arrest
- ▶ Property and sex as most serious offense versus drug offense

⁹These logistic models were generated using data from a file that had subsequent revisions. The file with subsequent revisions, lacked some of the data transformation coding used to analyze the information for the logistic models. As a result, models built from the revised data file were slightly distorted. In response, the logistic models used in this section reflect the data from the original data file.

- ▶ Bond type: deposit bond versus jail I-bond

The impact each of these variables had on the likelihood of rearrest is summarized as follows:

- ▶ As age at bond release increases, the likelihood of rearrest for a new crime decreases. In other words, older defendants are less likely to be rearrested for a new crime than younger defendants.
- ▶ Being white, as compared to being black, decreases the likelihood of being rearrested for a new crime. In other words, blacks are more likely than whites to be rearrested for a new crime.
- ▶ There is no significant difference in the likelihood of being rearrested for a new crime for Latinos as compared to blacks. In other words, Latinos and blacks are equally likely to be rearrested for a new crime.
- ▶ Being a women decreases the likelihood of being rearrested for a new crime. In other words, women are less likely to be rearrested for a new crime than men.
- ▶ Having a prior arrest increases the likelihood of being rearrested for a new crime.
- ▶ There is no significant difference in the likelihood of being rearrested for a new crime when the most serious offense in the qualifying case is violent, a violation, or a public order offense as compared to a drug offense. In other words, a defendant whose most serious offense in the qualifying case is violent, a violation, or a public order offense is just as likely to be rearrested for a new crime as a defendant whose most serious offense in the qualifying case is a drug offense.
- ▶ Having a property offense as the most serious offense in the qualifying case increases the likelihood of being rearrested for a new crime as compared to having a drug offense as the most serious offense. In other words, accused property offenders are more likely to be rearrested for a new crime than accused drug offenders.

- ▶ Having a sexual offense as the most serious offense in the qualifying case increases the likelihood of being rearrested for a new crime as compared to having a drug offense as the most serious offense. In other words, accused sexual offenders are more likely to be rearrested for a new crime than accused drug offenders.
- ▶ Court I-bond defendants are less likely to be rearrested for a new crime than jail I-bond defendants, even with all other variables taken into account.
- ▶ Deposit bond defendants are less likely to be rearrested for a new crime than jail I-bond defendants, even with all other variables taken into account.
- ▶ As the length of the follow-up period for a defendant increases, the likelihood of the defendant being rearrested for a new crime increases.

What influences the likelihood of rearrest for men?

Initial interpretation of the model indicates that all of the variables taken at each step, and as a system, significantly influence the likelihood of rearrest for a new crime for men. The length of the follow-up period exerts the most influence on the likelihood of rearrest for a new crime for men.

In addition to length of the follow-up period, the following variables also had a measurable impact on the likelihood of rearrest:

- ▶ Age at bond release (in years)
- ▶ Race: white versus black
- ▶ Prior arrest
- ▶ Property or sexual offense as the most serious offense versus a drug offense
- ▶ Bond type

In analyzing these variables, the following observations can be made about the male sample:

- ▶ Older defendants are less likely than younger ones to be rearrested for a new crime.
- ▶ White defendants are less likely than black defendants to be rearrested for a

new crime.

- ▶ Defendants with prior arrests are more likely to be rearrested for a new crime.
- ▶ Accused property and sex offenders are more likely than accused drug offenders to be rearrested for a new crime.
- ▶ Court and deposit bond defendants are less likely than jail I-bond defendants to be rearrested for a new crime.
- ▶ As the length of the follow-up period for a defendant increases, the likelihood of rearrest for a new crime increases.

What influences the likelihood of rearrest for women?

The following variables were found to have a statistically measurable impact on the likelihood of rearrest for women:

- ▶ Age at bond release (in years)
- ▶ Prior arrest
- ▶ Violation of probation as most serious offense versus a drug offense
- ▶ Bond type

In analyzing these variables, the following observations can be made:

- ▶ Older female defendants are less likely to be rearrested for a new crime.
- ▶ Defendants with prior arrests are more likely to be rearrested for a new crime than those with no prior arrests.
- ▶ Accused probation violators are more likely to be rearrested for a new crime than accused drug offenders.
- ▶ Court and deposit bond defendants are less likely than jail I-bond defendants to be rearrested for a new crime.

What influences the number of rearrests for new crimes?

While certain factors influence the *likelihood* of rearrest for a new crime, these same factors have virtually no effect on explaining the *number* of rearrests for new crimes for those who recidivate.

General linear regression analysis was conducted separately for men and women. It was discovered that even when controlling for gender; age at bond release, and race/ethnicity, prior arrests, most serious offense type, bond type, and length of follow-up period are *not* influential in explaining the *number* of rearrests for new crimes.

Factors that influence failure to appear

All of the variables taken at each step, and as a system, significantly influence the likelihood of failure to appear. This suggests that the same variables that influence the likelihood of rearrest also influence the likelihood of failure to appear.

However, the variables previously used to explain the likelihood of rearrest have a different *degree* of influence on the likelihood of failure to appear. Demographic variables, for example, are stronger as an explanation of rearrest than failure to appear. The length of the follow-up period is the most influential factor in explaining both forms of pretrial failure.

The most serious offense in the qualifying case and the type of bond release were factors in explaining the likelihood of failure to appear, but not in explaining the likelihood of rearrest. Also, the type of bond release, which had a lesser effect on rearrest than any of the other variables, tied with most serious offense in the qualifying case as the second greatest influence on failure to appear.

In the full model developed to explain failure to appear, the following variables were found to have a measurable impact:

- ▶ Race: white versus Latino
- ▶ Prior arrest
- ▶ Property offense, violation of probation, and public order offense as the most serious offense in the qualifying case
- ▶ Bond type: court and deposit
- ▶ Length of follow-up period

The following observations can be made about these variables:

- ▶ Being white decreases the likelihood of failure to appear compared to being black. In other words, whites are less likely to fail to appear than blacks.
- ▶ Being Latino decreases the likelihood of failure to appear compared to being black. In other words, Latinos are less likely to fail to appear than blacks. This effect is stronger than the effect of being white.
- ▶ Having a prior arrest increases the likelihood of failing to appear. Prior arrests had roughly the same degree of influence on failure to appear as rearrest.
- ▶ There is no significant difference in the likelihood of failing to appear when the most serious offense in the qualifying case is violent, public order, or sexual. In other words, a defendant whose most serious offense in the qualifying case is violent, public order, or sexual is just as likely to fail to appear as a defendant whose most serious offense in the qualifying case is a drug offense.
- ▶ Having a property offense as the most serious offense in the qualifying case increases the likelihood of failure to appear when compared to having a drug offense as the most serious offense. In other words, accused property offenders are more likely to fail to appear than accused drug offenders. This effect is stronger on failure to appear than on rearrest.
- ▶ Accused probation violators are significantly less likely to fail to appear in court than accused drug offenders, even though a violation charge had no effect on rearrest.
- ▶ Court I-bond defendants are less likely to fail to appear than jail I-bond defendants, even with all other factors being equal. The effect is stronger on failure to appear than rearrest.
- ▶ Deposit bond defendants are less likely to fail to appear than jail I-bond defendants, even when all other variables are simultaneously taken into account.

- ▶ As the length of the follow-up period for a defendant increases, the likelihood of failure to appear increases. This variable had roughly the same influence on failure to appear as on rearrest.

In conclusion, the same variables that influence the likelihood of rearrest do not influence the likelihood of failure to appear. Of those that do, their influence is exerted in differing degrees.

What influences the likelihood of failure to appear for men?

In summary, the group of demographic variables, knowledge of previous arrest, most serious offense in the qualifying case, bond type, and length of follow-up period influence the likelihood of failure to appear for men. The type of most serious offense in the qualifying case was the most influential factor in explaining the likelihood of failure to appear for men.

The following observations can be made about the factors influencing failure to appear levels for men:

- ▶ White and Latino men fail to appear less than black men.
- ▶ Defendants who were previously arrested fail to appear more than those with no prior arrests.
- ▶ Accused property and public order offenders are more likely than drug offenders to fail to appear.
- ▶ Violation offenders are less likely than drug offenders to fail to appear.
- ▶ Court deposit bond and court I-bond defendants are less likely than jail I-bond defendants to fail to appear.
- ▶ As the follow-up period increases, the likelihood of failing to appear increases.

What influences the likelihood of failure to appear for women?

Prior arrest, bond type, and follow-up period are significant influences on the likelihood of failure to appear for women. The follow-up period appears to influence the failure to appear more significantly than the other variables.

For women, the only variables with significant impact are age at bond release, court I-bond, deposit bond, and follow-up period. Based on this the following observations can be made:

- ▶ Older female defendants are less likely to fail to appear.
- ▶ Defendants with a prior arrest are more likely to fail to appear than those with no prior arrest.
- ▶ Court and deposit bond women are less likely than jail I-bond women to fail to appear.
- ▶ As the follow-up period increases, the likelihood of failing to appear increases.

What influences the number of bond forfeitures?

While certain factors influence the *likelihood* of failure to appear, these same factors have virtually no effect on explaining the *number* of bond forfeitures declared among those who fail to appear. The same general linear regression analysis was conducted separately for men and women. Even when controlling for gender; age at bond release, and race/ethnicity, being previously arrested, most serious offense type, bond type and length of follow-up period were not influential in explaining the number of bonds declared forfeited for failing to appear.

While multivariate analysis does not answer all of the questions about factors influencing pretrial failure, it substantially extends the body of knowledge about the pretrial sample population. The findings presented in this section may well be used by Cook County pretrial release officials to refine the criteria for pretrial release and the manner in which releasees are supervised during their release period.

X. Pretrial failure: a workload perspective

While pretrial failure can certainly be viewed as a setback for the individual releasee, these failures set in motion a series of pretrial criminal justice transactions requiring additional resources and time from every component of the criminal justice system. Compared to the ideal of no bond forfeitures, new arrests, or reincarcerations, each of these pretrial transactions could be considered extra or unnecessary. Given the current number of pending cases in the Cook County courts, and the fact that other parts of the system are overloaded as well, these additional transactions only exacerbate an already serious situation.

In order to look at the sampled releasees collectively, and account for their impact on the criminal justice workloads, it is necessary to give each individual bond group equal credit or weight. As illustrated earlier in this report, the court I-bond and jail I-bond men are sampled proportions that represent their larger populations, while the other bond groups are 100 percent of their total populations (see Figure 6). Those groups that are not 100 percent samples are assigned specific weights that enable them to represent their entire populations and be grouped as a whole with the other bond groups. Through weighting, the total additional workload attributable to the sampled groups--as well as the entire populations from which the samples were drawn--can be estimated (Figure 36).

The weighted sample represents the pretrial activity of 5,816 eligible individuals who were released on jail I-bond, court I-bond or deposit bond from September 13-30, and from November 10 through December 31, 1988. This weighted sample also represents 100 percent of the eligible population from which it was drawn. Based on this, it is estimated that the courts had to process 3,493 additional bond forfeitures, police had to handle 5,320 rearrests, and the jail had to deal with 2,639 reincarcerations.

Assuming relatively consistent levels of release over time, and that the study sample is representative of its larger population, an estimated 30,000 defendants receive at least one pretrial release during one year in Cook County. Given the number of defendants released on bond per year, the annual workload impact of pretrial failures is staggering. It is estimated that these 30,000 releasees account for nearly 60,000 criminal justice transactions during the period from release on bond to case disposition. These transactions increase the workload of the Cook County criminal justice system by an estimated 18,214 bond forfeitures, 27,735 rearrests and 13,761 reincarcerations.

Figure 36: Number of failure outcomes for the unweighted sample, by bond type

	Women			Men			Total
	Jail I-bond	Court I-bond	Deposit bond	Jail I-bond	Court I-bond	Deposit bond	
Bond Forfeitures	129	94	22	417	282	168	1112
Rearrests	148	104	27	648	389	380	1696
Re-incarcerations	60	50	11	326	194	177	818

Number of failure outcomes for the weighted sample, by bond type

	Women			Men			Total
	Jail I-bond	Court I-bond	Deposit bond	Jail I-bond	Court I-bond	Deposit bond	
Sample N	187	226	94	601	577	442	2,127
Weight	1.0000	1.0000	1.0000	5.6855	2.5129	1.0000	
Weighted Sample N	187	226	94	3,417	1,450	442	5,816
Transactions contributed by the weighted sample							Total
Bond Forfeitures	129	94	22	2,371	709	168	3,493
Rearrests	148	104	27	3,684	978	380	5,320
Re-incarcerations	60	50	11	1,853	488	177	2,639

* Note: numbers are rounded after weighting and may vary slightly

In analyzing pretrial failures by bond type it was observed that certain releasees are more criminally active than others. That is, a relatively small number of pretrial releasees accounted for a relatively large number of transactions. Figure 37 takes the weighted sample and shows the inverse cumulation of people in the sample against the inverse cumulation

of arrests. For example, reading across columns, 12 percent of the entire weighted releasee sample accounted for nearly 60 percent of all rearrests of pretrial releasees during the sample tracking period. This comparison is an important policy issue. To reduce pretrial failure, it will be necessary for criminal justice officials to focus on those releasees who have a higher likelihood of continued failure. This could be accomplished through standardized risk factor assessment scaling, such as those used in other large cities including Philadelphia, and New York. Such focused pretrial intervention could help reduce pretrial failure levels.

Previous studies have indicated that the criminal justice system in Cook County is straining to keep up with current workload demands. This study illustrates how workload pressures are increased by high levels of pretrial failures among all types of releasees. Reducing these failure levels will not only improve public safety and increase the chances of the individual releasee becoming stabilized in the community; reducing failure levels will also help contain the growing workload problem facing the county's justice system.

Figure 37: The percentage of arrests for new crimes accounted for by the weighted sample.

INVERSE CUMULATION % OF PEOPLE	INVERSE CUMULATION # OF PEOPLE	INVERSE CUMULATION % OF REARRESTS	INVERSE CUMULATION # OF REARRESTS
100.0%	5617	100.0%	5313
42.1%	2367	100.0%	5313
21.4%	1204	78.1%	4150
12.2%	684	58.5%	3110
6.0%	339	39.1%	2075
3.4%	189	27.8%	1475
2.1%	118	21.1%	1120
1.5%	82	17.0%	904
1.0%	54	13.3%	708
0.9%	48	12.4%	660
0.8%	44	11.7%	624
0.7%	37	10.4%	554
0.4%	25	7.9%	422
0.4%	25	7.9%	422
0.3%	16	5.7%	305
0.3%	15	5.5%	291
0.3%	15	5.5%	291
0.1%	7	3.1%	163
0.1%	7	3.1%	163
0.1%	7	3.1%	163
0.1%	6	2.7%	144
0.1%	6	2.7%	144
0.1%	6	2.7%	144
0.1%	6	2.7%	144
0.1%	6	2.7%	144
0.0%	0	0.0%	0

XI. Financial impact of pretrial failure

In 1991, Cook County spent more than \$450 million for the operation of county criminal justice agencies, and the Chicago Police Department spent more than \$565 million. However, these total figures do not reveal how much is spent to process *individuals* through the criminal justice system. Estimated costs for each stage of the criminal justice process must be applied to the population sampled for the Pretrial Release Study in order to examine how more efficient programs could reduce overall costs while also reducing recidivism.

Application of the cost estimates of the pretrial population

Information from a parallel study on criminal justice transaction costs (Olson, 1990) estimates the average cost of each arrest at about \$1,847, the cost of court dates at \$119 per appearance,¹⁰ and the cost of detention in the Cook County Jail at \$33 per day. In the pretrial sample (weighted to the total population), each arrestee spent 10.584 days in pretrial detention and had an average of 8.655 court dates. Based on this information, the combined cost to arrest, detain prior to release, and process through the Cook County court system, averaged \$3,227 per defendant. This includes \$1,847 for the arrest, \$1,030 for court appearances (8.655 appearances at \$119 each), and \$350 for pretrial detention (10.584 days at \$33 a day).

Comparing the costs attributable to the qualifying cases (initial costs) in the different bond groups reveals dramatic variations in per case costs (Figure 38). This is due to differences in length of stay prior to release and differences in the number of court appearances. For example, because court deposit bond defendants spent an average of 27.5 days in jail prior to release (16.9 more than the sample average), and had an average of 9.7 court dates (1.1 more than the sample average), the average *initial* cost for each individual in this group was \$3,920. In contrast, jail I-bond defendants had an average of 9.2 court dates (.5 more than the average), but spent .6 fewer days than average in jail prior to release, resulting in an average cost of \$3,270 per defendant. Court I-bond defendants (at \$2,893 per defendant) had the lowest initial costs, since, on average, they spent only 6.0 days incarcerated prior to release, and averaged 7.130 court dates (or 1.525 fewer than the entire sample).

¹⁰Included in these costs are those associated with providing court security, a public defender, a prosecutor, and maintaining court records. The costs assume that each defendant had a public defender.

Figure 38: Initial costs to arrest, detain, and process 1,000 pretrial releasees in Cook County

	Arrest	Detain	Court processing	Total
Total sample	\$1,847,000	\$350,000	\$1,030,000	\$3,227,000
Deposit bond	\$1,847,000	\$910,000	\$1,163,000	\$3,920,000
Court I-bond	\$1,847,000	\$198,000	\$848,000	\$2,893,000
Jail I-bond	\$1,847,000	\$328,000	\$1,095,000	\$3,270,000

Cost of rearrest

The costs to Cook County's criminal justice system do not end with the initial costs to process each defendant's qualifying case (Figure 39). Although \$3,227 was spent on average to process a defendant from arrest through prosecution or acquittal, each defendant in the sample was rearrested for a new crime an average of .9 times, initiating a new case in the criminal justice process. Average rearrest costs are estimated at \$1,749 per defendant. In addition, each releasee was rearrested .227 times for technical violations resulting in the issuance of a warrant for bond forfeiture, or violation of probation or parole. Although this does not initiate an additional case the court must process, rearrests on bond forfeiture warrants are estimated at about \$419 per individual. Combined costs for arrests on new offenses and technical violations are estimated at \$2,168 per defendant. The cost to reincarcerate a defendant prior second release after rearrest for a new crime averaged \$331 per defendant. The cost to reprocess releasees through the courts for subsequent offenses is estimated at \$975 per defendant. The total cost of the rearrest and subsequent reprocessing is estimated at \$3,474 per individual.

Figure 39: Additional costs to rearrest, detain, and reprocess 1,000 pretrial releasees in Cook County, by bond type

	Rearrest	Detain	Court reprocessing	Total reprocessing cost
Total sample	\$2,168,374	\$331,061	\$975,358	\$3,474,795
Deposit bond	\$1,656,759	\$716,170	\$915,281	\$3,288,210
Court I-bond	\$1,612,431	\$138,399	\$592,232	\$2,343,062
Jail I-bond	\$2,484,215	\$353,935	\$1,181,546	\$4,019,696

Among the three different bond types, differing rearrest rates contributed to differences in the average total additional costs attributable to each of these groups (Figure 39). Court deposit bond defendants averaged .8 rearrests per defendant for new crimes and .110 rearrests per defendant for technical violations. The cost of reprocessing (including rearrest, reincarceration and reprocessing through the courts) the court deposit bond defendants for these additional cases is estimated at \$3,288 per defendant. Court I-bond defendants averaged .7 rearrests per defendant for new crimes and .2 rearrests per defendant for technical violations. The cost of reprocessing the court I-bond defendants is estimated at \$2,343 per defendant. The highest rearrest rate occurred among the jail I-bond defendants, who averaged 1.0 rearrests per defendant for new crimes and .266 per defendant for technical violations. The cost of reprocessing the jail I-bond defendants is estimated at about \$4,020 per defendant.

Combining initial costs and additional costs, it can be seen how the "total" costs criminal justice agencies in Cook County are much higher for the jail I-bond population than for the court I-bond population (Figure 40). The cost of arrest and rearrest was 25 percent higher for jail I-bond releasees than for court I-bond releasees, the cost of detention was 103 percent higher, and court costs were 58 percent higher. In contrast, the cost of processing jail I-bond releasees was not vastly different from the cost of processing court deposit bond releasees. The cost of arrest and rearrest was 24 percent higher for jail I-bond releasees than for deposit bond releasees, but the cost of detention was more than twice as high for court deposit bond releasees. Court costs were about the same for both groups.

Figure 40: Total costs to criminal justice agencies in Cook County per 1,000 pretrial releasees, by bond type

	Law enforcement	Corrections	Courts	Total
Total sample	\$4,015,374	\$681,061	\$2,005,358	\$6,701,793
Deposit bond	\$3,503,759	\$1,626,170	\$2,078,281	\$7,208,210
Court I-bond	\$3,459,431	\$336,399	\$1,440,232	\$5,236,062
Jail I-bond	\$4,331,215	\$681,935	\$2,276,546	\$7,289,969

Cost to incarcerate all defendants prior to trial

Some might argue that the additional cost of rearresting and reprocessing could be saved by keeping all pretrial releasees incarcerated until after disposition and sentencing. However, based on the data from the population studied, this would not be prudent, even if it were possible. On average, 233 days passed from the initial arrest of the defendant to the disposition of the case. The cost to keep one inmate in the Cook County Jail for that period of time would have been approximately \$7,696 per defendant. Although this alternative would guarantee that defendants would not commit any additional crimes before trial, the additional cost would be enormous (Figure 41). Including the initial arrest, processing through the court system, and detention until sentencing, the cost for 1,000 defendants would total more than \$10 million, or \$10,573 per defendant.

Figure 41: Cost to arrest, detain prior to trial, and process 1,000 defendants through the Cook County courts

	Arrest	Pretrial Incarceration	Court processing	Total
Total Sample	\$1,847,000	\$7,696,000	\$1,030,000	\$10,573,000

Conclusion

In summary, an average additional cost (beyond that to process the case for the qualifying case) of \$3,474 per releasee is imposed on the Cook County criminal justice system.

However, it is possible that recidivism, and its cost, could be reduced by increased funding of pretrial services. For example, based on the 1992 Cook County Annual Appropriations Bill and estimates by Cook County Pretrial Services, it would cost \$457.50 for Pretrial Services to keep surveillance on a releasee for 224.3 days from release to disposition (the average number of days for this sample). Home confinement through the Adult Probation Department would cost approximately \$1,947 per person.

It is obvious that some defendants would be rearrested regardless of their level of pretrial supervision. For this minority of defendants, incarceration may be cost effective in the long run. However, a number of less expensive pretrial supervision tools and techniques are available that would ensure a higher degree of public safety than simply allowing defendants to be released with no supervision. If home confinement or pretrial supervision can reduce rearrests by a even modest amount, savings may be realized in the long run through reduced reprocessing costs.

The cost of incarcerating all defendants and expanding pretrial supervision--two alternatives to current bond release and pretrial detention practices--are compared in Figure 42. The cost of current jail I-bond court I-bond and deposit bond programs includes both the initial costs and additional costs imposed on the criminal justice system (see Figure 40). The second option shows the cost to incarcerate all defendants in the sample until the disposition of their cases (if it were possible to do so). The last category is an estimate of the cost of a Pretrial Supervision Program in which defendants would be supervised (through telephone contact, client check-ins, and curfew monitoring) in the community prior to the disposition of their cases. This estimate begins with costs to process the initial offense through the criminal justice system, assumes a failure rate of 30 percent, and further assumes a pretrial detention length of 10.6 days for a complete evaluation. Thus, this is a very conservative estimate of the cost of more intensive pretrial supervision.¹¹

¹¹ The failure to appear and rearrest rate for those currently on pretrial supervision in Cook County is 22 percent; this study uses a failure to appear and rearrest rate of 30 percent. In addition, the study assumes a detention period of 10 days to conduct a complete background check, which is longer than the period currently used.

Figure 42: Cost comparison of the current pretrial bond release practice, incarceration of all defendants, and use of pretrial supervision, per 1,000 defendants

Options	Arrest	Pretrial Detention	Courts	Total
Current	\$4,015,374	\$681,061	\$2,005,358	\$6,701,793
Incarcerate all defendants	\$1,847,000	\$7,696,000	\$1,030,000	\$10,573,000
Pretrial supervision	\$2,401,100	\$911,967	\$1,339,000	\$4,652,067
Difference between current & pretrial	\$1,614,274 (-40%)	(\$230,906) (+34%)	\$666,358 (-33%)	\$2,049,726 (-31%)

The comparisons in Figure 42 reveal that the cost of the pretrial supervision option would vary by each component of the criminal justice system. Pretrial supervision would be 40 percent less expensive than the cost of the current system at the arrest level, but 34 percent more expensive at the detention level. At the court level, however, pretrial supervision would again be less expensive than the current system, by 31 percent. Thus, although the cost incurred to provide pretrial supervision to 1,000 defendants would be a 34 percent higher than the cost of the current system of pretrial release, there would be a net savings of 31 percent over the entire cost of processing of these cases. This savings, which would total more than \$2 million per 1,000 defendants, would result from the reduced rearrest rate, and all the accompanying costs that these rearrests impose on the system.

Methodology and assumptions

Most of the cost estimates used in this analysis came from the Cook County Annual Appropriations Bill for 1992. Costs for individual components or agencies of the Cook County criminal justice system were combined to arrive at "total" costs for specific activities.

The cost to arrest a suspect was estimated by dividing total Chicago Police Department expenditures in 1990 by total arrests made during that year, or \$1,847 per arrest. This is a conservative estimate since most arrests are relatively minor, whereas the population we are

analyzing were arrested for felonies, more serious crimes. Further support that this figure is conservative can be found in previous analyses of per-arrest costs in Illinois, which estimated an average arrest cost of \$2,711 and an average cost of \$4,209 for an arrest on a serious drug offense (Olson and Stout, 1991, Olson and Przybylski, 1992).

Court costs were available on a per-court-appearance basis through analysis of the Cook County Annual Appropriations Bill for 1992. Combining the per-defendant and per-court-appearance costs incurred by the Clerk of the Circuit Court (for keeping court records), the Sheriff's Court Services Department (for providing court security), the State's Attorney's Office, and the Public Defender's Office, it costs an average of \$119 per court appearance for a criminal defendant. Not included in this cost is that of the judge or court reporter, which are costs assumed by the state government. The cost for incarceration in the Cook County Jail is estimated at \$33 per day, and also came from the Cook County Annual Appropriations Bill for 1992.

XII. Impact of pretrial release on public safety

Beyond the financial and workload impact of pretrial failures, public safety is also compromised. The 5,816 releasees in the pretrial study weighted sample accounted for 5,320 new arrests, or an average of almost one new arrest per person.¹² These arrests were for a wide range of charges, including both violent and property offenses.

Arrests, however, are not a complete measure of public safety impact. Conviction on the charge is a more definitive measure. In this study, slightly more than 50 percent of rearrests resulted in conviction. This victimization analysis, however, looks only at convictions on violent and property charges, because each of these crimes is assured of having at least one victim. These charges accounted for 60 percent of the total rearrests recorded for the sample. Releasees convicted of violent or property offenses accounted for at least 1,670 additional victimizations (527 before weighting), a number which represents a conservative measurement of the impact on public safety resulting from pretrial failure.

When the sample results are extrapolated to the population from which they were drawn, and the number of people released on all bond types studied is estimated over a one year period, the problem of compromised public safety becomes even larger. For instance, using the weighted sample of 5,816 releasees and assuming relatively consistent levels of release over time, an estimated 30,000 defendants receive at least one pretrial release during one year in Cook County. Assuming relatively consistent levels of rearrest (as based on the rearrests recorded for the sample) these 30,000 releasees account for an estimated 27,734 rearrests. Applying the sample conviction rate of slightly more than 50 percent results in an estimated 14,283 new convictions for these 30,000 pretrial releasees. Removing rearrests for drug, sexual, and public order charges, an estimated 8,708 victimizations are attributable to defendants released prior to trial during one year in Cook County.

¹²These weighted totals are based on 2,127 actual releasees and 1,696 rearrests. For details of the weighting necessary for this sample, see the "Pretrial failure: a workload perspective" section.

XIII. Pretrial release failure: a national perspective

Because the Authority's pretrial release study focused exclusively on pretrial release outcomes in Cook County, it is helpful to discuss the results within a national context, using information on outcomes in a number of other large U.S. cities. Authority staff worked with officials from the Pretrial Services Resource Center in Washington, D.C. (PSRC), which collects data on pretrial activities throughout the United States.

PSRC estimates that between 30 percent and 45 percent of all pretrial releasees nationwide fail to appear, and that between 20 percent and 35 percent of all pretrial releasees are rearrested for a new offense. These are, of course, averages based on *all* types of pretrial release (recognizance, cash or deposit bond) mechanisms. These numbers also are for male and female releasees combined. Thus, while no direct comparison can be made to these ranges and the outcomes obtained in the Cook County study, these national ranges do provide a reference for discussion.

Figure 43 shows the national averages and the outcomes obtained in the Cook County study. Looking at male outcomes, the percentage of court I-bond and deposit bond releasees who failed to appear is at the lower end of the national range. Failures to appear among the jail I-bond releasees (52 percent) were higher than the highest failure level in the national range. Rearrest levels for both the male jail I-bond and the male deposit bond releasees were higher than the top end of the national failure range. Only the court I-bond releasees, at 33 percent, were within, yet still at the high end of the national range for rearrest.

Analysis of the female releasees yields a somewhat different picture. Female defendants released on court I-bond and deposit bonds in Cook County failed to appear at a level consistent with, or even less than, the lower end of the national range. In contrast, 54 percent of the jail I-bond women failed to appear, a level well above the national average. Looking at rearrest, women in the Cook County sample performed better than their male counterparts, with court I-bond and deposit bond releasees failing at lower levels than the lowest in the national range. Jail I-bond releasees showed a failure level within, but at the high end of, the national range.

Figure 43: Pretrial failure levels in Cook County and the nation

	MEN			MEN AND WOMEN*	
	COOK COUNTY PRETRIAL RELEASE STUDY FINDINGS			United States (PSRC Cities)	
	Jail I-bond	Court I-bond	Deposit Bond	75 largest U.S. cities Average	Large cities**
FAILURE TO APPEAR	52%	34%	30%	24%	30% - 45%
REARREST	47%	33%	39%	18%	20% - 35%

	WOMEN			MEN AND WOMEN*	
	COOK COUNTY PRETRIAL RELEASE STUDY FINDINGS			United States (PSRC Cities)	
	Jail I-bond	Court I-bond	Deposit Bond	75 largest U.S. cities Average	Large cities**
FAILURE TO APPEAR	54%	31%	21%	24%	30% - 45%
REARREST	34%	19%	17%	18%	20% - 35%

*All types of release, men and women.

** See Fig 44 for detail of selected large cities.

Source: Pretrial Service Resource Center, and Illinois Criminal Justice Information Authority Cook County Pretrial Release Study.

In addition to national averages for pretrial failure, PSRC provided pretrial failure to appear

and rearrest statistics for six selected urban areas in the United States. These statistics are again not strictly comparable to the Cook County findings since "failure to appear" does not equate to this study's measure, nor is it likely that the definitions of "cash" or "release on recognizance" (ROR) used in the PSRC data are consistent with Cook County definitions of those terms. Even with these constraints, it is valuable to know general levels of failure among releasee groups in other large urban areas as a point of reference for the failure levels in this study. Figure 44 shows those outcomes for several large U.S. jurisdictions:

Figure 44: Failure outcomes for selected urban areas in the United States

Jurisdictions	BOND TYPE	FAILURE TO APPEAR		REARREST	
		MEN	WOMEN	MEN	WOMEN
BRONX, N.Y.	ROR	35%	28%	23%	9%
	CASH	27%	29%	22%	29%
KINGS, N.Y. (Brooklyn)	ROR	31%	47%	25%	29%
	CASH	18%	25%	22%	N.A.
QUEENS, N.Y.	ROR	31%	33%	29%	30%
	CASH	17%	33%	16%	17%
NEW YORK, N.Y. (Manhattan)	ROR	31%	24%	20%	10%
	CASH	39%	33%	23%	33%
PHILADELPHIA, P.A.	ROR	55%	20%	33%	N.A.
	CASH	23%	50%	14%	N.A.
WASHINGTON D.C.	ROR	11%	N.A.	11%	N.A.
	CASH	33%	N.A.	50%	N.A.

Source: 1990 National Pretrial Reporting Program, a product of the Pretrial Services Resource Center and the Bureau of Justice Statistics.

The data from other cities reveal several points. First, major urban areas similar to Chicago all suffer from substantial levels of pretrial failure for both men and women. Failure to appear levels range from a low of 11 percent (Washington, D.C./male/ROR) to a high of 55 percent (Philadelphia/male/ROR). Rearrest levels range from a low of 9 percent (Bronx/female/ROR) to a high of 50 percent (Washington, D.C./male/cash).

Representatives from the PSRC were able to provide some insight into these levels of pretrial failure. One reason for pretrial failure has been the increase in the number of people on pretrial release due to jail crowding in larger cities. Further, the high number of drug-related arrestees on pretrial release has increased the likelihood of failure. PSRC also indicates that the failure rate of more structured pretrial release programs has even increased within its releasee populations. For example, bond forfeiture rearrest levels of 10 percent for supervised pretrial release programs a decade ago have now risen to 20 percent or more. However, even at 20 percent the defendants released under this form of pretrial release are more "successful" than those released under the bonds analyzed in this study.

These data on other cities do not permit a conclusion on whether Cook County's pretrial situation is better or worse than any other city. But they do provide a realistic context in which Cook County officials can view the problem. Presumably, any long range goals will include the reduction of pretrial failures in each bond category. County officials may want to obtain more detailed information on successful pretrial release programs in other cities. The PSRC can serve as a resource to provide such information.

XIV. Findings and recommendations

Major findings

Defendants released on jail-I bonds (or AMF, see page 1) in Cook County have higher rates of pretrial bond forfeiture, rearrest, and reincarceration than defendants released on either court deposit bonds or court I-bonds. But, "failure" (having a bond declared forfeited or a rearrest) for the two court bond types are also high in Cook County, when compared with pretrial failure levels in other large U.S. jurisdictions.

The Cook County Pretrial Release Study looked at pretrial release activity among a group of 2,127 defendants (1,620 men and 507 women) released between September 13-30, 1988, and November 10 through December 31, 1988, on different bond types: court deposit bond, court individual recognizance bond, and jail I-bond.

More than half of both the men and women in the jail I-bond groups studied had at least one bond forfeiture between the time of their release and the disposition of their original cases. Nearly half of the jail I-bond men and 34 percent of the women were rearrested before the final disposition of their cases. Twenty-five percent of the jail I-bond women and 36 percent of the jail I-bond men were reincarcerated after bond release. Lower percentages of the men in both the court deposit and court I-bond groups had bond forfeitures, were rearrested, or reincarcerated, although failure rates still ranged from 11 percent to 39 percent.

While not a direct comparison, a look at pretrial failure (having a bond forfeiture or a rearrest) in other large U.S. jurisdictions provides some context for the Cook County numbers. The 75 largest cities in the United States have an overall average bond forfeiture level of 24 percent. These same cities have an overall average rearrest level of 18 percent. Looking only at the larger cities (for example, New York, Los Angeles, Philadelphia, and Washington, D.C.), the overall average bond forfeiture level ranges from 30 percent to 45 percent, and the overall average rearrest level ranges from 20 percent to 35 percent.¹³

In Cook County, figures are at the top end of the national range. The overall level of bond

¹³Information obtained from the National Pretrial Reporting Program, conducted by the Pretrial Services Resource Center, Walt Smith, Project Director.

forfeitures for the three bond groups studied was 44 percent. The overall rearrest level was nearly 41 percent.

Pretrial release failures have serious consequences for the courts and other elements of the criminal justice system in Cook County in terms of increased workload and financial expenditures. Pretrial failures also affect the citizens of Cook County. Of the 5,816 releasees in the weighted sample, 5,320 were rearrested before the disposition of their qualifying case. Since it cannot be assumed that all of these people are guilty, the sample's conviction rate of 52 percent (the conviction rate of the qualifying case) was used. Applying this 52 percent conviction rate results in an estimated 2,739 convictions for the weighted sample group, 450 violent offenses and 1,220 property offenses. Assuming one victimization per conviction (an extremely conservative assumption), pretrial failures among the 5,816 defendants in the weighted sample group may well have accounted for at least 1,670 additional victimizations.

Other findings

Here are some of the study's other significant findings (many of these are summarized in Figure 45)

- ▶ Fifty-two percent of the male defendants released on jail I-bonds had one or more bond forfeitures, compared to 34 percent of those released on court I-bonds, and 30 percent released on court deposit bonds. For female defendants, the trends were similar.
- ▶ Forty-seven percent of the male defendants released on jail I-bonds were rearrested at least once before their original case was disposed of, compared to 33 percent released on court I-bonds, and 39 percent released on court deposit bonds. Among the women, 34 percent released on jail I-bonds, but only 19 percent released on court I-bonds, and 17 percent released on deposit bonds, were rearrested.
- ▶ Of the jail I-bond defendants who were rearrested, 25.8 percent of the men and 14.3 percent of the women were rearrested for at least one violent (non-sexual) offense. Fifty-four percent of the rearrested men and 54 percent of the rearrested women in the jail I-bond group were charged with a new property offense. The remaining offenses involved mostly drug and public order offenses.

- ▶ Of the court I-bond defendants, 27.7 percent of the rearrested men were charged with at least one violent offense, 44.7 percent with property offenses. Among the rearrested women in this bond group, 14 percent were charged with violent crimes and 69 percent with property crimes.
- ▶ For both men and women, reincarceration rates were highest among those released on jail I-bonds. More than one-third of the men in this bond group, and one-quarter of the women, were reincarcerated before their original case was disposed of, compared to one-quarter of the men and 11 percent to 16 percent of the women in other bond groups.
- ▶ A small portion of the releasee sample accounted for a large portion of the total number of rearrests. For example, 12 percent (684) of the weighted sample accounted for 59 percent (3,110) of the rearrests.
- ▶ The first 10 weeks after pretrial release were the most critical for bond forfeiture. Of all the defendants who had a bond forfeiture, 28 percent forfeited their bond status within the first 10 weeks of their release.

Figure 45 reflects the percentage of each bond group who "failed" by forfeiting a bond, being rearrested or being reincarcerated at least once. For example, under jail I-bond men, the bond forfeiture (BF) figure of 52 percent means that 52 percent of all releasees sampled in that bond group forfeited their bond after release.

Figure 45: Comparison of failure outcomes across bond types

	MEN			WOMEN		
	Jail I-bond	Court I-bond	Deposit bond	Jail I-bond	Court I-bond	Deposit Bond
Bond forfeiture	52%	34%	30%	54%	31%	21%
Rearrest	47%	33%	39%	34%	19%	17%
Re-incarcerate	36%	24%	26%	25%	16%	11%

Workload issues

From a workload perspective, the 5,816 defendants in the weighted sample tracked over the course of this study accounted for at least 11,451 additional "transactions" requiring criminal justice resources and time. The courts had to process 3,493 additional bond forfeitures, police had to handle 5,320 rearrests, and the jail had to deal with 2,639 reincarcerations. Each of these pretrial transactions could be considered extra or unnecessary, compared to an "ideal" of no bond forfeitures, rearrests, or reincarcerations, during the pretrial release period.¹⁴

Applying these findings to the entire population (eligible for this study) of people released pending qualifying case disposition in Cook County in one year (about 30,000), it is estimated that pretrial failures add nearly 60,000 criminal justice transactions during the time of release to case disposition. These additional transactions include 18,214 bond forfeitures, 27,735 rearrests for new crimes, and 13,761 reincarcerations. Given the current number of pending cases in the Cook County courts and the fact that other parts of the system are overloaded with activity as well, these additional transactions only exacerbate an already serious situation.

Financial issues

Using information from a parallel study on criminal justice transaction costs (Olson, 1991), Authority staff were able to assess the estimated costs to criminal justice agencies in Cook County for all of the documented transactions of the sample group. Again, extrapolating the additional transaction costs to the entire population of released defendants in Cook County illustrates the enormous impact of pretrial release failures.

Present estimates put the average cost of an arrest at \$1,847, the average cost to try a defendant at \$119 per court appearance, and the average cost to incarcerate a prisoner at \$33 per day in Cook County. Looking at the transactions of the weighted sample group (5,816), it is estimated that the pretrial failures of this group alone amounted to \$12.6 million in law enforcement costs, nearly \$5.7 million in court costs, and more than \$1.9 million in correctional costs. The total additional cost of all pretrial failures among the group studied is estimated in excess of \$20.2 million. The total cost to process (and then reprocess) the weighted sample population was an estimated \$39 million.

¹⁴Unweighted additional transactions are shown in figure 36 in the "Pretrial failure: a workload perspective" section.

In comparison, if all pretrial defendants in the weighted sample had been detained for the entire period from arrest to disposition, the cost to the county would have been approximately \$61.5 million. From a simple release or incarcerate perspective, pretrial release, even given relatively high failure rates, is more economical, at least in terms of direct criminal justice costs. However, this cost does not reflect the larger (and largely unmeasurable) costs to the victims of the new crimes.

Experience suggests there may be a more economical option still—formalized and more structured pretrial services. Using estimated costs of supervision within the recently implemented Cook County Pretrial Services Program, it is estimated that placing all of the 5,816 released defendants in the weighted sample in Pretrial Services would have cost the county \$2.6 million. Including the costs for the initial arrests and processing through the courts, and rearrest for new crimes, the total cost of 5,816 released defendants would be \$27 million. The cost estimates for Pretrial Services assume an increase in current failure rates: 30 percent in an expanded program compared to a 22 percent failure rate for Pretrial Services, as of July 1991 (Pretrial Services Department, April 1992). Even so, the county could theoretically have reduced overall expenditures for the weighted sample population by \$11.9 million, while ensuring a higher degree of public safety, through use of structured supervised pretrial release.

Recommendations

It is difficult to view any one bond type as "best". This study shows that there are substantial levels of pretrial release failure in each bond category, not just in the jail I-bond category. Further, it is difficult to determine how many pretrial release failures can be viewed as acceptable. For example, all failures for the jail I-bond group can be seen as unacceptable since they are "forced releases". But, a certain number of these failures could be seen as acceptable, if they provide the benefit of additional jail space or program services for even more serious and dangerous inmates. Based on comparable data from other states, it is apparent that a zero tolerance level of pretrial failure is not achievable.

Nevertheless, defendants released by the courts fare better than those released by the jail. And, the current reported failure outcomes for the Cook County Pretrial Services Program (22 percent forfeited bond as of July 1991) are substantially lower than even those for the court bond categories in this study. These higher performance levels are due, at least in part, to the increased availability of resources and supervision for defendants in this program. In addition, eligibility criteria and other elements of the screening process may also have an influence.

The Cook County Department of Corrections currently uses programs such as electronic monitoring to accommodate pretrial releasees and help limit adverse effects on the criminal justice system and the community. Also, the department's focus on job training, education, and treatment, in conjunction with supervision on pretrial release, may help reduce pretrial failure.

Pretrial release funds in Cook County must be spent more effectively, and must address public safety issues aggressively. The Authority recommends that the following actions be carefully considered in light of this study's findings.

In the area of court managed pretrial programs:

- ▶ Examine and continue to refine the selection criteria for pretrial release.
- ▶ Develop additional programs to supervise and support defendants released through court-issued deposit or recognizance bonds.
- ▶ Increase resources for the Cook County Pretrial Services Program, to permit more defendants to enter the program.
- ▶ Accommodate high-risk defendants with high levels of failure by expanding the Cook County Pretrial Services Program or creating a special focus in the program for high-risk defendants.

In the area of jail-based recognizance release:

- ▶ Reduce the number of pretrial defendants released through the jail I-bond program through development and use of other, more structured alternatives.
- ▶ If the jail I-bond program continues, expand the resources available to the Cook County Department of Corrections to improve pretrial release programs, such as pretrial electronic monitoring and other enhanced pretrial supervision efforts.

The results of the Cook County Pretrial Release Study should serve as a baseline from which comparisons can be drawn with new or expanded pretrial supervision programs. The Authority recommends that comparable outcome measurements (bond forfeiture, rearrest, and reincarceration) be taken of the Pretrial Services Program and of any other new or

enhanced pretrial programs, to ensure that these programs are, in fact, reducing pretrial failure and improving public safety.

Further information/research needs

Another critical area that demands attention is the pretrial information and research infrastructure. Prior to the Cook County Pretrial Release Study, Cook County officials had no consistently documented information on what happens after a defendant is released on bond prior to disposition. The pretrial behavior of defendants released on court deposit bonds, court I-bonds, and jail I-bonds was virtually unknown, with the exception of limited anecdotal information or newspaper accounts. Ironically, the need for such information is critical, especially at particular stages of the judicial process.

For this project, the Illinois Criminal Justice Information Authority, working with the Chicago Police Department, the Illinois State Police, the Clerk of the Circuit Court of Cook County, and the Illinois Department of Corrections, brought together the data to create a comprehensive database on the pretrial behavior of a random sample of 2,127 defendants released on bond prior to trial. While cooperation among the agencies was excellent, the absence of a unified information system and uniform data collection made creation of the database a difficult task. Once created, however, this database served, in essence, as a *pretrial release tracking system* for the purposes of the study.

The Authority's findings are of immediate value in ascertaining weaknesses in current pretrial release policies. However, to help shape future pretrial release policy, Cook County needs to collect similar criminal justice data--on a systemwide basis--that could be used continuously to assess release outcomes and program effectiveness. Assuming the continued growth of the Cook County Pretrial Services Program and other supervised pretrial release mechanisms, the ability to evaluate pretrial release outcomes will be even more important in the future. The database created by the Authority for this study could not only serve as a prototype for future Cook County data collection efforts, but also as a model for how such a database could be used for decision making.

Appendix A: Sampling strategy

This appendix describes the steps and techniques employed in the selection of the sample for the pretrial release study. It includes the basic principles of sampling technique, a description of the sampling frame, a description of the subgroups around which the study focuses, a discussion based on the smallest cell size/rarest case theory, the role of confidence levels and precision, a comparison between two sampling techniques used, and a final sample size.

To determine the parameters for the sampling strategy, a pilot study was conducted of 25 cases of each bond type. Based on the analysis of these 75 cases, we determined that a random sample of the total pretrial release universe would not include enough women nor enough cases of violent offenses so that separate analysis could be conducted. In order to have enough of such cases so that analysis would be possible, we decided to over-sample the rare categories, and then correct for over-sampling by weighting the results of the final analysis. Therefore, the results of the pilot study were vital in developing the final sampling strategy for the study. This appendix contains some discussion of the results of this pilot study, but for more detail, see Appendix B, "Final Research Methodology".

Basic principles

After a review of sampling literature, and becoming familiar with the concepts underlying the techniques used in sampling, staff chose Stratified Random Sampling as the technique that best suited this study. The Stratified Random Sampling technique is a sampling method that depends upon randomness but combines this with another method calculated to increase representativeness (Goode & Hatt, 1952). The concept behind it is that a homogeneous population (in which every element is the same) requires a smaller sample than a heterogeneous population, in order to represent each of the differing parts or subpopulations. A series of homogeneous subpopulations can be sampled in such a way that, when the samples are combined, they construct a sample that accurately represents the heterogeneous population. The technique of doing this (called stratified random sampling) will yield a smaller sample size than the alternative technique in which a uniformly large sampling percentage is applied over the entire population (called a simple random sample). The stratified random sampling technique, therefore, saves time and money, and increases accuracy (Goode & Hatt, 1952). This method can be applied to any mutually exclusive group or to a group where none of its units appear in more than one group (Bailey, 1982).

To draw a stratified random sample, the heterogeneous population is separated into non-overlapping groups called strata, and a simple random sample is selected from within each stratum. In the Pretrial Release Study, a numbered list of each of six subpopulations (court

I-bond, jail I-bond and deposit bond men and women releasees) was obtained, and within each list, a sample was drawn using random numbers generated by an SPSS program.

Unit of measurement

Before describing the sampling frame, the universe and population from which it is composed must first be defined, beginning with the most basic component, the element. An element is the unit about which information is collected and which provides the basis of analysis. A universe is the theoretical and hypothetical aggregation of all elements, as defined for a given survey. A population is that aggregation of elements from which the sample is actually selected, and the sampling frame is the actual list of sampling units from which the sample is selected (Babbie, 1979). The element in the Pretrial Release Study is the releasee, whether court I-bond, deposit bond or jail I-bond. The universe is the total of all bonded releasees. The specific population, the source from which the sample of releasees was extracted, is a list of all releasees meeting the same qualifications as the qualifications for jail I-bond release, who were released during a time period when these qualifications were consistent.

As the study progressed, it became apparent that the unit of measurement for the Pretrial Release Study was not always completely clear. The sample for the study was a sample of *people* -- people released on bond. However, much of the data gathered for the study was *case* data, both the "qualifying case" for the study and the "follow-up cases" of rearrest, failure to appear, or reincarceration during the follow-up period. In fact, the definition of what data would be gathered for each *person* depended on the length of the follow-up period, and the length of the follow-up period was determined by the *qualifying case*. Thus, even though the unit of measurement in this study is each person (each bond releasee), the parameters for data gathered about each person were determined by the date of release on bond and the date of final disposition of the qualifying case.

The individual releasee was the unit of measurement. Because the purpose of the Pretrial Release Study was to identify successful and unsuccessful outcomes subsequent to release on three types of bond, the appropriate measure was to track the performance of each individual releasee from the date of release on bond for a given case to the date of the disposition of that case. This follow-up period was determined by the dates of the qualifying case. Therefore, even though the unit of measurement was the individual releasee, each sampled releasee also had to have a "qualifying case," a specific case that qualified the releasee to be chosen for the study.

Each sampled releasee was chosen in relation to a particular case. If a sampled releasee was released on bond for more than one case on the same day, the case meeting the criteria for the study is the one used to qualify the defendant for inclusion into the study. Criteria necessary for inclusion into the study include the following:

- ▶ Released on bond between September 13 through September 30, 1988, or November 10 through December 31, 1988.
- ▶ Bond amount equal to or less than \$50,000
- ▶ Charged with a felony that would enable the individual to be released on a jail I-bond.

Defendants given bonds of more than one type on the same day with cases that meet the requirements to qualify the defendant for the study, are described as having a dual status. Under these conditions, sampling with replacement is used. Individuals with dual status are left in the population. If they are chosen to be part of the sample they are removed from the group they are in and placed in a fourth, dual status group. They are then replaced in the sample by another randomly selected individual. If the number of individuals with dual status is large enough, separate analyses will be conducted.

As it turned out, there were less than ten dual status defendants randomly selected from the population. They were identified as dual status releasees and another individual was selected to replace them in the population strata from which they were drawn. However, once additional information was collected for these sampled releasees, it was discovered that one of the two cases associated with the bonds were "tag along" cases and in the end, there were no dual status people in the sample. For instance, within the jail I-bond population strata, information was provided that identified a releasee as receiving both a jail I-bond and a court I-bond on the same day. That person was given a special sample number (identifying he or she as having a dual status) and another individual was randomly selected from the jail I-bond population strata to replace the dual status person. Once additional information was collected for the individual, particularly the court docket for the cases associated with the dual bonds, it was discovered that the case where the person was issued a court I-bond had already been disposed of on the day that the individual entered the study. As a result that person was no longer a dual status releasee but a jail I-bond releasee, and subsequently tracked as such.

Sampling frame

The sampling frame (sample population) was the list of all jail I-bond, court I-bond and deposit bond releasees in 1988 during the months of September, November, and December. The year 1988 was chosen so that, in the great majority of the cases, a final disposition would have been rendered, thereby allowing a complete analysis of the activities of the releasee. In addition, the year chosen was current enough to provide information for decisions based on up to date issues. Finally, it was necessary to choose a time period in which the criteria used for jail I-bond release decisions were consistent.

On September 13, 1988, a memorandum was sent to the Cook County Department of Corrections authorizing the release of inmates based on the following criteria:

- ▶ Bond limit increase to \$50,000
- ▶ Eligible charges expanded to include the following:

16-1	Theft
16-3	Theft of labor/services
17-1	Deceptive practices
17-2	Impersonating police officer
17-3	Forgery
18-1	Robbery
19-1	Burglary
19-2	Possession of burglary tools
19-3	Residential burglary
19-4	Criminal trespass to residence
95-1/2-4	Auto theft
56-1/2-1401	Manufacture/deliverance controlled sub.
56-1/2-1402	Possession controlled substance

In October 1988, charges 18-1 and 19-3 were dropped from the eligibility list. By November 10, 1988, charges 18-1 and 19-3 were back on the eligibility list, with a \$50,000 bond amount. This made the month of November consistent with the policy decisions made in the month of September. There was no policy change in December. Therefore, the months of September, November, and December were chosen specifically to account for the policy changes made in 1988 at the jail. These months constitute the only time in 1988 when the policy was consistent. The policy for eligibility prior to September varied from one month to the next and was not consistent.

The pretrial releasee population includes not only jail I-bond releasees, but also court I-bond releasees and deposit bond releasees. Because the purpose of the study was to compare the behavior of jail I-bond releasees to the behavior of the other two groups, it was necessary to set the same sampling criteria for all three groups. Therefore, since the criteria for receiving a jail I-bond release in the above time period was that the amount of bond was no higher than \$50,000, and that the defendant was charged with a felony that would enable he or she to be released on a jail I-bond, the sampling criteria for all three groups was the same. The sampling frame was designed using the criteria for jail I-bond release eligibility. In other words, the sampling frame for the pretrial release study consisted of jail I-bond, court I-bond, and deposit bond releasees, released in the months of September, November, and December of 1988, on felony offenses that were not in contrast with those felony offenses acceptable for release under the jail I-bond program (eg..not including violent Class X felony offenses), with bond amounts equal to or less than \$50,000.

The population of pretrial bond releasees in Cook County, meeting the above criteria, was estimated by county experts to be 9,137 jail I-bond, 1,681 deposit bond, and 4,500 court I-bond releasees. The results of the pilot study (see Appendix B) indicated that a simple random sample of this total population would not yield an adequate number of cases of some of the specific subgroups within this total population in order to answer the basic questions posed by the study.

Stratified random sampling: the strata

The division of a heterogeneous population into homogeneous subpopulations requires that the criteria used for division is related to the variable(s) being studied, and that the division does not yield so many sub-samples that the size of the required sample exceeds the size required by a simple random sampling technique (Goode & Hatt,1952). The pilot study showed women accounted for only six percent (5 cases) of the 75 cases sampled. This led to the conclusion that, in a random sample of the releasee population, women would appear so infrequently that separate analysis of men and women would not be possible. A stratified random sample, over-sampling women, corrected this problem.

This addressed the issue of proportionality. The customary procedure in sample selection is to select from each strata in the same proportion that the stratum is distributed in the population. If a stratum constitutes seven percent of the total population, then the sample selected from the stratum should be seven percent of the total stratum (Goode & Hatt, 1952). However, when intensive analysis is needed within one stratum, or an analysis of the

difference between strata is needed, it becomes necessary to select a disproportionate number from a stratum, and then to weight the results (reduce the results proportionately) during analysis of the whole population (Goode & Hatt, 1952). This latter situation was the case here.

Because of our desire to study both female and male releasees, and to have enough cases for the analysis of somewhat rare qualifying case types (especially violent cases), the pretrial release population was divided into six strata; court I-bond men, court I-bond women, jail I-bond men, jail I-bond women, deposit bond men and deposit bond women. Initially, we estimated the population size for each group, by obtaining best estimates from the Cook County Department of Corrections (8,330 men and 807 women in the jail I-bond population, and 1,408 men and 273 women in the deposit bond population), and the Cook County Circuit Court Clerk's office (4,275 men and 225 women in the court I-bond population). The sampling strategy was based on these estimates. The actual sub-population sizes, after the complete lists were obtained and meticulously cleaned, were 3,417 men and 187 women in the jail I-bond population, 1,450 men and 226 women in the court I-bond population, and 442 men and 94 women in the deposit bond population (see figure 6, page 19).¹⁵

The division criteria used to create subpopulations has been satisfied in our sampling strategy. The variables being studied apply to all releasees and not just men, justifying the further division of the population to account for women. Dividing the stratum into six groups and using the techniques employed for selection (discussed shortly) does not yield a sample size that exceeds a size drawn from a simple random sampling technique, but in fact allows for a more accurate and representative sample.

Smallest cell size technique

When determining sample size, it is important to estimate how many times the sample may have to be subdivided during data analysis and to ensure an adequate sample size for each

¹⁵The population estimates obtained from the Cook County Department of Corrections and the Cook County Circuit Court Clerk's Office were much larger than the actual subpopulations used in the study. This is because the estimates were based on cases not individuals. The unit of analysis for this study is people, not cases. During the cleaning process, multiple cases were accounted for and identified with the releasee, thereby allowing staff to count people who may have multiple cases which reduced the estimated population sizes down to the size of the actual populations used in the study.

subdivision (Bailey, 1982). The smallest cell size theory is designed to take subdivision into account, by determining what sample size is large enough to represent the rarest situation that may occur in the population, and that is important for analysis. Using the pilot study, a crosstab was constructed to display two important characteristics of the groups in the study, the qualifying case offense type and the court history outcomes of their cases.

The idea of the smallest cell size theory is to pinpoint the cell in the crosstab with the fewest number of observations, then to select a minimum number of observations that would allow adequate subdivisions later during data analysis. The establishment of a size large enough to account for the rarest case will by default exceed the minimum number needed for analysis of any other more common situation deemed important to the goals of the study. The two variables, qualifying case offense type and court history outcomes, were chosen because they are important characteristics of the releasee. Crosstabs were created for all three groups indicating the frequency distribution between offense type and court history outcome, by gender.

The qualifying case offense types varied slightly from one group to another, the court history outcomes varied between groups, and the crosstab cells far exceeded the number of observations available from the pilot (especially for women). Therefore, it was necessary to combine and condense the offense and court history categories. The recoded qualifying case offense types and court history outcome categories were used to create a generic crosstab that was applied to each of the groups. Based on the information contained in the crosstabs, a sample size was then selected for each of the six sub-populations. The criteria were the following:

1. For the women, who were represented by only five cases in the pilot, the minimum number needed for data analysis of each subdivision (20 cases) was multiplied by the number of subdivisions (the number of rows times columns in the "generic" crosstab (16 cells). This yielded an estimate of 320 (20 times 16) cases as a minimum number that would allow the analysis of the basic questions asked by the study.

- ▶ Deposit bond women (Pilot N = 1)
 $20 * 16 = 80$
Minimum sample size for deposit bond women = 320
- ▶ Court I-bond women (Pilot N = 1)
 $20 * 16 = 80$

Minimum sample size for court I-bond women = 320

- ▶ Jail I-bond women (Pilot N = 2)

$$20 * 16 = 80$$

Minimum sample size for jail I-bond women = 320

Thus, the equation used for the women assigns a minimum number needed and applies that number to all of the cells in the crosstab, because there are so few women in the pilot study.

2. For the men, who were represented by 69 pilot cases, a more specific analysis was possible. For each bond type, we divided the number of cases in the smallest cell size in the generic table by the total number of pilot cases, to equal the percent of the total that is likely to occur in any one cell. This was multiplied by the minimum cell size to estimate the number of sampled cases that would be necessary to produce the minimum cell size for the given sample. If the row count totaled 0 or 1, the next highest row count total was used in the equation, because the size of a sample needed to account for a situation so rare as to have only one observation would be too large and costly.

- ▶ Deposit bond men (Pilot N = 22)

$$\text{pilot cell size} = 5 / 22 = 23\%$$

$$\text{minimum cell size} = 20 \times 4 = 80$$

$$80 / .23 = 348$$

Minimum sample size for deposit bond men = 348

- ▶ Court I-bond men (Pilot N = 23)

$$\text{pilot cell size} = 5 / 23 = 22\%$$

$$\text{minimum cell size} = 20 \times 4 = 80$$

$$80 / .22 = 363$$

Minimum sample size for court I-bond men = 363

- ▶ Jail I-bond men (Pilot N = 22)

$$\text{pilot cell size} = 4 / 22 = 18\%$$

$$\text{minimum cell size} = 20 \times 4 = 80$$

$$80 / .18 = 444$$

Minimum sample size for jail I-bond men = 444

In summary, the analysis of the 75 pilot study cases determined that the minimum sample required, in order to have adequate cases to study the characteristics of women and violent qualifying cases, would be 348 for each of the sub-populations of women, 348 for the deposit bond men, 363 for the court I-bond men, and 444 for the jail I-bond men.

Confidence levels and precision

In addition to the criterion of minimum cases (obtaining a minimum number of cases to permit the analysis necessary for the study), a second criterion for sample size selection is to obtain a given level of precision and confidence levels. The precision of a sample is an estimation of how closely the sample fits the actual population. Based on the objective of the study, precision determines the rate of the existence of error between the sample and its population (Arkin, 1984). For example, if the objective used to determine precision were the rearrest of the releasee after bond release, and the chosen precision level were + or - 4 percent, then it could be said (with a given degree of confidence) that the average number of people rearrested in the sample will be no more or less than 4 percent from the population's average number of people re-arrested.

The achievement of sample precision can be expressed only in terms of probability (confidence level). The researcher must decide how likely it is that the sampling rate of error (precision) will be within the chosen range (Arkin, 1984). Once a level of sampling precision is chosen, the next step is to determine how confident we are that the chosen precision of the sample to its population is truly within that range. To say that we are 95 percent confident that the precision of the sample is accurate, then we can say that, 95 times out of 100, the sampled value will not vary from the population value by more than the established range of precision.

One final issue that needs addressing along with confidence and precision is the rate of occurrence. When selecting the size of a sample with a specified precision and confidence level, it is useful to estimate how often the value in question occurs in the population. In other words, does rearrest occur in the population 10 percent of the time or 50 percent of the time? The researcher may not know, in advance, what the rate of occurrence of a value in the population will turn out to be. When the researcher does not know the rate of occurrence, it is recommended that a rate of 50 percent be used, which is the most conservative possible estimate but may yield a sample size that is larger than necessary (Arkin, 1984). For the sampled value of rearrest, assuming a rate of occurrence of 50 percent and a precision of + or - 4 percent and a 95 percent confidence level, it can be said

that the average of the sampled value (rearrests) occurs half of the time in the population and is within 8 percent of the population average, 95 times out of 100.

Once the decisions necessary to determine the sample size based on confidence level, precision, and rate of occurrence were made, staff was ready to use this technique to determine the sample sizes for the groups in the pretrial study. It was decided that a 100 percent sample of court I-bond and deposit bond women was necessary, because of the low number of female releasees estimated to be in the population of these groups (see "Smallest cell size technique", above). In addition, when the actual populations were determined, the numbers of jail I-bond women and deposit bond men were also so small that a 100 percent sample was necessary in order to achieve the minimum number required for analysis. Therefore, the sampling techniques below apply only to the jail I-bond men and the court I-bond men. The entire population was selected for the other four sub-populations (see Figure 6 for final sample sizes).

The population of jail I-bond men was estimated to be 8,330. Given assumptions of a 99 percent confidence level, a 50 percent rate of occurrence of re-arrest, and a precision of + or - 5 percent, the necessary sample size was determined to be 613 cases (7.4%). Therefore, we attempted to sample 613 jail I-bond releasee men, and actually sampled 601.¹⁶ However, the original estimate of 8,330 jail I-bond release men was much higher than the actual number because cases were counted instead of people. After complete and detailed checking of each unit of analysis (the releasee), the actual population total was only 3,417. Therefore, the actual sample proportion for jail I-bond men was 17.6 percent (601/3,417). This means that the actual level of precision and confidence levels are higher than the original estimate.

Similarly, the population of court I-bond men was estimated to be 4,275. Given assumptions of a 99 percent confidence level, a 50 percent rate of occurrence of rearrest, and a precision

¹⁶After the sampling procedure was completed, additional information was obtained on those sampled individuals. During the process of obtaining additional information not available during population and sample selection, aspects of the individual were identified which caused he or she to be dropped from the study. For example, in some instances the release date obtained from the population source for a sampled releasee, while within the parameters of the study, was also the disposition date of the qualifying case for that individual. This information was only available after receiving the court docket describing the progression of the qualifying case in court. In this situation the releasee was eliminated from the study, because there was no activity to record.

of + or - 5 percent, the necessary sample size was determined to be 573 cases (13.4%). Therefore, we attempted to sample 573 court I-bond releasee men, and actually sampled 577. However, the original estimate of 4,275 male court I-bond release cases was much higher than the actual number of cases, after complete and detailed checking of each case. The actual total was only 1,450. Therefore, the actual sampling percentage for court I-bond men was 40.0 percent (577/1,450). Again, this means that the actual level of precision and confidence levels are higher than the original estimate.

Appendix B: Research methodology

This appendix describes the final methodology used in conducting the Cook County Pretrial Release Study. This includes a re-statement of the research goals and objectives, a list of all data elements and their sources, the sampling strategy, data analysis techniques, data quality assessment, and a discussion of the comparisons to be made with other urban courts.

Research goals and objectives

The overall objective of this study was to meet the following critical information needs:

- ▶ Provide timely and useful information on pretrial release outcomes.
- ▶ Assist Cook County decision-makers in developing pretrial release policies.
- ▶ Provide research support for the implementation of formalized pretrial release programs in Cook County and other jurisdictions in the state.
- ▶ Examine comparative information on pretrial release programs and outcomes in other urban jurisdictions in the U.S.

The specific goal of this study was to assess failure/success rates of three types of pretrial releasees; court deposit bond releasees (deposit bond), court individual recognizance bond releasees (court I-bond), and administrative mandatory furlough releasees (jail I-bond). Failure versus success was measured by having a forfeiting a bond, and rearrest or reincarceration for new, unrelated, charge(s).

Data elements and agency sources

The study was designed to view the sample of pretrial releasees from the point of their release on bond until the final disposition of their court case.¹⁷ The events occurring within that time provided the basis for the analyses in this study as well as the source for measuring success or failure outcomes. Data elements for this study included tracer information about

¹⁷In fact, all cases were followed to the final disposition, with the exception of three that were still pending as of February 25, 1992. (Final disposition was defined as final disposition by the Circuit Court, and did not include appeals.)

the releasee, for tracking the releasee throughout the different agency data sources. In addition, data included variables be used during the analysis phase of the study.

Original samples of jail I-bond releasees and deposit bond releasees were extracted from the Cook County Jail's Correctional Institution Management Information System (CIMIS). Data from this source included the following:

name, date of birth, IR#, CIMIS#, offense charge(s), bond type, bond amount, booking date, release date, next court appearance date and next court appearance location.

Original samples of court I-bond releasees were extracted from the Cook County Clerk's automated database. Information for this group included the following:

bond number, bond amount, initial court date, case#, initial court location, name.

Initial court appearance date, court disposition (interim and final), and issuance of bond forfeiture warrants were obtained from the clerk's data for all three samples.

Data from the Chicago Police Identification Record Index and the Illinois State Police's Computerized Criminal History Record System provided the arresting agency ID#, date of arrest, and arrest charge(s). From this information, staff determined which of the releasees have been rearrested for new unrelated charges in Chicago and outside of Chicago in Illinois.

Reincarceration information was obtained from the Identification Record Index and the Computerized Criminal History Record System, in conjunction with the CIMIS dataset to determine how many releasees within the samples are being held again in the Cook County Jail.

Sampling strategy and pilot study

The strategy employed in this study to ensure accurate and representative sampling evolved through various stages, beginning with a pilot study that established sampling boundaries. In order to establish the sample size needed to represent the entire releasee population in question, we conducted a pretest or pilot to determine how many individuals would be necessary to account for the variation of possible outcomes between bond release and final disposition. We then proceeded to extract the actual sample.

The pilot study was performed as a preliminary step to determine the following:

- ▶ Definition of the follow-up period for the sampled cases
- ▶ The sample size necessary to meet the project objectives, given the complexity of the data; the minimum number of people needed to account for the different types of outcomes; the minimum number of individuals needed to represent the entire population in question, accounting for variance within each sample group, as well as relative size to total population
- ▶ Reliability of cross-data sources, data comparison, discovering how effectively the individuals sampled could be traced throughout the various datasets, assessing limitations inherent in the approach and resolving the issues without compromising data quality
- ▶ The extent and complexity of outcome variation; assessing the nature of possible outcomes that are not accounted for by the established success/failure measurements, such as bond status changes, that may occur from the point of discharge up until final disposition

The pilot study provided an indicator of the degree of variation and complexity within the population to be sampled. It reflected the homogeneity versus heterogeneity of the population from which the primary sample would be extracted, and provided a basis for determining the minimum number of individuals needed to represent the most important outcomes or situations that might occur. Outcomes can include issuance of bond forfeiture warrants, change of bond status from administrative mandatory furlough to court recognizance bond, rearrest and reincarceration for a new unrelated charge, successfully appearing for the final disposition of the case, or a combination of these.

The pilot sample was extracted from the CIMIS database and data from the Cook County Circuit Court Clerk's Office. Twenty-five releasees from each of the three groups (jail I-bond, court I-bond, deposit bond), were selected randomly from a list provided by the two agency sources. For more detail on the results of the pilot study, see "Sampling frame" in Appendix A.

The sample used for the study was selected based on the following boundaries:

- ▶ bond amounts ranging from \$5,000 and up

- ▶ felony cases only
- ▶ stratified random sampling technique
- ▶ type of releasee (jail I-bond, court I-bond, deposit bond)
- ▶ multiple-month periods (approximately 3) used as start dates, (selected in this way to account for policy changes throughout the period in question)

The specific sampling strategy is described in detail in Appendix A, "Sampling Strategy".

Information systems issues

As part of the methodology for this study it was necessary to determine, and resolve, issues of data quality and interpretation that arose during the course of the study. The following information systems issues were discovered:

- ▶ Some of the data elements extracted from the various data sources are not automated, but are stored manually on microfilm or in documented books.
- ▶ The tracer variables (IR number, NAME) are not universal elements found in each agency's dataset.

To resolve these information systems issues, the project team at the Authority organized a working session in which each contact person from the various agencies was called in, and made aware of the problems faced during the data collection process. By presenting them with the obstacles of cross data source comparison the staff established alternate methods of collecting the data without affecting its quality.

Analytical techniques used

In analyzing the pretrial releasees in this study the following techniques were utilized: frequency distributions, difference of means tests, and survival analysis.

- ▶ Frequency distributions are descriptive statistics that describe various aspects of a group or groups, such as how many individuals are distributed within a certain category, how many people in a certain group are female and how many are male, what proportion of the group is under 25 or over 25, and so on.

- ▶ The difference of means test is a statistical procedure that allows a comparison of the means from two sample groups of the same population, and determines if the means of the two groups are equal in the population. This is important when establishing relationships between groups in the same population or comparing groups in the same population. If their sample means are different, then there is a real difference between the two groups in the population.
- ▶ Survival analysis is a statistical method that analyzes rates over time in which events or failures occur for a given population or group. For this study, the observation period begins with each individual's release on bond. The occurrence of bond forfeiture warrants, rearrests, or reincarceration indicates failure, or levels of failure. Survival analysis specifies the proportion of releasees who survive by appearing in Court for the final disposition of their case, and who do not survive or fail by not appearing in Court and receiving a bond forfeiture warrant, or is rearrested. This is conducted across specified intervals within the follow-up period. This enables the researcher not only to determine the proportion that failed or succeeded but also the proportion who failed within every month, week, or day of a specified follow-up period. This method provides more precision and detail than a fixed observation method would.

Data quality assessment

To ensure quality data, the following steps were taken:

- ▶ A pilot study was conducted to establish and correct preliminary problems faced during data collection.
- ▶ Questionable information was assessed at the beginning, during, and after data collection.
- ▶ Problematic data was corrected to improve the validity and reliability of the sample.

Appendix C: Multivariate analysis of pretrial failure

Multivariate analysis provides a better understanding of pretrial failure and addresses many questions left unanswered by bivariate comparisons. For example, knowing that jail I-bond men are more likely to be arrested than court I-bond men for new crimes committed while out on bond is very important information. However, a difference between these arrest patterns might be due to many factors. For example, if people receiving jail I-bonds are more likely to have a previous arrest record, and if a previous arrest record is related to the likelihood of rearrest while free on bond, then an apparent difference between the performance of jail and court I-bond defendants may have, in reality, nothing to do with the actual bond type. Therefore, it is even more informative to determine what factors, other than bond type, influence the chances that a defendant will be arrested for a new crime or fail to appear for a scheduled court date. To answer these more complex questions, all of the releasee's pretrial behavior needs to be taken into account at the same time. This is where multivariate analysis is needed.

Factors that contribute to a defendant's pretrial behavior include several areas of a defendant's social life. Conditions influencing pretrial behavior are not limited to a defendant's interaction with the criminal justice system, but are also a result of factors such as economic status, family life characteristics (marital status, single family home, etc), and employment status. Unfortunately, in this study, we are limited to basic demographic factors such as race and age, along with other factors relating to a defendant's contact with the criminal justice system, to explain pretrial failure. But even with this limited information, we will be able to better understand pretrial failure as it exists in the criminal justice arena, and be able to better formulate useful policies to help resolve the problems of pretrial failure.

Multivariate analysis was used to answer the following questions:

1. What influences pretrial failure?
2. Of those factors that influence pretrial failure, which exert the most influence?
3. To what extent does the type of bond release influence pretrial failure?
4. What about gender differences? Do the same factors influence both males and females, and to the same degree?

5. Are the same factors that influence one type of failure also as influential in explaining another type? In other words, do the same factors influencing rearrest for new crimes also influence failure to appear? If so, is there a common factor that is exerting the most influence on both forms of failure?

The models built to answer these questions were generated using logistic regression. Logistic regression is appropriate when the dependent variable is nominal or categorical. The two dependent variables measuring pretrial failure ask whether or not the releasee was rearrested for a new crime while out on bond (NEWCRIME) and whether or not the releasee failed to appear in court and forfeited bond (FTAPPEAR). The variable NEWCRIME has two values: 0, which means the defendant was never arrested for a new crime during the follow-up period from bond release to end of case, and 1, which means the defendant was arrested at least once for a new crime during the follow-up period. The variable FTAPPEAR also has two values; 0, which means the defendant never forfeited a bond for failing to appear in court, and 1, which means the defendant had at least one bond forfeiture. Separate models were constructed for each pretrial failure outcome using logistic regression. Logistic regression was used to identify the variables that influence rearrest for a new crime in order to *explain* this type of pretrial failure, rather than to *predict* pretrial failure.

The group of independent variables available in the data collected on this sample of pretrial defendants include: age at bond release, race, gender, previously arrested, most serious offense, bond type, and length of follow-up period. Before building the logistic model, the independent variables had to be grouped into a logical causal order reflecting theoretical expectations.

Transforming categorical independent variables

Before attempting to explain the likelihood of pretrial failure, certain independent variables needed to be transformed in order to be meaningful in the analysis.

The age at bond release and the length of the follow-up period are both ratio-level continuous variables. Ratio-level variables are those with an absolute, fixed, and non-arbitrary zero point (Bailey, 1982, p. 66). For example, a defendant cannot have a negative age or a negative number of days from release date to disposition date. Either they have no age (not born) or no days from release date to disposition date. Continuous variables are those that may contain fractions, for example a defendant might be 20.5 years old or have a follow-up period of 1.5 days (Bailey, 1982, p. 67).

The remaining indicators or independent variables used in this analysis are nominal, which means they consist of at least two categories that are distinct, mutually exclusive, and exhaustive (Bailey, 1982, p. 63). This type of variable is essentially a classification system. When using regression analysis, the values of categoric or nominal independent variables must be transformed into separate dichotomous variables that reflect the meaning of the original variable. For example, race includes black, white, Latino, and other. Before putting the race variable into a regression model, it must be transformed into a system of dichotomous dummy variables identifying membership in the various race categories. Each dummy race variable has two values: 0, which indicates absence of category membership and 1, which indicates presence of category membership. For example, the dummy race variable white will have a value of 0 or 1. A respondent with a score of 0 is not white and a respondent with a score of 1 is white. The dummy variables used in the regression models include the following: black, white, Latino, and other (representing the race variable); gender (two categories, 0 = male, and 1 = female); previously arrested (two categories, 0 = no previous arrest, and 1 = at least one previous arrest); violent, property, drug, sex, public order, and probation violations (representing the most serious type of qualifying offense variable); and court, deposit, and jail (representing bond type).

Theoretical expectations and causal ordering

The order in which the independent variables are entered into the model is a function of the theoretical expectations of the order in which they occurred. The multivariate analyses are then used as statistical tools to answer the questions raised.

In answering the questions explaining rearrest for new crimes, the independent variables were entered into the model in the following order:

1. Age at bond release, the system of dummy race variables, and gender were entered first in the model because they occur first in time. A defendant's age race and gender are determined at birth. If these demographic variables were placed last in the model, their influence on the likelihood of being rearrested for a new a crime would be distorted by the influence of the remaining variables.
2. Whether the defendant was previously arrested is entered next in the model because this occurs after the background variables and before the remaining variables. The defendant's previous arrests occurred before the time period of this study, so that prior arrest comes before the most serious offense in the

qualifying case, type of bond release, and length of the follow-up period.

3. The system of dummy variables representing the most serious qualifying case offense type are entered next in the model because they happen next in time. The defendant was arrested and is then included in the sample. This event precedes the type of bond and the length of the follow-up period.
4. The system of dummy variables representing bond type is next in the causal ordering because after the defendant is arrested, he or she is released on a particular bond which identifies their group membership throughout the analysis.
5. The length of the follow-up period is entered last in the model because it occurs last in time. After the defendant is released on bond, his or her activity is tracked until the disposition of the case. All of the other indicator or independent variables used to explain the likelihood of rearrest for a new crime occur before this point in the defendant's case.

Interpreting the logistic model

Based on the causal ordering of the variables, the logistic model progresses through five separate steps. With the entrance of variables in progressive steps, three things are determined: 1) How well the variables entered as a system at each step improve the fit of the model to the data. In other words, how well the model represents the actual patterns or trends in the data as each variable, or system of variables, is entered in the model. 2) How much influence each group of variables entered on a step has in the likelihood of rearrest for a new crime. 3) How much influence each variable has as a system, and individually, once all variables are entered into the model.

The -2 Log Likelihood statistic (-2LL) is used to measure how well the model fits the data at various steps. A good model is one that results in a high likelihood of the observed results. This translates to a small value for -2 Log Likelihood; because if a model fits perfectly, the likelihood is 1, and -2 Log Likelihood is 0 (SPSS/PC+, 1989, p. B-88).

The following formula is used in hypothesis testing of the improved significance of the model:

$$((-2LL(1) - (-2LL(2))) = \text{model improvement chi square}$$

$$((df(1) - df(2))) = \text{total degrees of freedom used}$$

The null hypothesis for the first group of variables entered into the model is: knowing age at bond release, race, and gender does not significantly improve the fit of the model to the data over just knowing the constant.

$$(-2LL(\text{constant only}) - (-2LL(\text{variables in first step})) = 7319.494 - 7234.968 = 84.526.$$

$$(df1(\text{constant only}) - df2(\text{variables in first step})) = 5335 - 5331 = 4.$$

Using a chi square distribution table, the null hypothesis is rejected because the model that includes the group of demographic variables significantly improves the fit of the data over a model with just the constant at the .001 level of significance. This procedure is repeated at each step of the model building until all of the variables are entered into the model.

These statistical tests compare the model progressively at each step as a variable or group of variables are entered. The goal is to see if the last entered independent variable or system of dummy variables has an influence on the outcome variable. For example the -2LLs for the model containing the background variables (race, age, gender), and the model containing the next ordered variable (prior arrests), will be compared along with the number of degrees of freedom used in order to determine if prior arrests significantly influence likelihood of rearrest for a new crime.

What improves the fit of rearrest data to the model?

One way to measure the influences of factors on an outcome, such as rearrest for a new crime, is by determining how well the model fits the data. Statistical testing of significance at each step of model building revealed the following:

- Step 1. Information on age at bond release, race/ethnicity and gender significantly improve the fit of the model to the data over just knowing the constant (sign. < p.05).
- Step 2. Knowing if the defendant was previously arrested significantly improves the fit of the model to the data over just knowing the group of demographic variables (sign. < p.05).
- Step 3. Knowing the most serious offense in the qualifying case significantly

improves the fit of the model to the data over just knowing demographic information, and if defendant was previously arrested (sign. < p.05).

Step 4. Knowing type of bond release significantly improves the fit of the model to the data over just knowing demographic information, whether previously arrested, and most serious offense in the qualifying case (sign. < p.05).

Step 5. Knowing length of time from release on bond to the disposition date of the qualifying case significantly improves the fit of the model over just knowing the demographic information, previously arrested, most serious offense in qualifying case, and bond type (sign. < p.05).

Based on this initial interpretation, all of the variables taken at each step and as a system, significantly influence the likelihood of rearrest for a new crime.

Of those factors that influence the likelihood of rearrest for a new crime, which exert the most influence?

This question can be answered by reviewing statistics describing the "goodness-of-fit" of the model at each step of variable entrance. Goodness-of-fit statistics are generated by the -2LL test of significance formula. For example, the group of demographic variables entered in the first step of model building improved the fit of the model to the data by 84 units (-2LL constant only - -2LL model with demographic variables) = 84.526. The variable, or system of variables, with the largest units of improvement has the most influence in explaining the likelihood of rearrest for a new crime (Figure 46).

Figure 46: Goodness-of-fit, rearrest for new crime

	Units of improvement	Significance level
Step 1	84.526	<.05
Step 2	45.197	<.05
Step 3	56.715	<.05
Step 4	21.208	<.05
Step 5	302.559	<.05

Step 1 = Age at bond release, race, and gender

Step 2 = Previously arrested

Step 3 = Most serious offense in qualifying case

Step 4 = Type of bond release

Step 5 = Length of follow-up period

Thus, of all the "systems" of variables entered into a logistic regression equation for rearrest, type of bond contributes the least amount of improvement to the explanation of rearrest. Because the length of the follow-up period improves the model's fit to the data by 302.559 units, it is the most influential variable in determining the likelihood that a defendant will be rearrested for a new crime.

Additional information provided by the logistic analysis of the likelihood of rearrest for a new crime.

It is informative to know in what ways different variables individually influence the likelihood of rearrest for a new crime. Is each variable, or a system of dummy variables, significant? Are one or two variables accounting for all of the significance for the variable that they represent?

In Figure 47, the "significance" column describes the significance of each variable individually. The column labeled "B" displays the coefficients for each individual variable.

Coefficients are descriptions of the sample, which are the best guess or estimate of the unknown population value (Norusis, 1987, p. 341). The sign of the B coefficient describes the direction of the relationship between the indicator, or independent, variable and the outcome, or dependent, variable -- which in this case is the likelihood of being rearrested for a new crime.

Figure 47: Significance of variables influencing the likelihood of rearrest for a new crime

Variable	B	Significance
Age at bond release	-.0170	.0000
White	-.3106	.0011
Latino	.0204	.8440
Gender	-.5527	.0000
Pre-arrest	.6632	.0000
Violent offense	-.0032	.9774
Property offense	.3936	.0000
Violation of Probation	.0503	.6728
Sexual offense	1.161	.0322
Public order offense	.3615	.1554
Court I-bond	-.2208	.0020
Deposit bond	-.3847	.0004
Follow-up period	.0022	.0000
Constant	-.8634	.0000

The following variables are significant at the .05 level or less:

- ▶ Age at bond release (in years)
- ▶ Ethnic group
- ▶ Gender

- ▶ Previous arrest
- ▶ Most serious offense--property, sex or drug
- ▶ Type of bond release
- ▶ Length of follow-up period

When using dummy variables to represent the values of a nominal variable, the coefficients for the new dummy variables characterize the effect of each category in the nominal variable on the outcome or dependant variable. The reference category is simply a category of the original nominal variable that is left out to be used as a comparison to those categories included in the analysis (SPSS/PC+, 1989, p. B-90). For example, the dummy variable white indicates whether or not the defendant is white, (coded 1 for white and 0 otherwise) and is one of three values of the nominal race variable.

Of the three values of the race variable; white, black, and Latino, only two are needed in the analysis. White, and Latino were transformed into dummy variables with 0 or 1 values. Black was left out of the analysis as the reference category. As a result, when referring to race, if the dummy variable white is significant, this means that being white significantly effects the outcome, or dependent variable. The white dummy variable includes white, native Americans, Asians and others. The reference category for the most serious offense in the qualifying case is drug offense.

In analyzing Figure 47, the following observations can be made:

- ▶ As age at bond release increases, the likelihood of rearrest for a new crime decreases ($B = -.0170$, sign. at $< p.05$). In other words, older defendants are less likely to be rearrested for a new crime than younger defendants.
- ▶ Being white, as compared to being black, decreases the likelihood of being rearrested for a new crime ($B = -.3106$, sign. at $< p.05$). In other words, blacks are more likely than whites to be rearrested for a new crime.
- ▶ There is no significant difference in the likelihood of being rearrested for a new crime for Latinos when compared to blacks (sign. at $> p.05$). In other words, Latinos and blacks are equally likely to be rearrested for a new crime.
- ▶ Being a women decreases the likelihood of being rearrested for a new crime ($B = -.5527$, sign. at $< p.05$). In other words, women are less likely to be rearrested for a new crime than men.

- ▶ Having a prior arrest increases the likelihood of being rearrested for a new crime ($B = .6632$, sign. at $< p.05$).
- ▶ There is no significant difference in the likelihood of being rearrested for a new crime when the most serious offense in the qualifying case is a violent offense, a probation violation, or a public order offense as compared to a drug offense (violent sign. $> p.05$, probation violation sign. $> p.05$, public sign. $> p.05$). In other words, a defendant whose most serious offense in the qualifying case is a violent offense, a probation violation, or a public order offense is just as likely to be rearrested for a new crime as a defendant whose most serious offense in the qualifying case is a drug offense.
- ▶ Having a property offense as the most serious offense in the qualifying case increases the likelihood of being rearrested for a new crime when compared to having a drug offense as the most serious offense ($B = .3936$, sign. $< p.05$). In other words, accused property offenders are more likely to be rearrested for a new crime than accused drug offenders.
- ▶ Having a sexual offense as the most serious offense in the qualifying case increases the likelihood of being rearrested for a new crime when compared to having a drug offense as the most serious offense ($B = 1.1605$, sign. $< p.05$). In other words, accused sexual offenders are more likely to be rearrested for a new crime than accused drug offenders.
- ▶ Court I-bond defendants are less likely to be rearrested for a new crime than jail I-bond defendants ($B = -.2208$, sign. $< p.05$), even with all other variables taken into account.
- ▶ Deposit bond defendants are less likely to be rearrested for a new crime than jail I-bond defendants ($B = -.3847$, sign. $< p.05$), even with all other variables taken into account.
- ▶ As the length of the follow-up period for a defendant increases, the likelihood of the defendant being rearrested for a new crime increases ($B = .0022$, sign. $< p.05$).

Gender differences in explaining the likelihood of rearrest for a new crime

In the following analysis, the logistic modeling used to explain the likelihood of rearrest for a new crime for the entire sample is replicated separately for men and for women. The same variables were used in the same causal order with exception of the gender variable. A "select" statement was used to select out men and women when building the model. The main purpose of this analysis is to determine if there are differences between men and women in the factors that influence rearrest for a new crime.

What influences the likelihood of rearrest for a new crime for women?

- Step 1. Information on age at bond release, and race/ethnicity significantly improves the fit of the model to the data over just knowing the constant for women (sign. < p.05).
- Step 2. Knowing if the defendant was previously arrested significantly improves the fit of the model to the data over just knowing the group of demographic variables for women (sign. < p.05).
- Step 3. Knowing the most serious offense in the qualify case does not significantly improve the fit of the model to the data over just knowing demographic information and if the defendant was previously arrested for women (sign. > p.05).
- Step 4. Knowing the type of bond release significantly improves the fit of the model to the data over just knowing demographic information, previously arrested, and most serious offense in the qualifying case for women, (sign. < p.05).
- Step 5. Knowing length of time from release on bond to the disposition date of the qualifying case does not significantly improve the fit of the model to the data over just knowing the demographic information, previously arrested, most serious offense in qualifying case, and bond type for women (sign. > p.05).

From this initial interpretation of the model, it appears that the only significant factors in explaining the likelihood of rearrest for a new crime for women are knowing age, race/ethnicity, previous arrests, and the type of bond release (Figure 48).

Figure 48: Goodness-of-fit, for rearrests among women

	Units of improvement	Significance level
Step 1	9.001	<.05
Step 2	11.780	<.05
Step 3	6.917	>.05
Step 4	7.464	<.05
Step 5	.424	>.05

Step 1 = Age at bond release, race/ethnicity

Step 2 = Previously arrested

Step 3 = Most serious offense in qualifying case

Step 4 = Type of bond release

Step 5 = Length of follow-up period

In addition to understanding the influence of variables--especially as a system (age at bond release, race/ethnicity), or a system of dummy variables--on the likelihood of rearrest for women, it is informative to know in what ways the different variables individually influence the likelihood of rearrest. In Figure 49, the "significance" column describes the significance of each variable individually. The column labeled "B" displays the coefficients for each individual variable, which provides the direction of the relationship between the independent variable and the outcome.

Figure 49: Significance of variables influencing the likelihood of rearrest for a new crime, for women

Variable	B	Significance
Age at bond release	-.0328	.0327
White	.1047	.7419
Latino	-1.837	.0807
Pre-arrest	1.016	.0066
Violent offense	-.1083	.8196
Property offense	.4334	.1236
Violation of Probation	.9133	.0240
Sexual offense	.4437	.5857
Public order offense	.4191	.6302
Court I-bond	-.5154	.0485
Deposit bond	-.7946	.0208
Follow-up period	9.74	.5278
Constant	-.7569	.1734

With all of the variables in the equation, those that are significant at the .05 level or less include:

- ▶ Age at bond release (in years)
- ▶ Previously arrested
- ▶ Violation of probation as most serious offense versus a drug offense
- ▶ Type of bond release

In analyzing Figure 49, the following observations can be made:

- ▶ Older female defendants are less likely to be rearrested for a new crime (B = -.0328, sign. < p.05).

- ▶ Defendants with prior arrests are more likely to be rearrested for a new crime than those with no prior arrests ($B = 1.0156$, sign. $< p.05$).
- ▶ Accused probation violation offenders are more likely to be rearrested for a new crime than accused drug offenders ($B = .9133$, sign. $< p.05$).
- ▶ Court I-bond and deposit bond defendants are less likely than jail I-bond defendants to be rearrested for a new crime ($B_{\text{court}} = -.5154$, sign. $< p.05$, $B_{\text{deposit}} = -.7946$, sign. $< p.05$).

What influences the likelihood of rearrest for a new crime for men?

A model was constructed for the male population with the same independent variables entered in the same causal order as the model generated for the female sample groups. The men were "selected out" and the results were quite different from the female groups.

- Step 1. Information on age at bond release, and race/ethnicity significantly improves the fit of the model to the data for men over knowing just the constant (sign. $< p.05$).
- Step 2. Knowing if the defendant was previously arrested significantly improves the fit of the model to the data for men over knowing just the group of demographic variables (sign. $< p.05$).
- Step 3. Knowing the most serious offense in the qualifying case significantly improves the fit of the model to the data for men over knowing just demographic information, and whether the defendant was previously arrested (sign. $< p.05$).
- Step 4. Knowing type of bond release significantly improves the fit of the model to the data for men over knowing demographic information, previously arrested, and most serious qualifying case offense (sign. $< p.05$).
- Step 5. Knowing length of time from bond release to the disposition of the qualifying case significantly improves the fit of the model to the data for males over knowing the demographic information, previously arrested, most serious qualifying case offense, and bond type (sign.

<p.05).

From this initial interpretation of the model it appears that all of the variables taken at each step, as a system, significantly influence the likelihood of rearrest for a new crime for men. Even though all variables--taken as a group or individually in each step--significantly improve the fit of the model, the length of the follow-up period exerts the most influence on the likelihood of rearrest for a new crime for men (Figure 50).

Figure 50: Goodness-of-fit for rearrests among new crimes, for men

	Units of improvement	Significance level
Step 1	30.238	<.05
Step 2	35.480	<.05
Step 3	56.029	<.05
Step 4	16.845	<.05
Step 5	345.139	<.05

Step 1 = Age at bond release, race/ethnicity

Step 2 = Previously arrested

Step 3 = Most serious offense in qualifying case

Step 4 = Type of bond release

Step 5 = Length of follow-up period

In addition to understanding the influence of variables--especially as a system, or a system of dummy variables--on the likelihood of rearrest for men, it is informative to know in what ways the different variables individually influence the likelihood of rearrest. In Figure 51, the "significance" column describes the significance of each variable individually. The column labeled "B" displays the coefficients for each individual variable which provides the direction of the relationship between the independent variable and the outcome.

Figure 51: Significance of variables influencing the likelihood of rearrest for a new crime, for men

Variable	B	Significance
Age at bond release	-.0171	.0000
White	-.3404	.0007
Latino	.0591	.5767
Pre-arrest	.6469	.0000
Violent offense	-.0036	.9753
Property offense	.3857	.0000
Violation of Probation	-.1461	.2435
Sexual offense	1.7672	.0215
Public order offense	.3551	.1873
Court I-bond	-.1967	.0090
Deposit bond	-.3562	.0021
Follow-up period	.0025	.0000
Constant	-.9132	.0000

With all of the variables in the equation, those that are significant at the .05 level or less include:

- ▶ Age at bond release (in years)
- ▶ Race
- ▶ Previously arrested
- ▶ Property or sexual offense as the most serious offense versus a drug offense
- ▶ Type of bond release
- ▶ Length of follow-up period

In analyzing the summary table in Figure 51, the following observations can be made about the male sample:

- ▶ Older defendants are less likely than younger ones to be rearrested for a new crime ($B = -.0171$, sign. $< p.05$).
- ▶ White defendants are less likely than black defendants to be rearrested for a new crime ($B = -.3404$, sign. $< p.05$).
- ▶ Defendants with prior arrests are more likely to be rearrested for a new crime ($B = .6469$, sign. $< p.05$).
- ▶ Accused property and sex offenders are more likely than accused drug offenders to be rearrested for a new crime ($B = .3857$, sign. $< p.05$ and $B = 1.7672$, sign. $< p.05$).
- ▶ Court and deposit bond defendants are less likely than jail I-bond defendants to be rearrested for a new crime ($B = -.1967$ and $-.3562$, sign $< p.05$).
- ▶ As the length of the follow-up period for a defendant increases, the likelihood of failure to appear increases ($B = .0025$, sign. $< p.05$).

What influences the number of rearrests for new crimes?

In using a two-level (tiered) approach to analyzing pretrial failure the question shifts from understanding the likelihood of rearrest for a new crime, to understanding what influences the *number* of rearrests for a new crime once a person recidivates. To answer this, general linear regression is applied. Analysis at this second level focuses exclusively on the people who *did* recidivate.

General linear regression is fundamentally similar to logistic regression except for the statistics used to assess the goodness-of-fit of the model to the data, and the level of measurement of the dependent variable. The dependent, or outcome, variable is no longer dichotomous, with a 0 or 1, presence or absence logic. Instead it is a ratio-level continuous variable. Ratio-level variables are those with an absolute, fixed, and non-arbitrary zero point (Bailey, 1982, p .66).

The dependant variable used in the general linear regression models is the number of rearrests for a new crime. The same variables that were used in logistic regression are used in the following general linear regression modeling, and in the same causal order. The purpose is to determine the influence of demographics, prior criminal history, most serious offense in qualifying case, bond type, and length of the follow-up period on the number of rearrests for new crimes.

As with logistic modeling, one way to measure the influence of factors on an outcome--such as the number of rearrests for new crimes--is by determining how well the model fits the data. Figure 52 provides a way to assess how well the regression model actually fits the data. This also determines whether or not the independent variables help explain the number of rearrest for new crimes and to what degree.

Figure 52: Goodness-of-fit for number of rearrests for new crimes

	Multiple R	R square (R^2)
Step 1	.1382	.0191
Step 2	.1382	.0191
Step 3	.1940	.0376
Step 4	.1944	.0378
Step 5	.2176	.0474

Step 1 = Age at bond release, race/ethnicity and gender

Step 2 = Previously arrested

Step 3 = Most serious offense in qualifying case

Step 4 = Type of bond release

Step 5 = Length of follow-up period

The "Multiple R" column shows the correlation figures between the values predicted by the regression model and the actual observed values. If the value is close to 1, the regression model fits the data well, if it is close to zero, the regression model does not fit the data well

(Norusis, 1987, p. 344). An additional way of determining how well the model fits the data is to see what proportion of the total variance in the dependant variable can be explained by the independent variables. This is determined by squaring Multiple R. The numbers produced when squaring the Multiple R are presented in the "R square" (R^2) column.

In Figure 52, the factors used in explaining the *likelihood* of rearrest for a new crime are not very useful in explaining the *number* of rearrests for new crimes. For example, the Multiple R values for the variables entered at each step are closer to 0 than they are to 1. This means that the model does not fit the data well. In addition, the R^2 at each step explains less than six percent of the variance in the dependant variable. For example, only 5 percent of the variability in the number of rearrests for new crimes can be explained by knowing the length of the follow-up period (Step 5 in Figure 52). Five percent, which is the highest percentage of variability explained by any of the independent variables in this model, is not very much.

The same general linear regression analysis was conducted separately for men and women. What was discovered is that even controlling for gender; the demographic variables (age at bond release and race/ethnicity), previously arrested, most serious offense type, bond type and length of follow-up period are not influential in explaining the number of rearrests for new crimes.

Explaining failure to appear

As mentioned earlier, failure to appear is measured by whether or not a defendant forfeited a bond for failing to appear for a scheduled court date. Logistic analysis was again used to determine what variables influence failure to appear, which are most influential, and whether or not the same factors that influence rearrest also influence failure to appear.

The independent variables entered into the model include:

- Step 1. Demographic variables: age at bond release, the system of race dummy variables, and gender
- Step 2. Previously arrested
- Step 3. Most serious offense dummy variables
- Step 4. Bond type dummy variables

Step 5. Length of follow-up period

The reference dummy category for the race variable is black, and the reference dummy category for the most serious offense variable is drug offense. Statistical testing (-2LL) of significance at each step of model building revealed the following:

- Step 1. Information on age at bond release, race/ethnicity, and gender significantly improves the fit of the model to the data over just knowing the constant (sign. < p.05).
- Step 2. Knowing if the defendant was previously arrested significantly improves the fit of the model to the data over just knowing the group of demographic variables (sign. < p.05).
- Step 3. Knowing the most serious offense in the qualifying case significantly improves the fit of the model to the data over just knowing demographic information, and if the defendant was previously arrested (sign. < p. 05).
- Step 4. Knowing type of bond release significantly improves the fit of the model to the data over just knowing demographic information, previously arrested, and most serious offense in the qualifying case (sign. < p.05).
- Step 5. Knowing length of time from release on bond to the disposition date of the qualifying case significantly improves the fit of the model over just knowing the demographic information, previously arrested, most serious offense in qualifying case, and bond type (sign. < p.05).

Based on this initial interpretation, all of the variables taken at each step, and as a system, significantly influence the likelihood of failing to appear. This also suggests that the same variables influencing the likelihood of being rearrested for a new crime, also influence the likelihood of failing to appear. However, the analysis goes further than this. The degree to which the variables entered at each step influence the outcome needs to be determined. In addition, the question of whether the same factors are influential on both outcomes (and to the same degree) needs to be answered. Also, the individual contribution of each variable should be presented in order to identify those factors that provide the most influence in a causal step.

Of those factors that influence the likelihood of failure to appear, which exert the most influence?

As indicated in Figure 53, the same variables used to explain the likelihood of rearrest for a new crime have a different *degree* of influence on the likelihood of failure to appear. The demographic variables entered in step one, for example, improve the fit of the model to the data more when explaining rearrest for new crimes than when explaining the likelihood of failure to appear. The length of the follow-up period is the most influential factor in explaining both forms of pretrial failure, with a goodness-of-fit of 261 units of improvement for failure to appear, and 303 units of improvement for rearrest for a new crime.

The most serious offense in the qualifying case, and the type of bond release, improve the fit of the model to the data more when explaining the likelihood of failing to appear than when explaining the likelihood of being rearrested for a new crime. Also, type of bond release, which had the smallest effect on rearrest for a new crime of any of the five variable systems, was nearly as influential as the most serious offense in influencing failure to appear.

Figure 53: Goodness-of-fit for failure to appear

	Units of improvement	Rearrest new crime	Significance level
Step 1	51.021	84.526	<.05
Step 2	52.488	45.197	<.05
Step 3	123.268	56.715	<.05
Step 4	123.052	21.208	<.05
Step 5	260.550	302.559	<.05

Step 1 = Demographic variables: age at bond release, race, and gender

Step 2 = Previously arrested

Step 3 = Most serious offense in qualifying case

Step 4 = Type of bond release

Step 5 = Length of follow-up period

Additional information provided in the logistic analysis of the likelihood of failing to appear

The same variables influencing the likelihood of rearrest for a new crime also significantly influence the likelihood of failure to appear given the same causal reasoning and model structure.

In Figure 54 it is apparent that some of the variables entered as a group in a given step significantly improve the fit of the model to the data based on only one variable out of the system. And in the system of dummy variables, those that were significant in explaining rearrest for a new crime are not significant when explaining failure to appear. For example, age and gender have a significant effect on rearrest but not on failure to appear. On the other hand, being Latino has a significant effect on failure to appear but not on rearrest.

Figure 54: Significance of variables influencing the likelihood for failure to appear

Variable	B	Significance
Age at bond release	-.0006	.8700
White	-.2425	.0098
Latino	-.5523	.0000
Gender	.0912	.4153
Pre-arrest	.6445	.0000
Violent offense	-.0578	.6082
Property offense	.5338	.0000
Violation of Probation	-.2679	.0281
Sexual offense	.9996	.0819
Public order offense	.4863	.0566
Court I-bond	-.5678	.0000
Deposit bond	-1.0033	.0000
Follow-up period	.0021	.0000
Constant	-1.0712	.0000

In the full model developed to explain failure to appear, the following variables are significant at the .05 level or less (see "Significance" column in Figure 54):

- ▶ Both dummy race variables; white and Latino
- ▶ Previously arrested
- ▶ Property offense, violation of probation, and public order offense as the most serious offense in the qualifying case
- ▶ Both dummy bond type variables; court and deposit
- ▶ Length of follow-up period

In this analysis it is revealed that age at bond release, and gender are not needed because

they do not significantly improve the fit of the model to the data (age at bond release, sign. $> p.05$, gender sign. $> .05$). In the system of dummy variables representing the most serious offense in the qualifying case, the types of offenses that are significant in explaining failure to appear are very different from those which explain rearrest. For example, property and sex offenses were the only significant most-serious-offense-type dummy variables in explaining rearrest while property, and violation dummy variables are significant in explaining failure to appear.

Dummy variables--that are created as a system representing the categories of a nominal variable and entered into a model together must always be considered together. If there is one or more individual dummy variable accounting for all of the significance of a nominal variable, the represented nominal variable is significant and the dummy variables that are not contributing to that significance cannot be trimmed from the model. Age at bond release and gender are not part of a system of dummy variables and can be treated individually. Because they do not significantly influence failure to appear, they were trimmed from the model (Figure 55).

Figure 55: Significance of variables influencing the likelihood for failure to appear, revised model

Variable	B	Significance
White	-.2422	.0098
Latino	-.5557	.0000
Pre-arrest	.6352	.0000
Violent offense	-.0588	.6017
Property offense	.5326	.0000
Violation of Probation	-.2682	.0278
Sexual offense	1.0219	.0719
Public order offense	.4829	.0577
Court I-bond	-.5628	.0000
Deposit bond	-.9930	.0000
Follow-up period	.0021	.0000
Constant	-1.0713	.0000

In analyzing Figure 55 from a trimmed (without age at bond release and gender) failure-to-appear model, the following observations can be made:

- ▶ Being white decreases the likelihood of failure to appear compared to being black ($B = -.2422$, sign. $< p.05$). In other words, whites are less likely to fail to appear than blacks.
- ▶ Being Latino decreases the likelihood of failure to appear compared to being black ($B = -.5557$, sign. $< p.05$). In other words, Latinos are less likely to fail to appear than blacks. This effect is stronger than the effect of being white.
- ▶ Having a prior arrest increases the likelihood of failing to appear ($B = .6352$, sign. $< p.05$). This effect is about as strong as the effect on rearrest.

- ▶ There is no significant difference in the likelihood of failing to appear when the most serious offense in the qualifying case is a violent, public order, or sexual offense (sign. > p.05). In other words, a defendant whose most serious offense in the qualifying case is violent, public order, or sexual is just as likely to fail to appear as a defendant whose most serious offense in the qualifying case is a drug offense.
- ▶ Having a property offense as the most serious offense in the qualifying case increases the likelihood of failure to appear when compared to having a drug offense as the most serious offense ($B = .5326$, sign. < p.05). In other words, accused property offenders are more likely to fail to appear than accused drug offenders. This effect is stronger for failure to appear than for rearrest.
- ▶ Accused probation violators are significantly less likely to fail to appear in court than accused drug offenders ($B = -.2682$, sign. < p.05), even though a violation charge had no effect on rearrest.
- ▶ Court I-bond defendants are less likely to fail to appear than jail I-bond defendants ($B = -.5628$, sign. p < .05), even with all other factors held equal. The effect is stronger than for rearrest.
- ▶ Deposit bond defendants are less likely to fail to appear than jail I-bond defendants ($B = -.9930$, sign. p < .05), even when all other variables are simultaneously taken into account.
- ▶ As the length of the follow-up period for a defendant increases, the likelihood of failure to appear increases ($B = .0021$, sign. p < .05), about the same effect as for rearrest.

In conclusion, the same variables that influence the likelihood of rearrest do not influence the likelihood of failure to appear and of those that do, their influence is exerted in differing degrees.

Gender differences in explaining the likelihood of failure to appear

The logistic modeling was also used to explain the likelihood of failure to appear for men and for women. The same variables were used in the same causal order with exception of the gender variable. A "select" statement was used to select out men and women when

building the models. The main purpose of this analysis is to determine if there are differences between men and women in the factors that influence failure to appear.

What influences the likelihood of failure to appear for women?

Statistical testing of significance at each step of model building revealed the following:

- Step 1. Information on age at bond release and race/ethnicity does not significantly improve the fit of the model to the data over just knowing the constant for women (sign. > p.05).
- Step 2. Knowing if the defendant was previously arrested significantly improves the fit of the model to the data over just knowing the group of demographic variables for women (sign. < p.05).
- Step 3. Knowing the most serious offense in the qualifying case does not significantly improve the fit of the model to the data over just knowing demographic information and if the defendant was previously arrested for women (sign. > p.05).
- Step 4. Knowing type of bond release significantly improves the fit of the model to the data over just knowing demographic information, previously arrested, and most serious offense in the qualifying case for women (sign. < p.05).
- Step 5. Knowing length of time from release on bond to the disposition date of the qualifying case significantly improves the fit of the model for women over just knowing the demographic information, previously arrested, most serious offense in qualifying case, and bond type (sign. < p.05).

Prior arrest, bond type, and follow-up period are significant influences on the likelihood of failure to appear for women. Of those variables that significantly influence the likelihood of failure to appear for women, the follow-up period fits the model to the data slightly more than the other significant influences (27.562 units of improvement).

For women, the only variables with significant individual contributions at the .05 level or less are age at bond release, court I-bond, deposit bond, and follow-up period. Based on this,

the following observations can be made:

- ▶ Older female defendants are less likely than younger ones to fail to appear ($B = -.0291$, sign. at $p.03$).
- ▶ Defendants with a prior arrest are more likely to fail to appear than those with no prior arrest ($B = 1.2201$, sign. at $<.001$).
- ▶ Court I-bond and deposit bond women are less likely than jail I-bond women to fail to appear ($B = -.9163$ and -1.5821 , sign at $<.001$).
- ▶ As the follow-up period increases, the likelihood of failing to appear increases ($B = .0032$, sign. at $<.001$).

What influences the likelihood of failure to appear for men?

All of the variables entered at each step significantly improved the fit of the model to the data (sign. at $<.05$).

The type of most serious offense in the qualifying case was the most influential factor in explaining the likelihood of failure to appear for men (126.483 units of improvement).

With all the variables included in the model, age at bond release, and the most serious offense dummy variables, violent and sex, were not significant at the .05 level. From this analysis, the following observations can be made:

- ▶ Black men are more likely to fail to appear than white and Latino men ($B = -.3657$ whites, sign. $< p.05$; $B = -.5328$ Latinos, sign. $< p.05$).
- ▶ Defendants who were previously arrested are more likely to fail to appear than those with no prior arrests ($B = .5537$, sign. $< p.05$).
- ▶ Accused property and public order offenders are more likely than drug offenders to fail to appear ($B = .5543$ property, sign. $< p.05$; $B = .7024$ public order, sign. $< p.05$).
- ▶ Violation offenders are less likely than drug offenders to fail to appear ($B = -$

.3213, sign. < p.05).

- ▶ Deposit and court I-bond defendants are less likely than jail I-bond defendants to fail to appear ($B = -.5834$ court, sign. < p.05; $B = -.8298$, sign. < p.05).
- ▶ As the follow-up period increases, the likelihood of failing to appear increases ($B = .0002$, sign. < .05).

What influences the number of bond forfeitures?

Again, taking the two tiered approach to analyzing failure shifts the question from understanding the likelihood of failure to appear, measured by whether or not the defendant failed to appear, to understanding what influences the *number* of bond forfeitures declared after the first failure to appear. General linear regression was applied to determine whether or not the factors found influential in explaining the likelihood of failure to appear are also influential in explaining the number of bond forfeitures declared among those who fail to appear.

The dependant variable used in the general linear regression models is the number of bond forfeitures declared for failing to appear. The same variables that were used in logistic regression are used in the general linear regression modeling, in the same causal order.

As with logistic modeling, one way to measure the influence of factors on an outcome, such as the number of bond forfeitures declared for failing to appear, is by determining how well the model fits the data. Figure 56 assesses how well the regression model actually fits the data. This also determines whether or not, and to what degree, the independent variables help explain the number of bond forfeitures declared for failing to appear.

Figure 56: Goodness-of-fit for number of bond forfeitures for men

	Multiple R	R square (R^2)
Step 1	.0470	.0022
Step 2	.0503	.0025
Step 3	.1272	.0162
Step 4	.1352	.0183
Step 5	.1697	.0288

Step 1 = Demographic variables: age at bond release, race/ethnicity, and gender

Step 2 = Previously arrested

Step 3 = Most serious offense in qualifying case

Step 4 = Type of bond release

Step 5 = Length of follow-up period

Figure 56 shows that the factors used in explaining the *likelihood* of failure to appear are not very useful in explaining the *number* of bonds declared forfeited for failing to appear. For example, the "Multiple R" values for the variables entered at each step are closer to 0 than they are to 1. This means that the model does not fit the data well. In addition, the R^2 at each step explains less than 6 percent of the variance in the dependant variable. For example, only 3 percent of the variability in the number of bonds declared forfeited for failing to appear can be explained by knowing the length of the follow-up period (Step 5 in Figure 56). Three percent, which is the highest percentage of variability explained by any of the independent variables in this model, is not very much.

The same general linear regression analysis was conducted separately for men and women. What was discovered is that even controlling for gender; the demographic variables (age at bond release and race/ethnicity), being previously arrested, most serious offense type, bond type and length of follow-up period are not influential in explaining the number of bonds declared forfeited for failing to appear.

Appendix D: Offense Codebook

UCR* CODE	OFFENSE	STATUTE REFERENCE	OFFENSE CLASS
HOMICIDE			
0110	Murder, First Degree Murder, First Degree	38 9 1 38 9 1 a	Violent Violent
0111	Attempted Murder, 1st (unspecified)	38 8 4 (38 9 1)	Violent
CRIMINAL SEXUAL ASSAULT			
0265	Aggravated Criminal Sexual Assault Caused bodily harm to the Victim. The accused was over 17 and victim was under 13.	38 12 14 38 12 14 a 2 38 12 14 b 1	Sex Offense Sex Offense Sex Offense
0281	Criminal Sexual Assault Criminal Sexual Assault The use of, or threatened use of force. The victim was unable to understand the act and unable to give consent.	38 12 13 38 12 13 a 38 12 13 a 1 38 12 13 a 2	Sex Offense Sex Offense Sex Offense Sex Offense
0291	Attempted Criminal Sexual Assault	38 8 4 (38 12 13)	Sex Offense
ROBBERY			
0320	Strong Arm, No Weapon Strong Arm, No Weapon Strong Arm, No Weapon	38 18 1 38 18 1 a 38 18 1 a 2	Violent Violent Violent
0321	Armed Robbery (unspecified) Armed Robbery (unspecified)	38 18 2 38 18 2 a	Violent Violent
0322	Attempted Armed Robbery (unspecified)	38 8 4 (38 18 2)	Violent
0340	Attempted Strong Arm, No Weapon Attempted Strong Arm, No Weapon	38 8 4 (38 18 1) 38 8 4 (38 18 1 a)	Violent Violent

* Uniform Crime Reporting Code

BATTERY

		38 12 4	Violent
		38 12 4 a	Violent
0440	Aggravated, Hands, Fists, Feet, etc. (inflicts great bodily harm)	38 12 4 a 1	Violent
	Aggravated, Hands, Fists, Feet, etc. (inflicts great bodily harm)		
	Aggravated, Hands, Fists, Feet, etc. (inflicts great bodily harm)		
0445	Aggravated, Hands, Fists, Feet, etc.	38 12 4 b 2-12	Violent
	Knows the individual harmed to be a peace officer.	38 12 4 b 6	Violent
	The person battered is on public property.	38 12 4 b 8	Violent
	The individual harmed is a public transportation worker.	38 12 4 b 9	Violent
	The individual harmed is over 60 years old.	38 12 4 b 10	Violent
0450	Aggravated Battery (unspecified)	38 12 4	Violent
	Aggravated Battery (unspecified)	38 12 4 a	Violent
	Aggravated Battery (unspecified)	38 12 4 b	Violent
	Uses a deadly weapon other than firearm discharge.	38 12 4 b 1	Violent
0460	Simple Battery	38 12 3	Violent
	Simple Battery	38 12 3 a	Violent
	Causes bodily harm to an individual.	38 12 3 a 1	Violent
	Makes physical contact of an insulting nature.	38 12 3 a 2	Violent
	Simple Battery	38 12 3 b 1	Violent
0470	Reckless Conduct	38 12 5	Violent
	Causes great bodily harm, or endangers safety.	38 12 5 a	Violent

ASSAULT

0510	Aggravated Assault (unspecified)	38 12 2 a	Violent
	Uses a deadly weapon.	38 12 2 a 1	Violent
	Concealed his identity or that of a firearm.	38 12 2 a 2	Violent
	Discharges a firearm.	38 12 2 a 13	Violent
0511	Aggravated Assault, Handgun	38 12 2 a 11	Violent
0545	Aggravated, Hands, Fists, Feet, etc.	38 12 a 2-12	Violent
0560	Simple Assault	38 12 1	Violent
	Simple Assault	38 12 1 a	Violent

0570	Home Invasion	38 12 11	Violent
	Home Invasion	38 12 11 a	Violent
	Armed with dangerous weapons.	38 12 11 a 1	Violent
	Intentionally causes any injury to any person within such dwelling place.	38 12 11 a 2	Violent

BURGLARY

0609	Burglary (unspecified)	38 19 1	Property
	Burglary (unspecified)	38 19 1 a	Property
0627	Residential Burglary (unspecified)	38 19 3	Property
	Residential Burglary (unspecified)	38 19 3 a	
0630	Attempted Forcible Entry (Attempted Burglary)	38 8 4 (38 19 1)	Property
	Attempted Forcible Entry (Attempted Burglary)	38 8 4 (38 19 1 A)	Property
	Attempted Forcible Entry (Attempted Burglary)	38 8 4 a (38 19 1)	Property
0631	Attempted Residential Burglary	38 8 4 (38 19 3)	Property

THEFT

0800	Theft (unspecified)	38 16 1	Property
	Theft (unspecified)	38 16 1 a	Property
	Obtains or exerts unauthorized control over property of the owner.	38 16 1 a 1	Property
	Obtains by deception control over property of the owner.	38 16 1 a 2	Property
	Obtains by threat control over property of the owner.	38 16 1 a 3	Property
	Theft (unspecified)	38 16 1 b	Property
	Theft of property other than a firearm, not exceeding \$300.	38 16 1 b 1	Property
	Obtains control over known to be stolen property.	38 16 1 d	Property
	Intends to deprive the owner permanently the use or benefit of the property.	38 16 1 d 1	Property
	Theft from a person not >\$300, or theft of property >\$300, but <\$10,000.	38 16 1 e 3	Property
	Theft from coin operated machines.	38 16 5	Property
0801	Retail Theft (unspecified)	38 16 A 3 a	Property
	Retail Theft (unspecified)	38 16 A 3 a d	Property
	Retail Theft (unspecified)	38 16 A 3 a f	Property
	Retail Theft (unspecified)	38 16 A 3 a 3	Property
0850	Attempted Theft	38 8 4 (38 16 1)	Property

0910	Auto Theft	38 16 1	Property
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ARSON

1000	Arson (unspecified)	38 20 1	Property
	Damages any real property, or any personal property >\$150.	38 20 1 a	Property
	Damages any real property, or any personal property >\$150.	38 20 1 a 1	Property
	With intent to defraud an insurer >\$150.	38 20 1 b	Property

1025	Aggravated Arson	38 20 1.1	Violent
	He knows or reasonably should know that one or more persons are present therein.	38 20 1.1 a 1	Violent

1030	Possession Explosives, Incendiary Device	38 20 2	Property
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1091	Attempted Aggravated Arson	38 8 4 (38 20 1.1)	Violent
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DECEPTION

1110	Deceptive Practices	38 17 1	Property
	Deceptive Practices	38 17 1 a	Property
	Attempt to pay with fraudulent check.	38 17 1 b d	Property
	Attempt to defraud, any check or money order for payment of money, without the consent of the account holder.	38 17 1 c 2	Property
	Deceptive Practices	38 17 1 d	Property

1120	Forgery	38 17 3	Property
	Forgery	38 17 3 a	Property
	Makes or alters any document apparently capable of defrauding another.	38 17 3 a 1	Property
	Issues or delivers such a document known to have been altered.	38 17 3 a 2	Property
	Possesses with intent to deliver such a document known to have been altered.	38 17 3 a 3	Property
	Forgery	38 17 3 b	Property
	Forgery	38 17 3 1 p	Property

1130	Fraud	38 17 1	Property
	State Benefits Fraud	38 17 6	Property
	State Benefits Fraud	38 17 6 a	Property
	State Benefits Fraud	38 17 6 a 3	Property
	Public Aid Fraud	23 8 A 2 a 1	Property
	Public Aid Fraud	23 8 A 2 a 2	Property
	Home Repair Fraud	121 5 1603 a	Property
1150	Credit Card Fraud	17 5901	Property
	Unlawful Use	17 5917	Property
	Receive Lost Credit Card	17 5918	Property
	Unlawful Use	17 5921	Property
	Unlawful Use	17 5921 I	Property
	Unlawful Use	17 5921 3	Property
1200	Obtains control over property known to be stolen.	38 16 1 d	Property
	Intends to deprive the owner permanently.	38 16 1 d 1	Property
1210	Theft of Labor, Service, Use of Property	38 16 3	Property
	Obtains temporary use of property, service, or labor, by means of deception.	38 16 3 a	
	Renting or leasing a motor vehicle, and fails to return the vehicle within the time specified.	38 16 3 b	Property
1220	Theft of Lost or Mislaid Property	38 16 2	Property
CRIMINAL DAMAGE & TRESPASS TO PROPERTY			
1310	Criminal Damage to Property	38 21 1	Property
	Knowingly damages the property of another without his consent.	38 21 1 a	Property
	Criminal Damage to Property	38 21 11	Property
1320	Criminal Damage to Vehicle	38 21 1	Property
	Criminal Damage to Vehicle	38 21 11	Property
1330	Criminal Trespass to Land	38 21 3	Property
	Criminal Trespass to Land	38 21 3 a	Property
	Criminal Trespass to Land	38 21 11	Property
1340	Criminal Damage to State Supported Property	38 21 4	Property
	Criminal Damage to State Supported Property	38 21 33	Property

1350	Criminal Trespass to State Supported Land	38 21 5 a	Property
	Criminal Trespass to State Supported Land	38 21 33	Property
1360	Criminal Trespass to Vehicle	38 21 2	Property
1365	Criminal Trespass to Residence	38 19 4	Property
1375	Institutional Vandalism	38 21 1.2	Property
1380	Unauthorized Possession or Storage of Weapons	38 21 6	Property
	Unauthorized Possession or Storage of Weapons	38 21 6 a	Property

DEADLY WEAPONS

1410	Unlawful Use of Weapons (unspecified)	38 24 1	Violent
	Unlawful Use of Weapons (unspecified)	38 24 1 a	Violent
	Sells, manufactures, purchases, possesses or carries any bludgeon, black-jack, slung-shot, sand-club, sand-bag, metal knuckles, throwing star or any switchblade style knife.	38 24 1 a 1	Violent
	Same as 38 24 1 a 1	38 24 1 a 1 c	Violent
	Carries or possesses with intent to use the same unlawfully against another, a dagger, a dirk, billy, dangerous knife, razor, a stiletto, broken bottle or other piece of glass, stun gun or taser or any other dangerous or deadly weapon.	38 24 1 a 2	Violent
	Carries or possesses in any vehicle or concealed on or about his person, except when on his land, any pistol, revolver, stun gun or taser or other firearm.	38 24 1 a 4	Violent
	Sells manufactures, purchases, possesses or carries a machine gun, or a modified weapon (sawed off), any bomb shell, grenade, Motor vehicle cocktails, or artillery projectiles.	38 24 1 a 7	Violent
	Carries or possesses on or about his person, upon any public street or public land for the purpose of display of such weapons, or the lawful commerce in weapons, except when on his land, any pistol, revolver, stun gun or taser or other firearm.	38 24 1 a 10	Violent
	Carries, possesses any bludgeon, black-jack, slung-shot, sand-club, sand-bag, metal knuckles, throwing star, switchblade, ballistic knife, tear gas gun, pistol, revolver, or any other firearms, on any school grounds.	38 24 1 a 12	Violent
1411	Unlawful Use of Weapons by Felon	38 24 1.1	Violent
	Unlawful Use of Weapons by Felon	38 24 1.1 a	Violent

1430	Unlawful Possession of Ammunition Unlawful Possession of Ammunition	38 24 3 1 38 24 3 1 a	Violent Violent
1450	Defacing ID Marks of Firearms Defacing ID Marks of Firearms	38 24 5 38 24 5 a	Public Order Public Order
1460	Firearms & Ammunition, No FOID Card Firearms & Ammunition, No FOID Card Firearms & Ammunition, No FOID Card Requisites for Transfer.	38 83 2 38 83 2 a 38 83 2 2 38 83 3	Public Order Public Order Public Order Public Order
SEX OFFENSES			
1505	Prostitution Any person who performs or agrees to perform any act of sexual... for money or anything of value. Any person who performs or agrees to perform any act of sexual... for money or anything of value.	38 11 14 38 11 14 a 38 11 14 a 2	Sex Offense Sex Offense
1510	Soliciting for a Prostitute	38 11 15 a 2	Sex Offense
1515	Pandering	38 11 16 a 2	Sex Offense
1520	Keeping a Place of Prostitution Permits the continued use of a place after becoming aware that it is being used for purposes of prostitution.	38 11 17 38 11 17 a 3	Sex Offense Sex Offense
1530	Pimping Pimping	38 11 19 38 11 19 1	Sex Offense Sex Offense
1562	Aggravated Criminal Sexual Abuse The accused over 17 and the victim under 13 or the accused over 13 but under 17 and the use or the threat of force.	38 12 16 38 12 16 c 1	Sex Offense Sex Offense
1563	Criminal Sexual Abuse	38 12 15 38 12 15 b 1	Sex Offense
1570	Public Indecency	38 11 9	Sex Offense
1580	Sexual Relations within Families Sexual Relations within Families	38 11 11 38 11 11 a	Sex Offense Sex Offense

1582	Child Pornography With knowledge of its content reproduces, disseminate, exhibits or possesses any film, videotape, of any child <18 in such activity...	38 11 20.1 38 11 20.1 a 2	Sex Offense Sex Offense
1585	All Other Sex Offenses Indecent Liberties with a Child	38 11 4	Sex Offense
GAMBLING			
1610	Bookmaking Bookmaking, receives or accepts more than five wages or bets.	38 28 1.1 b 38 28 1.1 d	Public Order Public Order
1620	Numbers, Lottery	38 28 1 a 7	Public Order
1630	Keeping a Gambling Place	38 28 3	Public Order
1651	Card Game, Playing Card Game, Playing	38 28 1 a 1 38 28 1 a 1 d	Public Order Public Order
1661	Dice Game, Playing	38 28 1 a 1	Public Order
1680	All Other Gambling Offenses Gambling Knowing owns or possesses any book, instrument or apparatus by means of which bets or wagers have been recorded. Knowingly transmits information as to wagers or betting odds.	38 28 1 38 28 1 a 5 38 28 1 a 11	Public Order Public Order Public Order
OFFENSES INVOLVING CHILDREN			
1720	Contributing to Delinquency of a Child Child Neglect	23 2361 a 23 2361	Public Order Public Order
1780	All Other Offenses Involving Children Child Abandonment	23 2359	Public Order
CANNABIS CONTROL ACT			
1800	Possession of Cannabis (unspecified)	56.5 704	Drug Offense

1811	Possession of 30 Grams or Less		
	Possession of not more than 2.5 grams.	56.5 704 a	Drug Offense
	Possession of more than 2.5 grams but not more than 10 grams.	56.5 704 b	Drug Offense
	Possession of more than 10 grams but not more 30 grams.	56,5 704 c	Drug Offense
1812	Possession of Over 30 Grams		
	Possession of more than 30 grams but not more than 500 grams.	56.5 704 d	Drug Offense
	Possession of more than 500 grams.	56.5 704 e	Drug Offense
1820	Manufacture, Delivery of Cannabis (unspecified)	56.5 705	Drug Offense
1821	Manufacture, Delivery or Possession with Intent to Deliver or Manufacture 10 Grams or Less		
	Not more than 2.5 grams.	56.5 705 a	Drug Offense
	More than 2.5 but not more than 10 grams.	56.5 705 b	Drug Offense
1822	Manufacture, Delivery or Possession With Intent of Deliver or Manufacture Over 10 Grams		
	More than 10 grams but not more than 30 grams.	56.5 705 c	Drug Offense
	More than 30 grams but not more than 500 grams.	56.5 705 d	Drug Offense
	More than 500 grams.	56.5 705 e	Drug Offense
1850	Production of Cannabis Plant	56.5 708	Drug Offense
	More than 5 but not more than 20 plants.	56.5 708 b	Drug Offense
1900	Intoxicating Compounds	38 81 1	Drug Offense

CONTROLLED SUBSTANCES ACT

2009	Attempted Manufacture, Deliver or Posses with Intent to Deliver or Manufacture Controlled Substance	38 8 4 (56.5 1411) 38 8 4 (56.5 1401)	Drug Offense Drug Offense
2010	Manufacture, Deliver or Possess with Intent to Deliver or Manufacture Controlled Substance.	56.5 1401	Drug Offense
	15 grams or more but not more than 100 of any substance containing heroin or any analog thereof.	56.5 1401 a 1	Drug Offense
	15 grams or more but not more than 100 of any substance containing cocaine or any analog thereof.	56.5 1401 a 2	Drug Offense
	30 grams or more grams of any substance containing phencyclidine or any of the salts, PCP, or an analog thereof.	56.5 1401 a 10	Drug Offense
	Manufacture, Deliver or Possess with Intent to Deliver or Manufacture Controlled Substance.	56.5 1401 b	Drug Offense

2010 cont.	More than 10 grams but not more than 15 of any substance containing heroin or any analog thereof.	56.5 1401 b 1	Drug Offense
	More than 10 grams but not more than 15 of any substance containing cocaine or any analog thereof.	56.5 1401 b 2	Drug Offense
	More than 10 grams but not more than 30 grams of any substance containing phencyclidine or any of the salts, PCP., or any analog thereof.	56.5 1401 b 10	Drug Offense
	Any other amount of a controlled or counterfeit substance which is not a narcotic drug. (fine shall not be more than \$200,000)	56.5 1401 c	Drug Offense
	Any other amount of a controlled or counterfeit substance which is not a narcotic drug. (fine shall not be more than \$150,000)	56.5 1401 d	Drug Offense
	Any other amount of a controlled or counterfeit substance which is not a narcotic drug. (fine shall not be more than \$75,000)	56.5 1401 g	Drug Offense
	Manufacture, Deliver or Possess with Intent to Deliver or Manufacture Controlled Substance.	56.5 1401 1 1	Drug Offense
	Manufacture, Deliver or Possess with Intent to Deliver or Manufacture Controlled Substance.	56.5 1401 13 2	Drug Offense
2020	Possessing a Controlled Substance	56.5 1402	Drug Offense
	Possessing a Controlled Substance	56.5 1402 a	Drug Offense
	15 grams of any substance containing heroin.	56.5 1402 a 1	Drug Offense
	15 grams of any substance containing cocaine.	56.5 1402 a 2	Drug Offense
	30 or more grams of any substance containing phencyclidine or any of the salts, PCP., or any analog thereof.	56.5 1402 a 10	Drug Offense
	Any amount of controlled or counterfeit substance.	56.5 1402 b	Drug Offense
	Possessing a Controlled Substance	56.5 1402 c	Drug Offense
2030	Look Alike Substances, Manufacture, Deliver or Possess	56.5 1404	Drug Offense
2050	Criminal Drug Conspiracy	56.5 1405	Drug Offense
2070	Delivery to Persons Under 18	56.5 1407 b	Drug Offense
2090	All Other Controlled Substances Offenses		
	Miscellaneous Violations	56.5 1406 b	Drug Offense

HYPODERMIC SYRINGES & NEEDLES ACT

2110	Possession or Sale		
	Possession of instruments adapted for use of controlled substances or cannabis by subcutaneous injection.	38 22 50	Drug Offense
	Sale or exchange of such instruments.	38 22 51	Drug Offense

LIQUOR CONTROL ACT VIOLATIONS

2210	Sales and possession by persons under 21, intoxicated or legal disabled.	43 131	Public Order
	Sales and possession by persons under 21, intoxicated or legal disabled.	43 131 a	Public Order
	Sales and possession by persons under 21, intoxicated or legal disabled.	43 131 6 16	Public Order
2220	Illegal Possession by Minor	43 134	Public Order
	Purchase or acceptance of gift liquor by persons under 21 (Identification cards).	43 134 a 6 20	Public Order

MOTOR VEHICLE OFFENSES

2400	Other Motor Vehicle Offenses		
	Security Interest	95.5 3 203	Public Order
	Display of Registration Plates and Sticker	95.5 3 413	Public Order
	Expired Registration Plates and Sticker	95.5 3 413 f	Public Order
	Failure to Keep Records	95.5 404 a	Public Order
	Unlicensed Business	95.5 801	Public Order
	Obedience to Traffic Control Device	95.5 11 305	Public Order
	Driving While Under The Influence	95.5 11 501	Public Order
	Transportation of Alcoholic Liquor in M.V.	95.5 11 502 a	Public Order
	Driving Wrong Side	95.5 11 701	Public Order
	Moving Violation	95.5 11 804	Public Order
	Motor Vehicle Offense	95.5 11 601	Public Order
	Motor Vehicle Offense	95.5 3 203	Public Order
	Horn and Warning Device	95.5 12 601	Public Order
	Horn and Warning Device	95.5 12 601 b	Public Order
	Bumper	95.5 12 608	Public Order
2409	Driving Under Influence (unspecified)	95.5 11 501	Public Order

2410	Driving Under the Influence, Alcohol	95.5 11 501	Public Order
2420	Driving Under the Influence, Drugs	95.5 11 501	Public Order
2430	Transportation of Alcoholic Liquor	95.5 11 502	Public Order
2455	No Registration	95.5 3 701	Public Order
2465	Improper Use of Registration	95.5 3 703	Public Order
2470	No Drivers License	95.5 6 101	Public Order
2475	Motor Vehicle Anti-Theft Laws	95.5 4 102-5	Property
	Motor Vehicle Anti-Theft Laws (Misdemeanors)	95.5 2 102 a	Property
	Motor Vehicle Anti-Theft Laws (Felonies)	95.5 4 103	Property
	Motor Vehicle Anti-Theft Laws (Felonies)	95.5 4 103 a	Property
	A person not entitled to the possession of a vehicle or essential part of a vehicle to receive, possess, conceal, sell, dispose or transfer, knowing it to have been stolen.	95.5 4 103 a 1	Property
	A person to knowingly remove, altar, deface, destroy or falsify a manufacturer's identification number.	95.5 4 103 a 2	Property
	A person to knowingly buy, receive, possess, sell or dispose of a vehicle or any essential part thereof, with knowledge that its identification number has been removed or falsified.	95.5 4 103 a 4	Property
	Offenses Relating to Possession of Titles and Regulation	95.5 4 104	Property
	A person to possess without authority any manufacture statement of origin, or certificate of title.	95.5 4 104 a 1	Property
	A person to possess any manufacture statement of origin, or certificate of title, without complete assignment.	95.5 4 104 a 2	Property
	A person to possess any manufacture statement of origin, or certificate of title, without complete assignment.	95.5 4 104 a 2 2	Property
	A person to display or affix to a vehicle any certificate of title or manufacturers origin not authorized by law for use on such vehicle.	95.5 4 104 a 4	Property
	A person to display or affix to a vehicle any certificate of title or manufacturers origin not authorized by law for use on such vehicle.	95.5 4 104 b	Property
	Offenses Relating to Possession of Titles and Regulation	95.5 4 104 1	Property
	Offenses Relating to Possession of Titles and Regulation	95.5 4 104 3	Property
	Offenses Relating to the disposition of Titles and Regulation	95.5 4 105	Property
	A person to alter forge or counterfeit any manufacture statement of origin, or certificate of title.	95.5 4 105 a 1	Property

2480	Suspended, Revoked Drivers License	95.5 6 303	Public Order
	Suspended, Revoked Drivers License	95.5 6 303 a	Public Order
	Any person convicted of a second or subsequent violation.	95.5 6 303 d	Public Order
2485	Driver and Passenger Safety Belts	95.5 12 603 1	Public Order
2490	Unlawful Use of Drivers License	95.5 6 301	Public Order
2496	Soliciting Rides	95.5 11 1006	Public Order
	Soliciting Rides	95.5 11 1006 a	Public Order

DISORDERLY CONDUCT

2807	Drunkenness (local laws)		
	Intoxication of a Minor	190 4	Public Order
2810	Prowler		
	Disorderly conduct.	38 26 1	Public Order
	Disorderly conduct.	38 26 1 a	Public Order
	Does any act in such a manner as to alarm or disturb another and to provoke a breach of the peace.	38 26 1 a 1	Public Order
2860	False Police Report	38 26 1 a 4	Public Order
2890	All Other Disorderly Conduct Offenses (Not Drunkenness)	38 26 1 a 1	Public Order
	Disorderly Conduct	38 26 1	Public Order
	Unlawful use of identification card.	124 34 4	Public Order
	Unlawful use of identification card.	124 34 13 3	Public Order
3100	Mob Action & Related Offenses	38 25 1	Violent
3200	Armed Violence	38 33 a 2	Violent
	Armed Violence	38 33 a 2 I	Violent

INTERFERENCE WITH PUBLIC OFFICERS

3710	Resist, Obstruct, Disarm an Officer		
	Resisting or obstructing a peace officer.	38 31 1	Public Order
	Disarming a peace officer.	38 31 1 a	Public Order
	Obstructing service of process.	38 31 3 a	Public Order

3730	Obstructing Justice	38 31 4	Public Order
3740	Concealing or Aiding a Fugitive	38 31 5	Public Order
3741	Fugitive Warrant	38 157 21	Public Order
	Arrest of accused person illegally in state.	38 157 21 b	Public Order
3750	Escape	38 31 6	Public Order
	A person in the lawful custody of a peace officer who intentionally escapes from custody.	38 31 6 c	Public Order
3770	Bringing Contraband into a Non-State Penal Institution	38 31A 1	Public Order
	Bringing Contraband into a Non-State Penal Institution	38 31A 1 a	Public Order
	Bringing Contraband into a State Penal Institution	38 31A 1.1	Public Order
3800	Interfere with Judicial Procedure	38 32	Public Order
	Communicating with jurors and witnesses.	38 32 4	Public Order
	With intent to deter any party or witness from testifying freely, fully and truthfully to any matter pending in court.	38 32 4 b	Public Order
	Violation of bail bond.	38 32 10	Public Order
	Violation of bail bond.	38 32 10 4	Public Order
3810	Contempt of Court	38 1 3	Public Order
3820	Perjury	38 32 2	Public Order
	Perjury	38 32 2 a	Public Order
3910	Bribery		
	Offering a bribe	38 29	Public Order
	Offering a bribe	38 29 a	Public Order
	Bribery	38 33 1	Public Order
	Bribery	38 33 1 a	Public Order
	Failure to report a bribe.	38 33 2	Public Order
3960	Intimidation	38 12 6	Violent
	Inflict physical harm on the person threatened or any other person or property.	38 12 6 a 1	Violent
	Intimidation	38 12 6 1	Violent
3965	Ethnic Intimidation	38 12 7.1	Violent

KIDNAPPING

4230	Unlawful Restraint (Includes Aggravated)	38 10 3	Violent
	Unlawful Restraint	38 10 3 a	Violent
	Unlawful Restraint Aggravated	38 10 3.1	Violent
	Unlawful Restraint Aggravated	38 10 3.1 a	Violent
4250	Child Abduction	38 10 5	Violent
	Intentionally violates any terms of a valid court order granting sole or joint custody.	38 10 5 b 1	Violent
	Intentionally conceals, detains or removes the child without the consent of the mother or the lawful custodian of the child.	38 10 5 b 3	Violent
	Intentionally lures or attempts to lure a child under the age of 16 into a motor vehicle without the consent of the parent.	38 10 5 b 10	Violent
4270	Harboring a Runaway	38 10 6 a	Violent

OTHER OFFENSES

4310	Possession of Burglary Tools	38 19 2	Property
	Possession of Burglary Tools	38 19 2 a	Property
4311	Unlawful Use of Theft Detection Shielding Device	38 16 15	Property
	Unlawful Use of Theft Detection Shielding Device	38 16 15 a	Property
	Unlawful Possession of Theft Detection Shielding Device	38 16 15 b	Property
4387	Violation of Orders of Protection	38 111 8	Public Order
	Illinois Domestic Violence Act	40 2302 8	Public Order
4510	Probation Violation or Revocation		
	Violation Supervision	38 1005 6 4	Public Order
	Periodic Imprisonment Revoked	38 1005 7 2	Public Order
5000	Other Criminal Offenses		
	Conspiracy	38 8 2	Public Order
	Discharging Firearm in City	193 29	Public Order
	Other Criminal Offenses	120 452	Public Order
	Illegal Tobacco Sales	120 453 60	Public Order
	Violation of Civil Rights	38 13 2	Public Order

Appendix E: Circuit Court Of Cook County Pretrial Services Department

The Cook County Pretrial Services Department was not in existence in 1988 when samples were selected for this study, therefore the impact of this department on pretrial outcomes could not be measured by this study. Nonetheless, this department's current activities have, and will continue to have a direct impact on all future pretrial outcomes. For that reason, the following profile information has been provided by the Pretrial Services Department.

Program Description:

The Pretrial Services Department of Cook County was established to "provide the court with accurate background data regarding the pretrial release of persons charged with felonies and effective supervision of compliance with the terms and conditions imposed on release." Ill.Rev.Stat., ch. 38, sec. 301 et seq.

Adult Services

When an adult is arrested on a felony charge in Cook County he or she is brought before a municipal court judge within 36 hours. Prior to this bond hearing, Pretrial officers attempt to determine which defendants should be referred to the judge as candidates for conditional release or release on recognizance. Officers evaluate the defendants on two criteria:

- 1) If released the defendant will not commit a crime and;
- 2) if released he or she will appear for subsequent court hearings.

This determination is made through an initial screening process by examining the arrest reports and criminal history records. Defendants who make it through this process are then interviewed. The interviewing officer collects information from the defendant regarding his/her social background including employment, education, family and living situation, mental health, and drug or alcohol use. This information is then verified prior to the court hearing.

This profile is used to determine whether or not the defendant is a good risk for pretrial release. At the hearing the judge receives a written report, presented in person by the officer, which outlines what has been learned and whether Pretrial believes the defendant should or should not be released. Along with this the judge receives a list of special

non-financial conditions of bond that Pretrial believes should be imposed if the defendant is released.

Conditions recommended are tailored to each defendant in-order to insure his/her future attendance at court and to lessen the chance that the defendant will pose a threat to public safety.

Recommendations can include but are not limited to: reporting to a Pretrial officer in person and/or by phone; seeking or maintaining employment; avoiding certain people or places; and curfews. Other conditions can include reporting in person for scheduled drug monitoring and seeking or continuing treatment for drug, alcohol or emotional problems. All defendants released to Pretrial Services get notification of court dates via letter and follow-up call. A judge can accept, reject, or modify Pretrial's recommendations and then set bail accordingly.

Since the program was established in March of 1990, pretrial staff have screened more than 97,000 defendants. Over 35,000 of these have been assigned to supervision. Comparisons of judicial I Bond rates prior to and after the implementation of Pretrial Services indicate that between 11,000 and 15,000 fewer defendants were initially incarcerated due to the department's activities in fiscal year 1991.

Failure To Appear Services

Since Pretrial Services began sending letters notifying defendants of their upcoming court date, the "failure to appear" (FTA) rate has been reduced. This service has limited the number of arrest warrants issued for defendants who failed to appear in court and helped limit the jail population growth in the past year.

The department also has a check-in booth in the lobby of the Criminal Court Building where defendants who have missed a court date are encouraged to voluntarily surrender themselves. FTA officers attempt to verify any information provided by the defendant and accompany him/her to court.

Felony Trial Courts Unit

The Felony Trial Courts Unit serves the needs of 48 felony trial judges. The felony trial judges, each of whom has caseloads exceeding 200, must frequently make new determinations about bond for incarcerated defendants. The FTC Unit provides detailed

up-to-the-minute investigative reports for these cases.

Many of these cases require special efforts to obtain suitable placements for defendants who present special challenges i.e., the homeless, addicted, and mentally ill. As part of its work, the FTC Unit regularly screens candidates for pretrial release. Many judges rely on Pretrial reports to assess needs in these areas at the time of sentencing.

Domestic Violence Courts

Pretrial Services has three officers that are assigned to the three domestic violence courtrooms located at 1340 South Michigan in Chicago. These courtrooms handle only cases involving violence or the threat of violence among family members.

Pretrial Services officers interview individuals who are in custody following an initial arrest upon the complaint of a family member, an arrest on a warrant, or allegations of violations of probation, conditional discharge, supervision, or an order of protection.

At a bond hearing, recommendations of conditions of release are made to the judge. Generally, if a defendant is released from custody the judge will require the defendant to comply with the conditions specified by the Pretrial Services officers. These conditions include reporting in person or by phone, avoiding unlawful contact with the complaining witness, and attending Alcoholics Anonymous or Batterers Anonymous meetings.

The officers continue to monitor compliance with the conditions of the bond pending disposition of the case. Efforts are made to refer the individual to meaningful treatment programs in the hope of bringing the family unit back together in a violence-free environment.

Juvenile Services

Pretrial Services staff attorneys screen all candidates for admission to the Cook County Juvenile Temporary Detention Center. This 24 hour per day, seven day per week screening program has reduced the Juvenile Detention Center's population substantially since screening was initiated in August of 1991.

The National Center for Juvenile Justice estimated in a recent study that the average daily population for the Center would be 755 for the year 1992 if Pretrial detention screening had not been implemented. This would have resulted in the Detention Center's

population exceeding 150% of its rated capacity of 498 on a typical day. Other services to juveniles include mail and telephone notification of court dates and a more rigorous screening and supervision program for juveniles who are processed by the adult courts due to the seriousness of the charges against them.

Pretrial Staff and Locations

In addition to the Director, Pretrial Services has 1 Assistant Director, 3 Chief Supervisors, 15 supervisors, 14 Administrative Assistants, 118 sworn officers and 25 Support Staff members. These 177 employees are located at 12 different sites:

ADMINISTRATIVE OFFICE:

CRIMINAL COURT BUILDING

2650 South California Ave.

2nd floor - Room 2A78

Chicago, IL 60608

(312) 890-6279

BRANCH COURT LOCATIONS:

CENTRAL DAY COURT and NIGHT COURT

2650 South California Ave.

1st floor - Room 110

Chicago, IL 60608

(312) 890-6930

BRANCH 42

2452 West Belmont

Chicago, IL 60618

(312) 404-3301

BRANCH 44

3151 West Flournoy

Chicago, IL 60612

(312) 265-8915

BRANCH 48

155 West 51st Street

Chicago, IL 60609

(312) 373-8911

SKOKIE

5600 Old Orchard Road
Skokie, IL 60077
(708) 490-5199

ROLLING MEADOWS

2121 Euclid
Rolling Meadows, IL 60008
(708) 818-3178

BRIDGEVIEW

10220 South 76th Avenue
Bridgeview, IL 60455
(708) 974-6554

MARKHAM

16501 So. Kedzie Parkway
Markham, IL 60426
(708) 210-4685

CHICAGO POST RELEASE DIVISION

1500 N. Halsted
Chicago, IL 60622
(312) 335-6163

DOMESTIC VIOLENCE

1340 South Michigan Avenue
Chicago, IL 60605
(312) 341-2768

TRAFFIC COURT

321 North LaSalle Street
Chicago, IL 60610
(312) 822-3641

JUVENILE DIVISION

1100 South Hamilton
Chicago, IL 60612
(312) 738-6990

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