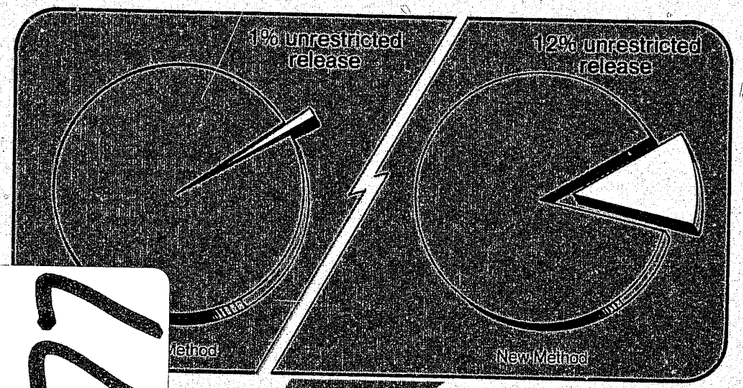
Pretrial Release Assessment of
DANGER & FLIGHT:
METHOD MAKES A DIFFERENCE



- Slight decrease in failure-to-appear rates
- No change in pretrial arrest rates

PRETRIAL RELEASE ASSESSMENT OF DANGER AND FLIGHT: METHOD MAKES A DIFFERENCE

—Final Report—

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ABSTRACT

In July 1980 the D.C. Pretrial Services Agency (PSA) adopted a new method of risk assessment and release recommendation development. The new method provides separate assessments of danger and flight risks, as well as recommended release conditions to try to reduce risks to acceptable levels. The impact of the new approach is analyzed in this report, through comparisons of outcomes for eighteen-month periods before and after the change.

Under the new method PSA increased its recommendations for unrestricted personal recognizance (PR) release and for nonfinancial release in general (both unrestricted and conditional PR). PSA also reduced the average number of conditions recommended for defendants.

The changes in PSA's actions affected judges' decisions and defendants' subsequent release outcomes. Unrestricted PR release increased, although total rates of nonfinancial release were unchanged. Also, judges set fewer conditions for the average defendant under the new system.

Failure-to-appear and pretrial arrest rates remained virtually the same. Thus, the less restrictive release practices were attained with no increases in rates of pretrial misconduct.

Another topic studied was whether risk assessments might be improved by using a quantitative forecasting model. The results suggest that this approach has much merit and should be given further consideration.

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ACKNOWLEDGEMENTS

This study could not have been completed without the assistance of a great many individuals. We would especially like to thank the staff of the D.C. Pretrial Services Agency (PSA) for their efforts to help us understand the new risk assessment system, including how it was developed, how it differs from the former system, and how it is used operationally. Although PSA's entire staff was unfailingly helpful, we would particularly like to thank Mr. J. Daniel Welsh, Project Monitor for the study and Director of Research for the Agency; Mr. Bruce D. Beaudin, Director; Mr. John A. Carver, Deputy Director; Ms. Kathryn M. Reade, Director of Administrative Services; Ms. Linda Cope Waldman, Director of Data Processing; Mr. George F. Moriarty, Director of Court Services; Mr. Timothy Murray, former Director of Pre-Release Services; Ms. Donna Jones, Budget Analyst; Mr. Mohammad Chaudhari, Supervisor, Failure-to-Appear Unit; Ms. Brenda A. Greene, former Director of Post-Release Services; and Ms. Connie Barnaba, Administrative Assistant.

A variety of D.C. criminal justice officials also provided interesting insights about PSA's risk assessment and recommendation system. These persons included judges, prosecutors, defense attorneys and police officials who were interviewed by study staff.

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I. INTRODUCTION

A. Background

After an arrest has been made, a prompt decision is required about whether to release the defendant before trial and, if so, on what conditions. Although time constraints usually do not permit an in-depth evaluation of each defendant, an assessment of potential risk is an inherent part of any release decision. In many communities those decisions are aided by information developed by pretrial release programs. Typically, such programs interview defendants, verify the information provided, and present the findings to the court, often in conjunction with specific release recommendations.

In the past most pretrial release programs have focused on the defendant's likelihood of appearing for court as the sole basis for a release recommendation. However, there has been increasing concern about public safety considerations and ways to address them. In response to this concern, the D.C. Pretrial Services Agency (PSA) revised its procedures to provide separate ratings of danger and flight risks for all defendants except those facing relatively minor charges. Implemented on July 21, 1980, this risk assessment method was the first in the nation to provide for explicit consideration of safety risk in addition to the likelihood of court appearance for the vast majority of arrested persons.

This study analyzes the impact of PSA's changed risk assessment approach. Those changes primarily affected cases in Superior Court, where the majority of arrests in the District of Columbia are handled. A brief description of the pretrial process for Superior Court defendants is provided below, followed by a description of the risk assessment method.

B. The Pretrial Process

A defendant arrested in the District of Columbia is usually taken to a police station for booking. If the charge is a misdemeanor, the defendant is typically eligible for citation release, which may be granted by the police after a PSA staffmember interviews the defendant over the telephone, verifies the information provided and makes a release recommendation.[1] Defendants who are not released from the police station are transferred to a lock-up in the Superior Court building. Because release decisions are made at Superior Court during the day only, a defendant arrested at night will be held in custody until the following morning and taken to the Superior Court lock-up at that time.

While in the lock-up, the defendant will be interviewed by PSA about residence, employment, family ties and references who could verify the information (see Appendix A for a copy of the interview form). PSA makes extensive verification efforts. Sources contacted may include references given by the defendant; relatives who appear at the Agency's court office on the defendant's behalf; probation and parole officers, where applicable; and staff at third party custody organizations.[2] In addition, PSA checks criminal history information on the defendant with various sources, including several computerized data bases. The data sources consulted most often are the Washington Area Law Enforcement System (WALES),

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[1] Defendants ineligible for citation release are juveniles; any person ever convicted of an escape from jail; any person who has willfully failed to appear on bond or who has a pending charge of failure to appear; any person with an outstanding attachment, warrant, or detainer; any person presently under the influence of narcotics or alcohol to the extent that an intelligent interview cannot be conducted. In addition to citation release, defendants may be released from the police station by posting the bond amount shown on the bail schedule for the offense charged. However, only about one percent of all defendants secure release in this way. Giannina P. Rikoski and Debra Whitcomb, An Exemplary Project: The D.C. Pretrial Services Agency, Washington, D.C. (Washington, D.C.: National Institute of Justice, U.S. Department of Justice, May 1982), pp. 22, 24.

[2] Ibid., p. 28.

run by the Metropolitan Police Department; the Prosecutor's Management Information System (PROMIS), run by the U.S. Attorney's Office; and the Correctional Record Informational System (CRISYS), run by the Department of Corrections.

The information obtained is entered into PSA's automated data system and used to prepare a release recommendation report (see Appendix A for an example). Such reports include the information gathered about the defendant, separate release recommendations for appearance and safety, and in some cases remarks about additional relevant information that does not fit within the reports' standardized format. Reports for all defendants are presented in court to the judges or commissioners[3] making release decisions and are also made available to the prosecuting and defense attorneys (see Appendix B for a brief description of the major criminal justice agencies in the District of Columbia, including prosecution and defense).

The release hearing itself is essentially an adversary proceeding between the defendant and defense attorney on one hand and the prosecutor on the other. After hearing both sides and reviewing PSA's report, the judge makes a release decision. A release hearing usually takes only a few minutes in Superior Court.

Release decisions in Superior Court are governed by the Court Reform and Criminal Procedure Act of 1970 (see Appendix C).[4] This law provides for the pretrial release of all defendants, except those charged with first degree murder, on the least restrictive conditions needed to assure appearance in court and the safety of the community. Such conditions may include third party custody; restrictions of travel, association

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[3]The Superior Court implemented a commissioner system for making release decisions in October 1982. Because release decisions were made exclusively by judges during the time period considered in the present study, subsequent discussions refer only to judges.

[4]This law appears in the D.C. Code as Chapter 13, "Pretrial Services and Pretrial Detention."

or place of abode; money bond; or other conditions. Financial release conditions may not be imposed to assure safety. In determining appropriate release conditions, judges are to consider the nature and circumstances of the offense charged; the weight of the evidence; and the accused's family ties, employment, financial resources, character and mental condition, past conduct, length of residence in the community, conviction record and prior court appearance record.

The law authorizes pretrial detention for 90 days for defendants charged with "dangerous" or "violent" crimes (including robbery, burglary, rape, assault with a dangerous weapon and sale of narcotics). A defendant can be held under this provision only if a preventive detention hearing determines that there is a substantial probability that the person committed the offense and that no release conditions would reasonably assure the safety of the community. Preventive detention hearings are initiated by motions made by the prosecution. Such hearings are relatively rare in the District of Columbia.

The law also provides, under certain circumstances, for five-day detention for a defendant on probation or parole and for three-day detention for a person charged with a dangerous or violent crime committed while awaiting trial on another case.

After a release decision has been made, a defendant released on personal recognizance reports to PSA's office in the court building. At that time, PSA staff review release conditions, if any, and emphasize the date of the next scheduled court appearance and the need to show up for it. Also, PSA staff will initiate any immediate actions needed to follow up on court-ordered release conditions. For example, a defendant may be referred for drug testing or told to report a verified address to PSA.

PSA monitors defendants' compliance with release conditions and reports serious violations to the court. To accomplish this, PSA maintains contact with various third party custody organizations and accepts required calls (or visits) from defendants.

PSA also notifies most released defendants of coming court dates; only persons released on secured bond are excluded. Defendants are required to call PSA when they receive these notices. If they do not, PSA attempts to contact them to insure that they are aware of their court dates.

PSA tries to minimize failures to appear for court through these activities as well as the efforts of its Failure-To-Appear Unit. Established in October 1979, this Unit attempts to contact defendants who miss court appearances immediately. Whenever possible, PSA tries to get the defendant to court the same day, so that no bench warrant will be issued. When the defendant cannot be located and returned to court the same day, PSA continues to try to find the person as quickly as possible.

C. PSA's Risk Assessment Approach

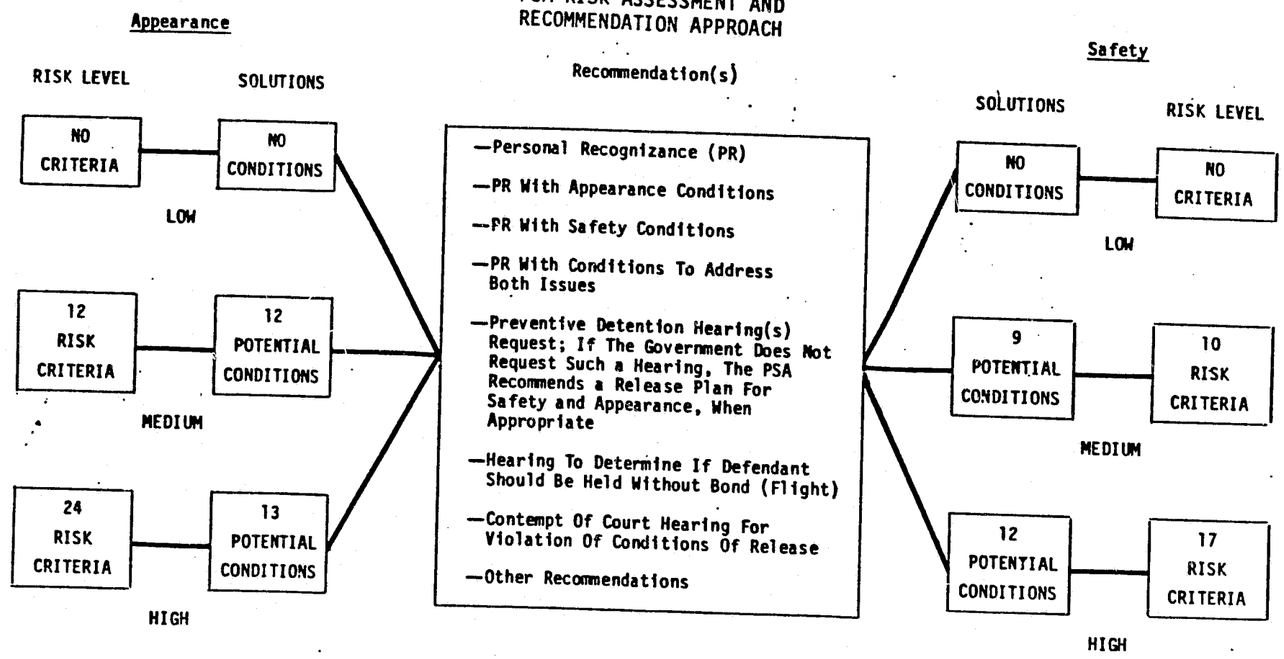
Figure 1 illustrates PSA's risk assessment and recommendation approach. Defendants are rated for both appearance and safety risk. For persons of high or medium risk (in either or both categories), there are specific release conditions that can be recommended to reduce risk to acceptable levels. No conditions are recommended for defendants rated as low risks. Altogether 63 criteria (36 for appearance and 27 for safety) have been identified as denoting medium or high risk, and 46 conditions (25 for appearance and 21 for safety) have been developed to reduce risk (see Appendix D for a complete list of risk indicators, conditions and standard recommendations).

Conditions must be selected from specific lists, matched to the risk problem and the risk level identified. Many of the same conditions appear on the various lists.

Once the appearance and safety problems, along with potential solutions, have been identified, PSA staff select appropriate release recommendations from a list providing standard wording. These recommendations are provided to the court within a few hours of a defendant's interview by PSA staff.

FIGURE 1

PSA RISK ASSESSMENT AND RECOMMENDATION APPROACH



This recommendation approach differs from prior Agency procedures in three major ways:

- Each defendant receives an explicit, dual rating of risk: one for appearance and the other for community safety.
- Whenever a risk problem is identified, a "solution" is developed to reduce the risk to an acceptable level. When appropriate, a recommendation for a preventive detention hearing will be made and supplemented with an alternative recommendation in the event the prosecutor concludes that such a hearing is not warranted.
- Each defendant receives a specific release recommendation, ending the earlier practice of making no recommendation for many defendants.

Although these procedures differ substantially from the former ones, they continue three principles long adopted by PSA: (1) risk assessment is done objectively; (2) any release conditions recommended are the least restrictive ones thought to be needed to reduce risks to acceptable levels; and (3) financial release conditions are never recommended. (Appendix E presents a brief history of risk assessment in the District of Columbia and other jurisdictions.)

Although PSA also makes release recommendations for U.S. District Court cases, Federal law does not permit consideration of safety issues. Thus, for the District Court the format of PSA's reports changed when the new system began, but the relevant information and recommendations did not.

D. Scope and Organization of Report

This report analyzes PSA's changed risk assessment and recommendation system. The questions addressed are largely those specified by PSA in its contract requirements for the study. In general, these topics are of three kinds. The first set considers the types of changes that occurred over time and the extent to which various options available at different points in time were used. For example, did the use of unrestricted Personal Recognizance (PR) versus PR with

conditions change over time? Under the new recommendation system, what proportion of defendants received various risk ratings?

The second group of issues deals with the impact of PSA's new procedures. For example, did the elimination of PSA's old policy of making no recommendations for many defendants lead to increased release rates for those defendants? If so, how did those defendants perform in terms of appearance and safety?

The third set of concerns involves analyses that might suggest further changes for PSA to consider. For example, how well does PSA's current system identify appearance and safety risks? Are better risk indicators available? What types of changes might enhance the predictive capabilities of PSA's risk assessment system?

The next four chapters address the first two sets of issues. This is accomplished primarily through comparisons of outcomes under the last eighteen months of operation of PSA's old recommendation system and the first eighteen months of activity under the new recommendation system. These analyses consider only cases where release decisions were made by Superior Court judges. Citation and U.S. District Court cases were excluded, because their release procedures did not change. Data for these, as for other, analyses came from PSA's automated information system. (For more information on the data base and study methodology, see Appendix F.)

Chapter Two discusses PSA's release recommendations, judges' release decisions and defendants' release outcomes. The chapter also addresses the impact on release rates associated with PSA's elimination of its "no recommendation" policy.

Chapter Three considers conditions of release—both those recommended by PSA and those set by judges. Changes in the number and types of conditions are assessed.

Chapter Four describes the court appearance and safety outcomes of released defendants, as measured by failure-to-appear and pretrial arrest rates. These outcomes are presented for released defendants as a whole and by type of release.

Chapter Five, unlike the preceding chapters, focuses only on the time period after the new recommendation system was adopted. It compares PSA's risk assessments of defendants with judges' release decisions and defendants' release outcomes.

Chapter Six turns to the third broad set of issues discussed earlier, namely, whether risk assessment could be improved by using different risk indicators. This topic is addressed in detail for safety risk through multivariate analyses of the likelihood of pretrial arrest for any charge and for a dangerous or violent charge.

Chapter Seven summarizes the major findings and conclusions of the study. It also presents recommendations for improving the risk assessment of defendants in the District of Columbia.

II. RELEASE RECOMMENDATIONS, DECISIONS AND OUTCOMES

A. PSA's Release Recommendations

PSA's release recommendations changed dramatically after introduction of the new risk assessment approach, as shown in Figure 2 for felony cases and Figure 3 for misdemeanor cases.[5] (The underlying data for all figures in this report are shown in the tables of Appendix G.) As indicated in the figures, recommendations for unrestricted personal recognizance (PR) release increased sharply for both felonies and misdemeanors. During the first 18 months of the new system an average of 13 percent of felony cases and 23 percent of misdemeanor cases received unrestricted PR release recommendations, as compared with fewer than 1 percent of the cases under the old system. Because the percentage of defendants recommended for release on PR with conditions[6] was virtually unchanged for felony cases (52 percent under the old system and 51 percent under the new system) and increased slightly for misdemeanor cases (from 58 percent to 62 percent), the total percentage of defendants recommended for any type of PR release increased (from 52 percent to 64 percent for felonies and from 58 percent to 85 percent for misdemeanors).

Another major change in PSA's recommendations was the elimination of the "no recommendation" category, which had accounted for 24 percent of all felony cases and 40 percent of all misdemeanor cases during the last 18 months of the old system.

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[5] The quarters shown in these and all subsequent figures do not correspond to calendar year quarters; rather, they represent quarters based on the date that PSA's risk assessment system changed (July 21, 1980). For convenience, the quarters in the figures were labeled with months, rather than the actual dates. Hence, the quarter labeled "Jan.—Mar., 1979" actually reflects the time period from Jan. 21, 1979—Apr. 20, 1979; and so on, as shown in the tables in Appendix G.

[6] In this study "PR with conditions" includes all types of nonfinancial release except unrestricted PR. Thus, PR with conditions includes supervised release, third party custody, etc.

Figure 2. PSA's Release Recommendations for Felony Cases

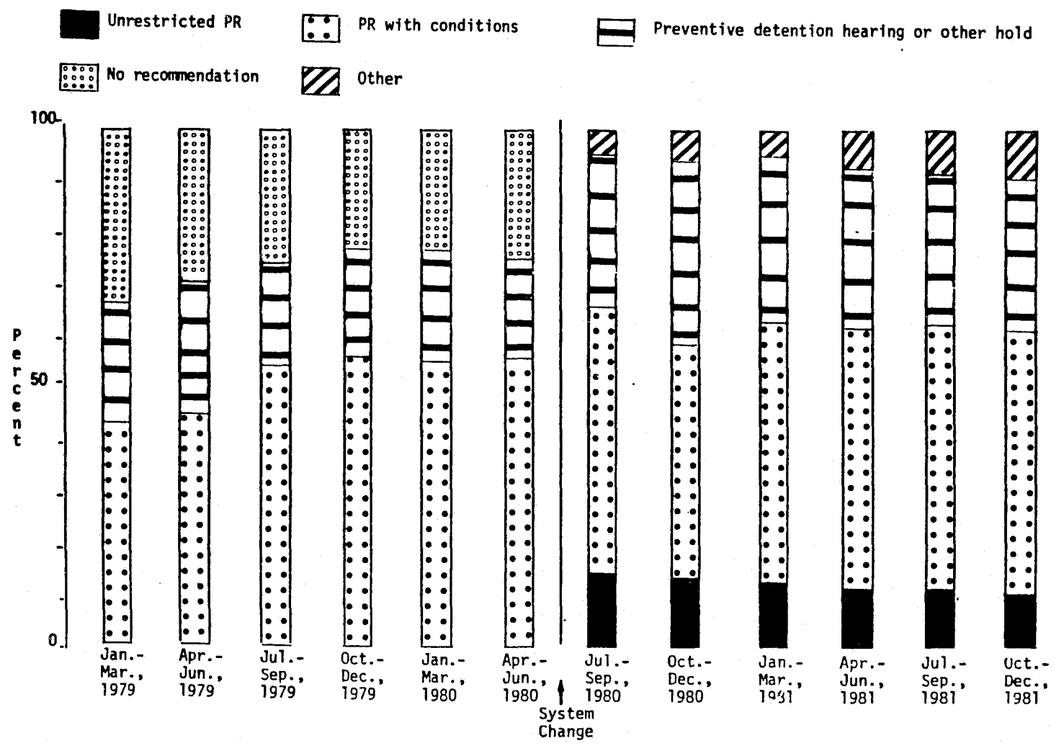
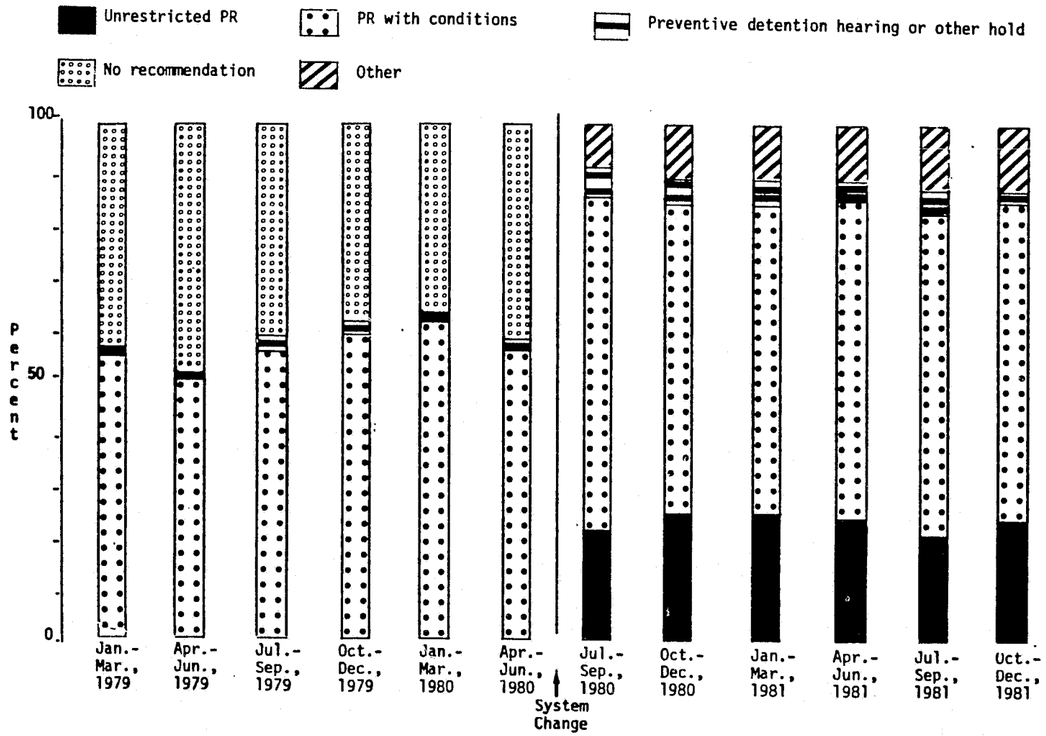


Figure 3. PSA's Release Recommendations for Misdemeanor Cases



The percentage of defendants recommended held for preventive detention hearings or other reasons (e.g., parole or probation revocation hearings) increased slightly under the new system: from 24 percent to 29 percent for felonies and from 3 percent to 4 percent for misdemeanors. Also, a category of "other" recommendations was added under the new system; these include such recommendations as making an inquiry in open court to resolve conflicting information about the defendant's identity or address. Such recommendations accounted for 7 percent of felony and 10 percent of misdemeanor cases.

As shown in Figure 2, a trend toward greater use of nonfinancial release recommendations and lesser use of the "no recommendation" category for felony cases was evident before the new system began. Nevertheless, there was a large increase in the use of nonfinancial release recommendations under the new system; although the percentage declined somewhat over time, it still remained above the old system levels at the end of 18 months.

Misdemeanor cases had also experienced an increase in the use of nonfinancial release recommendations before the new system began, although this increase (see Figure 3) had been more modest than the one for felony cases. After the new system was introduced, the percentage of misdemeanor cases with nonfinancial release recommendations increased sharply—much more than for felony cases—and the increase was sustained throughout the following 18 months.

B. Judges' Release Decisions

Changes in judges' release decisions paralleled the changes in PSA's recommendations in one major respect, namely, the increased use of unrestricted PR release for both felony and misdemeanor cases under the new system (see Figures 4 and 5). About 9 percent of felony defendants and 15 percent of misdemeanor defendants were released in this way under the new system, as compared to approximately 1 percent of the defendants under the old system.

Figure 4. Judges' Release Decisions for Felony Cases

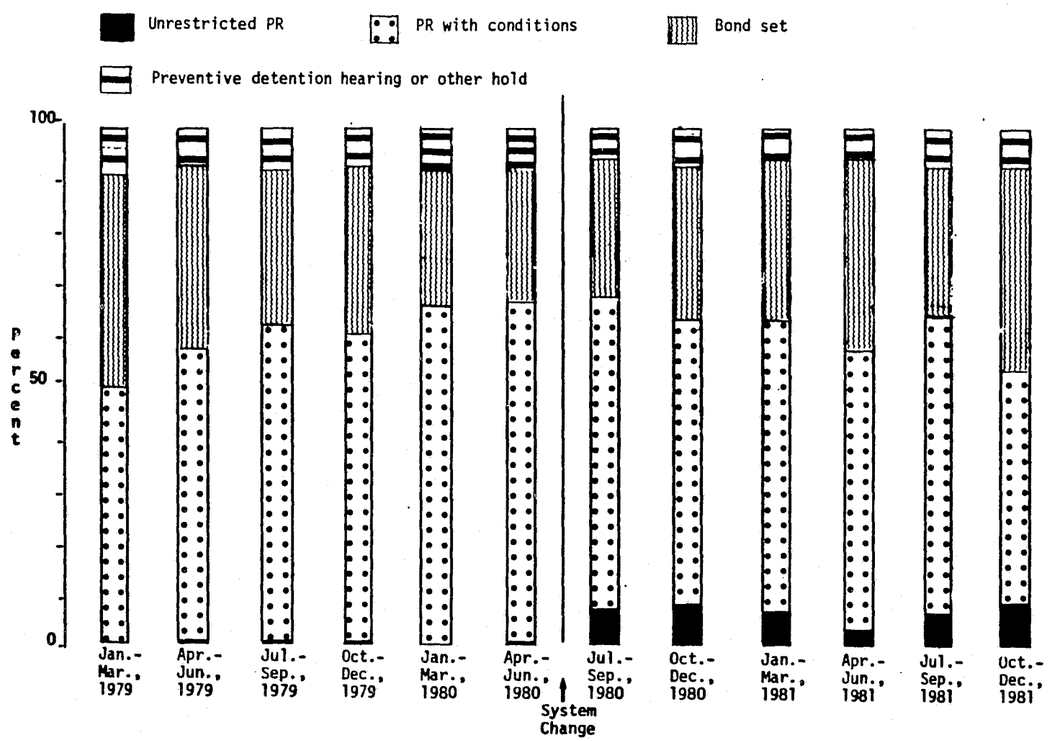
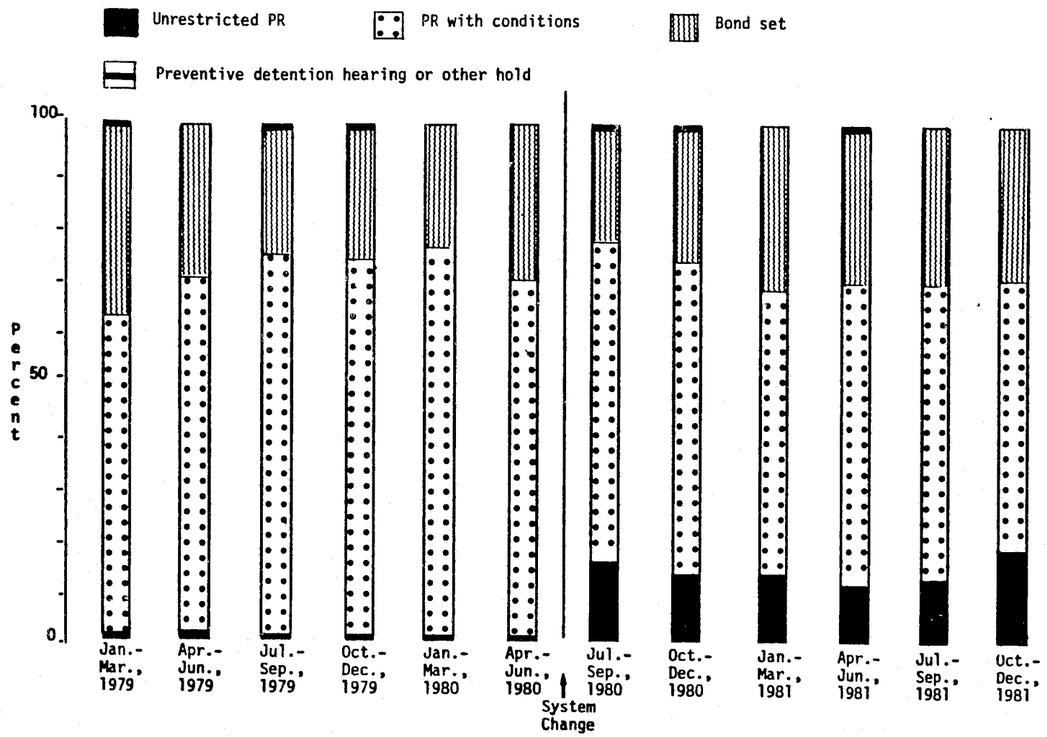


Figure 5. Judges' Release Decisions for Misdemeanor Cases



Unlike PSA's recommendations, the increases in judicial use of unrestricted PR release were offset by declines in their use of release on PR with conditions. As a result, the overall rate of nonfinancial release was unchanged for felony defendants (62 percent) and virtually unchanged for misdemeanor defendants (74 percent, old system; 73 percent, new system).

Although the use of nonfinancial release did not vary on the average under the old and new systems, there were changes over time, as shown in the data by quarter. Before the new system was introduced, there had been an increase in judicial use of nonfinancial release. After the new system began, nonfinancial release rates declined somewhat, although they did not fall to the levels experienced at the start of the study period. As shown in Figures 4 and 5 this trend was somewhat more pronounced for felony than misdemeanor cases.

The causes of this trend cannot be fully explained. The increased use of nonfinancial release under the old system parallels PSA's increase in recommendations for nonfinancial release during that period. However, such an explanation does not apply under the new system, where PSA's recommendations for nonfinancial release increased sharply, though judges' use of it did not.

Judicial decision-making was apparently strongly influenced by PSA's increased recommendations for unrestricted PR release. Such release increased when PSA's recommendations for it increased, even though no corresponding impact occurred on nonfinancial release decisions as a whole.

Orders for preventive detention hearings or other holds were relatively rare throughout the time period studied, despite the fact that PSA had recommended such actions for a substantial proportion of felony cases. Another area where judicial decision-making diverged sharply from PSA's recommendations is in use of bond. Although PSA did not recommend bond under either the old

or new systems, financial release conditions were set by judges during both periods. On the average judges' use of bond increased slightly for felony cases (from 31 percent to 33 percent) and remained the same for misdemeanors (26 percent) under the new system.

Several types of bond are used in the District of Columbia (see Appendix C for the statutory provisions regarding bond):

- Percentage bond, under which the defendant posts a percentage (usually 10 percent) of the full bond amount with the court and gets those funds back, if all court appearances are made;
- Surety bond, under which the defendant pays a nonreturnable fee to a commercial bail bondsman ("surety"), who in turn posts the bond with the court; the bondsman's money is returned if the defendant makes all the required court appearances and can be ordered forfeited otherwise;
- Cash bond, under which the defendant (not a surety) posts the full bond amount (not a percentage) with the court and gets those funds back, if all court appearances are made; and
- Cash-surety option, under which the defendant may post either a cash or surety bond.

"Unsecured appearance bonds" may also be set, although they are rarely used. Under an unsecured appearance bond, the defendant is released upon a promise to pay the full amount of the bond, if a court appearance is missed; no money must be paid initially to secure release.

Surety bond is the most common type of bond condition set in the District of Columbia. For felony cases surety bond accounted for 74 percent of all bonds set under the old system and 70 percent under the new system. Corresponding percentages for misdemeanor cases were 54 percent and 59 percent, respectively.

C. Defendants' Release Outcomes

After judges have made their release decisions, many defendants will be released immediately. Others will have to satisfy bond or other requirements first. Thus, the release outcomes of defendants may differ from the release

decisions of judges, because some defendants for whom release is possible never satisfy the conditions necessary to secure release.

As expected, defendants' release outcomes paralleled judges' release decisions (see Figure 6 for felonies and Figure 7 for misdemeanors):

- More defendants were released on unrestricted PR under the new system.
- The percentage of defendants released nonfinancially was virtually unchanged and averaged 62 percent for felonies and 73 percent for misdemeanors.7/
- There was little change in the percentage of defendants released on bond or detained until trial.
- Total release rates for felony cases were 76 percent under the old system and 77 percent under the new system; for misdemeanor cases, 89 percent under the old system and 88 percent under the new.
- Over time, nonfinancial release rates (and release rates in general) increased under the old system and declined somewhat under the new system, though not to former levels; this trend was more pronounced for felony than misdemeanor cases. For the last quarter studied, 76 percent of felony defendants were released, versus 66 percent for the first quarter studied. Comparable percentages for misdemeanor defendants are 89 percent, last quarter; and 83 percent, first quarter.

D. Possible Reasons for Findings

Figure 8 summarizes the findings concerning PSA's recommendations, judges' decisions and defendants' release outcomes before and after PSA's new system was introduced. As shown, the major change in both decisions and outcomes was the increase in unrestricted PR release under the new system. This change mirrors PSA's increased use of unrestricted PR release recommendations under

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7 It is noteworthy that nonfinancial release rates were relatively high at the start of the study period. A comparative analysis for 1977 of eight jurisdictions found that the District of Columbia had the second highest rate of nonfinancial release. Mary A. Toborg, et al., Pretrial Release: A National Evaluation of Practices and Outcomes, National Evaluation Program Phase II Report (Washington, D.C.: National Institute of Justice, U.S. Department of Justice, October 1981), p. 6.

Figure 6. Release Outcomes for Felony Defendants

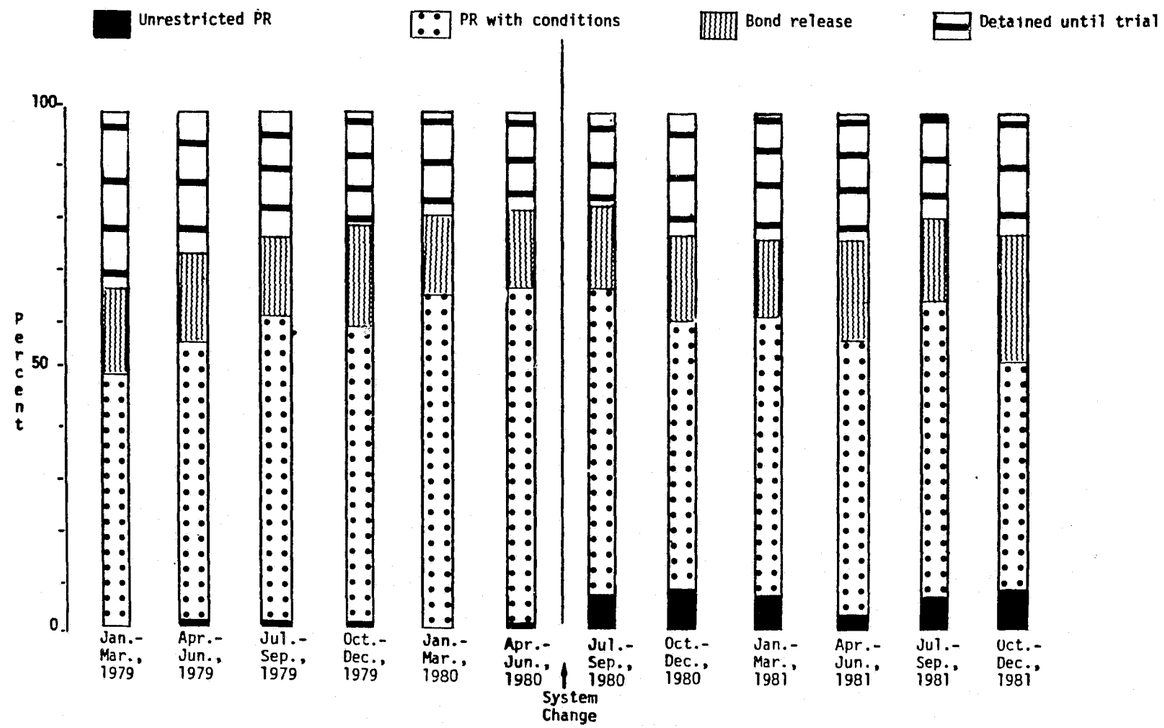


Figure 7. Release Outcomes for Misdemeanor Defendants

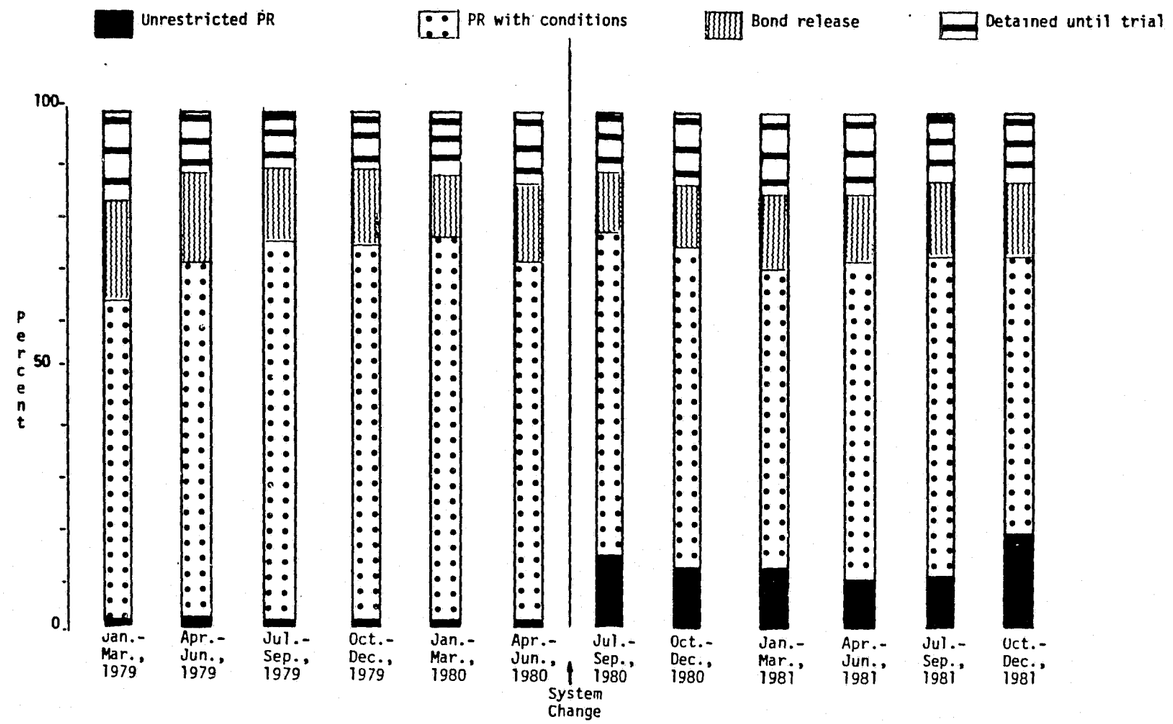
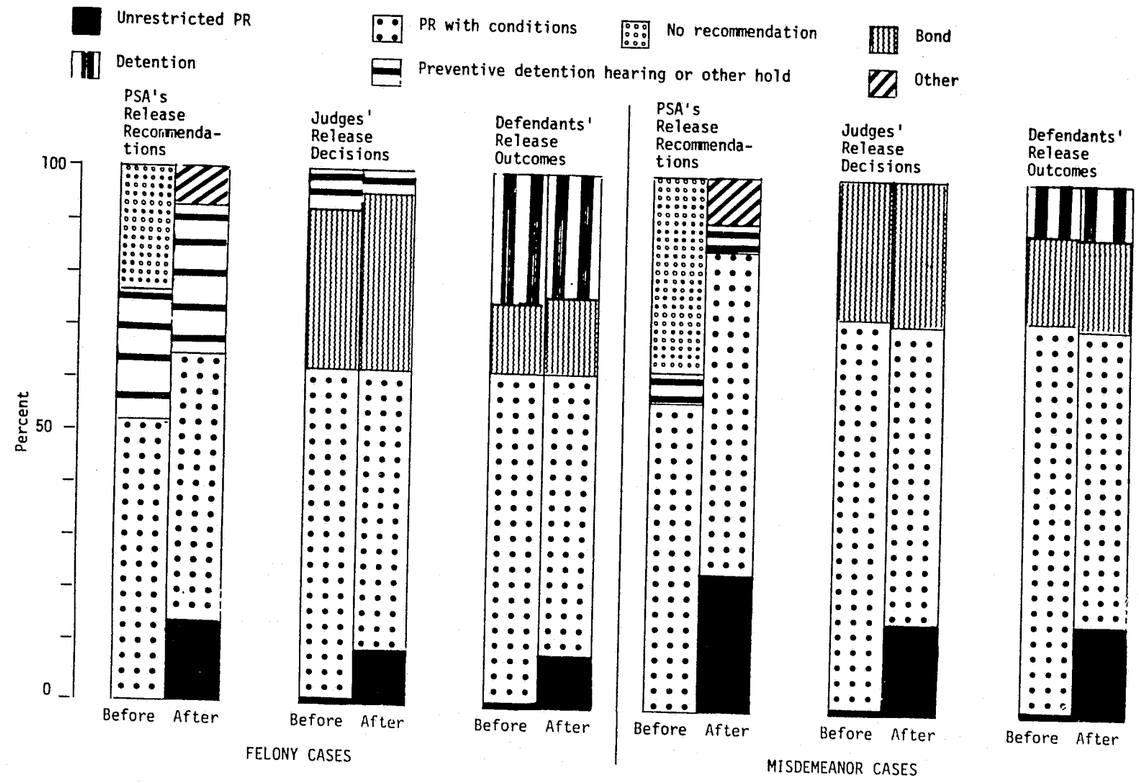


Figure 8. PSA's Recommendations, Judges' Decisions and Defendants' Release Outcomes Before and After New Recommendation System



the new approach. However, other changes in PSA's recommendation practices, such as increased recommendations for nonfinancial release in general, were not reflected in changed decision-making by judges or in changed release outcomes for defendants.

Two major factors that may affect release decisions and outcomes, aside from PSA's recommendations, are the characteristics of defendants and the identity of the judges making the release decisions. Presumably, as the characteristics of defendants change, release decisions will also change. One expects lower release rates and release on more stringent conditions for defendants whose characteristics suggest they pose higher release risks.

Similarly, differences in release decisions (and in defendants' subsequent release outcomes) may reflect differences in judges' release philosophies. A comparison of a time period when decisions were made by "tough" judges with a time period when decisions were made by "lenient" judges may reflect primarily the differences in the judges, not differences stemming from PSA's recommendations.

Thus, the impact of both defendant characteristics and the nature of the judges making the release decisions had to be assessed. The findings follow.

On the whole defendants had very similar characteristics under both the old and new systems, as shown in Figures 9 and 10. Defendants under both systems were usually black males who had not completed high school. About half were under 26 years of age. Typically, defendants were District of Columbia residents, unmarried and employed. About half lived with family of some type (spouse, parents, other relatives).

Figure 9. Defendant Characteristics Before and After New Recommendation System, Felony Cases

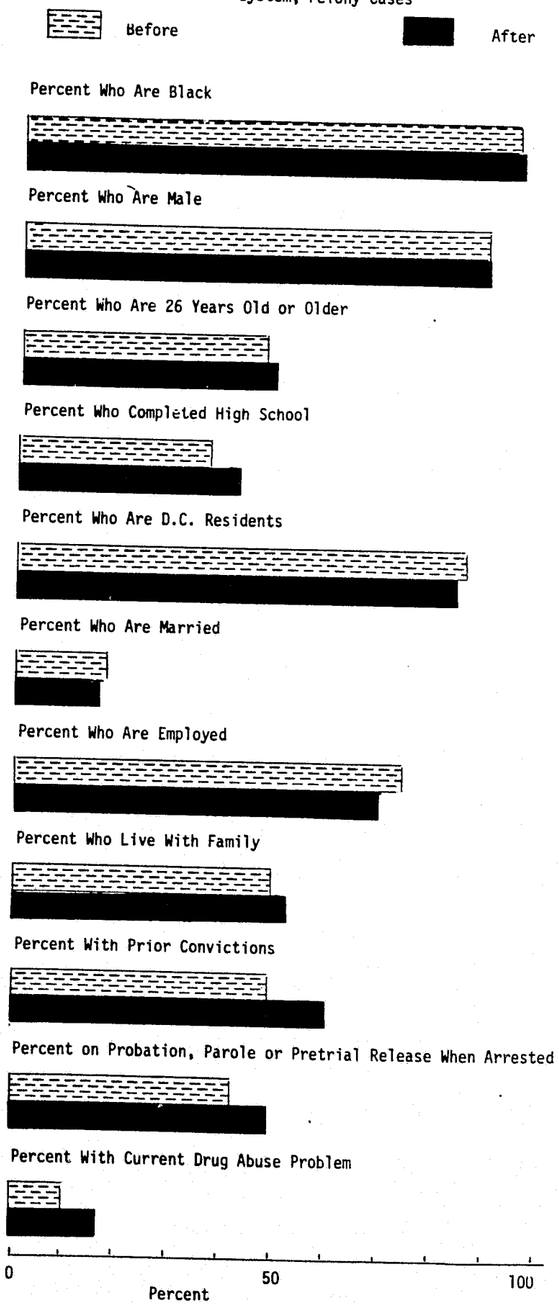
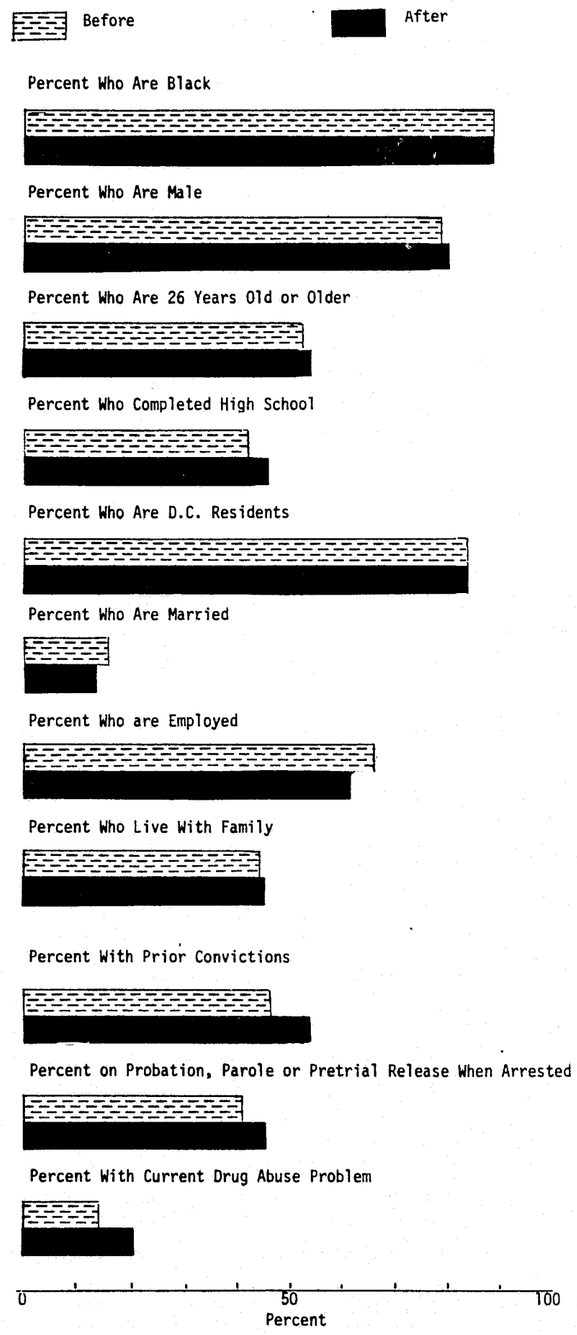


Figure 10. Defendant Characteristics Before and After New Recommendation System, Misdemeanor Cases



Two major differences in defendants are apparent over time. First, defendants are more involved in criminality in the later time period. This is shown by both a higher percentage of defendants with prior convictions (59 percent of felony defendants under the new system, as compared to 49 percent under the old; for misdemeanor defendants, 53 percent and 47 percent, respectively) and a higher percentage of defendants on probation, parole or pretrial release for another case when arrested (48 percent for felony defendants under the new system, as compared to 41 percent under the old; for misdemeanor defendants, 46 percent and 41 percent, respectively).

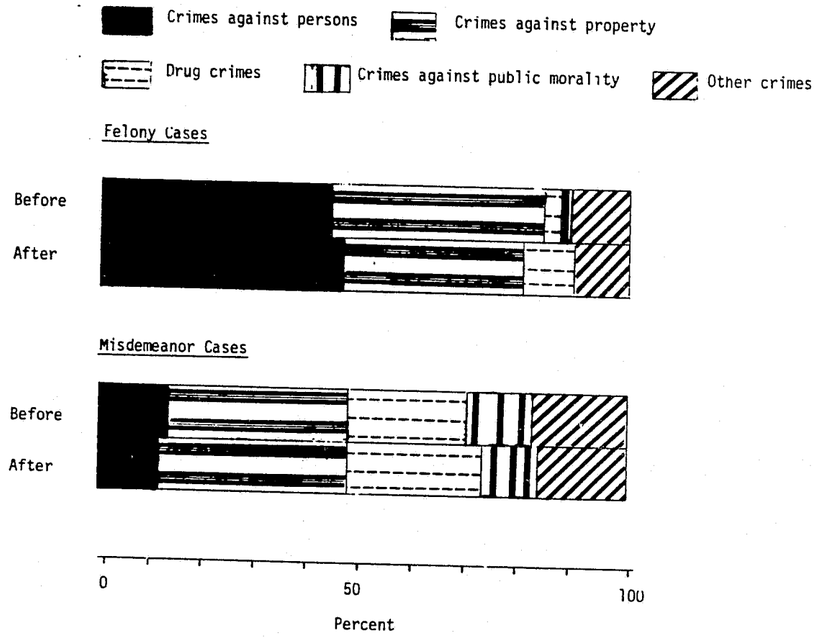
The second major difference in defendant characteristics is the increased use of drugs under the new system. The percentage of defendants reporting a current drug abuse problem at the time of arrest increased from 10 percent to 17 percent for felony cases and from 14 percent to 20 percent for misdemeanor cases. Increased drug use was also reflected in the charges made against defendants, as shown in Figure 11.

Both the increased involvement of defendants in criminality and the increased drug use would be likely to make release decisions more stringent, if these characteristics in fact affected release decisions. Hence, the impact from PSA's new system may have been underestimated in the earlier discussions.

The possible effect of judicial differences on release decisions and outcomes over time was assessed by identifying a group of judges who made a substantial number[8] of release decisions under both the old and new systems. Collectively, this group of the "same" judges accounted for

[8]Only judges who made at least 1 percent of all release decisions under both the old and new systems were included. A total of 15 such judges were identified.

Figure 11. Percentage Distribution of Charges Before and After New Recommendation System



62 percent of all release decisions under the old system and 55 percent of all release decisions under the new system. Release decisions before and after the new system were compared for this group of judges, as shown in Figure 12, which also indicates the decisions of all judges. As shown, the "same judges" group made virtually identical decisions to all judges. Thus, it is unlikely that the findings discussed previously were due to differences in the release philosophies of the judges who made release decisions before and after the new system was introduced.[9]

E. Judicial Acceptance of PSA's Specific Release Recommendations

In addition to analysis of changes in PSA's overall release recommendations and in judges' overall release decisions, the study assessed judicial acceptance of specific PSA recommendations under the old and new systems. The results appear in Figure 13 for felony cases and Figure 14 for misdemeanors.

On the whole, judges followed PSA's recommendations less often under the new system than under the old approach. For example, under the new system judges set conditional PR release in 68 percent of the felony cases and 70 percent of the misdemeanor cases where PSA recommended it, while under the old system conditional PR release had been ordered in 89 percent of the felony cases and 92 percent of the misdemeanor cases where it had been recommended.

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[9] It is, of course, possible that the release philosophies of individual judges changed over time. However, it is unlikely that such changes would have been so extensive and so consistent as to account for the findings.

Figure 12. Release Decisions by Judicial Groups Before and After New Recommendation System

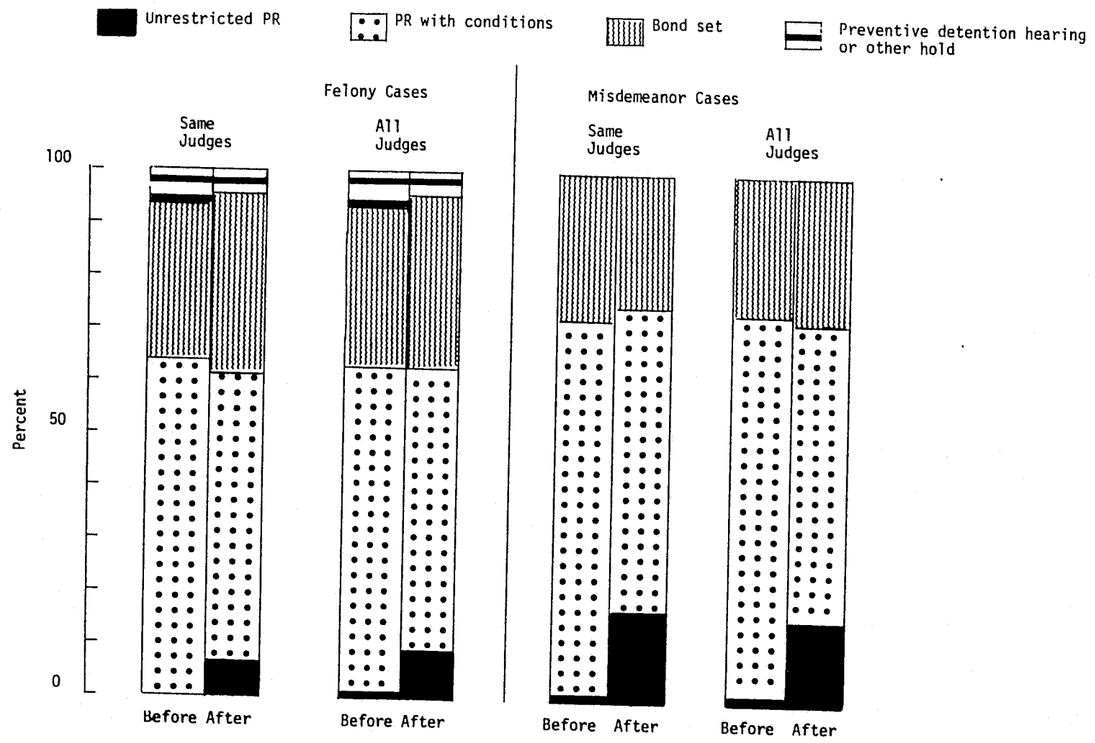


Figure 13. Judges' Release Decisions by PSA Recommendation Category, Felony Cases

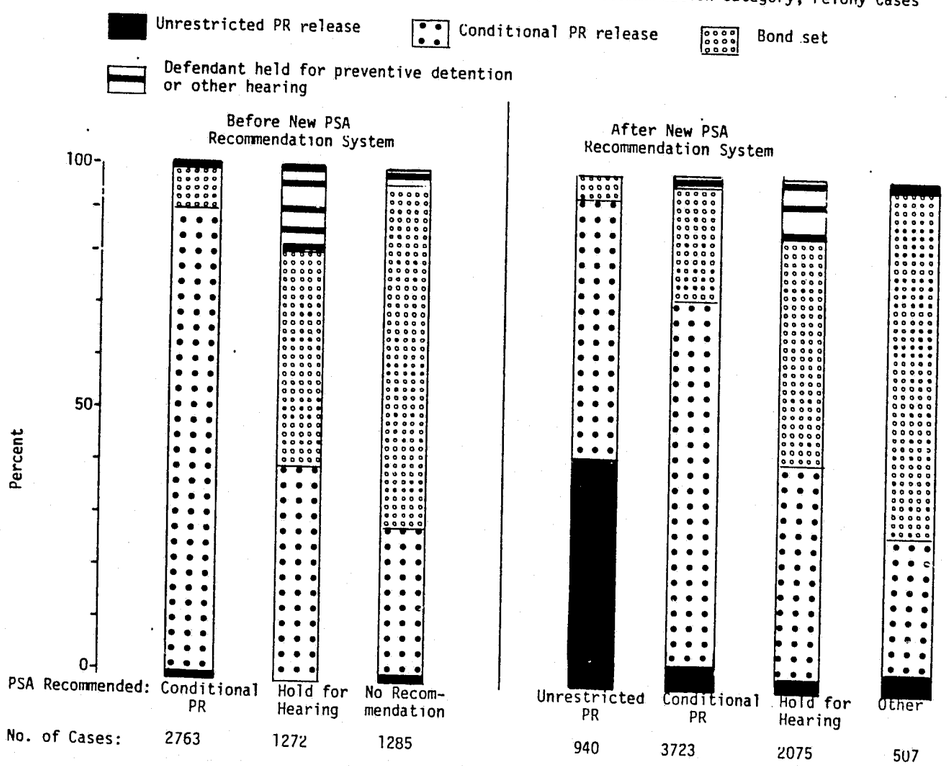
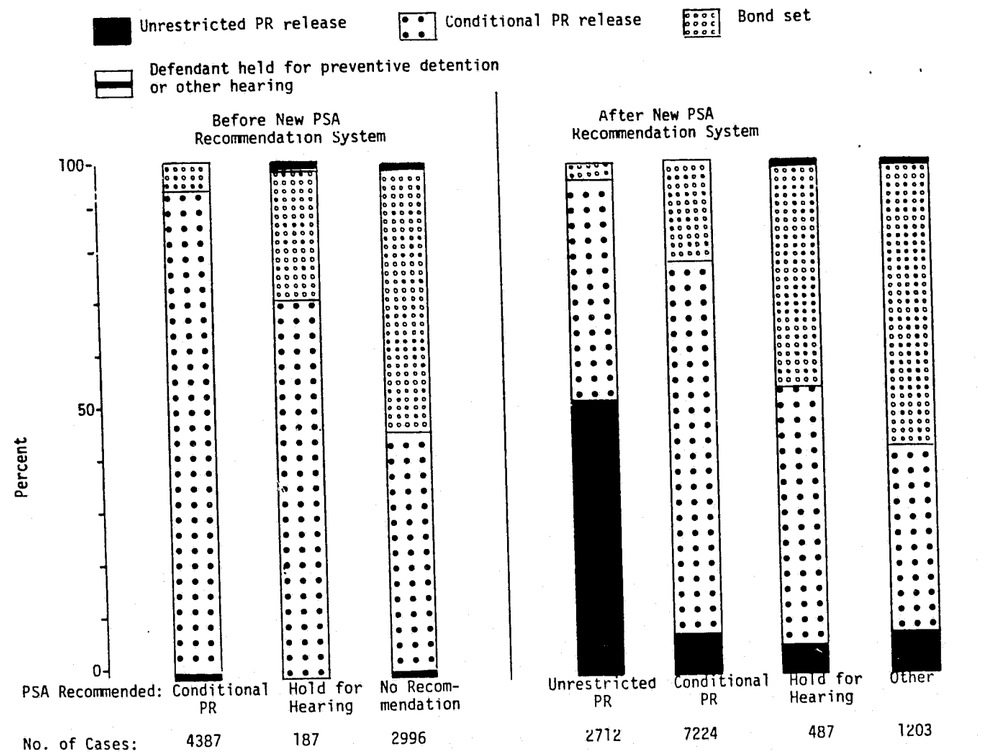


Figure 14. Judges' Release Decisions by PSA Recommendation Category, Misdemeanor Cases



An explanation for this finding was suggested during interviews with local criminal justice officials and seems supported by the data: under the old system, PSA's "no recommendation" category was widely viewed as a sub rosa bond recommendation; with the elimination of the "no recommendation" category, judges set bond for a greater proportion of defendants who received PSA recommendations for PR release or for holds. Stated differently, while the setting of bond was formerly concentrated among defendants with no recommendations from PSA, the setting of bond by judges is now dispersed throughout other PSA recommendation categories. This reduces the overall extent to which judges follow those recommendations.

Figures 13 and 14 illustrate three other findings that merit consideration. The first is the strong impact from PSA's use of the unrestricted PR release recommendation under the new system. Under the old system, virtually no one was recommended for unrestricted PR release, and very few defendants were released on that basis. Under the new system 13 percent of all felony cases and 23 percent of all misdemeanors received unrestricted PR release recommendations from PSA. For felonies 43 percent of those recommendations were accepted by judges and an additional 52 percent of the cases had conditional PR as the release decision. For misdemeanors the comparable percentages were 50 percent and 46 percent, respectively.

Second, when PSA recommended that defendants be held for preventive detention or other hearings, only a small percentage of those recommendations were followed under either the old or new systems. For felony cases, where such recommendations accounted for about one-fourth of all cases, the "hold" recommendation was accepted only 20 percent of the time under the old system and 15 percent under the new system. Defendants not held as recommended were about equally likely to have bond set or to be released on PR with conditions.

The third noteworthy finding is that, although PSA made only a small percentage of "other" recommendations (accounting for 7 percent of felony and 10 percent of misdemeanor cases), defendants with those recommendations were highly likely to have bond set. (Recall that "other" recommendations include such recommendations as making an inquiry in open court to resolve conflicting information about the defendant's identity or address.) Defendants with "other" recommendations were more likely to have bond set than defendants with "hold" recommendations. For felony cases, 71 percent of the defendants with "other" recommendations had bond set, as compared to 42 percent of the defendants with "hold" recommendations. For misdemeanor cases, comparable percentages were 59 percent and 48 percent, respectively.

This suggests that PSA should give careful attention to "other" recommendations and insure that these are indeed appropriately made. This is especially important, because the percentage of defendants with "other" recommendations increased over time under the new system (see Figures 2 and 3).

F. Impact from PSA's Elimination of "No Recommendation" Category

As discussed earlier, one of the major changes in PSA's recommendation system was the elimination of the "no recommendation" category, which had accounted for 24 percent of felony cases and 40 percent of misdemeanor cases. All defendants now receive specific release recommendations, based on assessments of their appearance and safety risks.

Because many of the defendants who received no recommendations had bonds set as their release conditions, it was widely thought that eliminating the "no recommendation" option would increase the rates of nonfinancial release for those defendants. An analysis of whether this occurred was conducted by comparing release decisions (and release outcomes) under the old and new systems for specific types of defendants who would not have received recommendations under the old system.

Because PSA's data base indicates the reasons for making no recommendations under the old system, defendants in similar situations could be identified for the new system. For example, unsatisfactory adjustment on probation or parole, which accounted for 7 percent of all "no recommendation" reasons under the old system, is identified under "flight problem" indicators in the new system. Thus, defendants with unsatisfactory adjustment on probation or parole could be identified under both old and new systems, and their release decisions and outcomes compared.[10] Altogether, approximately 80 percent of the defendants who received no recommendations under the old system did so for reasons that had counterparts in the new system.

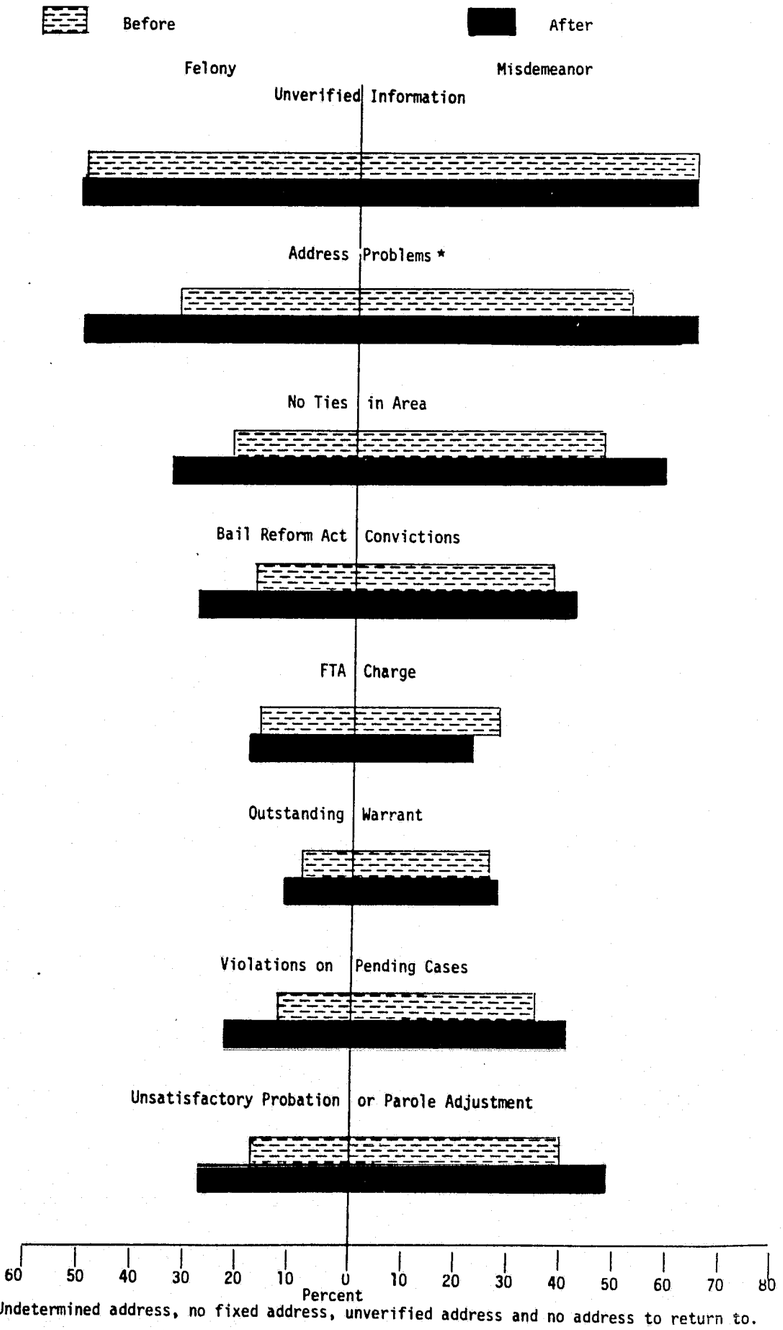
As Figure 15 shows, elimination of the "no recommendation" option resulted in increased rates of nonfinancial release for the vast majority of the categories studied. As will be discussed in Chapter IV, these increases were attained without increases in rates of failure to appear or pretrial arrest for those defendant categories.

Specific increases in nonfinancial release rates were as follows:

- Defendants with address problems—from 31 percent to 51 percent for felonies and from 53 percent to 67 percent for misdemeanors.
- Defendants with no ties in area—from 21 percent to 35 percent for felonies and from 49 percent to 60 percent for misdemeanors.
- Defendants with Bail Reform Act convictions—from 17 percent to 28 percent for felonies and from 39 percent to 42 percent for misdemeanors.
- Defendants with outstanding warrants—from 8 percent to 12 percent for felonies and from 25 percent to 27 percent for misdemeanors.
- Defendants with violations on pending cases—from 12 percent to 24 percent for felonies and from 34 percent to 42 percent for misdemeanors.
- Defendants with unsatisfactory adjustment on probation or parole—from 17 percent to 28 percent for felonies and from 40 percent to 49 percent for misdemeanors.

[10] Such comparisons are facilitated by the fact that, under the old system, PSA's pre-release processing of a defendant stopped as soon as a reason for making no recommendation was found. Thus, all defendants with "no recommendation" characteristics would have received no recommendations.

Figure 15. Nonfinancial Release Rates Before and After New Recommendation System, by Defendant Characteristics That Formerly Resulted in No PSA Recommendation



*Undetermined address, no fixed address, unverified address and no address to return to.

Nonfinancial release rates for defendants with unverified information were virtually unchanged, as were the rates for felony defendants charged with failure to appear (FTA). Only misdemeanor cases with FTA charges showed a decline in nonfinancial release rates under the new system.

Although the changes in nonfinancial release rates are substantial, these might have resulted from changes in defendant characteristics over time, rather than from changes in PSA's recommendation practices. To consider this possibility, an analysis of defendant characteristics under the old and new systems was conducted for each category shown in Figure 15. On the whole these categories of defendants had very comparable characteristics before and after the new system began. As might be expected, the major differences in specific defendant categories paralleled the major differences for defendants as a whole. That is, for each category studied, defendants under the new system were usually more heavily involved in criminality and more likely to be abusing drugs than defendants under the old system. Because both of these characteristics are, by themselves, likely to result in harsher release decisions and outcomes, the impact from eliminating the "no recommendation" category may be greater than the earlier discussion suggested.

* * * * *

As this chapter has shown, most defendants in the District of Columbia are released on conditions of some sort, either nonfinancial restrictions that they must follow during the pretrial period or financial conditions that they must fulfill to secure release. The next chapter considers the nature of these conditions and the ways in which they changed after PSA's new recommendation system was adopted.

III. RECOMMENDATIONS AND DECISIONS ABOUT RELEASE CONDITIONS

A. PSA's Recommendations for Release Conditions

PSA's new risk assessment system changed the Agency's policies regarding recommendations for release conditions (e.g., pretrial supervision, drug abuse treatment, curfews, etc.). The new approach required that conditions be recommended only in response to risk "problems" identified by the assessment system. If imposed, such conditions would—it was thought—reduce risks to acceptable levels, so that defendants could be safely released nonfinancially.[11] Additionally, because conditions were to be recommended only for specified risk problems, the use of unnecessary conditions should decline. Anticipated results were the use of fewer conditions on the average and increased rates of unconditional release.

As discussed in the last chapter, the number of defendants released on unrestricted personal recognizance did, in fact, increase under the new system. Moreover, the average number of conditions recommended for a conditional PR case decreased under the new system from 2.2 to 1.4 conditions for felonies and from 2.1 to 1.3 conditions for misdemeanors.

A sharp decline occurred in the percentage of defendants recommended to report to PSA by telephone, as shown in Figures 16 and 17. Such conditions accounted for 43 percent of all recommended conditions for felony cases under the old system but only 2 percent under the new approach. Comparable percentages for misdemeanor cases are 45 percent, old system, and 2 percent, new system.

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[11] Recall that PSA did not recommend financial release conditions under either the old or new system.

Figure 16. PSA's Conditions Recommendations for Felony Cases

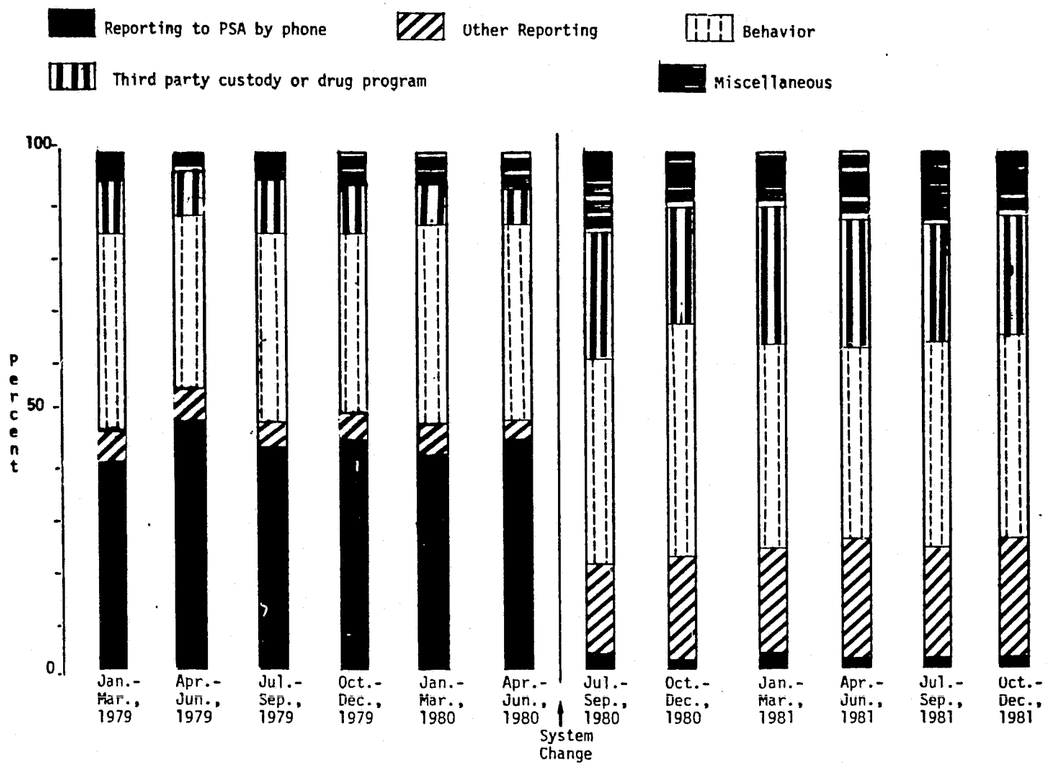
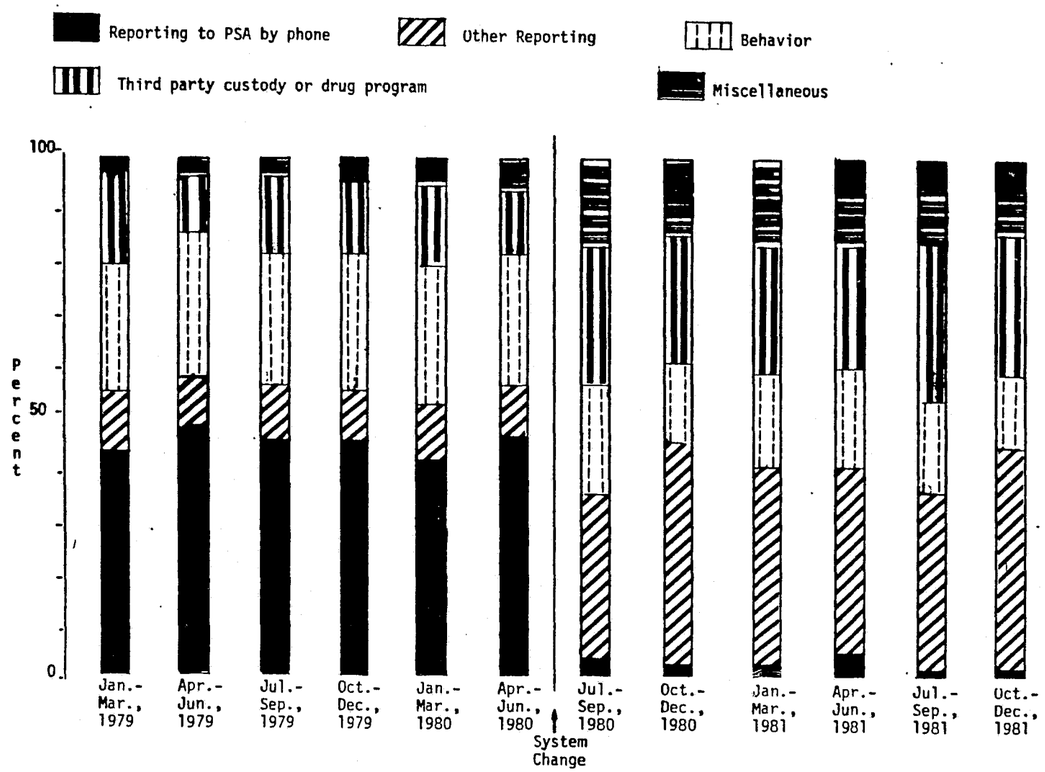


Figure 17. PSA's Conditions Recommendations for Misdemeanor Cases



Major increases occurred for other reporting (with an overall increase of 19 percent for felonies and 31 percent for misdemeanors), third party custody or drug program (up 14 percent for both felonies and misdemeanors), and miscellaneous conditions (up 8 percent for felonies and 11 percent for misdemeanors.[12] The incidence of "behavior" conditions (i.e., orders to stay away from certain locations, live at a specific place, remain in the area or abide by a curfew) was unchanged for felony cases (38 percent) and declined for misdemeanors (from 28 percent to 15 percent).

The conditions recommended most often for felony cases, both before and after the new system, were reporting and behavior conditions. These were also the most common conditions proposed for misdemeanor cases under the old system, but the new system used third party custody and drug program recommendations more often than behavior conditions for misdemeanors. Reporting conditions remained the most common requirements for misdemeanor cases under the new system, though, as with felonies, there was a greater use of reporting to other organizations, such as probation and parole, and a lesser use of reporting to PSA by telephone.[13]

Analysis by quarter shows that the changes discussed above corresponded with the introduction of the new risk assessment system. No trends in these directions were evident before that time, nor was there much subsequent change.

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[12]Miscellaneous conditions include reporting to alcohol or psychiatric programs, providing an address to PSA, living in a halfway house, etc.

[13]Reporting to PSA in person is included under other reporting.

B. Judges' Decisions About Nonfinancial Release Conditions

A comparison of judges' overall use of nonfinancial conditions under the old and new systems shows a decline over time: from 3.4 to 2.3 conditions per felony case with conditional release, and from 3.3 to 2.0 conditions for misdemeanors. Judges' total use of release conditions of all types exceeds these numbers, because, as discussed in the last chapter, judges sometimes set financial release requirements, rather than (or in addition to) nonfinancial conditions.

Changes in judges' use of specific nonfinancial release conditions reflected PSA's changed recommendation practices in some respects. However, differences in judges' actions were not so great as the changes in PSA's recommendations. For example, although judges set proportionately fewer reporting conditions under the new system, the decline was a modest 2 percent for felony cases and 6 percent for misdemeanors. (Recall that comparable declines in PSA's recommendations were 22 percent for felonies and 12 percent for misdemeanors.)

The setting of third party custody and drug program conditions increased by less than 10 percent for both felonies and misdemeanors. A similarly small increase occurred in the use of behavior conditions. Finally, judicial use of miscellaneous conditions declined (by 10 percent for felonies and 4 percent for misdemeanors).

Analysis by quarter (see Figures 18 and 19) shows that changes in judicial decisions regarding the setting of conditions coincided with the change in PSA's recommendation system. Indeed, in some instances there had been an apparent trend in the opposite direction before introduction of the new system. For example, the proportionate use of both reporting and

Figure 18. Release Conditions Set by Judges for Felony Cases

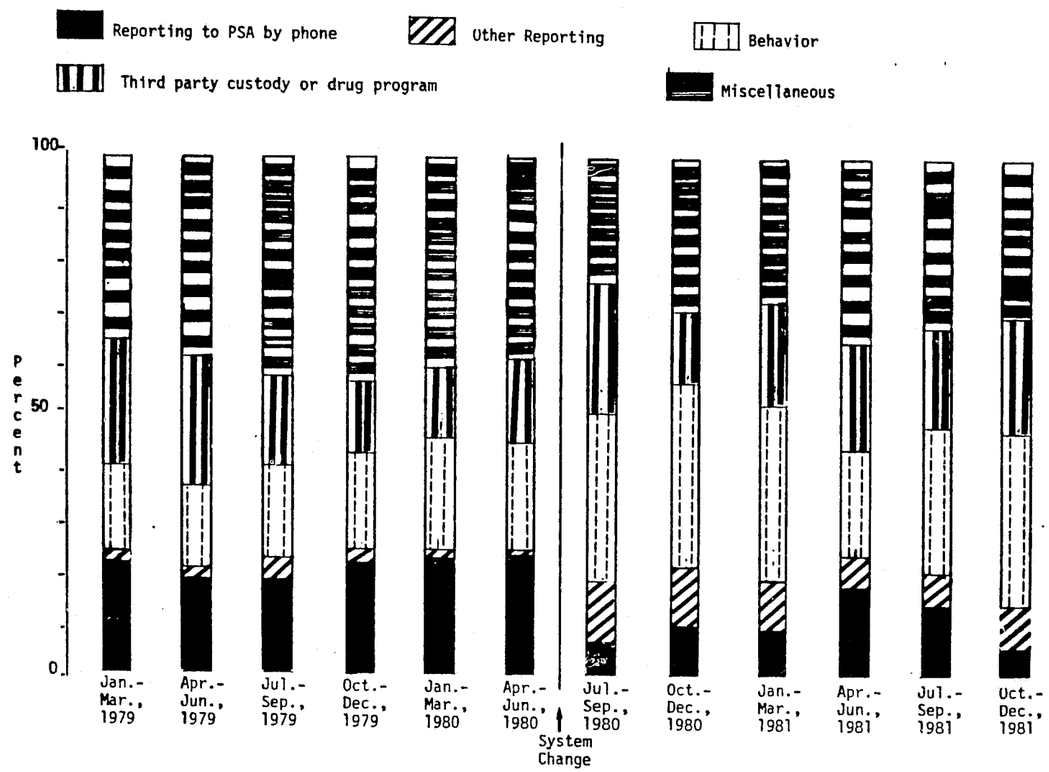
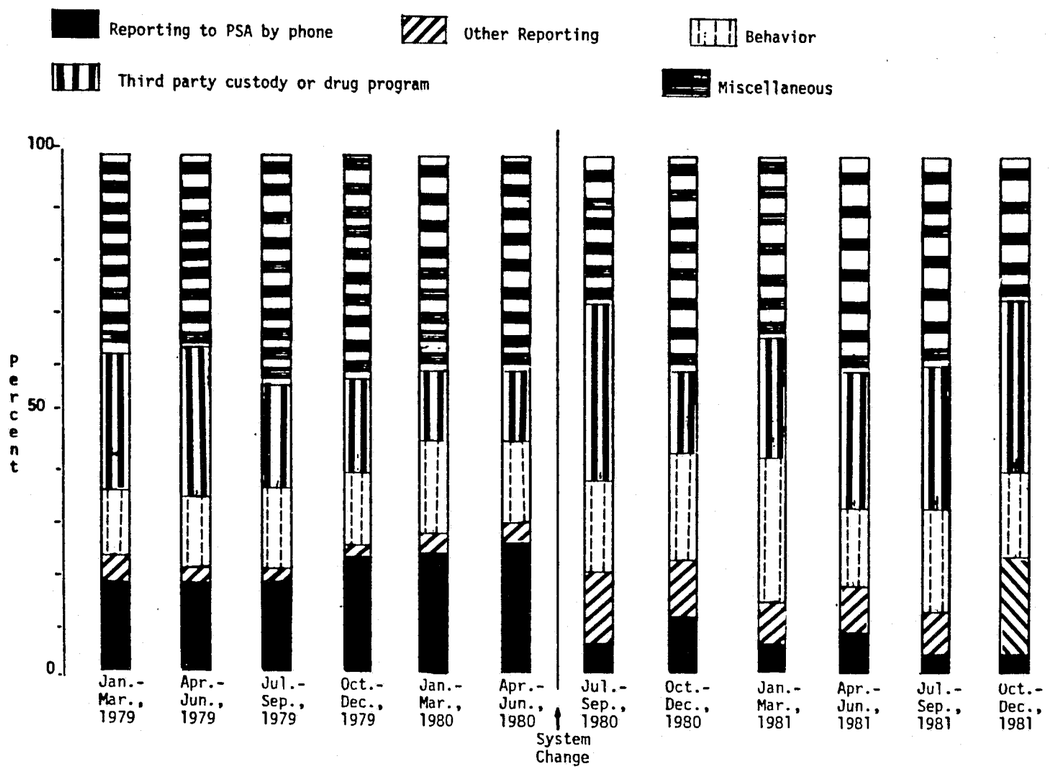


Figure 19. Release Conditions Set by Judges for Misdemeanor Cases



miscellaneous conditions had been increasing before PSA's new system began, and the proportionate use of both declined under the new system. Similarly, the percentage of third party custody and drug program conditions had been declining under the old system and increased under the new. Thus, the changes observed under the new system do not reflect continuation of trends begun earlier; rather, they seem at least partially attributable to the changes in PSA's recommendation system.[14]

C. Comparison of PSA's Recommendations and Judges' Decisions

PSA's recommendations and judges' decisions regarding release conditions are summarized in Figure 20. As discussed previously, greater change was evident for actions by PSA than for those by judges.

When comparing PSA's recommendations and judges' decisions, one must remember that judges set more conditions on the average than PSA recommended. Under the new system judges set an average of 2.3 conditions for each defendant released conditionally in a felony case, as compared to an average of 1.4 conditions recommended by PSA. They also set an average of 2.0 conditions for each conditional misdemeanor release versus an average of 1.3 conditions recommended by PSA.

Because judges set more conditions on the average than PSA recommended, judges may show a lower proportionate use of a particular condition, while imposing that condition on a larger absolute number of defendants than were recommended for that condition by PSA. For example, under the new system reporting conditions comprised 22 percent of all conditions set by judges in

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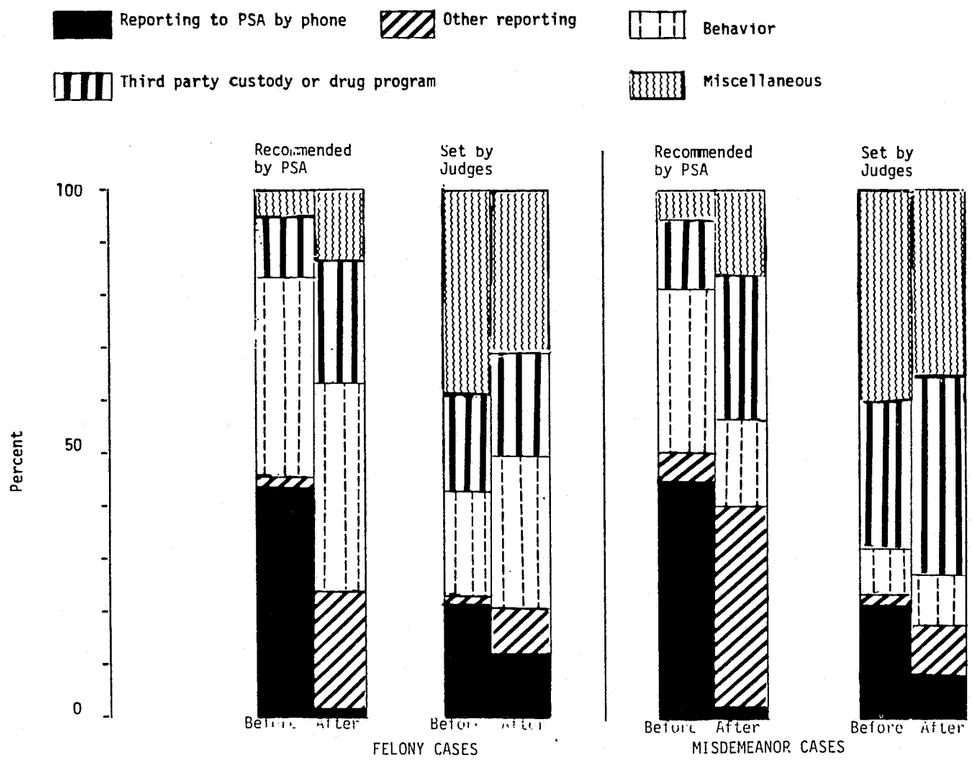
[14] The changes were not due to the fact that different judges made these decisions before and after the new system. When the decisions of the same judges were compared to those of all judges, in the same manner as discussed in the previous chapter for release decisions, there was no difference in the two groups for felony cases and only very minor differences for misdemeanor cases.

Figure 20. Conditions Recommended by PSA and Set by Judges Before and After New Recommendation System (Percentages)



felony cases. PSA's recommendations for reporting conditions had totaled 25 percent of all recommended conditions for felony cases. However, these percentages reflect 2387 cases for judges and only 1310 cases for PSA, which recommended many fewer conditions than judges ordered.

Figure 20 also highlights interesting differences concerning conditions for felony and misdemeanor cases. For felony cases PSA relied heavily on behavior and third party custody/drug program conditions under the old system, and this reliance increased under the new system. For misdemeanor cases PSA's proportionate use of behavior and third party custody/drug program conditions was essentially unchanged before and after the new system. Judges, however, increased their use of these types of conditions for <u>both</u> felony and misdemeanor cases under the new system.

The data suggest that PSA's recommendations of release conditions, particularly under the new system, implicitly consider charge seriousness to a greater extent than do judges' decisions. For misdemeanor cases, as compared to felonies, PSA is more likely to recommend reporting and less likely to recommend more stringent restrictions, such as limitations on behavior or third party custody/drug program requirements. Differences in judges' percentage use of conditions for misdemeanor versus felony cases, on the other hand, are not so great.

D. Judges' Use of Bond

Although PSA never recommended bond as a condition of release, judges set bond in about one-third of all felony cases and about one-fourth of all misdemeanor cases. Bond amounts increased slightly for felony cases and decreased slightly for misdemeanor cases under the new system, as compared to the old (see Figures 21 and 22). Under the new system only 45 percent of

Figure 21. Bond Amounts Set for Felony Cases

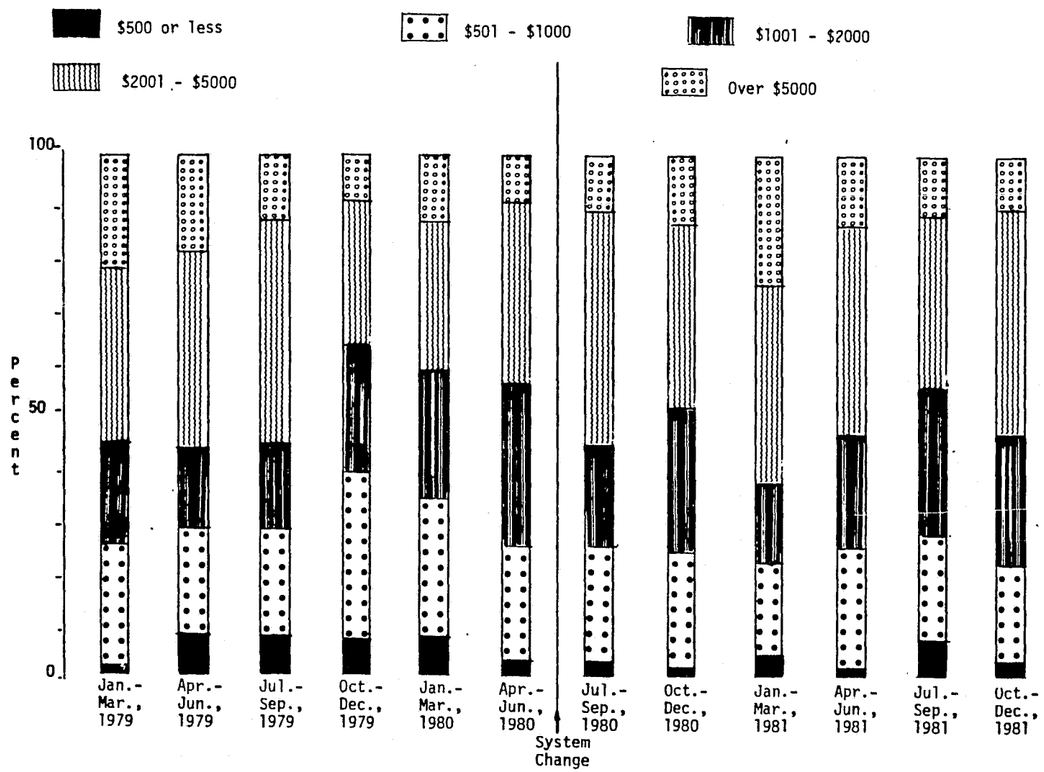
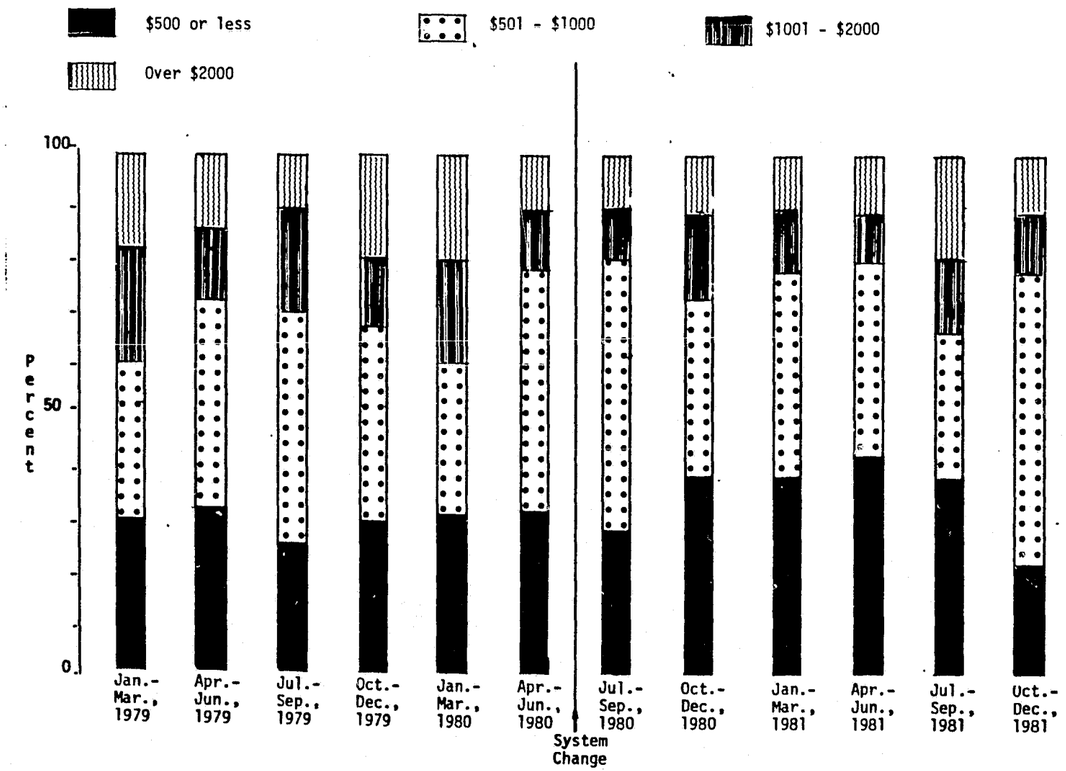


Figure 22. Bond Amounts Set for Misdemeanor Cases



the felony cases with bonds had amounts of $2,000 or less, versus 52 percent under the old system. For misdemeanor bonds, on the other hand, 89 percent were $2,000 or less under the new system, versus 84 percent under the old system.

Over time, starting in October 1979—approximately nine months before PSA's new recommendation system began—there was a trend toward increasingly higher percentages of bonded felony defendants having bonds set above $2,000. Despite this, there was a general decline over time in the mean bond amount set for felony cases, as shown in Figure 23. For misdemeanor cases, no major trends were discernible in proportionate use of specific bond amounts (see Figure 22), although mean bond amounts declined over time (see Figure 23). Because there was little change in judges' bond-setting behavior around the time that PSA's recommendation system changed, it is unlikely that bond amounts were affected by the introduction of PSA's new system.

It is important to remember that judges' bond-setting decisions directly affect detention. In general, as bond amounts increase, one expects that defendants will have more difficulty posting bond and, hence, that detention will rise.

Figure 24 (felony cases) and Figure 25 (misdemeanor cases) show the number of days of detention for defendants who eventually posted bond.[15] As indicated, no major changes were associated with the introduction of PSA's new recommendation system, although detention of bonded defendants was slightly longer under the new approach. This is shown, for example, by a

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[15]Similar data could not be reliably developed for defendants who were unable to post bond, because of incomplete bond-posting information.

Figure 23. Mean Bond Amounts Set by Judges

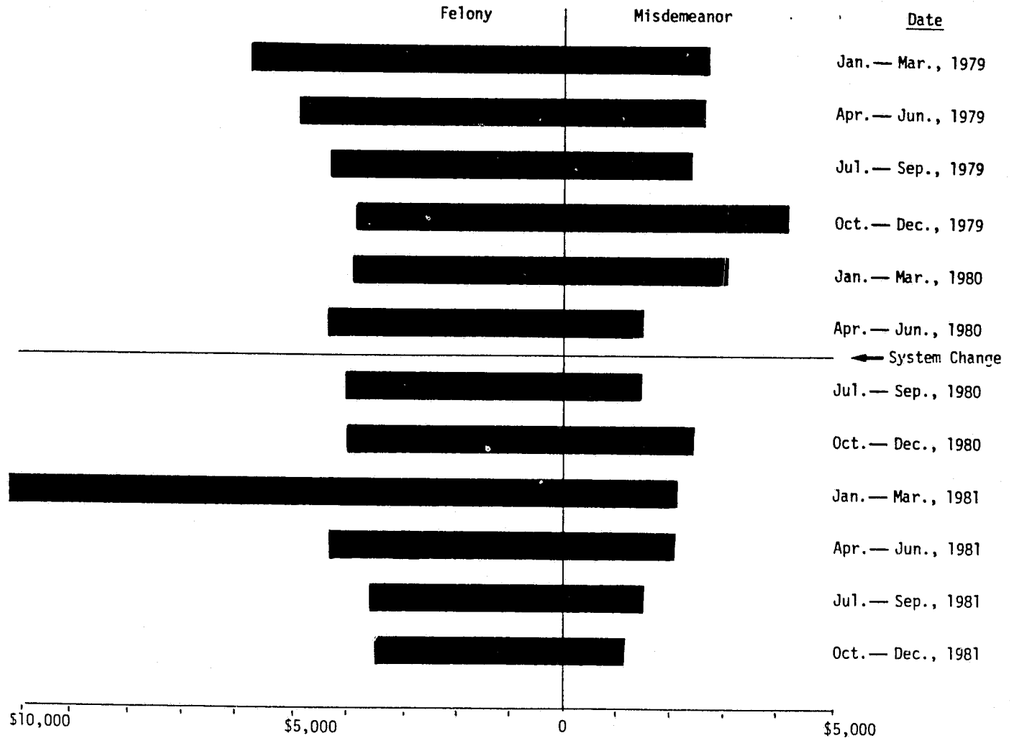


Figure 24. Days Detained for Bonded Defendants Who Secured Release, Felony Cases

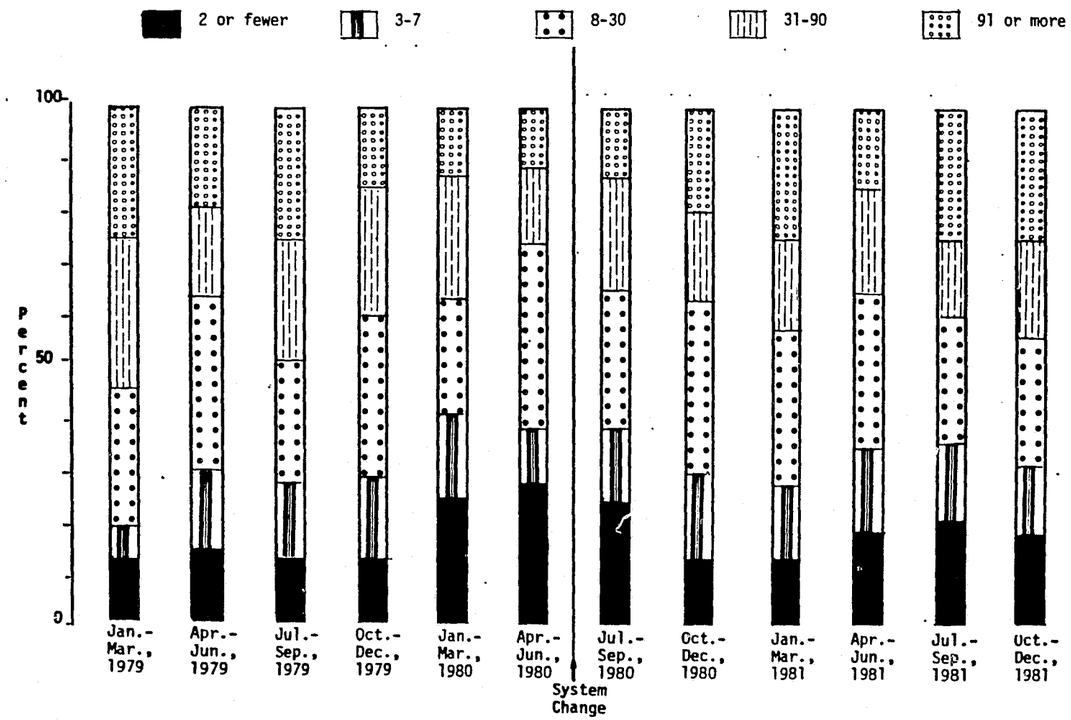
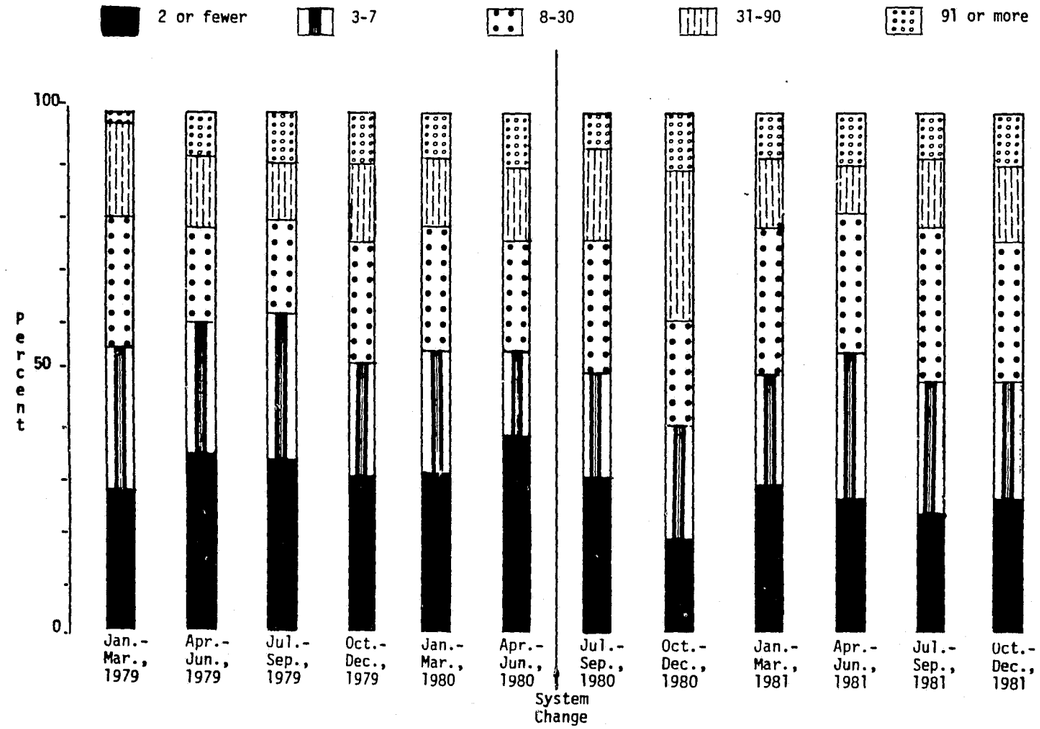


Figure 25. Days Detained for Bonded Defendants Who Secured Release, Misdemeanor Cases



decline in the percentage of defendants who were detained for two or fewer days: from 19 percent (old system) to 17 percent (new system) for felony cases and from 33 percent to 28 percent for misdemeanor cases.

* * * * * * *

This chapter and the last one have shown that defendants were, in general, released on less restrictive conditions after PSA's new recommendation system began: more defendants were released on unrestricted PR, and the defendants released on conditional PR received a lower average number of release conditions. The next chapter considers the effect of these changed release practices on court appearance and community safety.

IV. COURT APPEARANCE AND SAFETY OUTCOMES OF RELEASED DEFENDANTS

Failure-to-appear (FTA) rates declined very slightly after PSA's new recommendation system was introduced. A total of 15.5 percent of felony cases had a failure to appear under the new system, versus 16.2 percent under the old approach; comparable percentages for misdemeanor cases were 22.1 percent and 23.1 percent, respectively.[16]

Because many failures to appear are inadvertent, estimates of "willful" failures were also derived. These estimates are based on whether the defendant returned to court within a specified period of time. A high estimate considered as willful all cases where defendants had not returned to court within 30 days of failing to appear. A low estimate counted as willful only those cases where defendants had not returned to court within one year. As shown in Figure 26, the low estimate of willful FTA declined over time for both felony and misdemeanor cases. A similar decline was evident for the high estimate of willful FTA for misdemeanor cases but not for felonies.

To assess community safety, the primary indicator used was rearrest before trial. For felony cases pretrial arrest rates declined very slightly under the new recommendation system (from 20.7 percent to 19.4 percent). Rates for misdemeanor cases were virtually unchanged (21.9 percent under the old system and 22.3 percent under the new approach). As shown in Figure 27,

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[16]Note that these FTA rates are case-based, not appearance-based.

Figure 26. Court Appearance Outcomes of Released Defendants

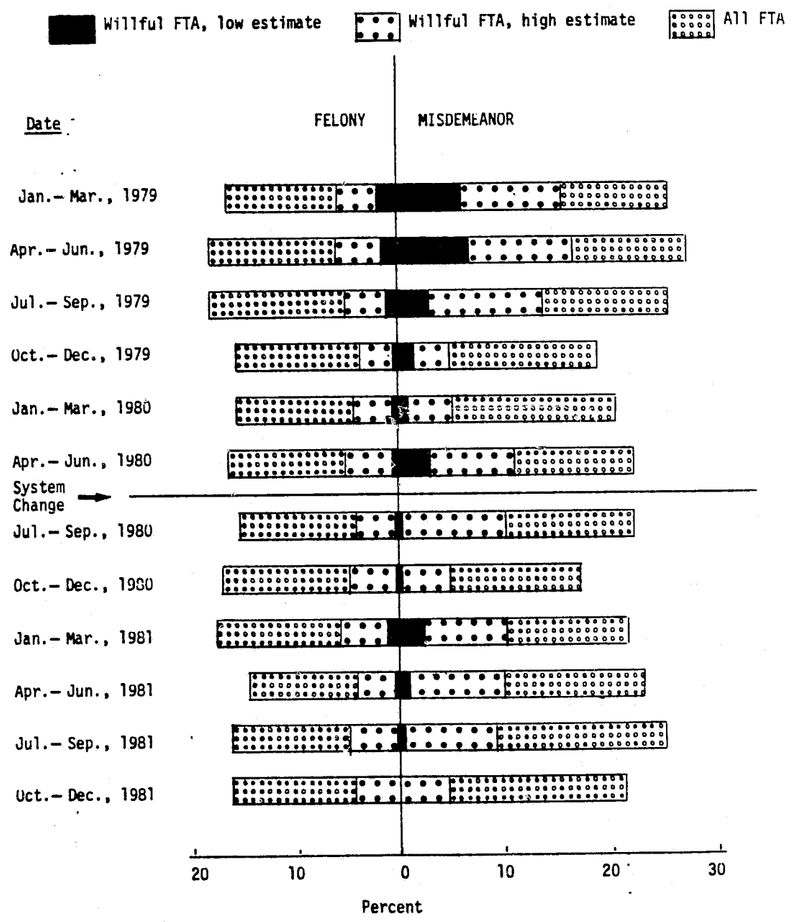
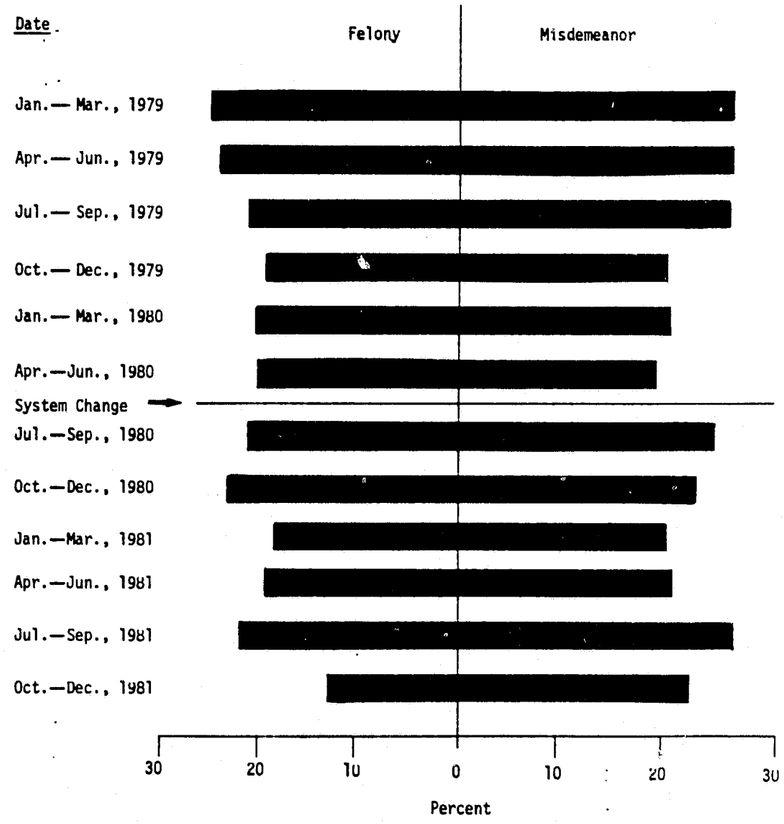


Figure 27. Pretrial Arrest Rates of Released Defendants



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1 OF 2

no sharp trends were evident over time for either felony or misdemeanor cases.[17]

Court appearance and safety outcomes were also analyzed by type of release: unrestricted PR, PR with conditions or bond. Under the old system FTA rates for both felony and misdemeanor cases were lower for defendants released on personal recognizance (with conditions) than for those released on bond (see Figure 28). Under the new system FTA rates for felony cases were about the same regardless of type of release. For misdemeanor defendants those released on unrestricted PR had the lowest FTA rate.

When safety outcomes are considered, defendants released on personal recognizance (either unrestricted or conditional) had lower pretrial arrest rates than defendants released on bond. This occurred for both felony and misdemeanor cases, under both the old and new systems.

It is also noteworthy that rates of pretrial misconduct are consistently higher for misdemeanor than for felony cases. This was so for both failure-to-appear and pretrial arrest rates, under both the old and the new systems, when controlling for type of release (see Figure 28).[18]

As discussed in Chapter II, a major effect of the new recommendation system was to increase the nonfinancial release rates of defendants who would

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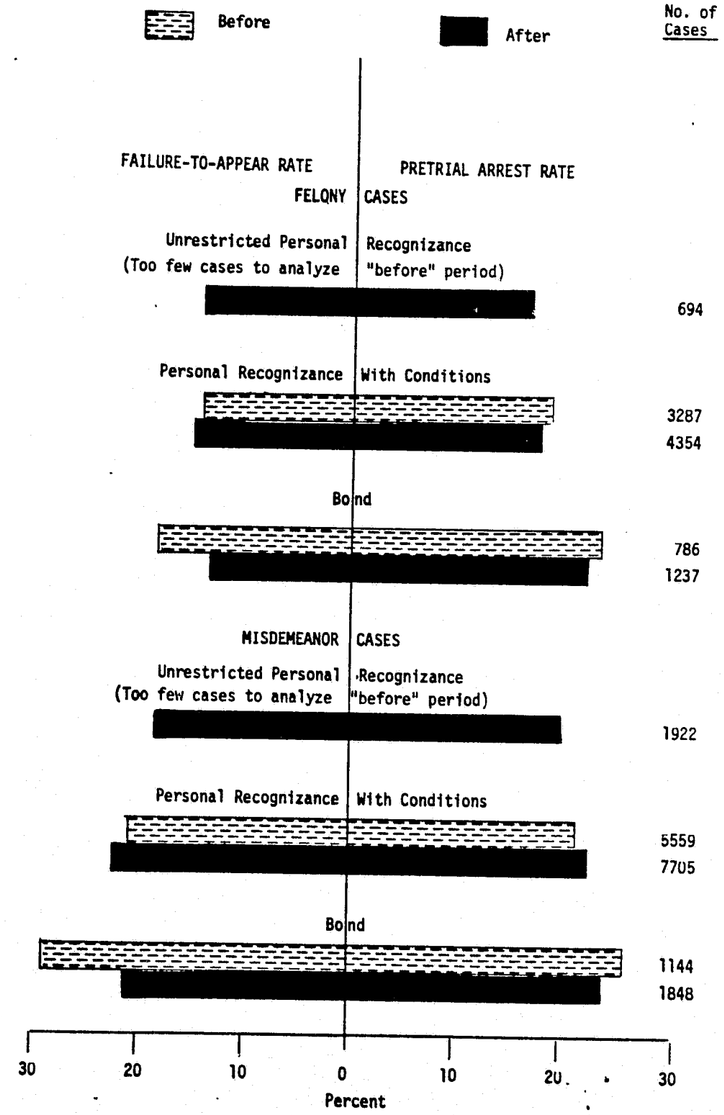
[17] Pretrial arrest rates for defendants charged with dangerous or violent offenses, as defined by statute, were about the same as the rates for other defendants: 19.8 percent under the old system and 20.1 percent under the new approach. Dangerous or violent offenses accounted for 34 percent of all cases of released defendants under the old system and 37 percent under the new approach.

[18] Kirby's review of the research on FTA notes that defendants charged with misdemeanors had FTA rates as high as or higher than those of defendants charged with felonies. Michael P. Kirby, Failure-To-Appear: What Does It Mean? How Can It Be Measured? (Washington, D.C.: Pretrial Services Resource Center, June 1979), pp. 6 - 7.

Figure 28. Court Appearance and Safety Outcomes of Released Defendants Before and After New Recommendation System, By Type of Release



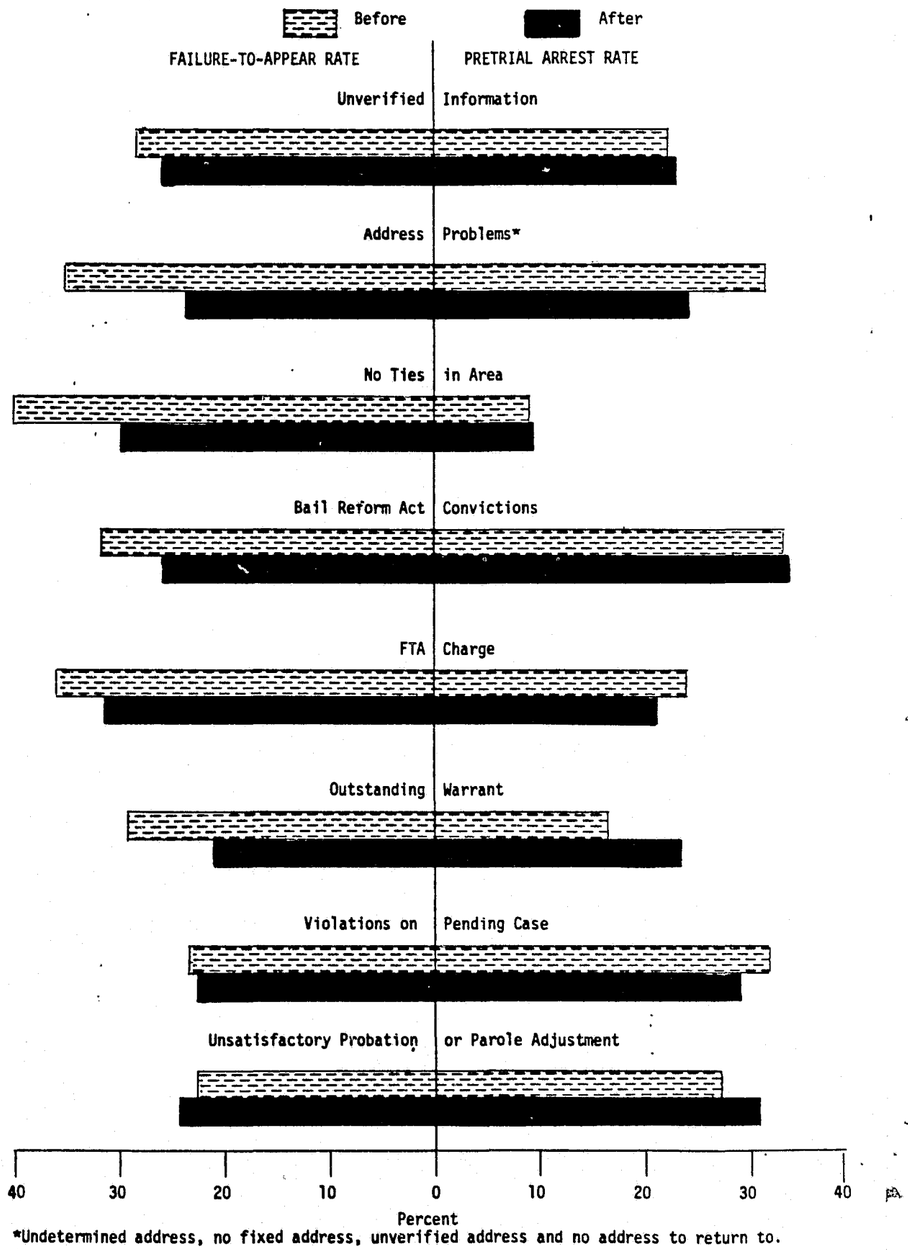
have received no PSA recommendations under the old system (see Figure 15). This increase was in most cases accompanied by no change or declines in failure-to-appear and pretrial arrest rates for those defendants, as shown in Figure 29. The major exceptions were for pretrial arrest rates of defendants with outstanding warrants (increased from 17.0 percent to 22.5 percent) or unsatisfactory probation/parole adjustments (increased from 26.6 percent to 31.0 percent). For the other defendants considered—those with unverified information, address problems, no ties in the area, Bail Reform Act convictions, FTA charges, or violations on pending cases—both failure-to-appear and pretrial arrest rates declined or remained about the same.

A final topic of interest regarding court appearance and safety outcomes concerns defendants who violate conditions of release. As shown in Figure 30, those defendants had much higher FTA and pretrial arrest rates than persons who followed their release conditions. This was so for both felony and misdemeanor cases, under both the old and new recommendation systems.

As this chapter has shown, the introduction of PSA's new recommendation system was not associated with any major changes in failure-to-appear or pretrial arrest rates. Hence, the increased rates of release on unrestricted personal recognizance under the new system, as discussed in Chapter II, did not result in increased rates of pretrial misconduct. This occurred despite the fact that defendant characteristics changed in the direction of greater risk under the new system. (Recall that defendants under the new system were more involved in criminality and more likely to have drug abuse problems than defendants under the old system.)

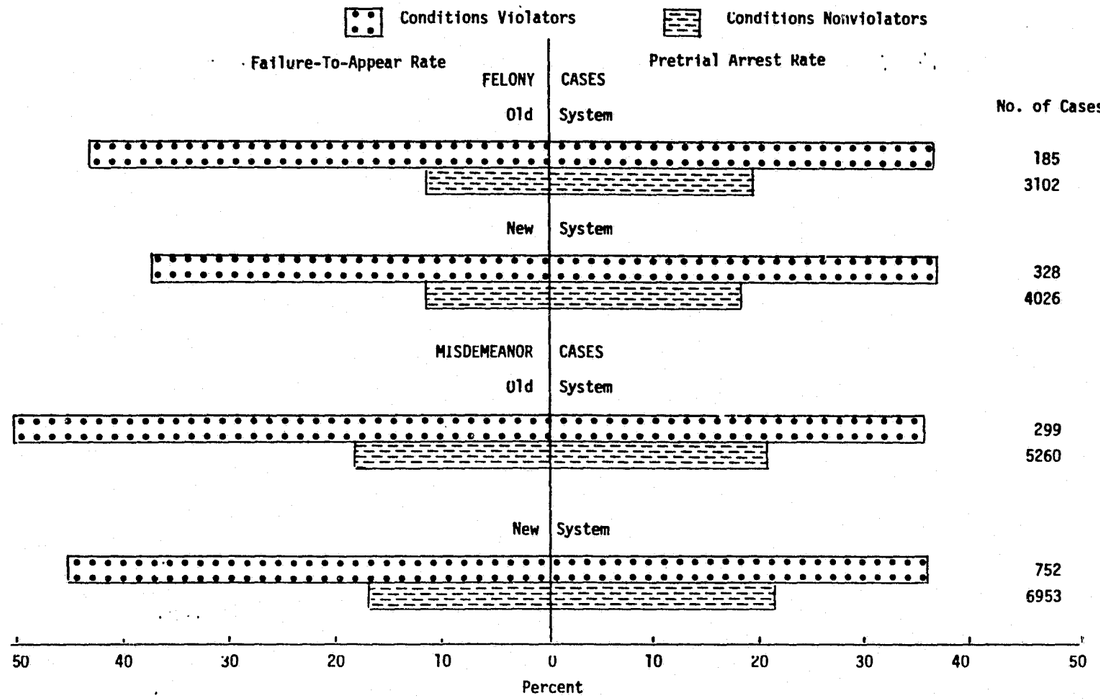
These findings suggest that PSA's adoption of a new recommendation system was beneficial for the jurisdiction: more defendants were released on less

Figure 29. Failure-To-Appear and Pretrial Arrest Rates Before and After New Recommendation System, by Defendant Characteristics That Formerly Resulted in No PSA Recommendation



*Undetermined address, no fixed address, unverified address and no address to return to.

Figure 30. Court Appearance and Safety Outcomes for Conditions Violators and Nonviolators



restrictive conditions under the new system, but there were no offsetting increases in failure-to-appear or pretrial arrest rates (indeed, those rates declined slightly). Because of the apparent utility of the new recommendation system, a closer analysis of its risk ratings is merited. This is provided in the next chapter, which also compares PSA's risk ratings of defendants with their subsequent outcomes.

V. PSA'S ASSESSMENTS OF RISK, AS RELATED TO JUDGES' DECISIONS AND DEFENDANTS' OUTCOMES

A. PSA's Assessments of Risk

Under the new risk assessment system PSA classifies defendants in terms of both appearance and safety risks as well as the degree of such risk (high, medium or low). More than half the felony cases were considered safety risks, with a large percentage of them also deemed appearance risks (see Figure 31). Approximately one-fourth of the felony cases were rated as presenting appearance risks alone, and about one-eighth of the felony cases were rated as posing neither appearance nor safety risks. In contrast to felonies, most (55 percent) misdemeanor cases were assessed as appearance risks only. Approximately one-fourth of the misdemeanor cases were considered risk-free, and about one-fifth were deemed safety risks.

Over time, as shown in Figure 31, there was a slight increase in the percentage of felony cases rated solely as appearance risks and a slight decrease in those rated as risk-free. For misdemeanor cases there was also a slight increase in the percentage considered appearance risks only. Additionally, the percentage of misdemeanor cases classified as safety risks (either alone or in combination with appearance risks) declined somewhat.

By degree of risk, most cases were rated either high or low, as shown in Figure 32; ratings of medium risk were relatively infrequent for both appearance and safety problems and for both felony and misdemeanor cases.

As discussed earlier, PSA not only rates defendants by type and degree of risk but also recommends release conditions to reduce risks to acceptable

Figure 31. PSA's Categorization of Defendants by Type of Risk Under New System

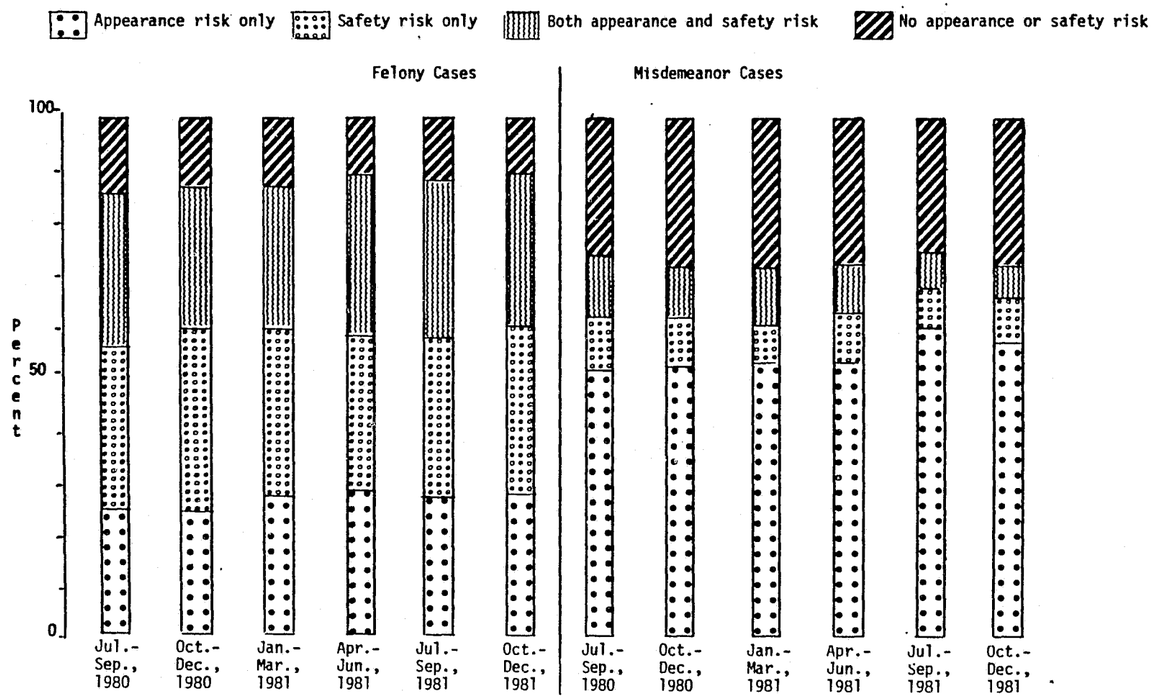
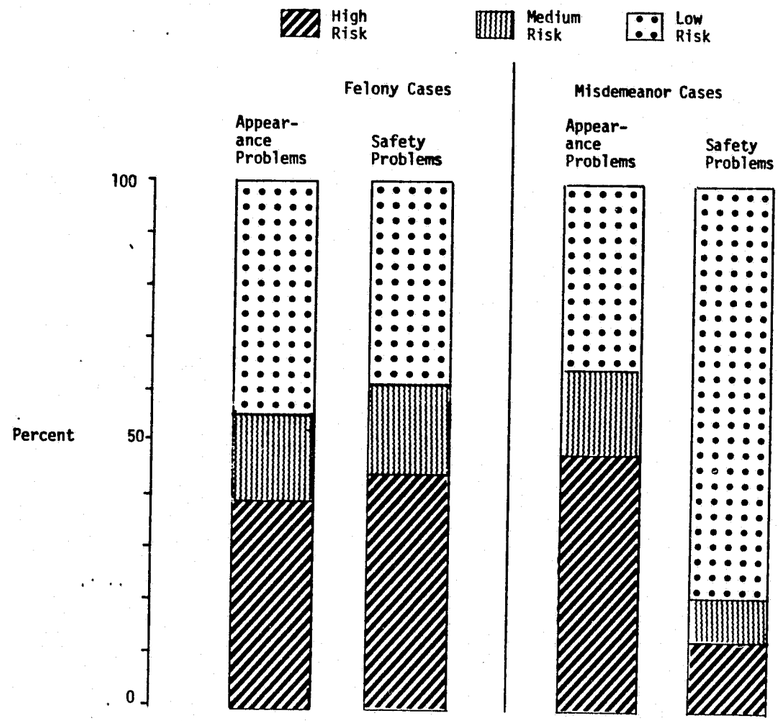


Figure 32. PSA's Risk Ratings of Defendants Under New System



levels. Figure 33 shows the types of conditions recommended for appearance and safety problems. As indicated, appearance conditions for both felony and misdemeanor cases were most often "miscellaneous" (e.g., receive alcohol treatment, live in a halfway house, provide address to PSA, etc.), followed by third party custody/drug program conditions for felonies and reporting conditions for misdemeanors. Behavior conditions (e.g., living at a certain place, staying in the area) were recommended only rarely for appearance problems.

For safety problems behavior conditions (including staying away from certain places or persons and abiding by a curfew) accounted for more than half of all conditions recommended for both felony and misdemeanor cases. Reporting conditions were the next most common (20 percent, felonies; 30 percent, misdemeanors), with third party custody/drug program and miscellaneous conditions suggested only rarely.

B. Judges' Release Decisions

Just as PSA's recommendations for conditions varied by problem type, so did judges' release decisions (see Figure 34). Defendants with no appearance or safety problems were most likely to be released on nonfinancial conditions (either unrestricted or conditional personal recognizance). At the other extreme, felony defendants with both appearance and safety problems were the least likely to be released on nonfinancial conditions. Defendants with only appearance problems were more likely than defendants with only safety problems to have bonds set as their release conditions.

As expected, misdemeanor defendants had higher rates of nonfinancial release than felony defendants for each problem type. Overall patterns of release decisions by problem type for misdemeanors were, however, similar to those for felonies.

Figure 33. PSA's Conditions Recommendations by Type of Problem

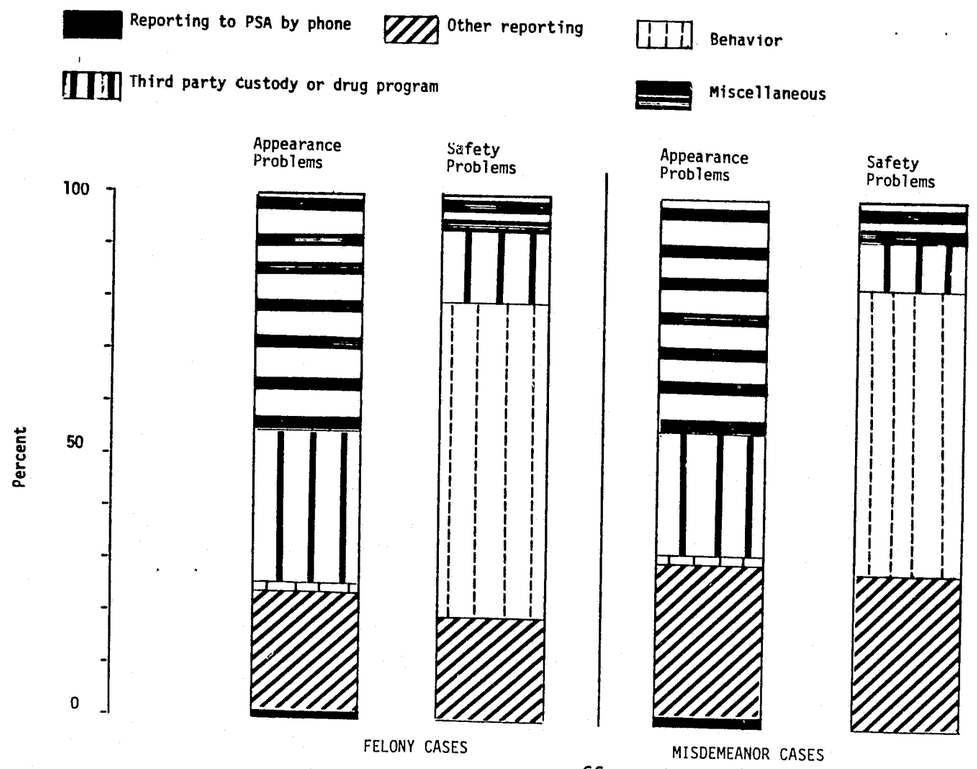
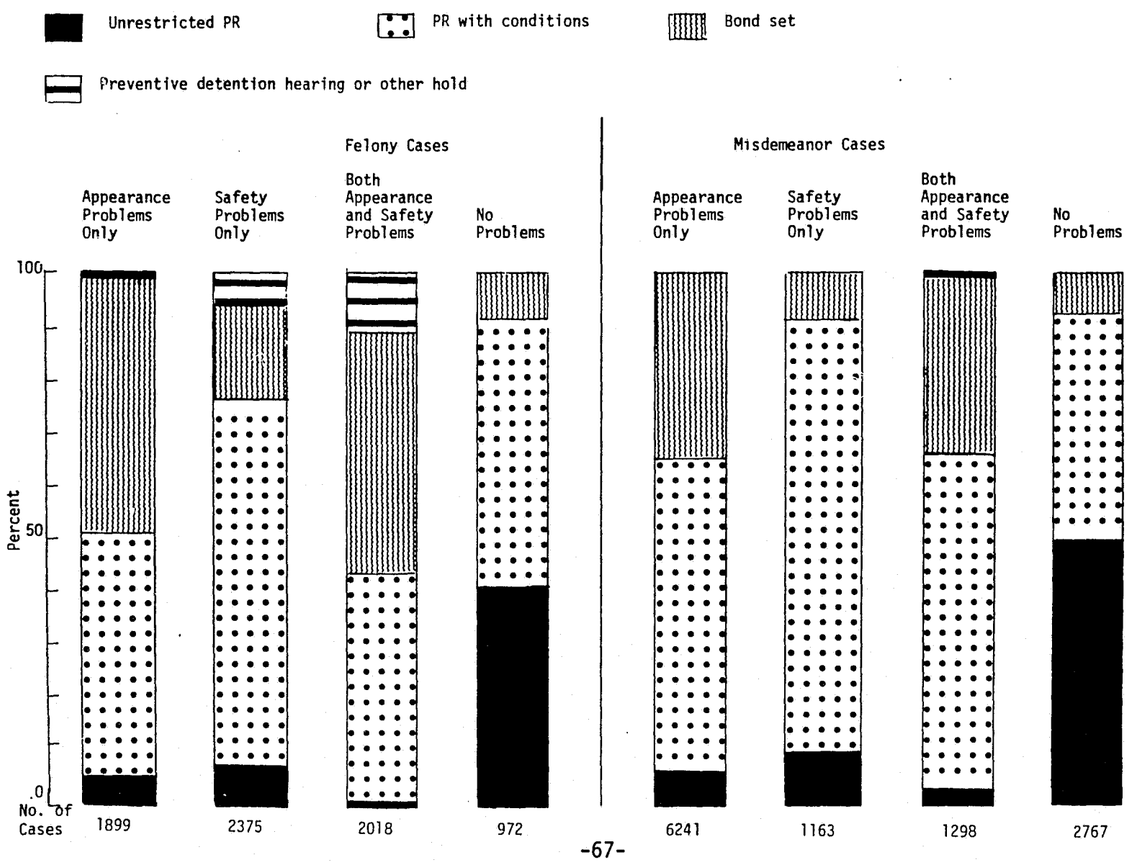


Figure 34. Judges' Release Decisions by Type of Problem



C. Defendants' Release Outcomes

Defendants' release outcomes also varied by type and degree of risk, as shown in Figures 35 and 36. In general, defendants rated as higher risks had higher rates of detention until trial and, when released, were released on more restrictive conditions.[19]

High safety risk cases had higher release rates than high appearance risk cases. Medium safety risk cases also had higher release rates than medium appearance risk cases at the felony level (misdemeanor rates were the same). Only for low risk cases did appearance risks show higher release rates than safety risks. These outcomes reflect judges' greater use of bond for defendants with appearance problems, as discussed in the preceding section.

Figures 37 and 38 consider appearance and safety risk levels jointly. Of particular interest is the group of felony cases with high risk appearance problems and high risk safety problems. Those cases comprised 17 percent of all felonies, and 42 percent of them resulted in detention until trial.

For cases where defendants were considered high appearance risks, the lowest release rate occurred for the high safety risk group. Similarly, for high safety risk cases, the lowest release rate was for the high appearance risk group. In general, as risk ratings increased, release rates declined.[20] Thus, the net effect of judges' decisions roughly parallels PSA's risk ratings.

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[19]The sole exception to this pattern occurred for medium safety risks, who experienced higher release rates and higher rates of nonfinancial release than low safety risks. Because medium safety risk cases accounted for only 16 percent of all felony cases and 8 percent of all misdemeanor cases, this exception had little effect on the overall trend.

[20]Again, exceptions occur for medium risk defendants.

Figure 35. Defendants' Release Outcomes by Risk Categories, Felony Cases

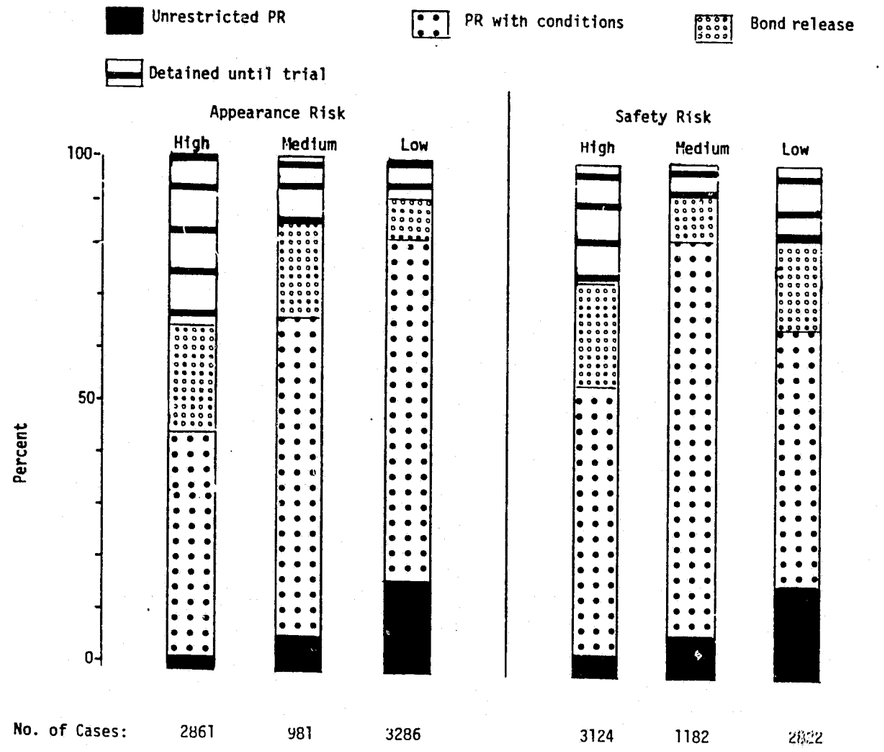


Figure 36. Defendants' Release Outcomes by Risk Categories, Misdemeanor Cases

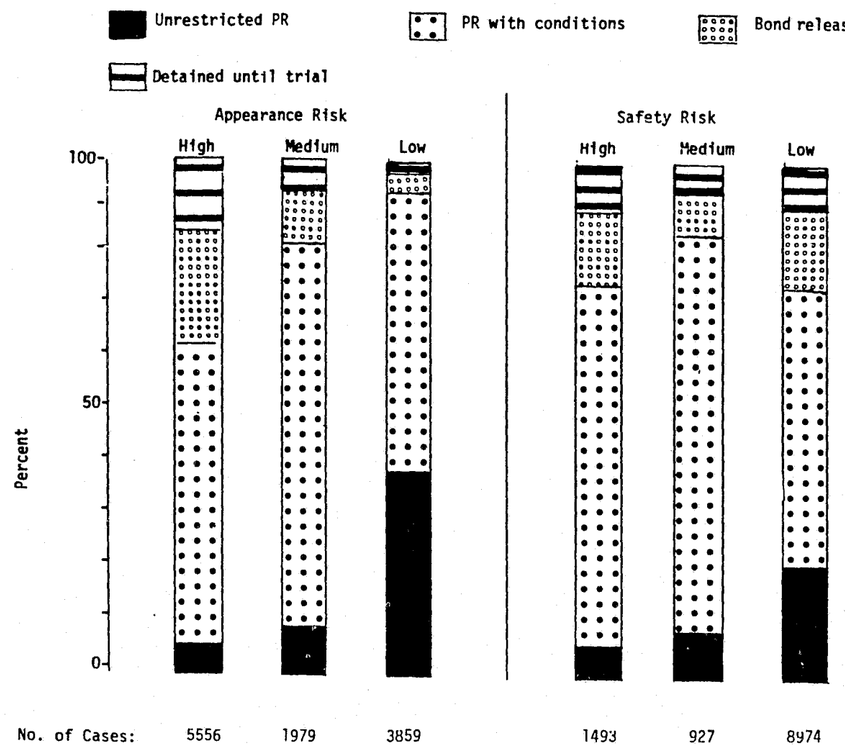


Figure 37. Defendants' Release Outcomes by Appearance/Safety Risk Categories, Felony Cases

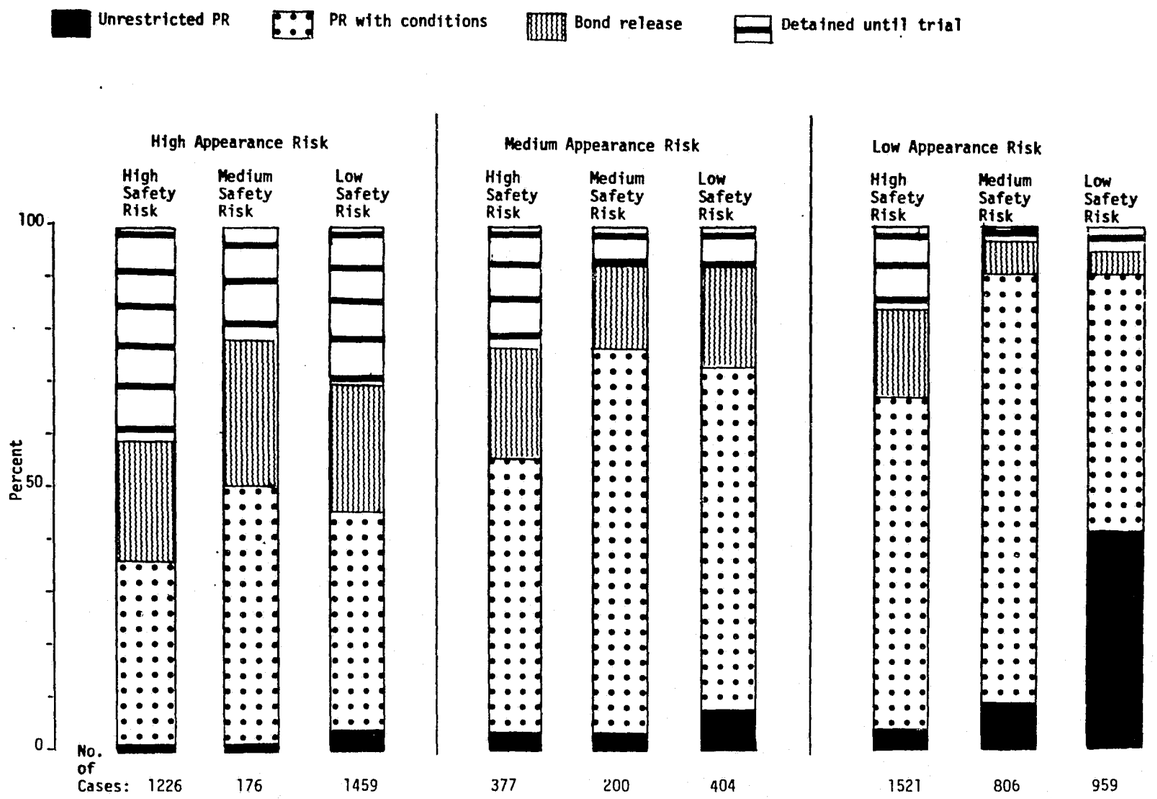
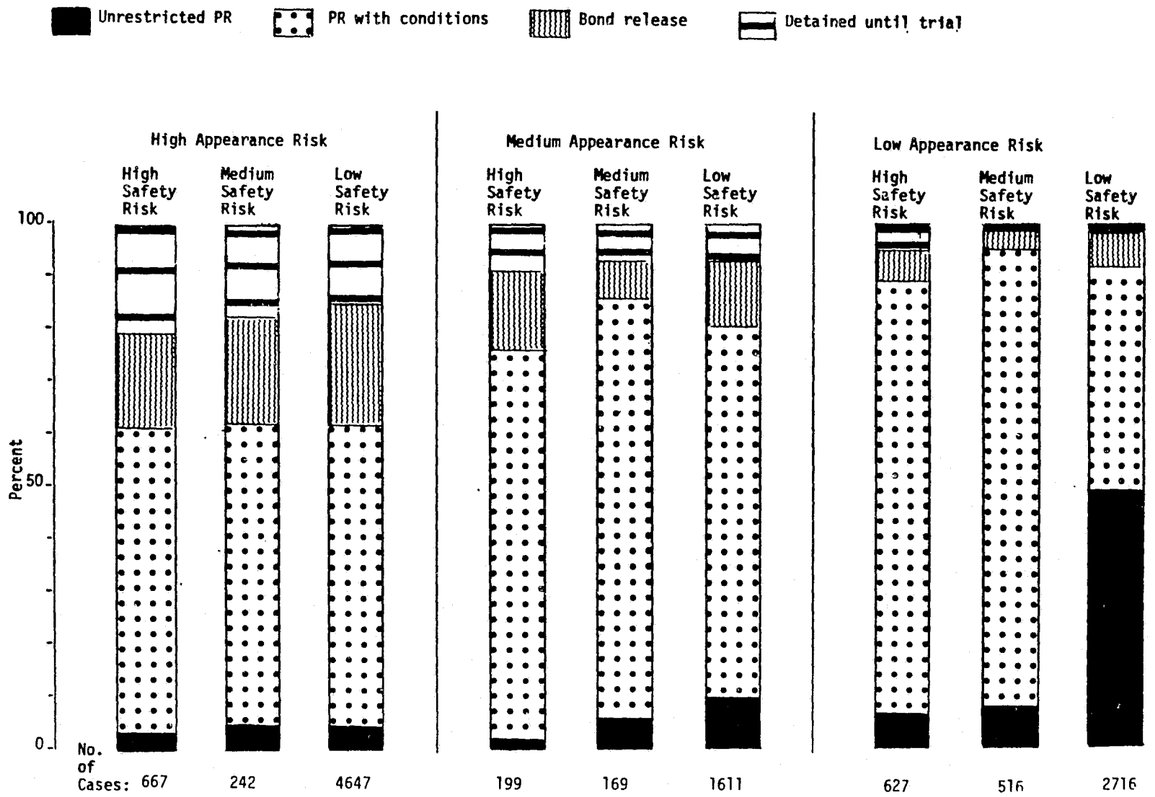


Figure 38. Defendants' Release Outcomes by Appearance/Safety Risk Categories, Misdemeanor Cases



D. Accuracy of PSA's Risk Ratings

Because PSA's risk ratings are reflected in defendants' release outcomes, it is particularly important to assess the accuracy of those ratings. One way of addressing this question is to compare the appearance and safety outcomes of released defendants with their risk ratings. Presumably, if defendants considered higher risks show higher rates of pretrial misconduct than persons deemed lower risks, the risk ratings can be considered accurate. In such a situation the effect of any conditions imposed to reduce release risks would not have been great enough to eliminate risk differences across groups. If failure-to-appear and pretrial arrest rates do not correspond to the assessed risk levels, an interpretation difficulty arises. This is because such a finding could result from inaccurate risk assessment or from effective imposition of release conditions.

As shown in Figure 39, for appearance, high-risk cases had higher failure-to-appear rates than low risk cases for both felonies and misdemeanors. However, medium risk defendants had the highest non-appearance rates of all.

For safety, there was little difference in pretrial arrest rates for high and low risk defendants. Indeed, for misdemeanors, low safety risk defendants had slightly higher pretrial arrest rates than high safety risk defendants. Medium safety risk defendants had the lowest pretrial arrest rates.[21]

These findings suggest that PSA's risk assessments are more accurate for appearance than safety risks. An alternative explanation is that the findings were due to distortions in underlying risk levels caused by the

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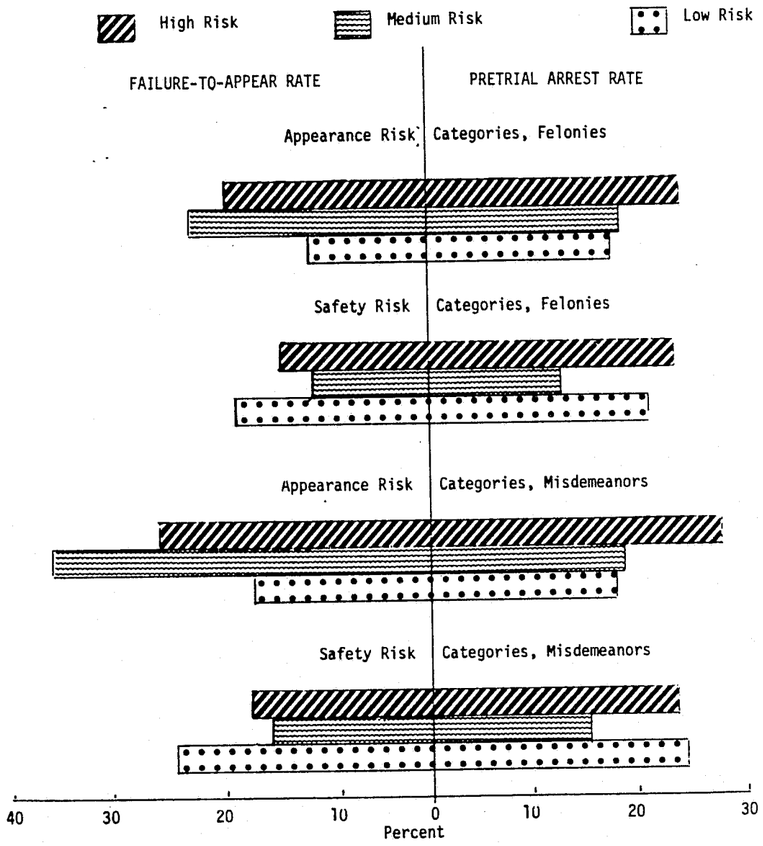
[21] Note in Figure 39 that the ratings of appearance risk were more closely associated with differences in pretrial arrest rates than the safety ratings.

Figure 39. Defendants' Appearance and Safety Outcomes by Risk Categories



imposition of release conditions. Although this possibility cannot be completely discounted, interviews with local criminal justice practitioners suggest that it is an unlikely one. Because penalties are rarely imposed for violations, release conditions are not considered sufficiently effective to account for the findings. Moreover, there is no reason to think that conditions ordered for safety reasons would distort underlying risk levels, while conditions imposed for appearance reasons would not.

It is not surprising that PSA's risk ratings would be more accurate for appearance than safety in view of the way the risk assessment system was developed. To assess appearance risk, PSA relied on experience and judgment that had been acquired over a period of almost 20 years. To assess safety risk, a more recent concern, PSA relied primarily on statutory criteria. Not only did PSA have little experience in assessing safety risk, but the drafters of the relevant statute had little as well. Thus, one would expect greater accuracy for the assessment of appearance than safety risk.

Now that PSA has gained experience in assessing safety risk, it is particularly important to consider whether the current rating system can be improved and, if so, in what ways. This topic is addressed in the next chapter.

VI. PREDICTION OF PRETRIAL ARREST THROUGH A FORECASTING MODEL

A. Introduction

This chapter considers whether PSA's assessments of safety risk, now based largely on charge and prior criminality, might be substantially improved by including additional criteria. (Appendix E provides a brief history of risk assessment in the District of Columbia and other communities; it includes a discussion of the predictive accuracy of various risk assessment efforts.)

The analysis presented in this chapter is sharply different from that of preceding chapters, which focused on comparisons of events before and after introduction of PSA's new risk assessment and recommendation system. Analysis of possible improvements in that system required multivariate analysis to identify the defendant characteristics most closely associated with pretrial arrest and to determine the likely extent of improved risk assessment if such characteristics were used by PSA.[22] This was accomplished by developing and testing a forecasting model for predicting pretrial arrests.[23] Additionally, special attention was given to prediction of rearrest for "dangerous or violent" charges, as defined by D.C. statute, because of the greater level of concern about such charges.[24]

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[22] Similar analysis could have been conducted for appearance risk, had resources permitted.

[23] Pretrial arrest was considered the best available measure of pretrial criminality, even though it excludes crimes that do not result in arrests and includes arrests that do not result in convictions.

[24] According to the Court Reform and Criminal Procedure Act of 1970, dangerous or violent charges are murder, rape, carnal knowledge, indecent liberties with minors, mayhem, kidnapping, robbery, burglary, voluntary manslaughter, extortion with threats, arson, assault, assault with a deadly weapon, and drug sales punishable by more than one year in prison. The prediction analysis for dangerous or violent rearrests excluded drug sales, because of difficulties in identifying the applicable charges in the data base accurately.

Development of a forecasting model required analysis of defendants, rather than the earlier analyses of cases. Consequently, the case-based data file was transformed into a defendant-based file by using the unique identifier for each defendant included in the data base. A random sample of released defendants was selected for analysis from 1981 cases filed in D.C. Superior Court.[25]

The rest of this chapter discusses the development of the forecasting model and its potential utility as a risk assessment aid. Readers who are primarily interested in the policy implications of these analyses, rather than in the detailed findings, may wish to skip to the next chapter.

B. Prediction Based on PSA's Indicators of Safety Risk

To provide a basis of comparison with the forecasting model, a model based on PSA's indicators of safety risk was derived. The results (see Table 1) show that PSA's indicators have some predictive power for pretrial arrest (for any charge) but none for pretrial arrest for dangerous or violent charges; this is reflected in the statistical significance level of the F ratio. The most important variable in the pretrial arrest prediction model is the one indicating defendants who are using drugs but are not in treatment. Other significant variables include those identifying defendants with juvenile records or on probation.

C. Development of a Model of Pretrial Arrest

In this section a forecasting model of pretrial arrest is derived. The model is based, in part, on analyses of the "economics of crime." In such analyses, an individual is viewed as facing a time allocation choice in which options include leisure, non-criminal work and criminal activity. The supply of criminal activity is increased for individuals with the following characteristics: a low wage in non-criminal work, a low

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[25] The year 1981 was selected, so that the analysis would be based on as recent a time period as possible. Note that citation release cases, which had been excluded from earlier analyses, were included.

Table 1. Prediction of Pretrial Arrest Based on PSA's Safety Problem Indicators

Indicator (Independent Variable)	Pretrial Arrest (Dependent Variable)		Pretrial Arrest for Dangerous or Violent Charge (Dependent Variable)	
	Parameter Estimate	t ratio	Parameter Estimate	t ratio
Intercept	0.28	23.20	0.10	11.92
D + alcohol use, no program[1]	-0.08	-0.82	0.03	0.46
D + drug use, no program	0.31*	3.04	0.11	1.55
D + prior D conviction	0.04	0.49	-0.06	-1.05
D + probation for D	0.12	1.12	0.14*	1.80
D + pending D	-0.10	-1.25	-0.04	-0.78
D + parole for D	-0.13	-1.21	-0.04	-0.59
Any charge + probation for D	-0.17	-1.36	-0.11	-1.28
D + probation for non-D	0.13*	1.68	-0.00	-0.06
D + serious juvenile record	0.18*	2.09	0.05	0.85
High risk condition violator	0.05	0.31	0.11	0.93
Any charge + parole for D	0.07	0.92	0.10*	1.93
D + parole for non-D	0.14	0.91	0.21*	1.91
D if weapon involved	-0.05	-1.22	0.02	0.71
D + psychiatric treatment	-0.13	-0.85	-0.05	-0.42
Felony and serious juvenile record	0.02	0.19	0.01	0.20
Other	-0.07*	-2.00	-0.01	-0.29
NOB	3661		3661	
R square	0.0086		0.0052	
F ratio	1.98*		1.18	

[1]"D" indicates "dangerous/violent charge"

*Statistically significant at 0.10 level (two-tailed test).

probability of arrest and conviction compared to potential economic gains and a strong preference for consumption goods that must be purchased with income as opposed to a preference for leisure.[26] These characteristics are reflected in the data base, as follows:

- Low wage in non-criminal work is shown by employment status, age and indicators of drug or alcohol problems. In addition, physical illness or prior criminal record could indicate employment problems.

- Low probability of arrest and conviction compared to potential gains is related to the type of charge for which a defendant is arrested. Some types of charges—such as burglary, robbery, larceny, fraud, forgery, embezzlement, possession of stolen property, prostitution, and drug sales—are for offenses with high rates of monetary return compared to other charges (e.g., murder, rape, destruction of property, possession of weapons). The former charges are, therefore, more likely to characterize individuals whose arrests were related to crimes undertaken for potential profit.

- A strong preference for consumption goods is related to dependence on drugs or alcohol and to physical illness. These are, of course, very indirect measures of the need for income, but they are the only relevant variables in the data base.

Specific variables that were used in the analyses are shown in Figure 40, along with the expected sign of their estimated parameters (a positive sign indicates a direct relationship with pretrial arrest and a negative sign, an inverse relationship).

Estimates of models of pretrial arrest were developed by using ordinary least squares regression techniques. Parameters were estimated for two models, one with the number of pretrial arrests and the other with the number of arrests for dangerous or violent charges as the dependent variable. The results of

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[26]For a basic insight into the seminal literature on the economics of crime, see G. Becker, "Crime and Punishment: An Economic Approach," Journal of Political Economy, (March 1968); S. Rottenberg, "The Clandestine Distribution of Heroin, Its Discovery, and Supression," Journal of Political Economy, (January 1968); and G. Stigler, "The Optimum Enforcement of Laws," Journal of Political Economy, (May 1970). This literature is updated in G. Becker and W. Landes, Essays in the Economics of Crime and Punishment, (New York: National Bureau of Economic Research, 1974) and J.M. Heineke, Economic Models of Criminal Behavior, (New York: North Holland, 1978).

Figure 40. Possible Indicators of Pretrial Arrest (from Economics of Crime Analyses)

Indicator (Variable)	Definition and Expected Sign
EXCON	Dummy variable equal to one if defendant has prior conviction(s) and zero otherwise; expected to have a positive sign due to employment problems.
AGE	Age of defendant in years; negative sign anticipated based on employment effect and difficulty of younger workers in finding employment.
MALE	Dummy variable equal to one if defendant is male and zero if female; no expectation regarding sign of coefficient.
BLACK	Dummy variable equal to one if defendant is black and zero otherwise; the expected sign is positive based on labor market problems of black workers.
EMPLYD	Dummy variable equal to one if defendant is employed and zero otherwise; the sign is expected to be negative based on the labor market effect.
ILL	Dummy variable equal to one if defendant has illness or physical disability and zero otherwise; sign anticipated to be positive based on labor market problems.
DRUGP	Dummy variable equal to one if defendant has a drug problem and zero otherwise; the sign is expected to be positive because of labor market problems of persons with drug problems and their need for income.
ALCOHOLP	Dummy variable equal to one if defendant has an alcohol problem and zero otherwise; the anticipated sign is positive based on labor market difficulties and need for income.
PENDCASE	Dummy variable equal to one if defendant has a criminal case pending and zero otherwise; no anticipated sign for coefficient.
MURDER	Dummy variable equal to one if defendant is charged with murder and zero otherwise; anticipated sign negative.
RAPE	Dummy variable equal to one if defendant is charged with rape and zero otherwise; anticipated sign negative.

(CONTINUED)

Figure 40
(Continued)

Indicator (Variable)	Definition and Expected Sign
ROBBERY	Dummy variable equal to one if defendant is charged with robbery and zero otherwise; expected sign positive.
BURGLE	Dummy variable equal to one if defendant is charged with burglary and zero otherwise; expected sign positive.
ASSLT	Dummy variable equal to one if defendant is charged with assault and zero otherwise; expected sign negative.
LARCENY	Dummy variable equal to one if defendant is charged with larceny and zero otherwise; anticipated sign positive.
STOLCAR	Dummy variable equal to one if defendant is charged with automobile theft and zero otherwise; anticipated sign positive.
DRUGS	Dummy variable equal to one if defendant is charged with possession or sale of drugs and zero otherwise; expected sign positive.
FRAUD	Dummy variable equal to one if defendant is charged with fraud and zero otherwise; expected sign positive.
FORGERY	Dummy variable equal to one if defendant is charged with forgery and zero otherwise; anticipated sign positive.
EMBEZ	Dummy variable equal to one if defendant is charged with embezzlement and zero otherwise; anticipated sign positive.
STOLPTY	Dummy variable equal to one if defendant is charged with possession of stolen property and zero otherwise; expected sign positive.
WEAPONS	Dummy variable equal to one if defendant is charged with possession of weapons and zero otherwise; expected sign is positive.
FLIGHT	Dummy variable equal to one if defendant is charged with flight to avoid prosecution and zero otherwise; anticipated sign negative.
PROSTY	Dummy variable equal to one if defendant is charged with prostitution and zero otherwise; anticipated sign positive.

(CONTINUED)

Figure 40
(Continued)

Indicator (Variable)	Definition and Expected Sign
DESTRPTY	Dummy variable equal to one if defendant is charged with destruction of property and zero otherwise; expected sign negative.
POSECRM	Dummy variable equal to one if defendant is charged with possession of criminal implements and zero otherwise; anticipated sign positive.
PAROLE&PROB	Dummy variable equal to one if defendant was on parole or probation when arrested and zero otherwise; expected sign positive.
PAROLE,P,&P	Dummy variable equal to one if defendant was on parole or probation and had a pending case when arrested and zero otherwise; anticipated sign positive.
NOWDV	Dummy variable equal to one if defendant is charged with a dangerous or violent crime and zero otherwise; expected sign of coefficient unknown.
PASTDV	Dummy variable equal to one if defendant was charged with a dangerous or violent crime in the past; expected sign of coefficient unknown.
ALLDV	Dummy variable equal to one if defendant was charged with a dangerous or violent crime in the past and also at time of arrest; expected sign unknown.

these estimates are displayed in Table 2. Overall, there is excellent agreement with expectations based on the economics of crime, and the significance of individual parameters, as well as of the overall estimated equations, is high. Specifically, the estimated parameters of age and employment are negative, indicating that if the accused is older or employed, expected pretrial arrests are lower. Personal problems that could produce employment problems—including prior criminal record, illness, disability, and drug problems—have positive and significant estimated parameters, indicating that they raise the probability of pretrial arrest. Finally, the categories of criminal charge at arrest that have positive and significant estimated coefficients are generally those associated with "crime for profit."[27]

Table 3 contains estimates of models that are identical to those presented in Table 2, except that the dependent variables are binary. The probability of pretrial arrest is equal to one if the defendant was arrested before trial and zero otherwise, and the probability of pretrial arrest for dangerous or violent charges is equal to one if a pretrial arrest for a dangerous or violent charge occurred and zero otherwise. The parameter estimates shown in Table 3 can be interpreted as reflecting the change in the marginal probability of pretrial arrest associated with a change in the value of the independent variable. For example, the parameter estimate for probability of pretrial arrest of 0.03 for EXCON indicates that the expected probability of pretrial

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[27] Many of the variables found significant in this analysis were also significant in an earlier analysis based on 1974 data. This was the case for major charge categories as well as for age, ethnicity, employment status and drug use. The earlier study used different indicators of prior record, except for probation/parole, which—unlike the present study—was found insignificant. Jeffrey A. Roth and Paul B. Wice, Pretrial Release and Misconduct in the District of Columbia, PROMIS Research Project Publication 16 (Washington, D.C.: Institute for Law and Social Research, April 1980), p. 62.

Table 2. Prediction of Pretrial Arrest Based on Forecasting Model

Independent Variable	Expected Sign	Pretrial Arrest		Pretrial Arrest for Dangerous or Violent Charge	
		Parameter Estimate	t Ratio	Parameter Estimate	t ratio
INTERCEPT	?	0.02	0.24	-0.01	-0.12
EXCON	+	0.05*	7.40	0.01*	1.39
AGE	-	-0.00*	-3.31	-0.00*	-3.20
MALE	?	0.05	1.47	0.04	1.54
BLACK	+	0.06*	1.77	0.06*	2.28
EMPLYD	-	-0.07*	-2.85	-0.02*	-1.32
ILL	+	-0.01	-0.31	0.04*	1.65
DRUGP	+	0.08*	2.62	0.04*	1.63
ALCOHOLP	+	-0.04	-0.77	-0.00	-0.11
PENDCASE	+	0.04*	1.72	0.01	0.35
MURDER	-	-0.00	-0.01	-0.13*	-1.31
RAPE	-	0.08	0.51	0.00	0.04
ROBBERY	+	0.21*	3.02	-0.07	-1.43
BURGLE	+	0.30*	5.03	0.06*	1.39
ASSLT	-	0.08	1.33	-0.04	-0.97
LARCENY	+	0.21*	4.22	0.06*	1.74
STOLCAR	+	0.09	1.01	0.01	0.18
FRAUD	+	0.20*	1.85	0.02	0.26
FORGERY	+	0.16*	1.71	0.00	0.07
EMBEZ	+	0.06	0.36	0.01	0.10
STOLPTY	+	0.21*	2.57	0.03	0.51
DRUGS	+	0.29*	6.66	0.11*	3.44
WEAPONS	+	0.21*	3.35	0.07*	1.60
FLIGHT	-	0.13	1.45	0.02	0.36
PROSTY	+	0.17*	2.72	0.05	1.03
DESTRPTY	+	0.24	3.06	0.08	1.40
POSECRM	+	0.19*	2.41	0.04	0.66
PAROLE&PROB	+	0.12*	3.14	0.06*	2.05
PAROLE,P,&P	+	0.01	0.26	0.05	1.19
NOWDV	?	0.08*	1.87	0.18*	5.69
PASTDV	?	-0.08	-1.23	0.02	0.47
ALLDV	?	0.03	0.34	-0.09	-1.40
NOB		3196		3196	
R-Square		0.047		0.084	
F Ratio		4.98**		9.43**	

*Statistically significant at 0.10 level (two-tailed test if expected sign is unknown; one-tailed test otherwise).

**Statistically significant at the 0.01 level.

Table 3. Prediction of Probability of Pretrial Arrest Based on Forecasting Model

Independent Variable	Expected Sign	Probability of Pretrial Arrest		Probability of Pretrial Arrest for Dangerous of Violent Charge	
		Parameter Estimate	t Ratio	Parameter Estimate	t Ratio
INTERCEPT	?	0.01	0.20	-0.00	-0.16
EXCON	+	0.03*	7.45	0.01*	2.07
AGE	-	-0.00*	-3.06	-0.00*	-3.18
MALE	?	0.03	1.64	0.02	1.60
BLACK	+	0.04*	1.81	0.03*	2.22
EMPLYD	-	-0.03*	-2.37	-0.01*	-1.39
ILL	+	-0.02	-1.00	0.02	1.88
DRUGP	+	0.04*	2.02	0.01	1.20
ALCOHOLP	+	-0.00	-0.08	0.00	0.19
PENDCASE	+	-0.02*	1.59	0.00	0.52
MURDER	-	0.00	0.03	-0.09*	-1.62
RAPE	-	0.03	0.36	-0.00	-0.06
ROBBERY	+	0.15*	3.62	-0.05*	-1.81
BURGLE	+	0.19*	5.15	0.02	0.75
ASSLT	-	0.06	1.55	-0.03	-1.22
LARCENY	+	0.16*	5.36	0.04*	2.04
STOLCAR	+	0.07*	1.34	0.02	0.54
FRAUD	+	0.15*	2.20	0.02	0.41
FORGERY	+	0.12*	2.20	0.01	0.37
EMBEZ	+	0.03	0.25	0.01	0.11
STOLPTY	+	0.15*	2.93	0.02	0.71
DRUGS	+	0.17*	6.35	0.05*	3.00
WEAPONS	-	0.13	3.55	0.03	1.42
FLIGHT	-	0.07	1.36	0.01	0.17
PROSTY	+	0.14*	3.62	0.02	0.97
DESTRPTY	-	0.18	3.92	0.05	1.71
POSESCRM	+	0.17*	3.51	0.03	1.11
PAROLE&PROB	+	0.11*	4.67	0.04*	2.47
PAROLE,P,&P	+	0.00	0.07	0.03*	1.60
NOWDV	?	0.06*	2.13	0.13*	7.33
PASTDV	?	-0.01	-0.26	0.05*	1.83
ALLDV	?	-0.03	-0.52	-0.08*	-2.20
NOB		3196		3196	
R-SQUARE		0.093		0.068	
F Ratio		10.50**		6.76**	

*Statistically significant at 0.10 level (two-tailed test if expected sign is unknown; one-tailed test otherwise).

**Statistically significant at the 0.01 level.

arrest for a defendant with a prior conviction, is, all other things being equal, 0.03 higher than for an identical defendant who does not have a prior conviction. Given a mean probability of pretrial arrest of 0.20, the parameter estimate for EXCON suggests that, all other things being equal, this would rise to 0.23 for defendants with prior convictions. Similarly, given a mean probability of pretrial arrest for dangerous or violent charges of 0.07, the EXCON parameter estimate of 0.01 suggests this would increase to 0.08 for defendants with prior convictions.

The overall results shown in Table 3 (see F ratio) show that the equations are statistically significant at the 1 percent level. Additionally, the signs and significance of the parameter estimates generally agree with the expectations discussed earlier.

The estimates of pretrial arrest presented above are produced by a combination of two effects. The probability of arrest during the pretrial period depends on both the length of the time period and on the underlying frequency of pretrial arrest by the defendant. That is, the likelihood of pretrial arrest increases as the pretrial period becomes longer. Hence, differences in the probability of arrest may reflect differences in the length of the pretrial period, rather than simply differences in defendants' underlying propensities for pretrial arrest. To separate these two effects, the estimates in Table 4 were developed, using the same independent variables as before.

The first set of estimates shown in Table 4 is based on a model with the time in days between arrest and disposition as the dependent variable. The parameter estimates reflect the marginal relationship between changes in the independent variables and the expected number of days until disposition

Table 4. Prediction of Rate of Pretrial Arrest Based on Forecasting Model

Independent Variable	Days to Disposition		Rate of Pretrial Arrest		
	Parameter Estimate	t Ratio	Expected Sign	Parameter Estimate	t Ratio
INTERCEPT	91.99*	8.03	?	0.08	0.51
EXCON	-0.38	-0.32	+	0.11*	7.05
AGE	-0.31	-1.39	-	-0.01*	-2.52
MALE	15.34*	2.67	?	0.09	1.18
BLACK	9.25	1.49	+	0.15*	1.81
EMPLYD	-3.09	-0.76	-	-0.12*	-2.34
ILL	12.15*	2.15	+	-0.16	-2.11
DRUGP	0.67	0.13	+	0.13*	1.92
ALCOHOLP	-5.91	-0.66	+	-0.02	-0.16
PENDCASE	6.28	1.53	+	0.06	1.15
MURDER	113.40*	4.78	-	0.05	0.16
RAPE	63.86*	2.43	-	0.17	0.50
ROBBERY	66.77*	5.75	+	0.38*	2.52
BURGLE	68.76*	6.77	+	0.58*	4.41
ASSLT	53.33*	4.96	-	0.21	1.52
LARCENY	71.65*	8.64	+	0.42*	3.89
STOLCAR	29.01*	1.88	+	0.31*	1.56
FRAUD	86.83*	4.66	+	0.37*	1.52
FORGERY	90.66*	5.83	+	0.49*	2.41
EMBEZ	71.10*	2.40	+	0.07	0.17
STOLPTY	74.41*	5.32	+	0.28*	1.54
DRUGS	88.80*	12.00	+	0.40*	4.17
WEAPONS	61.02*	5.73	-	0.24	1.72
FLIGHT	40.09*	2.64	-	0.17	0.86
PROSTY	59.39*	5.63	+	0.53*	3.84
DESTRPTY	70.35*	5.31	-	0.43	2.51
POSESCRM	66.95*	4.96	+	0.34*	1.93
PAROLE&PROB	12.27*	1.82	+	0.25*	2.90
PAROLE,P,&P	-16.54	-1.74	+	0.12	0.97
NOWDV	26.82*	3.51	?	0.03	0.28
PASTDV	2.91	0.25	?	-0.22	-1.46
ALLDV	8.93	0.58	?	0.00	0.02
NOB	3196			3196	
R-Square	0.078			0.067	
F Ratio	8.59**			7.31**	

*Statistically significant at 0.10 level (two-tailed test if expected sign is unknown; one-tailed test otherwise).

**Statistically significant at the 0.01 level.

of the case that prompted arrest. As indicated in Table 4, these estimates show that type of charge is quite important in determining the length of the period until the case is disposed. Charges for violent crimes have the longest pretrial periods. It is interesting that males face longer time to disposition and that age, race, and employment status have insignificant coefficients.

The second set of estimates in Table 4 is based on a model with the dependent variable equal to the rate of pretrial arrest, that is, the number of pretrial arrests per month of time spent waiting for trial or disposition of the case. Thus, differences in the number of pretrial arrests that are due to variation in time to disposition are eliminated in this equation. A comparison of the pattern of signs and significance of estimated parameters in this equation with the results for pretrial arrest in Table 2 and probability of pretrial arrest in Table 3 shows an underlying similarity. In all cases, the variables reflecting personal characteristics—including age, race, employment and drug problems—or previous criminal record have similar coefficients. This indicates that the variation in time to case disposition was not an important influence on the results of the previous analyses.

D. Tests of the Forecasting Models

While the models estimated thus far are of interest in understanding the determinants of pretrial arrest, and as a confirmation of existing theories of criminal activity, they are also useful as a guide to predicting which defendants are likely to be rearrested before trial. Two types of tests of the forecasting models were conducted: non-predictive and predictive. Non-predictive tests are based on the entire sample that was used to estimate the equations of the forecasting models. Predictive tests require that the sample be

divided in half: one-half of the sample is used to estimate the parameters of the equations, and these estimated parameters are then used to forecast pretrial arrests for the second half of the sample (i.e., a "hold-out" sample). Such forecasts are predictive in that the initial model development is not based on any of the cases that are used to test the model's forecasting ability. The predictive tests provide a realistic approximation of the expected performance of a forecasting model in a practical application.[28]

In forecasting the incidence of pretrial arrest, two types of errors are possible: "Type 1" error (a "false negative") occurs when a defendant is released and is rearrested before trial; "Type 2" error (a "false positive") occurs when a defendant is detained in jail who, if released, would not have been rearrested before trial. Because losses are associated with both types of errors, a system of pretrial release must consider the relative importance of each type of error implicit in decisions to release or detain specific fractions of all arrested persons.

Before considering the likely accuracy of forecasts based on the estimated models, it is useful to assess forecasts based on alternative, simpler predictive techniques. For example, one forecasting approach would be to use arrest itself as an indicator of pretrial arrest and to detain 100 percent of all accused persons. Given that 20.3 percent of the defendants in the sample were rearrested before trial and 6.8 percent were rearrested for dangerous or violent charges, the strategy of detaining all defendants would result in no Type 1 error and in Type 2 error of 79.7 percent and 93.2 percent, respectively.

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[28] An additional source of variation in pretrial arrests that could affect the precision of the forecasts in actual use is the possibility of structural shifts in criminal behavior over time. Given the data available for this study, it was not possible to test for this variation in determinants of criminality over time.

An alternative would be to base the forecast of pretrial arrest on the type of charge at arrest. Specifically, one could consider detaining all defendants charged with dangerous or violent offenses. Table 5 shows the results of such an approach.

As indicated in Table 5, this approach would correctly classify 66.7 percent of all defendants in the sample in terms of pretrial arrest. Defendants correctly classified are the 60.6 percent who were not accused of dangerous or violent offenses and were not arrested before trial plus the 6.1 percent who were accused of dangerous or violent offenses and were rearrested before trial. However, 14.3 percent of the cases would result in Type 1 error, with defendants not accused of dangerous or violent offenses arrested before trial, and 19.0 percent of the cases would result in Type 2 error, with defendants accused of dangerous or violent offenses not arrested before trial.

In short, the sum of the percentages on the diagonal running from left to right (i.e., 60.6 percent + 6.1 percent = 66.7 percent) shows the total correctly classified and the sum of the percentages on the other diagonal (i.e., 14.3 percent + 19.0 percent = 33.3 percent) shows the total in error. In the case of the prediction of pretrial arrest for dangerous or violent offenses, the percentage of defendants correctly classified is 74.5 percent (71.3 percent + 3.2 percent) and the percentage of defendants incorrectly classified is 25.5 percent (3.6 percent + 21.9 percent).

An important point to note concerning the prediction approaches summarized in Table 5 is that the percentage of defendants detained would always equal the percentage of defendants who were charged with dangerous or violent offenses (25.1 percent of all defendants for the sample considered in Table 5). Thus,

Table 5. Results of Using Current Arrest for Dangerous or Violent Charge as a Predictor of Pretrial Arrest (n=3196)

Part I. Prediction of Pretrial Arrest

Arrested Before Trial	Accused of Dangerous or Violent Offense		
	No	Yes	Row Total
No	60.6%	19.0%	79.6%
Yes	14.3%	6.1%	20.3%
Column Total	74.9%	25.1%	100.0%

Part II. Prediction of Pretrial Arrest for Dangerous or Violent Offense

Arrested for Dangerous or Violent Offense Before Trial	Accused of Dangerous or Violent Offense		
	No	Yes	Row Total
No	71.3%	21.9%	93.2%
Yes	3.6%	3.2%	6.8%
Column Total	74.9%	25.1%	100.0%

the determination of the percentage of defendants to be detained would not be a matter for policy decision and could not be changed to reflect changes in jail crowding or other factors.

The results shown in Table 5 serve as background against which to judge the forecasts of the econometric models discussed earlier. The forecasts to be considered are based on the equations shown in Table 3 for the probability of pretrial arrest and the probability of pretrial arrest for dangerous or violent charges. Those equations were used to compute the estimated probability of pretrial arrest and the estimated probability of pretrial arrest for a dangerous or violent offense for each defendant. At the time of arrest, any defendant will have an estimated probability of pretrial arrest that is greater than zero (no chance of pretrial arrest) and less than one (certainty of pretrial arrest). By the time of final disposition of the case, a pretrial arrest will either have occurred (probability of pretrial arrest = 1) or not occurred (probability of pretrial arrest = 0). Because defendants with higher expected probabilities of pretrial arrest are more likely actually to be arrested before trial, Type 1 error will tend to increase when persons with higher probabilities are released, and Type 2 error will tend to increase when persons with lower probabilities are detained.

To test the likely effects of using the forecasting models, one must first decide on the expected probability level above which defendants will be detained; this will be termed the risk cutoff point for the expected probability. If, for example, the risk cutoff point is set at 0.30, then all defendants would be detained whose characteristics yielded estimates of 0.30 or higher in the forecast of expected probability of pretrial arrest; that is, all defendants who were at least "30 percent likely" to be arrested

before trial would be detained, and all other defendants would be released. As the level rises, the percentage of defendants who will be released also rises.

Note that such an approach to developing release policy treats the percentage of defendants to be detained as a policy variable, which can be varied over time as circumstances change. This occurs because the percentage of defendants to be detained is determined by the selection of the risk cutoff point, which can be changed whenever desirable. This is in contrast to the approach discussed earlier and summarized in Table 5, in which the detention rate was determined by the frequency of specific charges and not subject to policy choice.

The results of using the forecasting model are shown in Table 6 for risk cutoff points that yield detention rates approximately the same as those shown in Table 5. Thus, a comparison of Table 6 with Table 5 shows the relative efficacy of using the forecasting model versus using a charge-based approach for assessing pretrial arrest risk, given the same detention rate in both cases.[29]

As shown in Table 6 for the prediction of pretrial arrest, 74.1 percent (65.6 percent + 8.5 percent) of the defendants were classified correctly and 25.9 percent incorrectly (11.9 percent were Type 1 errors, and 14.0 percent were Type 2 errors). For the prediction of pretrial arrest for dangerous or violent offenses, 73.9 percent (69.8 percent + 4.1 percent) were classified correctly and 26.1 percent incorrectly (2.7 percent were Type 1 errors, and 23.4 percent were Type 2 errors).

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[29] Because the charge-based approach yielded an overall detention rate of about 25 percent, a comparison with the forecasting model requires that it, too, yield an overall detention rate of about 25 percent.

Table 6. Results of Using Forecasting Model to Predict Pretrial Arrest (n=3196)

Note: These results presuppose a desired detention rate of about 25 percent.

Part I. Prediction of Pretrial Arrest

Arrested before Trial	Risk Cutoff Point Greater Than 0.30 (Any Pretrial Arrest)		
	No	Yes	Row Total
No	65.6%	14.0%	79.6%
Yes	11.9%	8.5%	20.4%
Column Total	77.5%	22.5%	100.0%

Part II. Prediction of Pretrial Arrest for Dangerous or Violent Offense

Arrested for Dangerous of Violent Offense Before Trial	Risk Cutoff Point Greater than 0.10 (Dangerous/Violent Pretrial Arrest)		
	No	Yes	Row Total
No	69.8%	23.4%	93.2%
Yes	2.7%	4.1%	6.8%
Column Total	72.5%	27.5%	100.0%

One way to compare the results shown in Tables 5 and 6 is to compare the "arrest rates" for released versus detained defendants in each case. Comparison of these percentages allows one to assess whether the approach for screening defendants actually separated them into a released group with low pretrial arrest rates and a jailed group with high pretrial arrest rates. Unless such separation is achieved, it is difficult to justify differential treatment of arrested persons.

Consider first the prediction of pretrial arrest, as shown in Part I of Tables 5 and 6. If release is based on the type of charge, as in Table 5, then the results indicate that 74.9 percent of the defendants would be released and that 14.3 percent of those released defendants would have been arrested before trial (see "No" column). Hence, 19.1 percent (14.3 percent divided by 74.9 percent) of those selected for release would have been arrested before trial. Similarly, 25.1 percent of the defendants would be detained, with 6.1 percent of them expected to have been arrested before trial had they been released (see "Yes" column). Thus, the expected pretrial arrest rate for detained defendants was 24.3 percent (6.1 percent divided by 25.1 percent). Note that the difference in the rate of pretrial arrest between those detained (24.3 percent) and those released (19.1 percent) is only 5.2 percentage points.

Turning to Table 6, one finds that the expected rate of pretrial arrest among those released is equal to 15.3 percent (11.9 percent divided by 77.5 percent) and among those detained is equal to 37.8 percent (8.5 percent divided by 22.5 percent).

In this case, the difference in the expected rate of pretrial arrest between those detained and released is equal to 22.5 percentage points (37.8 percent minus 15.3 percent). This is far larger than the 5.2 percentage point difference between the expected rate of pretrial arrest of those detained and those released when charge was used as the criterion for recommending detention. There would appear to be a much stronger justification for selective detention when the expected rate of pretrial arrest among those detained is 37.8 percent, while the rate for those released is only 15.2 percent.

A similar analysis may be conducted for the rate of pretrial arrest for dangerous or violent offenses with information from Part II of Tables 5 and 6. From Table 5 one finds that the rate of pretrial arrest for dangerous or violent offenses among defendants arrested for this type of charge initially would be 12.7 percent (3.2 percent divided by 25.1 percent), and the rate for other defendants would be 4.8 percent (3.6 percent divided by 74.9 percent), for a differential between groups of 7.9 percentage points (12.7 percent minus 4.8 percent). From Table 6 one finds that the expected rate of pretrial arrest for dangerous or violent offenses among detained defendants would be 14.9 percent (4.1 percent divided by 27.5 percent), and the rate among released defendants would be 3.7 percent (2.7 percent divided by 72.5 percent), for a differential in arrest rate between persons detained and released of 11.2 percentage points (14.9 percent minus 3.7 percent). Thus, the forecasting model provides a significantly larger spread between the expected rate of pretrial arrest for dangerous and violent offenses for defendants detained versus released than did the selection criterion based on an initial charge for a dangerous or violent offense.

If one believes that selective detention of arrested persons should be justified on the basis that those detained present a greater threat to the community, then it is important to demonstrate that the rate of pretrial arrest that would occur by detained defendants, if they were released, is likely to be substantially higher than the rate among those defendants who are released.

The tests discussed so far have been based on using the entire sample (i.e., they have been "non-predictive" tests). However, the forecasting model can also be tested using fully predictive tests by dividing the sample in half, estimating the forecasting equations with half the sample, and testing the forecasting equations on the other half of the sample. The results of such a fully predictive test are shown in Table 7.

Overall, the results of the predictive test shown in Table 7 are virtually identical to the results of the non-predictive test shown in Table 6. This could have been anticipated once the forecasting model for Table 7 (using half the sample) was developed, because the parameter estimates of its equations were almost identical to those based on the entire sample. This implies that the forecasts using these parameter estimates have low variance and that they are good estimates of the underlying model.

Despite its apparent utility, the forecasting model nevertheless classifies a significant percentage of defendants incorrectly. The reason for this is that some defendants with a low probability of pretrial arrest are in fact arrested before trial, while some persons with a high probability of pretrial arrest are not. Indeed, as shown in Part I of Tables 6 and 7, more of the defendants in the high-probability-of-pretrial-arrest group were <u>not</u> rearrested than were. This is illustrated under the "Yes" column of Table 7, which shows predicted

Table 7. Results of a Fully Predictive Test of Using Forecasting Model to Predict Pretrial Arrest

Note: Half the total sample of 3196 observations was used to develop the forecasting model, which was then applied to the remaining half of the sample, with the following results.

Part I. Prediction of Pretrial Arrest

Arrested Before Trial	Risk Cutoff Point Greater Than 0.30 (Any Pretrial Arrest)		
	No	Yes	Row Total
No	65.4%	14.2%	79.6%
Yes	12.2%	8.2%	20.4%
Column Total	77.6%	22.4%	100.0%

Part II. Prediction of Pretrial Arrest for Dangerous or Violent Offense

Arrested for Dangerous of Violent Offense Before Trial	Risk Cutoff Point Greater Than 0.10 (Dangerous/Violent Pretrial Arrest)		
	No	Yes	Row Total
No	69.5%	23.7%	93.2%
Yes	2.3%	4.5%	6.8%
Column Total	71.8%	28.2%	100.0%

pretrial arrest for 22.4 percent of all defendants but actual pretrial arrest for only 37 percent (8.2 percent divided by 22.4 percent) of those defendants. Such an outcome occurred because of the low base rate for pretrial arrest (about 20 percent) and because of the specific risk cutoff point selected.

Although the forecasting model is imperfect, it appears less so than other approaches to release decision-making. In this regard, recall that the frequency with which predictions of pretrial arrest were correct is much higher for the "Yes" than the "No" column of Table 7; this contrasts sharply with the predictions shown in Table 5, as discussed earlier. Thus, even though positive predictions of pretrial arrest are wrong more often than they are right for individual defendants, the forecasting model does separate defendants into groups that differ substantially in actual risk.

The discussions so far have been based on a risk cutoff point of 0.30 for the expected probability of pretrial arrest. A different value than 0.30 can, of course, be selected. In general, as the cutoff level rises, one is correct more often in positive predictions of pretrial arrest (e.g., for a risk cutoff point of 0.45 or more, positive predictions are correct 52 percent of the time, as compared to 37 percent of the time for a risk cutoff point of 0.30). However, offsetting this improvement is an increase in the frequency with which one is wrong in the negative predictions of pretrial arrest (e.g., for a risk cutoff point of 0.45 or more, negative predictions are wrong 19 percent of the time, as compared to 15 percent of the time for a risk cutoff point of 0.30). Thus, there are tradeoffs to be considered among the possible outcomes of pretrial release policies. The forecasting model facilitates assessments of such tradeoffs. This is illustrated in Table 8, which shows the relationship among the risk cutoff point for the expected probability of pretrial arrest above which

Table 8. Results of Selecting Alternative Forecasting Criteria for Release Decisions

Risk Cutoff Point Above Which Detention Would Be Recommended	Percentage Detained	Percentage Classified Correctly	Percentage of False Negatives (Type 1 Error)	Percentage of False Positives (Type 2 Error)
0.05	90.5%	28.9%	0.4%	70.6%
0.10	81.1	36.5	1.4	62.2
0.15	64.8	49.6	3.0	47.4
0.20	45.4	63.4	5.8	30.9
0.25	31.5	70.5	9.2	20.3
0.30	22.5	74.1	11.9	14.0
0.35	13.6	77.4	14.6	7.9
0.40	7.2	79.0	17.1	3.9
0.45	3.3	79.7	18.7	1.6
0.50	2.1	79.9	19.3	1.1
0.60	0.2	79.9	20.1	0.0

detention would be recommended, the overall percentage of defendants who would be detained, the percentage of defendants who would be classified correctly, and the percentages of false negatives and false positives that would occur.

As Table 8 shows, raising the risk cutoff point would decrease the percentage of defendants detained, raise the percentage of defendants classified correctly, increase false negatives and decrease false positives. Thus, the number of persons released who would be arrested before trial rises; and the number of defendants held who would have been arrested before trial, had they been released, falls.

Table 8 displays a menu of possibilities for pretrial release options. The best strategy depends on the costs and benefits associated with detaining additional defendants and with changes in errors due to false negatives and false positives. Once a choice has been made in view of these benefits and costs and an appropriate risk cutoff point selected, individual release decisions could be guided by deriving a risk "score" for each defendant. This score would be calculated from the defendant's characteristics, as weighted by the forecasting model. These scores could then be used to identify the highest risk defendants, for whom detention until trial or stringent release conditions would be appropriate, as well as the lowest risk defendants, for whom pretrial limitations on liberty would be unnecessary. Defendants falling between those extremes could be released on conditions whose restrictiveness reflected expected risk levels.

Such an approach to release decision-making policies or to release recommendation policies would provide them with an empirical basis that is now lacking. Moreover, such an approach permits evaluation of its efficacy and allows modifications to be made systematically, either as additional

data become available or in response to changed local circumstances (e.g., the need to reduce jail overcrowding).

E. Limitations of the Analysis

Several limitations of the analysis discussed in the preceding sections should be noted. First, because this part of the study was exploratory in nature and constrained by very limited funds, only ordinary least squares regression techniques were used to develop the forecasting models. Logit and probit techniques would have been more appropriate but also more costly to use.

Additionally, no attempts were made to adjust the model for "selectivity bias." This bias is of two types. First, some arrested defendants are detained; hence, their propensity for pretrial arrest cannot be observed directly. Second, released defendants are freed under different circumstances: some are released without restrictions, while others are released on bail or under specific conditions, such as to report to PSA once a week, to enroll in drug treatment, or to abide by a curfew. These release conditions are based on the characteristics of individual defendants. Thus, a second level of selectivity bias occurs. Although adjustments for such selectivity bias can be made using a multi-stage probit procedure,[30] these were beyond the scope of the present study.

Finally, only forecasting models for pretrial arrest and for pretrial arrest on a dangerous or violent charge were developed. No analysis was

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[30] This procedure is illustrated in Robert P. Trost and L.F. Lee, "Estimation of Some Limited Dependent Variable Models with Application to Housing Demand," Journal of Econometrics (December 1978) and Robert P. Trost, et al., "Returns to College Education: An Investigation of Self-Selection Bias Based on the Project Talent Data," International Economic Review (October 1979).

conducted of the likelihood of failure to appear for court, the other major consideration affecting release policies. Such a forecast of failure to appear could, of course, be derived and used in combination with the pretrial arrest forecasts to assess defendants' overall release risks.

Despite these limitations, the findings of the analysis demonstrate the potential utility of risk assessment based on empirically derived forecasts. As discussed earlier, such forecasts would facilitate a more systematic linking of release condition stringency to risk levels. This should increase the equity of the release process as well as improve the allocation of criminal justice resources, including jail space for detention and staff for monitoring release conditions.

VII. SUMMARY AND RECOMMENDATIONS

A. Effects of PSA's Changed Recommendation System

The procedures implemented by PSA in July 1980 reflected major changes from past practices. The new approach includes:

- specific release recommendations for all defendants;
- separate risk assessments of each defendant for both court appearance and community safety;
- recommendations of release conditions to reduce risks to acceptable levels; and
- recommendations of conditions only in response to identified appearance or safety problems.

As a result of these procedures, PSA increased its recommendations for unrestricted personal recognizance (PR) release and for nonfinancial release in general. The Agency also reduced the average number of conditions recommended for defendants.

These changes in PSA's actions were reflected to some extent in judges' decisions and defendants' subsequent release outcomes. In particular, the use of unrestricted PR release increased: from negligible levels to 9 percent for felony cases and 15 percent for misdemeanors. This increase was offset, however, by a decline in the percentage of defendants released on conditional PR. Consequently, total rates of nonfinancial release (both unrestricted and conditional PR) remained unchanged at 62 percent for felony cases and 73 percent for misdemeanors. On the average judges set fewer release conditions under the new system for defendants granted conditional PR release. Thus, on the whole, defendants released nonfinancially faced considerably fewer pretrial restrictions under the new system.

This change in nonfinancial release practices was not due to differences in defendant characteristics over time. Indeed, the major changes in the defendant population were a greater involvement in criminality and an increased use of drugs under the new system. Both of these would be likely to make release decisions more stringent, not less.

Nor can the change in nonfinancial release practices be attributed to differences in the judges who made release decisions under the old and new systems. When the decisions of the same judges were compared over time, the findings were virtually identical to those for all judges.

Thus, the change in nonfinancial release practices can reasonably be attributed to PSA's new recommendation system. Differences over time among defendants and judges do not explain these changes.

Although one might expect a decrease in release restrictiveness to be accompanied by an increase in rates of pretrial misconduct, this did not occur. Both failure-to-appear and pretrial arrest rates remained virtually unchanged under the new system. Failure-to-appear rates for felony cases were 15.5 percent under the new system and 16.2 percent under the old; for misdemeanor cases, 22.1 percent under the new system and 23.1 percent under the old. Pretrial arrest rates were:

- felony cases—19.4 percent, new system; 20.7 percent, old system; and
- misdemeanor cases—22.3 percent, new system; 21.9 percent, old system.

These results suggest that PSA's adoption of a new recommendation system was beneficial for the jurisdiction. More defendants secured release on less restrictive conditions under the new system, but there were no offsetting increases in failure-to-appear or pretrial arrest rates. This occurred even though the characteristics of defendants changed in the direction of greater risk.

One group of defendants is of special interest, namely, persons who would have received no recommendations from PSA under the old system. Such defendants, who had accounted for 24 percent of all felony cases and 40 percent of all misdemeanor cases under the old system, experienced increased rates of nonfinancial release under the new approach. This occurred for most "no recommendation" categories, including defendants without local community ties, with Bail Reform Act convictions, with outstanding warrants, with unsatisfactory adjustment on probation or parole, or with address problems (e.g., undetermined addresses or no fixed addresses). Most of these groups with increased nonfinancial release rates had stable or declining failure-to-appear and pretrial arrest rates. Hence, once again, less restrictive release practices were attained without increases in rates of pretrial misconduct.

➤ Recommendation: PSA should continue its current practices of making specific release recommendations for all defendants, assessing both appearance and safety risks, and recommending release conditions in response to identified risk problems. The adoption of these practices resulted in more defendants securing release on less restrictive conditions, with no offsetting increases in failure-to-appear or pretrial arrest rates.

Although PSA's changed recommendation procedures resulted in the increased use of unrestricted PR release and the imposition of fewer release conditions, the new system had little effect on the use of bond. Under the new approach judges set bond for slightly more felony cases (33 percent, as compared to 31 percent under the old system) and for the same percentage (26 percent) of misdemeanor cases. This finding suggests that

PSA's policy of never recommending bond[31] may in effect have reduced the Agency's influence on release decisions for a substantial portion of the pretrial population. Judges continue to set bond and currently must make those decisions without any information from PSA regarding the suitability of bond or specific bond amounts. Hence, for those defendants PSA apparently has no effect on the release decision.[32]

Another area in which PSA's release recommendations differ sharply from judges' decisions involves preventive detention hearings. Although PSA recommended such hearings for a substantial proportion of felony cases under both the old (24 percent) and new (29 percent) systems, the hearings were rarely held. This divergence between recommendations and decisions raises the possibility that the recommendations have little relevance. Indeed, PSA's policies suggest this, because an alternative recommendation is always provided for preventive detention hearings, though not for other recommended decisions.

► Recommendation: PSA should review its policies regarding bond and preventive detention hearing recommendations. In both of these instances, judges' practices are so different from PSA's policies as to suggest the policies may have little effect.

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[31] This policy is consistent with the release standards promulgated by the National Association of Pretrial Services Agencies in Performance Standards and Goals for Pretrial Release (Washington, D.C.: National Association of Pretrial Services Agencies, 1978), pp. 25-28. Additionally, the American Bar Association has recommended that release on financial conditions "be reduced to minimal proportions." See American Bar Association, Standards Relating to the Administration of Criminal Justice: Pretrial Release (Washington, D.C.: American Bar Association, February 1979), p. 4.

[32] Note that if PSA made bond recommendations and provided information on the defendants' ability to meet bond requirements, instances of bond-setting in excess of a defendant's ability to pay could be identified. Such situations might reflect the use of high money bond to obtain sub rosa preventive detention.

PSA's recommendations reflect the Agency's risk assessments of defendants. In general, defendants rated as higher risks received recommendations for release on more restrictive conditions. Moreover, higher risk defendants usually experienced higher rates of detention until trial and, if released, more limitations on their liberty. Because PSA's risk ratings are related to defendants' release outcomes, it is important to compare those ratings with the actual risk levels of released defendants.

Released defendants with low appearance risk ratings had lower failure-to-appear rates than persons with high ratings. However, defendants with medium ratings had the highest FTA rates.

In terms of community safety, felony cases had lower pretrial arrest rates for defendants considered low risks than for persons viewed as high risks. However, for misdemeanor cases low risk defendants had the highest pretrial arrest rates. Moreover, the lowest pretrial arrest rates were experienced by defendants considered medium risks (for both felony and misdemeanor cases).[33]

► Recommendation: PSA should continue its efforts to improve assessments of risk. This is particularly important for safety risk, because those ratings have apparently been less accurate than appearance ratings.

B. Prediction of Pretrial Arrest

Because of the interest in improving PSA's ratings of safety risk, analysis was undertaken to identify the "best" predictors of pretrial arrest. This was accomplished through development of a forecasting model,

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[33] As a result of these findings, PSA plans to eliminate medium risk ratings. Such ratings accounted for only a small percentage (about 15 percent) of all ratings and were not very accurate.

using multi-variate analysis techniques, to identify the defendant characteristics most closely associated with pretrial arrest and to determine the likely extent of improved risk assessment if such characteristics were to be used by PSA.

The best predictors of pretrial arrest were found to be certain charges (burglary, drugs, possession of the implements of crime, larceny, robbery, stolen property, fraud, prostitution, forgery or automobile theft), on probation or parole when arrested, prior conviction, younger, black, unemployed, self-reported drug problem, no pending case when arrested, and charged with a dangerous or violent offense.

In addition to pretrial arrest for any charge, the prediction analysis considered pretrial arrest for "dangerous or violent" charges, as defined by D.C. statute, because of the greater level of concern about such charges. The significant predictors of pretrial arrest for a dangerous or violent charge were as follows, in order of greatest effect: arrest for a dangerous or violent offense, arrest for a drug or larceny offense, arrest for a dangerous or violent offense in the past, on probation or parole when arrested, on probation or parole and had a pending case when arrested, black, and prior conviction. In addition, the following characteristics made defendants significantly less likely to be rearrested for a dangerous or violent offense before trial (again, shown in order of greatest effect); arrest for murder, both arrest charge and past charge for dangerous or violent offenses, arrest for robbery, employed at time of arrest, and older.

It is noteworthy that drug use was a major predictor of pretrial arrest. An earlier study of the District of Columbia also found that drug use was a significant predictor of pretrial arrest.[34] These findings show the importance of the program recently initiated by PSA to provide urinalysis surveillance of selected drug users before trial in an effort to reduce pretrial criminality.

In addition to identifying pretrial arrest predictors, the forecasting model was used to simulate release decisions based on it. These results were compared to those from other criteria for release decision-making. When compared with a model based on PSA's indicators of safety problems, the forecasting model provided better estimates of pretrial arrest. Also, when compared with a model that used seriousness of the arrest charge to predict pretrial arrest, the forecasting model performed better in terms of dividing the defendant population into groups with high and low risks of pretrial arrest.

Despite this, the forecasting model's identification of high risk defendants was wrong more often than right. That is, most of the defendants identified as high risk would not have been rearrested before trial. This outcome was due to the "low base rate" for pretrial arrest among defendants as a whole. Because most defendants were not rearrested before trial—indeed, only about 20 percent were—even a model that identifies defendants who are twice as likely to be rearrested before trial as the average defendant will find a group with a 40 percent pretrial arrest rate, or, conversely, a group where 60 percent of the defendants are not rearrested before trial.

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[34] See Roth and Wice, op. cit., p. 62.

This example demonstrates the importance of distinguishing accuracy of prediction for individual defendants from identification of groups of defendants who reflect sharply different levels of risk. At present, only the latter can be accomplished. Presumably, this should be the minimum requirement of a pretrial release system that detains some defendants, imposes release conditions on others, and releases still others without restrictions. If these groups do not at least represent differential release risks, the underlying fairness of the release decision-making system may be questioned. Although the forecasting model does not provide perfect predictions for individual defendants, it does identify groups of defendants who pose different levels of risk.

Because no highly accurate risk predictions can be made for individuals, it is especially important that defendants be handled in accordance with due process requirements. This is particularly so for defendants rated as high risks, who are presumably the persons most likely to be detained before trial or to be released on conditions that are highly restrictive of pretrial liberty. The D.C. statute governing preventive detention deals with this concern by providing such procedural safeguards as a special hearing in which the defendant is entitled to representation by counsel and may present information or call witnesses.

When combined with appropriate procedural protections, the use of risk forecasts offers several advantages. First, such an approach seems likely to generate more accurate assessments of high and low risk than now occur. Second, it would provide an empirical basis for risk ratings. Finally, it would permit the percentage of defendants identified as high risks to be varied as circumstances change. In effect, the forecasting model ranks each defendant in terms of risk. One could then pick the appropriate cut-off point above which defendants would be considered high risk and for whom special sanctions would be imposed.

This cut-off point could be changed at any time. For example, if jail crowding became severe and higher release rates were desired, a lower cut-off point for "high risk" could be selected. Under such an approach the determination of the percentage of defendants to be considered high risk would be a policy variable, rather than a constraint set solely by outside forces (as occurs with, for example, charge-based predictors of high risk).

Note that when changes in the percentage of defendants considered high risk were necessary, those changes could be implemented so that the highest risk defendants continued to receive the most stringent release conditions. In the earlier example of lowering the high risk cut-off point to alleviate jail crowding, the least risky defendants would be removed from the high risk group, while the status of the highest risk defendants would be unchanged.

While such an approach focuses on identifying high risk defendants and providing more restrictive release conditions for them, it would also assure the unconditional release of the lowest risk defendants. Thus, systematic use of a forecasting model for release decision-making could help avoid detaining defendants who are relatively low risk.[35]

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35 The forecasting approach is similar in concept to the point systems used in many jurisdictions to guide release decisions. However, the forecasts would be empirically derived, whereas most point systems are apparently based on "best guesses" about key factors affecting risk.

PSA is in an excellent position to implement a forecasting approach to risk assessment, because Agency procedures are automated. The data needed to generate a defendant's risk score from a forecasting model are currently entered into the computer as part of the Agency's routine operations. Thus, risk scores could be derived within a matter of seconds, by programming the computer to calculate them.

If PSA decides to adopt a forecasting approach to risk assessment, several steps must be taken. First, a decision must be made about the appropriate data to include when developing the risk forecasts. In this study all relevant data were used, because of the concern with obtaining forecasts that were as accurate as possible. As a result, the model included some variables whose use might be legitimately questioned. An example is age: should younger defendants be penalized for that circumstance, when they can do nothing to affect it? This may be considered unjust, even though younger age alone would not be sufficient to generate a high risk score but only younger age in combination with a specific past pattern of criminality and other risk-related characteristics.

The trade-off to be made is an important but difficult one. If variables are excluded from the risk forecast because they are not considered legitimate, then the forecasts will be less accurate. Consequently, more inappropriate risk ratings will be made and, presumably, more inappropriate release decisions will result. Hence, the issue is to determine which types of error a jurisdiction is most willing to tolerate: those caused by inclusion of variables that by themselves seem unjust, even if they are accurate indicators of risk, or errors stemming from inaccurate predictions caused by the exclusion of those variables.

Decisions are also required about the proper weighting of various risks. Are appearance and safety of equal concern? Should safety risk be further refined to show risk of pretrial arrest for a dangerous or violent charge separately from risk of pretrial arrest for any charge? Such decisions about both the risk indicators and their relative weights will affect the forecasting approach.

Finally, decisions must be made about the appropriate level of effort to allocate to developing the forecasting model. Although the model derived in this study has useful features, particularly in comparison to other risk assessment approaches, it also has important limitations, as discussed in the last chapter. Reducing these limitations would generate better forecasts of risk but increase the initial development costs.

► Recommendation: PSA should consider basing its risk assessment ratings in part on forecasts generated by an empirically derived model of risk. This study has demonstrated the potential utility of such an approach for identifying groups of defendants with different levels of risk.

C. Other Observations

Several observations made during the course of this study merit consideration, although they deal with topics outside the formal scope of the project. First, there are relatively few conditions available to reduce safety risks for released defendants in the District of Columbia. Such conditions now consist mainly of limitations on behavior (e.g., orders to stay away from certain locations, live at a specific place, remain in the area or abide by a curfew) or requirements to report to probation, parole or PSA. Also, some use is made of third party custody and drug abuse treatment conditions.

PSA has suggested additional conditions, such as requiring the defendant to report periodically to the police precinct, but so far these have not been implemented. Additionally, capacity limitations at halfway houses have restricted

the use of that condition. Thus, the number of options actually available to reduce safety risk is small.[36]

An expanded range of alternatives for reducing safety risk could be considered, including house arrest or requirements to spend each night in a special residential facility. Such options, although perhaps hard to implement, would increase the jurisdiction's capability to respond to the safety problems posed by released defendants who are awaiting trial.

► Recommendation: Efforts should be undertaken to expand the range of alternatives available for reducing safety risk for released defendants.

A second observation concerns the orientation of PSA's recommendation system around the defendant's initial release hearing, with no systematic Agency involvement in subsequent "bail review." In the past such review was hindered, because PSA did not routinely receive information about defendants who posted bond and so could not easily identify the individuals who were still detained.

Efforts are now underway to eliminate this information gap. If these efforts are successful, PSA could become more active in bail review. The Agency could, for example, periodically review the detained population to identify persons rated as relatively low release risks. Those defendants could receive special attention, such as an updated interview or a revised set of recommended release conditions.

► **Recommendation: PSA should, if possible, implement systematic bail review procedures. Such actions would help insure that low risk defendants were not detained unnecessarily.**

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[36] The lack of options to reduce risk seems more serious for safety than appearance. Many appearance problems are caused by defendant forgetfulness, which is likely to be reduced by reporting requirements. Also, PSA has a special unit to follow up with defendants who failed to appear and try to return them to court as soon as possible. This reduces the number of defendants who never return to court.

A third area for consideration involves PSA's management information system. As a result of this study, PSA is now in a position to track Agency actions and their effects on judges' decisions and defendants' release outcomes. PSA could, for example, generate the types of charts shown in Chapters II — V of this report. Because the needed data are routinely added to PSA's automated system and the necessary computer programs have been developed, such charts could be updated relatively easily, perhaps on a quarterly basis. This would provide a brief summary of activities as well as identify important trends over time. This should in turn facilitate a more rapid identification of potential problems and a speedier resolution of them.

► Recommendation: PSA should consider revising its management information system to include quarterly reviews of information similar to that presented in this study. Because the data are routinely available and the necessary computer programs have been written, such reports should be relatively easy to generate and would provide considerable on-going insight about Agency operations and impact.

Finally, although this study was designed solely to consider the District of Columbia's experiences with the new risk assessment method, as compared with the old one, a few comments are in order about the potential utility of such an approach for other jurisdictions. It is likely that persons making pretrial release decisions around the country will need to give increasing attention to the issue of community safety. Thirty-one States, in addition to the District of Columbia, have passed legislation permitting safety to be

considered for at least certain defendants,[37] and other jurisdictions are considering similar legislation. Levels of public concern suggest that the search for ways to reduce safety risk will continue to be an important legislative and programmatic issue.

The approach PSA has taken to dealing with this problem is a systematic, objective one. Each defendant is screened for potential safety problems, as indicated on a list derived largely from the relevant D.C. statute. If a safety problem is identified, release conditions are recommended to try to lower those risks to acceptable levels. A similar process is used to assess appearance risk and to develop recommended conditions to try to reduce it.

PSA's approach seems a reasonable one that other jurisdictions may wish to adopt. However, as discussed in a prior section of this chapter, it appears that more accurate risk ratings could be developed from empirically derived forecasts of risk. Hence, jurisdictions considering the implementation of a risk assessment method similar to PSA's may also wish to consider the feasibility of including risk forecasts in the rating system.

In conclusion, the introduction of PSA's new method of risk assessment and recommendation development was apparently a beneficial change for the District of Columbia: more defendants secured release in less restrictive ways, but no increases were experienced in rates of failure-to-appear or pretrial arrest. Moreover, the explicit consideration of possible danger and flight problems provided a more systematic assessment of defendants' release risks than had occurred previously. This facilitated both the protection of the community and the operations of the court.

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[37] Barbara Gottlieb, The Pretrial Processing of Dangerous Defendants: A Comparative Analysis of State Laws, paper prepared as part of the study, "Public Danger as a Factor in Pretrial Release" (Washington, D.C.: Toborg Associates, Inc., January 1984), p. 1.

DISTRICT OF COLUMBIA
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BRUCE D. BEAUDIN, ESQ.
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JOHN A. CARVER III, ESQ.
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June 6, 1984

Mary Toborg
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Dear Ms. Toborg:

We have received a copy of your report entitled "Pretrial Release Assessment of Danger and Flight: Method Makes a Difference" and wish to compliment you and your staff for having written an accurate and well documented piece.

We have circulated the report throughout the Agency and have discussed it in several meetings. We felt that we would be remiss were we not to give you our impressions and reactions.

Certainly in a project of this length and depth, some facts, philosophical bases, etc., cannot be examined to the degree that we would all choose. At the same time, we feel that you have captured the real "essence" of our purpose for launching this program.

In the attachment we have tried to respond to the recommendations contained in the report in a way that gives some emphasis to our reasons for doing or not doing things. It is our hope that we have put into "perspective" what we do and why we do it; thus we have called our comments "The Agency Perspective."

Again, may we commend you and your staff for the genuine interest, dedication, and professionalism you have all shown throughout what has turned out to be a two year project. We appreciate your views and, as you know, we have already begun implementing some of the changes recommended.

Yours Truly,

Bruce D. Beaudin

Bruce D. Beaudin

THE AGENCY PERSPECTIVE

When we revised our risk assessment system in 1980, we hoped this would stimulate a number of changes in the pretrial processing of defendants—both by our Agency and by the rest of the criminal justice system. We commissioned a study of the new system's impact, so that we could determine whether such changes occurred. We also expected that the study's findings would assist us in planning for the future.

Because the study was designed to be used by decision-makers, we think that this report would be incomplete were we not to make some statement now with regard to our approach to implementing the recommendations made. What follows is our plan for doing so.

> Recommendation 1. PSA should continue its current practices of making specific release recommendations for all defendants, assessing both appearance and safety risks, and recommending release conditions in response to identified risk problems. The adoption of these practices resulted in more defendants securing release on less restrictive conditions, with no offsetting increases in failure-to-appear or pretrial arrest rates.

We agree with this statement and intend to continue our bifurcated approach to recommending conditions of release. Indeed, in addition to the study findings, conversations with judges, prosecutors, and defense counsel confirm our own belief that this approach is the only sensible one in an environment governed by a law which requires separate considerations of safety and appearance.

> Recommendation 2. PSA should review its policies regarding bond and preventive detention hearing recommendations. In both of these instances, judges' practices are so different from PSA's policies as to suggest the policies may have little effect.

We agree that at this time our policies with regard to these stated items seem to have little effect. At the same time, it was also argued in 1963 when the Bail Project began in the city that our policy of recommending release on recognizance was having "little or no effect" since less than 5 percent of those released were released on recognizance. (Today, 20 years later, closer to 90 percent of those released are released on recognizance.)

We are committed to forging policies that "set the tone" for what we believe to be the requirements of the law. If these policies do not seem to comport with current practice, we do not feel it incumbent upon us to change them only to reflect the status quo. At the same time, we recognize a real need to evaluate our policies to see whether our main goal—bringing system decisions closer to what the law intends them to be—is being met.

With regard to money bond, the law clearly states that its use is appropriate in some instances. The American Bar Association, the Pretrial Services Resource Center, and other respected groups have suggested that money bond is often a vehicle by which many people secure release earlier than would otherwise be possible. (We might add that such an early release mechanism, with no opportunity for prosecutorial or judicial scrutiny, can raise serious public safety questions in some cases.) Judges and prosecutors in this jurisdiction have criticized our policy of avoiding recommending money bond. Indeed, money bond has a solid but questionable place in the traditional approach to pretrial release in this country and has been condoned by the courts.

Our own policy which omits the use of money bond is premised on the belief that there exist other alternatives that are much more effective both at releasing or detaining persons charged with crime and at assuring

appearance in court as required. As part and parcel of this belief, we think that the background facts which can be gathered by the time of judicial consideration of release options cannot include data on financial capacity of the defendant or the defendant's family or friends—a key element in the analysis of what amount is appropriate.

We feel that it is almost impossible to decide first whether a person charged with a crime should be released or detained pretrial for either safety or appearance reasons and THEN have to decide what dollar amount will produce the desired result. Without knowing the financial resources available, no intelligent decision with regard to amount can be made.

At the same time, while we acknowledge that in some cases money at risk—which may be returned at case disposition—might motivate some to appear, certainly there is no argument that dollar amount protects the community. Indeed, all the release conditions extant designed to protect the safety of the community are added to any money bond set.

Thus, as to the issue of money bond, we are not ready to concede that our policies should be revised to conform to current practice. As the National Association of Pretrial Services Agencies has stated:

> "The adoption of totally nonfinancial release systems in place of money bail increases the equity of the pretrial release system, and brings pretrial release considerations more directly in line with the expressed purposes of bail." (Performance Standards and Goals for Pretrial Release and Diversion: Release; Washington, D.C.; 1978; p. 25.)

We believe that current practice—if it is that money bond continues to result in the release of some who shouldn't be released and the detention of some who shouldn't be detained—should itself be changed.

With regard to detention hearing recommendations, it is, perhaps, time to take another look at our policies. Initially, we felt that it was our role

to apply the terms of our statute to the particular situations of individual defendants and alert the court and parties to pretrial release consideration of all of the options appropriate. It is precisely because the hearings contemplated by statute are designed to elicit facts unknown to us at the time we make our recommendations that we adopted this policy. Perhaps, in light of this recommendation, we should take another look at our rationale.

> Recommendation 3. PSA should continue its efforts to improve assessments of risk. This is particularly important for safety risk, because those ratings have apparently been less accurate than appearance ratings.

We agree. We believed that our ability to predict safety risk was "iffy" at best. Defining the risk to be assessed has been our most difficult task. For example—should we be most concerned about rearrest? conviction? type of crime? Is a person charged with a new act of commercial sex or gambling the same as someone charged with a violent crime? We continue to assess these concerns and will also consider the study results. We note, nevertheless, that some risk factors in the safety category—specifically drug use—have a high correlation with subsequent arrest.

> Recommendation 4. PSA should consider basing its risk assessment ratings in part on forecasts generated by an empirically derived model of risk. This study has demonstrated the potential utility of such an approach for identifying groups of defendants with different levels of risk.

We agree. While we believe that only particular circumstances and individual concerns should be applied in determining release (or detention) conditions, certainly one of the many legitimate criteria would be group classifications. To the end of determining those classifications that would be most

appropriate, we would welcome the opportunity to be able to classify better. Certainly the determination of which conditions might minimize any perceived risk must include consideration of potential as well as real risks.

> Recommendation 5. Efforts should be undertaken to expand the range of alternatives available for reducing safety risk for released defendants.

Assuming that a proper "needs assessment" has been conducted, i.e., we have determined what activity is of such threat to safety that it must be controlled during pretrial release, then we agree that we must seek new behavior control options that are consistent with both community safety and civil liberty.

We have, for example, already begun an empirical and systematic study of drug use and crime. Although this project, funded by the National Institute of Justice, is but a few months old, we have already discovered "needs" and have seen those needs met on an emergency basis by the city. We expect to continue this and other approaches we have conceived to the end that we improve our ability both to diagnose risk and then to minimize it.

> Recommendation 6. PSA should, if possible, implement systematic bail review procedures. Such actions would help insure that low risk defendants were not detained unnecessarily.

We agree. A rule of court and the D.C. Code both require that the Chief Judge review the status of detained defendants periodically. In addition to a monthly meeting attended by Court, PSA, Jail, Prosecutorial, and Defense Personnel, at which the detention status of every defendant with a case pending is reviewed, the Court has established a jail project whose sole function is to examine each day's commitment papers. We may be doing as much as we can by exchanging information (both manual and automated) on a daily basis with the jail project office. We will examine this recommendation in light of the activities described above.

> Recommendation 7. PSA should consider revising its management information system to include quarterly reviews of information similar to that presented in this study. Because the data are routinely available and the necessary computer programs have been written, such reports should be relatively easy to generate and would provide considerable ongoing insight about Agency operations and impact.

We agree. Since the Deputy Director meets daily with the operations managers to deal with discrete problems in a timely manner, we think that weekly meetings to analyze trends would be in order. We expect to make much more use of the data we collect by examining pre-formatted reports on a weekly basis. We intend, at a minimum, to complete quarterly reviews.

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Finally, a few comments are in order for jurisdictions considering adoption of a risk assessment system similar to ours. An immediate response of a jurisdiction asked to consider a bifurcated approach might be "to what end? We do not have a law that permits (requires) consideration of danger." We faced that same issue here, since we serve both the Federal court (where danger may not be considered) and the local court (where danger must be considered).

It was our belief—one which seems to have been borne out by the study—that "forcing" decision-makers to think separately about danger and appearance leads to a more rational approach to the release setting process. Even in the Federal courts we noticed that arguments being made for and against release seemed to abandon traditional lines and concentrate on the particular risk identified. This kind of change enabled us to suggest behavior modifying conditions that were appropriate to the risk presented.