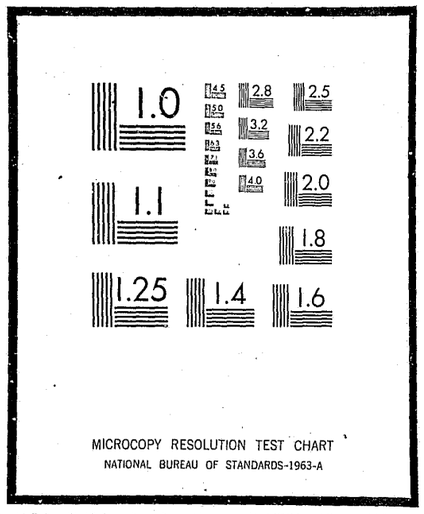

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A Descriptive Profile of Prosecutor Operations in the District of Columbia, in 1973

Final Report

Prepared by

Kathleen B. Brosi
Brian E. Forst

Institute for Law and Social Research

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THE INSTITUTE FOR LAW AND SOCIAL RESEARCH
Washington, D. C.

EXECUTIVE SUMMARY

This paper describes characteristics of the 15,460 adult criminal cases received and reviewed in 1973 by the Superior Court Division of the U.S. Attorney's Office in Washington, D.C. About 44 percent of these cases were felonies, subject to one year or more of incarceration, and the remainder were misdemeanors. This paper gives separate findings for these two major classes of cases. Around 62 percent of all felony defendants had been arrested prior to the current case, and 51 percent of all misdemeanor defendants had prior arrests. The defendants were predominately young black males -- about half under the age of 25, 87 percent black, and 84 percent male.

Major characteristics of the offenses that these defendants were arrested for are as follows: 17 percent involved personal injury, 37 percent involved theft damage, 20 percent involved a gun, and 15 percent involved victims that were corporations, associations, or other institutions.

The prosecutor rejected 23 percent of these cases at initial screening (i.e., filing or "papering"). Witness problems were cited as the cause of 39 percent of these rejected cases, and insufficient evidence as the cause of another 30 percent. Over one-third of all arrests were dismissed by the prosecutor or judge after initial screening, 23 percent of all arrestees pled guilty, and 11 percent went to trial, with 53 percent of these defendants found guilty in misdemeanor trials and 67 percent found guilty in felony trials. Six percent of the misdemeanors and 12 percent of the felonies in the 1973 data have no final disposition recorded.

Both felonies and misdemeanors were brought to the prosecutor in less than a week, on the average, after the date of the offense. After arrival

to the court, misdemeanors were disposed of, on average, in about a month, which was even shorter than the average length of time required to bring a felony case to the grand jury for indictment. Indicted felonies were in the court for an average of 6 months if they went to trial, and 3 1/2 months if they did not.

The prosecutors who handled these cases were predominately males and whites. The data confirm that the most junior prosecutors were typically assigned to the function of initial screening of misdemeanor cases, and the most senior attorneys handled felonies that had been previously screened.

The paper then reports results of the first step of an analysis of causal relationships among the variables in the data. This step consists of identifying the subset of available data elements to which court outcomes appear to be the most sensitive. This was done for outcomes of major stages in the prosecution system -- initial screening, felony indictment, guilty plea, dismissal by prosecutor, dismissal by judge, outcome at trial, and witness problems. Separate findings are reported for felonies and misdemeanors.

Factors found to be systematically associated with the likelihood of conviction were number of lay prosecution witnesses, existence of tangible evidence such as weapons or stolen property, delay between offense and initial screening, relationship between victim and defendant, and the nature of the crime. Other factors appear to be systematically related to specific outcomes. For example, felony trials appear to be significantly less likely to end with a finding of guilty when, other factors held constant, the defendant was represented by a lawyer from the Public Defender Service.

These findings have been incorporated in subsequent work in progress.

A Descriptive Profile of Prosecutor Operations

in the District of Columbia in 1973

Introduction

Our analysis of prosecutor operations begins with this statistical description of the system. In a companion document, the larger objectives of the analysis, previous research related to this work, and models for the more in-depth analyses now in progress are discussed.[1] The purpose of this paper is to set the stage for the more detailed analyses to be reported subsequently.

This profile is in two parts. Part I gives statistics describing, in some detail, the defendants, the offenses that gave rise to their cases, and the processing of these cases by the prosecutor. Part II gives results of a multivariate analysis that has a modest purpose--to identify independent variables to be used in subsequent analyses of relationships among the available data elements.

Part I

Statistical Overview of Criminal Prosecution in Washington, D.C.

A. Introduction

The Superior Court Division of the Office of the United States Attorney for the District of Columbia prosecutes nonfederal criminal cases which have a possible penalty of at least six months. In 1973, 15,460 cases[2] were received and reviewed (screened) by that office. The 15,460 cases involved 6,750 felonies (punishable by a sentence of one year or more), and 8,690 misdemeanors (less than one year). A computer-based management information system--PROMIS[3]--is used by that office in order to help manage the massive case load in an efficient and even-handed way. The PROMIS system records about 170 different items of data on each case prosecuted or considered for prosecution. These data fall into six categories describing the

1 - Defendant (e.g., age, sex, race, previous record),

2 - Crime (e.g., seriousness,[4] location, time of offense, number injured),

3 - Arrest (e.g., arresting police officers, time, location),

4 - Charges (e.g., whether brought by police or prosecutor, SEARCH code, disposition),

5 - Court events (e.g., prosecutor, defense attorney and judge at each event, outcome of each event),

6 - Witnesses (e.g., relationship to defendant, address).

Data from the PROMIS system on cases which were brought to the prosecutor in 1973 were transformed into a statistical data base and analyzed

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1 PROMIS Research Project Research Design, Chapter 2, Institute for Law and Social Research, Washington, D.C., 1975.

2 Cases means defendant case (i.e., all charges arising out of one incident against one defendant). That is, if there were two codefendants charged with the same crime, there would be two cases.

3 For a description of PROMIS, see William A. Hamilton and Charles R. Work, "The Prosecutor's Role in the Urban Court System: The Case for Management Consciousness," Journal of Criminal Law and Criminology, June 1973.

4 See Marvin E. Wolfgang and Thorsten Sellin, "Constructing an Index of Delinquency," a manual, Philadelphia: Center for Criminological Research, 1963.

through the use of SPSS[5]. This paper will describe the environment and operation of the Superior Court Division of the United States Attorney's Office in the District of Columbia by means of simple statistical profiles derived from the PROMIS data base. Characteristics of the defendant, the offense, and the process will be discussed. In this paper, statistical analyses are presented for descriptive purposes only; they do not deal with causal relationships. It remains for the second year of the PROMIS Research Project to explore causal relationships more fully by applying more sophisticated statistical methods than are employed here.

B. Characteristics of the Defendant

In 1973, the prosecutor screened 15,460 adult criminal cases. Eighty-four percent of those cases involved male defendants; eighty-seven percent involved black defendants. Half of the cases involved defendants younger than twenty-five. The defendants in D.C. Superior Court were largely young, male and black. Of the cases for which the relationship between the victim and the defendant was known, 60 percent involved strangers, 31.5 percent involved friends and 7.9 percent involved family members.[6]

1. Arrest Records

The majority of Superior Court defendants had arrest records. Over half (56 percent) of the cases screened involved defendants who

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[5] The Statistical Package for the Social Sciences (SPSS) is a system of computer programs developed by Dale Bent, Norman Nie, and Hadlai Hull, available through SPSS, Inc. at the National Opinion Research Center, 6030 South Ellis Avenue, Chicago, Illinois 60637.

[6] In 48.3 percent of the 15,460 cases, either the relationship between the victim and defendant was not known to the police officer at the time of case screening or the case did not involve victims.

previously had been arrested as adults; and, nearly 62 percent of the felony cases involved defendants with arrest records. Over one quarter (26 percent) of the cases involved a defendant who had been arrested four or more times, and about one case in ten involved a defendant who had been arrested ten or more times in the past. (See Charts 1 and 2 for distributions of defendant arrest records for various categories. Table 1 shows the prosecutor's work load with respect to a defendant's arrest record.) Only 12,382 different defendants were involved in the 15,460 cases in 1973. That is, 17 percent of the defendants had two or more cases screened that year. Over 20 percent of the defendants were on some type of conditional release at the time of the arrest. Indeed, nearly one-third of the robberies and murders involved defendants who were on conditional release for a previous crime at the time of their arrest.

The Major Violators Unit of the U.S. Attorney's Office of the Superior Court Division was set up to prosecute misdemeanors involving serious defendants (those judged likely to be rearrested). In 1973, the Major Violators Unit functioned this way. Each morning after the day's cases were screened, the chief of the Major Violators Unit would select some "papered" (i.e., accepted for prosecution) misdemeanor cases which involved the more serious defendants. One attorney then would be assigned responsibility for the prosecution of that misdemeanor case. (In misdemeanor cases not specially assigned to the Major Violators Unit, different attorneys handled each stage of processing; i.e., the arraignment attorney and the trial attorney typically would have been different.)

CHART 1
ARREST RECORDS OF DEFENDANTS

1) Top number represents percentage of cases involving defendants with a previous arrest record.
2) Middle number represents percentage of case involving defendants who had been arrested during the five years prior to the current arrest.
3) Bottom percentage represents percentage of cases involving defendants who have been arrested 10 or more times previously.

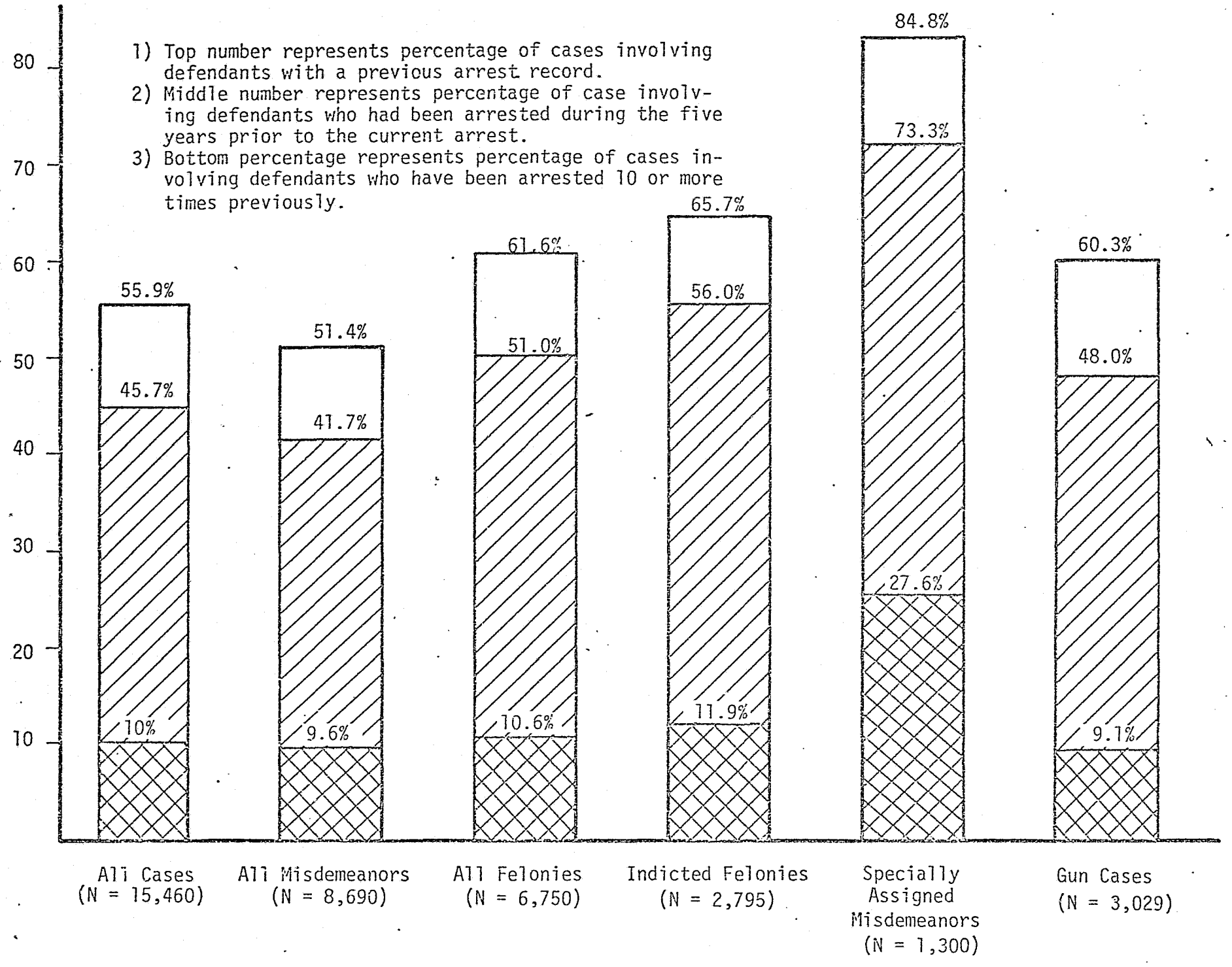


CHART 2

NUMBER OF PRIOR ARRESTS OF THE DEFENDANT FOR ALL CASES IN WHICH THE DEFENDANT HAD AN ARREST RECORD

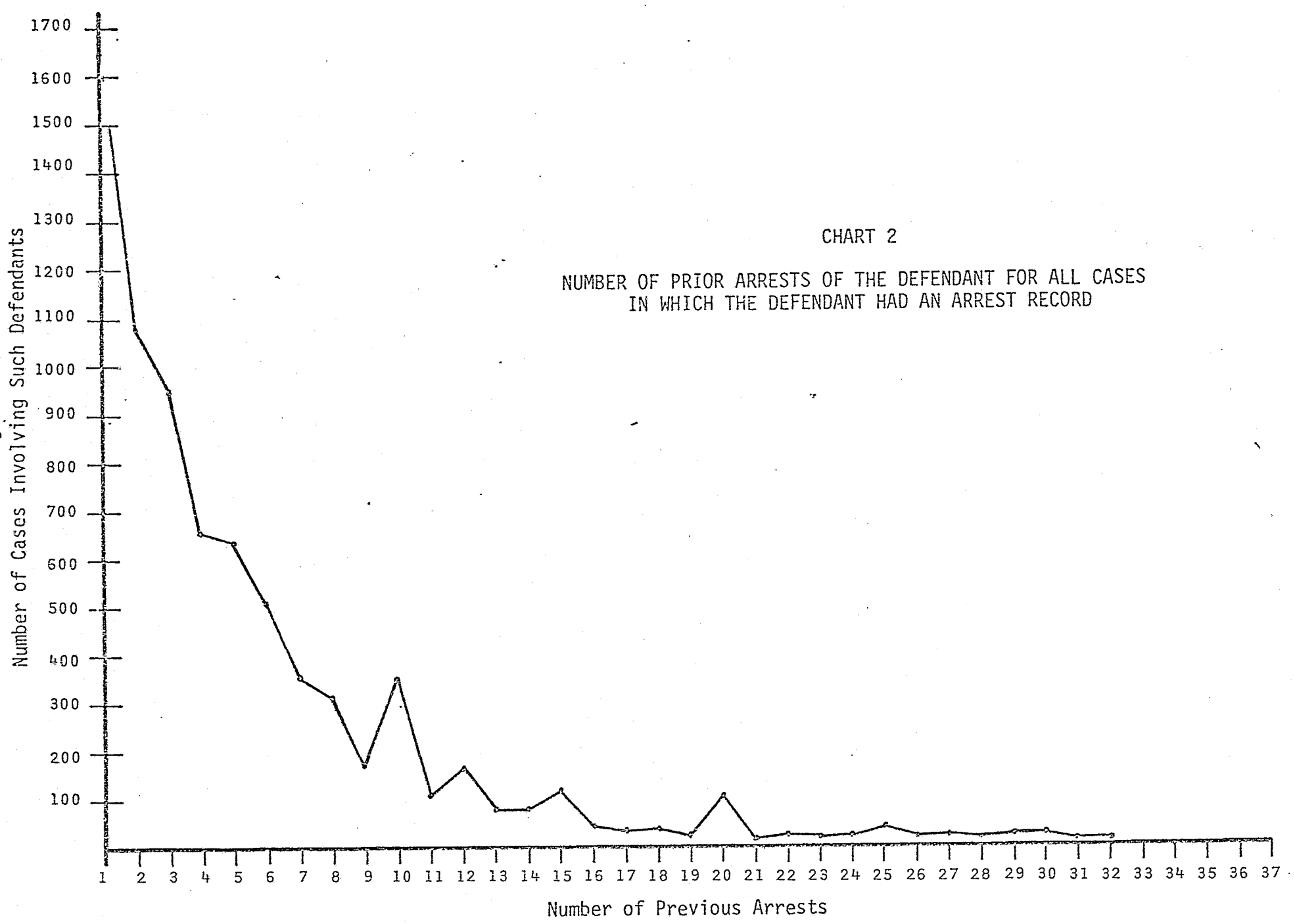


TABLE 1

ARREST RECORDS OF DEFENDANTS

Number of Previous Arrests	Percentage of Defendants Having at Least That Number of Previous Arrests	Percentage of Papered Cases Attributable to Defendants Having at Least That Number of Previous Arrests
0	100.0	100.0
1	49.4	60.7
2	38.7	49.8
3	31.7	42.3
4	25.9	35.4
5	21.8	30.2
6	17.8	25.1
7	14.7	21.0
8	12.5	18.3
9	10.5	15.7
10	9.4	14.1
11	7.5	11.2
12	6.7	10.0
13	5.8	8.6
14	5.3	7.7
15 or more	4.8	7.0

While 51 percent of all misdemeanors involved defendants with prior arrest records, nearly 85 percent of the misdemeanors assigned to the Major Violators Unit involved such defendants. Only one misdemeanor in ten involved defendants who had ten or more previous arrests, while more than one in four "specially assigned" cases involved such defendants.

2. Employment Status.

Unemployment was the norm for D.C. Superior Court defendants in 1973. Less than half (43 percent) of the cases involved defendants who held jobs at the time of arrest. Misdemeanor defendants were more often employed (44 percent) than felony defendants (42 percent). Defendants in indicted felonies and those assigned to the Major Violators Unit were the least likely to be employed.

3. Age

The characteristics of defendants in different kinds of cases varied somewhat from the overall averages. The median age for defendants in indicted felony cases was 24--slightly younger than the median age for all defendants. On the other hand, defendants in cases in which guns were involved and cases assigned to the Major Violators Unit were on the average older than other defendants. Each of those groups has a median age of 27. See Charts 3 and 4 for the age distribution of various categories of defendants.

4. Sex and Race

As may be seen in Chart 5, the defendant was a male in 83.6 percent of all cases, and black in 86.8 percent of all cases. The respective percentages were even higher than these for felonies, and higher still for indicted felonies and gun cases.

CHART 3

MEDIAN AGE OF DEFENDANTS BY TYPE OF CASE

28

27 — Gun cases, Specially assigned cases

26

25 — All cases, All misdemeanors, All felonies

24 — Indicted felonies, Stranger-to-stranger cases

23

22

21

20

CHART 4
Age of the Defendants in
Stranger to Stranger Misdemeanors, Stranger to Stranger Felonies
and Gun Cases

----- Stranger to Stranger Misdemeanors (N = 2419)

— — — Stranger to Stranger Felonies (N = 2424)

——— Gun Cases (N = 3029)

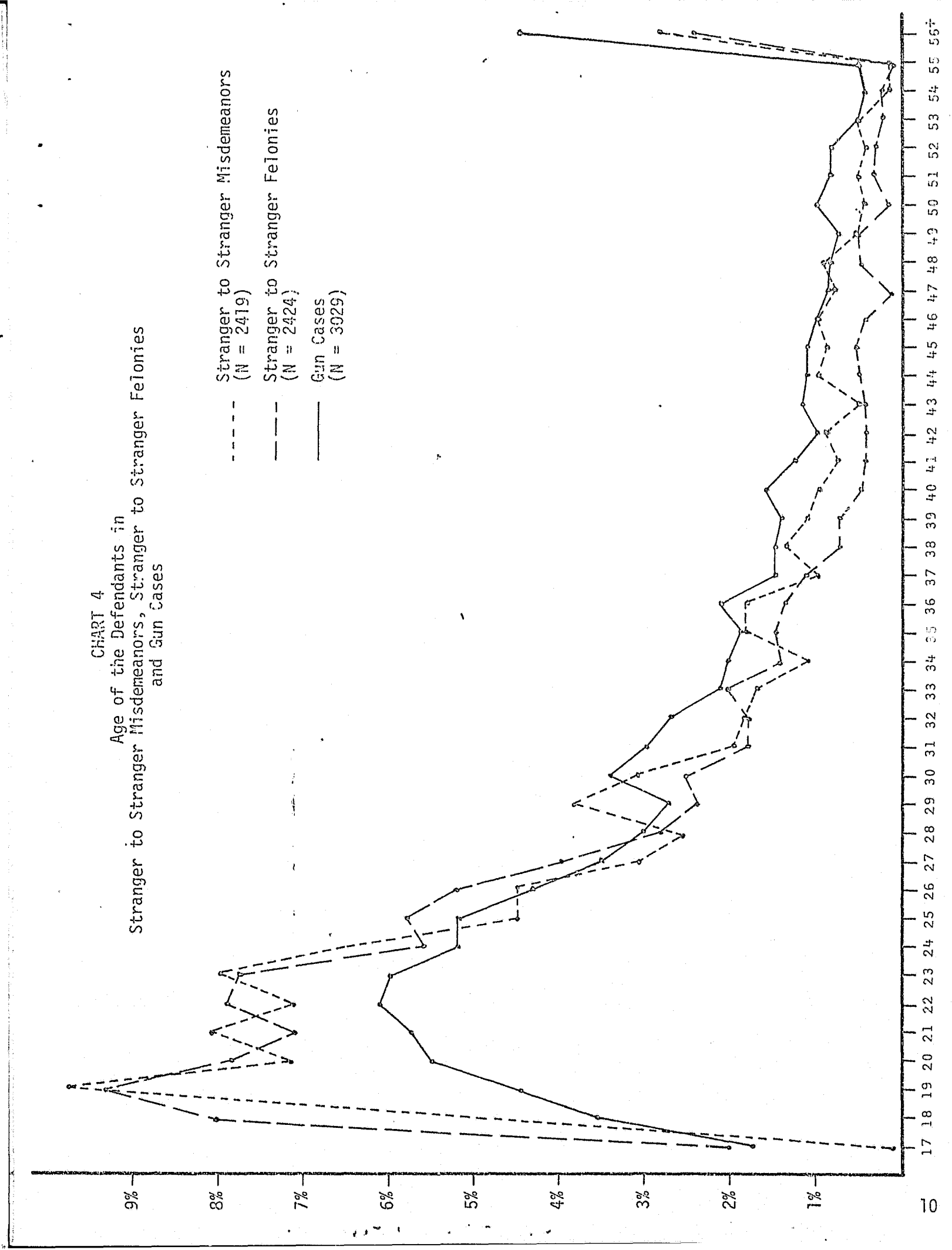
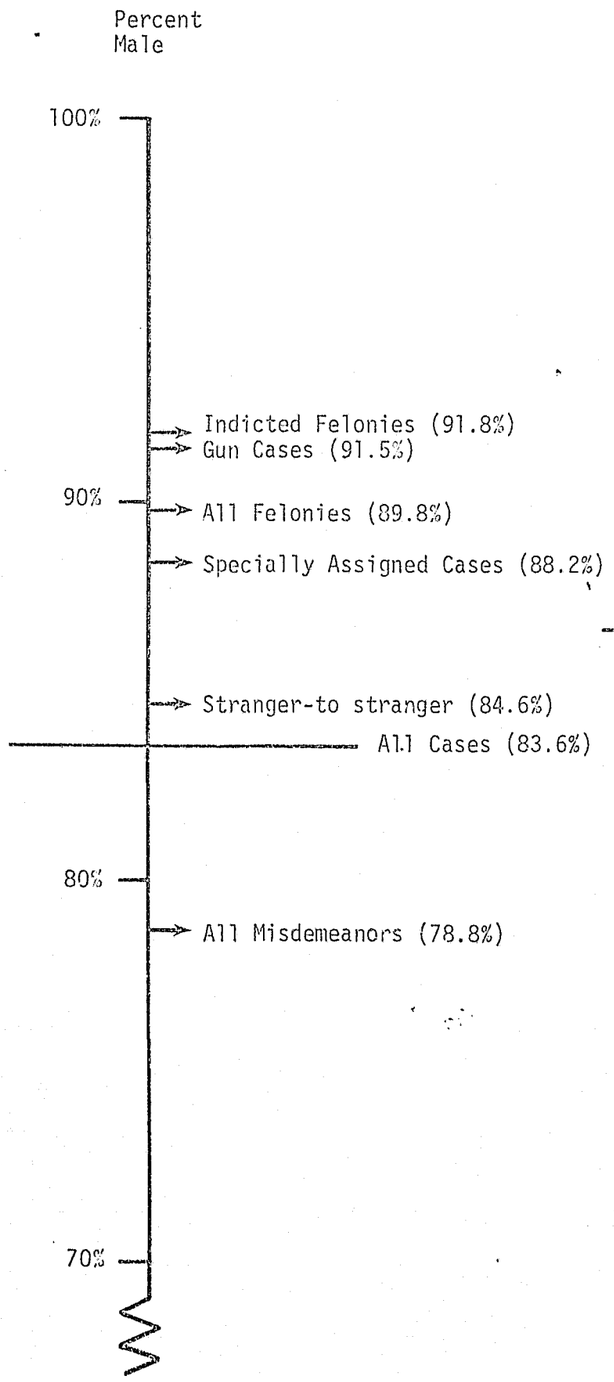
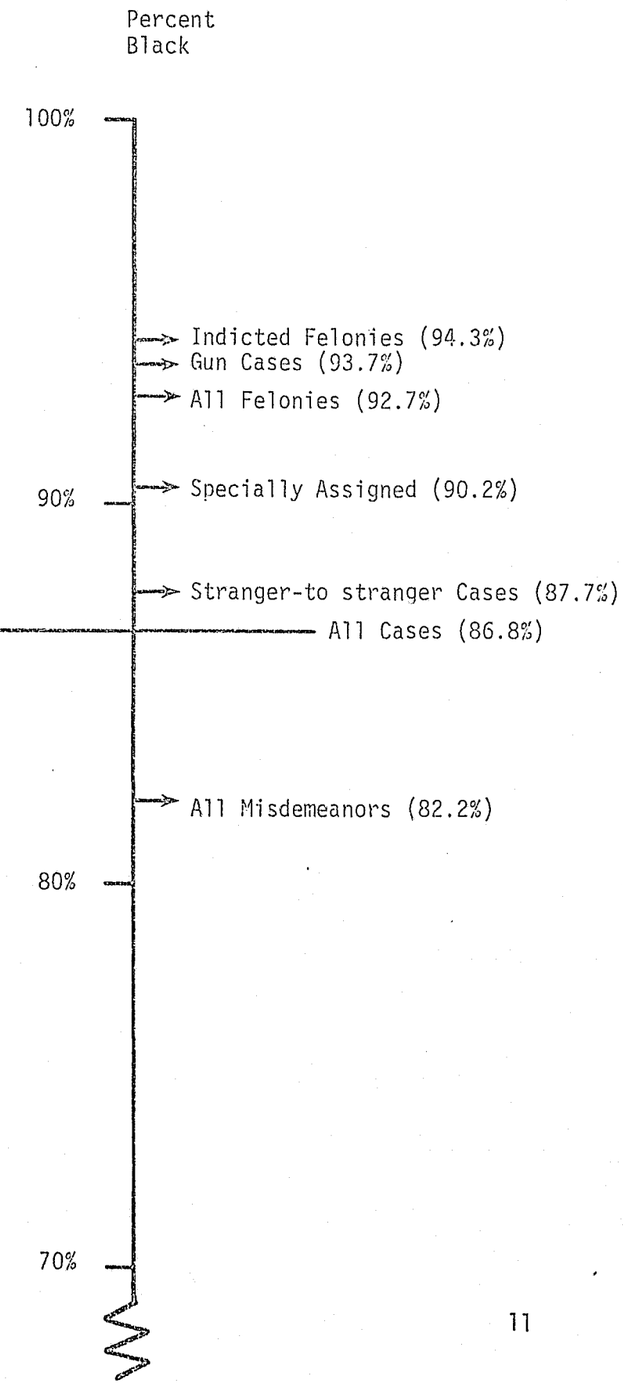


CHART 5

SEX OF DEFENDANTS
BY TYPE OF CASE



RACE OF DEFENDANTS
BY TYPE OF CASE



C. Characteristics of the Offenses

Of the 15,460 cases processed in 1973, 8,690 (56 percent) were misdemeanors; the remainder originally were charged as felonies. Slightly over one quarter (27 percent) of all cases arose out of offenses involving more than one offender. Indeed, the 15,460 cases represented only 13,028 separate criminal incidents. Personal injuries occurred in 17 percent of all cases; theft damage occurred in 37 percent of them. Felonies involved injury (27 percent) and theft (45 percent) more often than misdemeanors. Guns were involved in one of every five cases. About three percent of all cases (6 percent of the felonies) involved sex offenses; and about four percent of all cases (8 percent of the felonies) involved auto theft. The victim of the crime was a corporation, association, or institution in 15 percent of the cases.

The most common crimes charged[7] were sale or possession of narcotics (10 percent), robbery (10 percent), larceny (8 percent), assault with a deadly weapon--gun (5 percent), assault with a deadly weapon-other (4 percent), burglary II (4 percent), carrying a deadly weapon--gun (4 percent) and soliciting for prostitution (4 percent). Table 2 shows the most common crimes charged for each major category. The most common misdemeanor was sale or possession of narcotics; the most common felony was robbery. Gun cases involved assaults more often than any other associated charge. Table 3 gives a more elaborate picture of arrests brought to the prosecutor in 1973, by offense category.

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[7] The crime here is identified by the most serious charge in the case brought by the police or the prosecutor. Most serious charge is the one with the longest maximum sentence possible under the D.C. Code.

Table 2 - Most Common Offenses* by Category

All Cases (N = 15,460)

Sale or possession of narcotics - 10%
Robbery - 10%
Larceny - 8%
Burglary II - 4%
ADW-gun - 5%
ADW-other - 4%
CDW-gun - 4%
Soliciting for prostitution - 4%

All Misdemeanors (N = 8,690)

Sale or possession of narcotics - 18%
Larceny - 14%
Soliciting for prostitution - 7%
CDW-gun - 7%
Simple assault - 7%
Unlawful entry - 5%
BRA violations - 5%

All Felonies (N = 6,750)

Robbery - 22%
Burglary II - 9%
ADW-gun - 7%
ADW-knife - 6%
ADW-other - 6%
Grand larceny - 6%
Unauthorized use of a vehicle - 6%
Rape - 4%

Indicted Felonies (N = 2,794)

Robbery - 26%
Burglary II - 12% (plus Burglary I - 6%)
Grand larceny - 8%
ADW-gun - 6%
CDW after felony conviction - 5%
Forgery - 5%

*Crimes which appeared as most serious in less than four percent of the cases were omitted from this table.

Major Violators Unit (N = 1,300)

Larceny - 20% (plus attempted larceny - 5%)
Sale or possession of narcotics - 8%
BRA violations - 8%
Simple assault - 5%
CDW gun - 5%
Possession of implements of crime - 4%

Cases in which a gun was involved (N = 3,029)

ADW-gun - 24%
Robbery - 23%
CDW gun - 20%
CDW after felony conviction - 7%

TABLE 3
ARRESTS IN 1973 BY OFFENSE TYPE OF
MOST SERIOUS CHARGE AGAINST THE DEFENDANT

	Number	Percent
I. Crimes Involving A Victim		
A. Personal Victimizations Involving Violence	5040	32.6%
1) Homicide	259	
a) Murder	200	
b) Manslaughter	49	
c) Negligent homicide	10	
2) Assault	2891	
a) Aggravated	2002	
b) Simple	684	
c) Assault on a police officer	205	
3) Forcible Sex Offenses	450	
a) Female victim 16 and over	357	
b) Victim under 16	72	
c) Male victim	21	
4) Robbery	1440 + 217 = 1657	
a) Armed	726	
b) Other	714	
B. Personal Victimizations Without Violence	1898	12.3%
1) Larceny	1337	
2) Auto theft	372	
3) Fraud	189	
C. Crimes Against Residences Or Households	1370	8.9%
1) Burglary	1174	
2) Property destruction	164	
3) Arson	32	
D. Crimes Against Businesses Or Institutions	2099	13.6%
1) Robbery	217	
2) Burglary	372	
3) Larceny	1059	
4) Embezzlement and fraud	305	
5) Auto theft	74	
6) Arson	8	
7) Property destruction	64	
II. Crimes Without An Identifiable Victim	4757	30.8%
A. Weapons Offenses	1042	
1) Gun	827	
2) Other weapon	215	
B. Gambling	372	
C. Consensual Sex Offenses	836	
D. Drug Offenses	1872	
E. Bail Violations And Prison Breach	635	
III. Crimes Which Could Not Be Classified	296	1.9%
All Cases	15,460	100.0%

Victims were recorded by the prosecutor as participating in three percent of the cases and provoking four percent of the offenses. Both victim participation and provocation occurred less often in misdemeanors (2 percent for each) than in felonies (5 and 6 percent, respectively).

The prosecutor's case load at screening varied somewhat from month to month. Chart 6 shows a distribution of cases screened by month for all cases, misdemeanors, and felonies. The heaviest month for all cases was August, for misdemeanors was May, and for felonies was October. For all three categories, November and December were relatively light months.

The most common time of day recorded for an offense (for which a subsequent arrest occurs) to be committed was close to midnight. Chart 7 shows that for all cases, for all misdemeanors, and for indicted felonies, the frequency of offenses (for which arrests were made) increased steadily from about seven in the morning until midnight and then decreased steadily until seven in the morning. The sharp peak at midnight may reflect a greater tendency for the police to cite that hour, than any other hour, when there is uncertainty about the precise time of the offense. It might also reflect the fact that the police shifts overlap at midnight. Chart 8 shows the frequency of offenses by time of day for aggravated assault, rape, armed robbery, and burglary. Aggravated assaults occurred more frequently near 10 p.m. than at any other time, rapes near midnight, and armed robberies near 9 p.m. Burglaries, on the other hand, most often occurred in the late morning, near 11 a.m.

The next section describes the processing of these cases by the prosecutor and the court.

CHART 6

PROSECUTOR'S INTAKE CASE LOAD BY MONTH

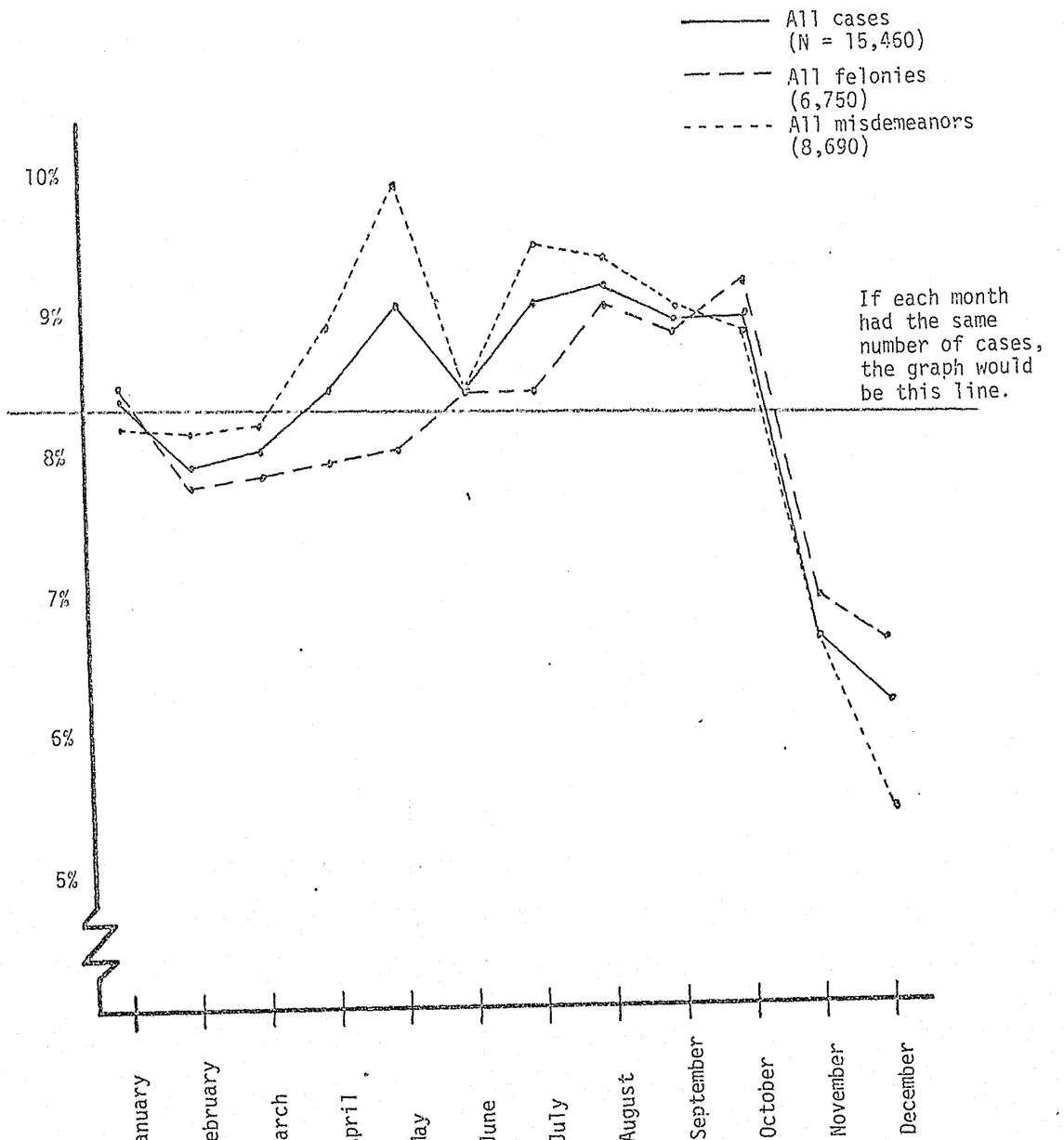
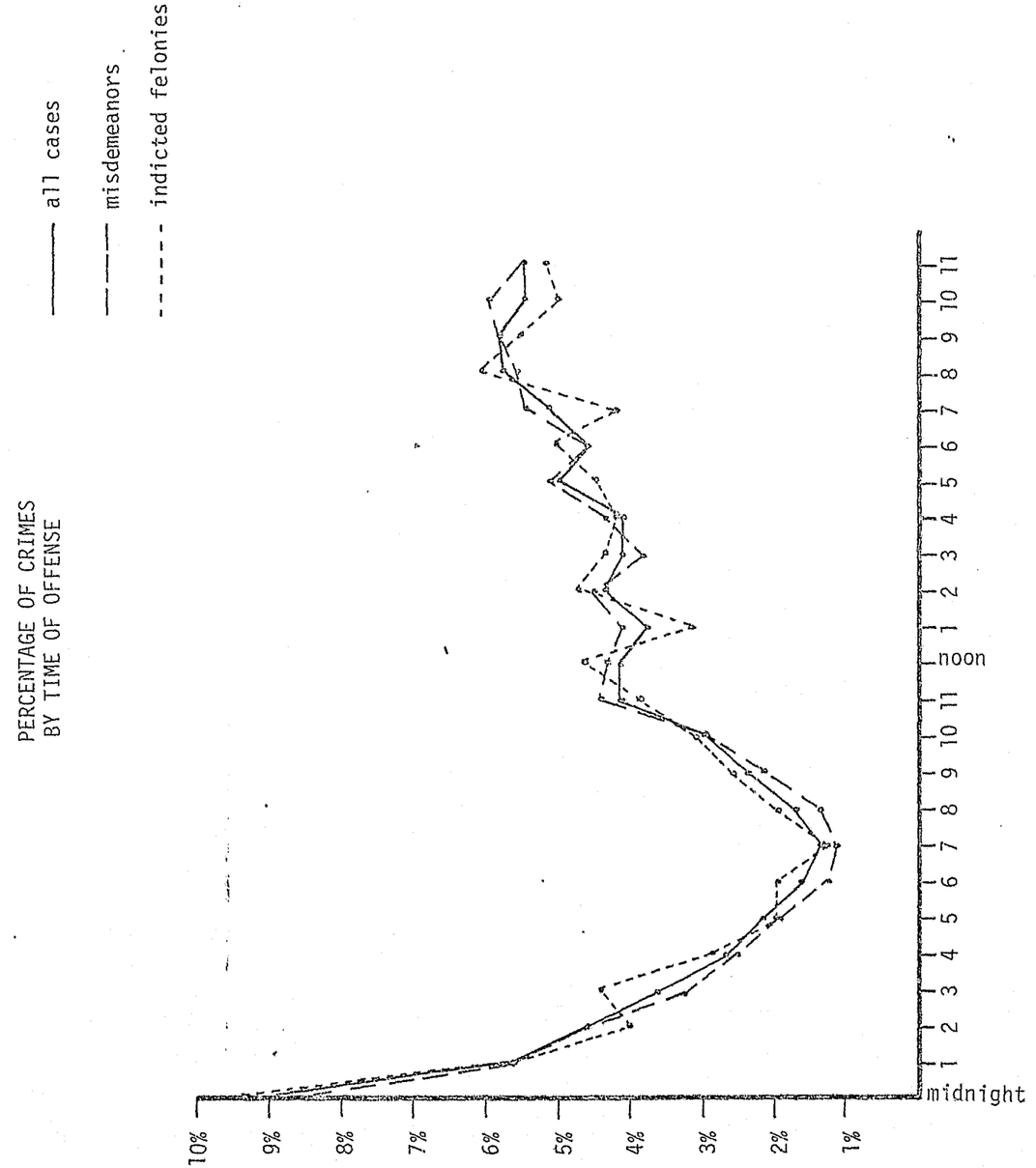


CHART 7

PERCENTAGE OF CRIMES BY TIME OF OFFENSE



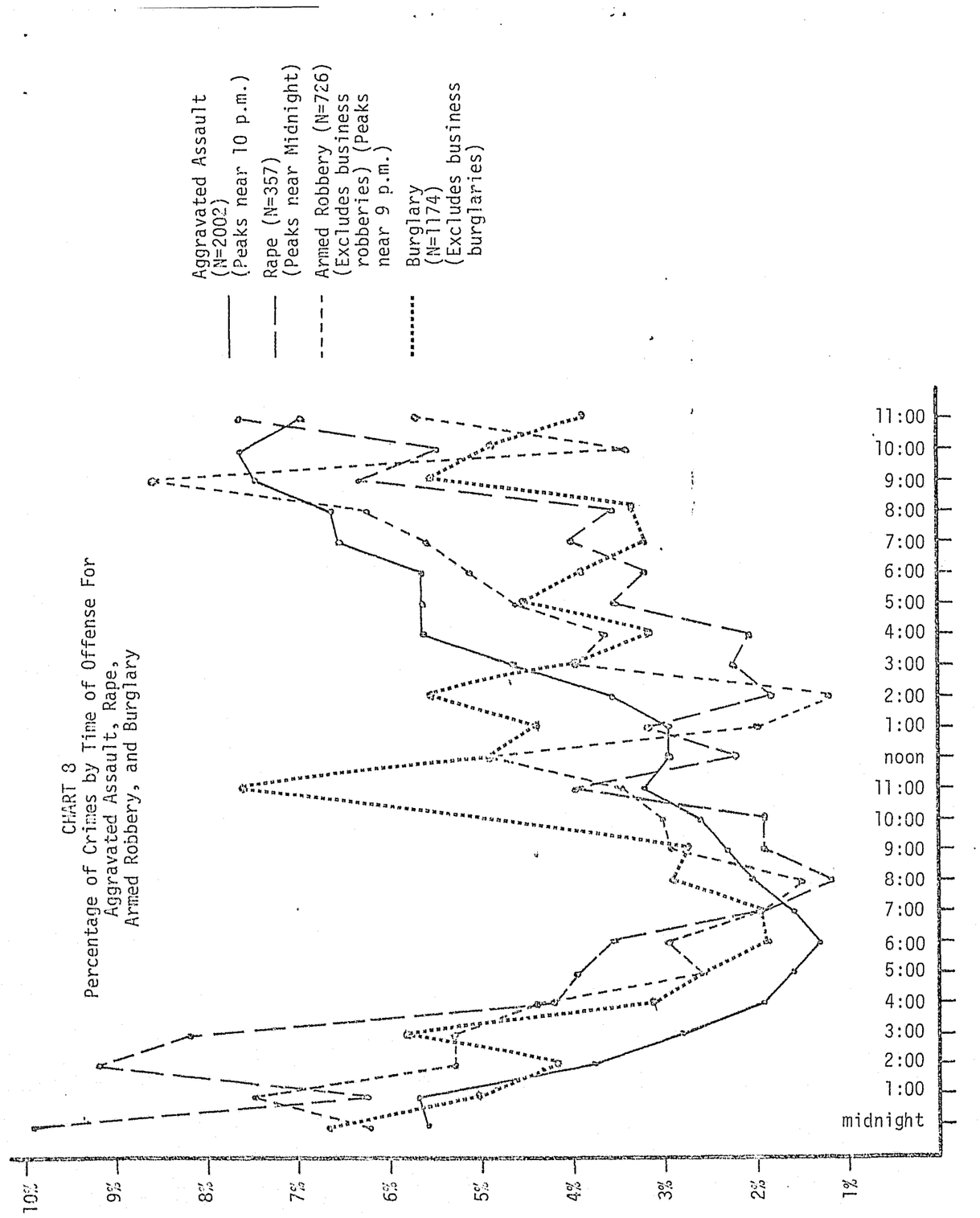


CHART 3
Percentage of Crimes by Time of Offense For Aggravated Assault, Rape, Armed Robbery, and Burglary

D. Characteristics of Case Processing

After an arrest is made, the police officer brings information about the offense, the arrest and the defendant to the prosecutor. The officer may also bring witnesses in to talk to the prosecutor. After reviewing the information, the prosecutor decides to accept or reject the case for prosecution. In Washington, D.C., this process is called "papering." If the prosecutor decides not to accept the case, he or she "no-papers" it. After a case is papered (or charges are filed), the prosecutor may drop a case for discretionary reasons (nolle prosequi), the court may dismiss the charges for legal reasons, the defendant may plead quilty, or a trial may be held.

1. The Network of Case Outcomes

Chart 9 shows the flow of cases through the prosecution system in 1973, separating felony cases into those that were indicted by the grand jury and those that were not indicted. The 1,019 "open" cases consisted mostly of cases in which the defendant failed to appear for scheduled court events. Chart 10 shows the proportion of each type of case disposition for all cases screened in 1973. If the case is no-papered, "nolled" (or dismissed by the prosecutor), or dismissed by the court, reasons for those actions are recorded.

a. The "Papering Decision

About 23 percent of the misdemeanors and 24 percent of the felonies were rejected by the prosecutor at screening. Table 4 lists the reasons for those rejections. The largest category of reasons for rejections of felony cases was "witness problems" (39 percent).

CHART 9

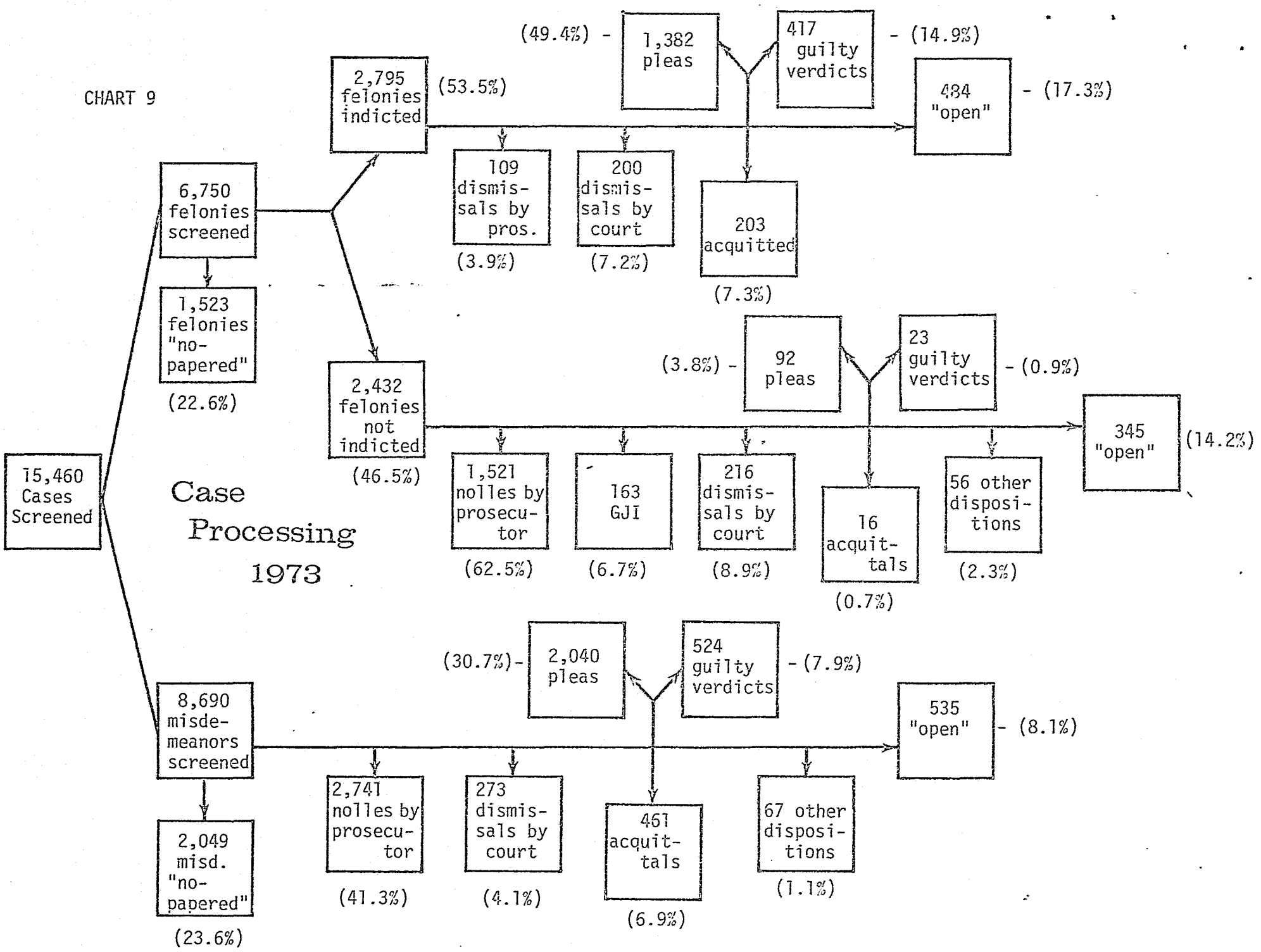
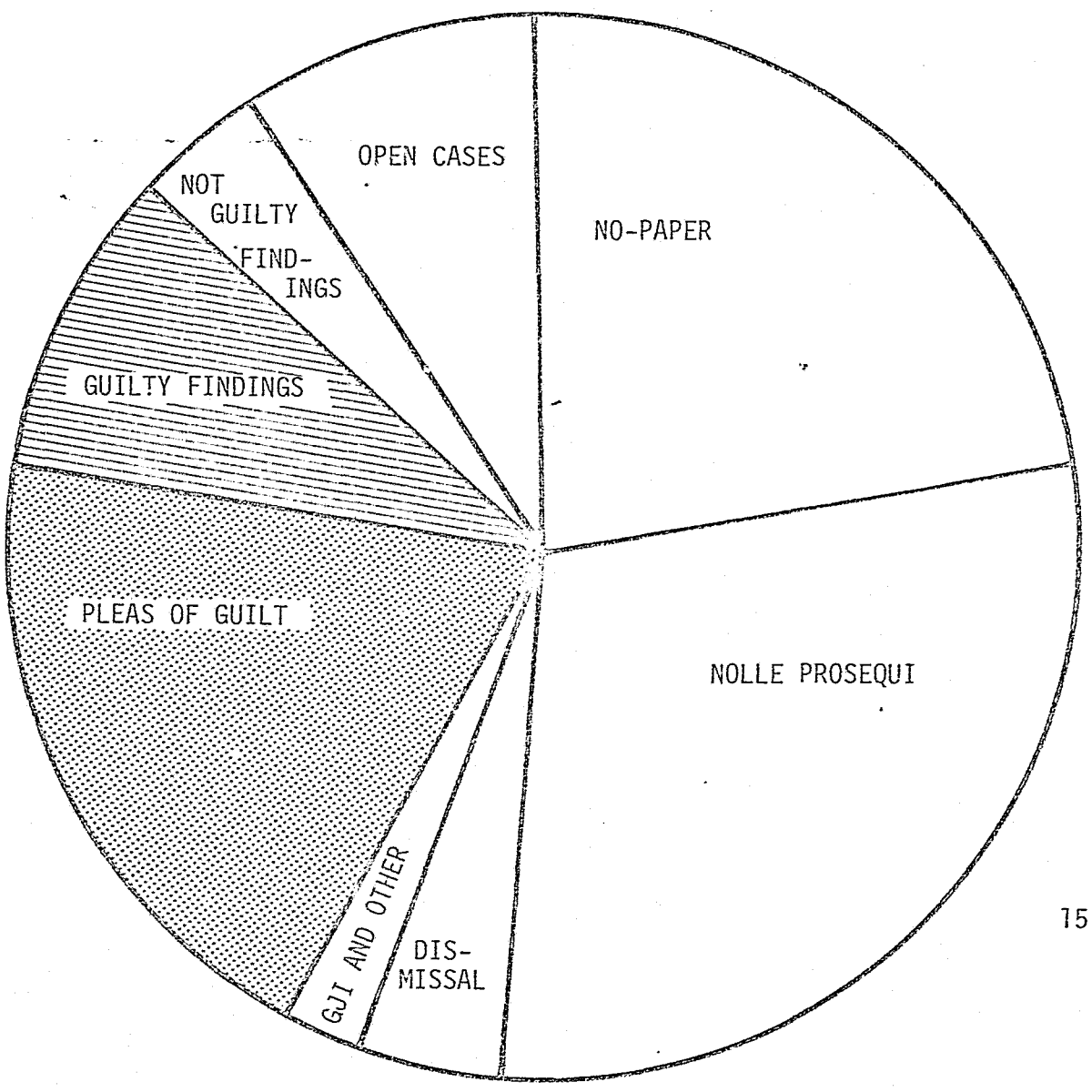


CHART 10

DISTRIBUTION OF CASE DISPOSITIONS

CALENDAR YEAR 1973



"Witness problems" also comprised a substantial share of misdemeanor rejections (21.5 percent). The reason category "witness problems" includes "complaining witness no show," "complaining witness signs off in writing," and "complaining witness refuses to testify."[8] Other important reasons for rejection of both felonies and misdemeanors include lack of evidence, lack of prosecution merit, and (legal) element of offense missing. Search and seizure and probable cause problems were much more pronounced in misdemeanor cases than in felony cases.[9]

One interesting feature of the papering decision is that it varies significantly by offense category. We see in Table 5 that 97 percent of all homicide arrests were accepted for prosecution, while only 56 percent of all arrests for bail violation were papered. We suspect that much of these differences is attributable to a tendency for some offenses by their very nature, to have stronger evidence than other cases. In addition, some charges, such as bail violations, may be dropped in plea negotiations.

b. Dismissals by the Prosecutor

After the case is accepted for prosecution, the prosecutor may drop the case for discretionary reasons. In misdemeanor and preindictment felonies, such a case rejection is called a "nolle prosequi." After indictment, a prosecutor-initiated drop is called a "dismissal." Table 6 shows the reasons used by the prosecutor for dropping cases subsequent to screening. Successful completion of a "diversion program" was the

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[8] A case drop-out reason analysis such as this one was the impetus for Witness Cooperation, by Frank J. Cannavale, D.C. Heath and Company, 1976.

[9] This difference is explained largely by the high proportion of so-called "victimless" crimes in misdemeanors, which, by their very nature, are more likely to contain search and seizure problems. See Brian E. Forst and Judy Lucianovic "A Descriptive Profile of Police Operations from the Court Perspective," INSLAW technical paper, January, 1976.

TABLE 4

NO PAPER REASONS

	Felonies	Misdemeanors
Witness Problems	39.0%	21.5%
Evidence Insufficient	29.5%	29.9%
Lack of Prosecutive Merit	14.1%	24.0%
Element of Offense Missing	6.4%	9.0%
Search and Seizure of Probable Cause Problems	0.9%	9.5%
Other Reasons	10.1%	6.1%
Number of Cases "No-Papered"	1,523	2,049

TABLE 5. PROSECUTION RATES BY TYPE OF CASE

(Rates computed as cases prosecuted per 100 cases brought by the police.)

I. Crimes Involving A Victim----------78

A. Personal Victimizations Involving Violence----------75
1) Homicide----------97
a) Murder----------98
b) Manslaughter----------96
c) Negligent homicide----------90*
2) Assault----------68
a) Aggravated----------70
b) Simple----------63
c) Assault on a police officer-67
3) Forcible Sex Offenses----------74
a) Female victim 16 and over---74
b) Victim under 16----------72
c) Male victim----------81*
4) Robbery----------86
a) Armed----------93
b) Other----------80

B. Personal Victimizations----------77
1) Larceny----------80
2) Auto Theft----------60
3) Fraud----------84

C. Crimes Against Residences or Households----------76
1) Burglary----------78
2) Property Destruction----------58
3) Arson----------91

D. Crimes Against Businesses or Institutions----------84
1) Robbery----------95
2) Burglary----------82
3) Larceny----------85
4) Embezzlement and Fraud----------87
5) Auto Theft----------58
6) Arson----------88*
7) Property Destruction----------77

II. Crimes Without An Identifiable Victim----------75

A. Weapons Offenses----------81
1) Gun----------86
2) Other weapon----------62
B. Gambling----------87
C. Consensual Sex Offenses----------92
D. Drug Offenses----------68
E. Bail Violations and Prison Breach----------56

III. Crimes Which Could Not Be Classified----------86

All cases----------77

*Base N smaller than 25.
N = 15,460 Cases in 1973.

TABLE 6

NOLLE (OR PROSECUTOR DISMISSAL) REASONS

	Indicted Felonies	Unindicted Felonies	Misdemeanors
Diversion Programs			
Project Crossroads		0.8%	18.1%
First Offender Treatment		0.4%	20.4%
Narcotics Diversion		0.9%	1.3%
Other Diversion		0.2%	3.4%
Witness Problems	8.3%	32.5%	14.7%
Plea in Other Case	4.6%	3.0%	12.6%
Lack of Prosecution Merit	8.3%	4.1%	9.0%
Search and Seizure or Probable Cause Problems	1.8%	0.3%	3.5%
Element of Offense Missing		3.6%	2.8%
Evidence Problems	20.2%	7.7%	2.7%
Referrals and Lack of Jurisdiction	1.8%	3.6%	1.4%
Facilitate Conviction of Other	1.8%	0.5%	0.5%
Pick Up at Grand Jury		2.6%	0.6%
Case Moot	5.5%	0.2%	0.1%
Superceding Indictment	21.1%	0.5%	0.1%
Offense Trivial	15.5%	8.4%	0.3%
Other Reasons	11.0%	29.9%	8.5%
Number of Cases Nolled or Dismissed by Prosecutor	109	1521	2741

reason most commonly cited for nolles in misdemeanor cases. Over 43 percent of the nolled misdemeanors were dropped because the defendant had been successfully diverted. In this jurisdiction, three types of programs--first offender, employment and narcotics--"divert" the offender from conventional criminal justice processing toward the objective of reducing recidivism. Successful completion of any of these three results in charges against the defendant being dropped; that is, successful completion assures the defendant that he or she will not have a criminal conviction record.[10] "Witness problems" and "evidence problems" resulted in a substantial number of nolles--much as they resulted in a substantial number of no papers. Also as in no papers, a higher proportion of misdemeanors than felonies were dropped for search and seizure or probable cause problems. Nearly 13 percent of the misdemeanors that were nolled were dropped by the prosecutor as part of a negotiation for a plea of guilty in another case.

c. Dismissals by the Judge

The court also may dismiss cases which the prosecutor has accepted for prosecution. In 1973, the court dismissed 200 indicted felonies, 216 unindicted felonies, and 273 misdemeanors. The reasons recorded by the prosecutor for those dismissals are listed in Table 7. As in prosecutor no papers and nolles, witness problems were a substantial reason given for court dismissal. Sixty-three of the 273 misdemeanors which were dismissed by the court were dropped because a necessary police officer did not appear at court for the proceeding. Ninety-two of the 216 unindicted felonies that were dismissed were dropped

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10 At present, INSLAW is conducting a study of the operation and effectiveness of diversion programs.

TABLE 7

COURT DISMISSAL REASONS

	Indicted Felonies	Unindicted Felonies	Misdemeanors
Witness Problems	14.0%	3.2%	36.3%
Police Officer No Show	1.0%	1.8%	23.1%
Case Moot	17.5%	1.4%	0.4%
Procedural Delays	1.0%	--	0.7%
No Probable Cause	--	42.6%	1.1%
Other Reasons or (No Reasons Listed)	66.5%	50.9%	38.5%
Number of Cases Dismissed by Court	200	216	273

with the prosecutor indicating that there was no probable cause to hold the defendant. The single most common reason cited for court dismissals of indicted felonies was "case moot." That reason might indicate any of several things occurred--for example, that another person had confessed to the crime, that the defendant had died, or that the law under which the defendant was being prosecuted was no longer in effect.

d. Continuances

In addition to recording reasons for cases dropping out of the prosecution system, the prosecutor records reasons for each continuance in a case. In 1973, the median number of continuances for papered misdemeanors and for papered felonies was two. For indicted felonies, the median number of continuances was three. Table 8 shows a distribution of reasons cited for continuances in 1973. Only "nonautomatic" continuances are counted in Table 8 (i.e., continuances from arraignment to initial trial date or to preliminary hearing or to grand jury, which are "automatic," were excluded from the base of all continuances.) The largest single category of continuance reasons was "defendant no show--bench warrant issued." Absconsion by defendants occurred in a substantial number of cases (14.6 percent). Unavailability of counsel also showed up as a significant problem. Court backlog and systems problems (such as unavailability of reports or clerical or administrative errors) were cited in 11 percent of the continuances. About nine percent of the continuances occurred because the defendant was engaged in a diversion program. Over five percent of the cases were continued because a police officer failed to appear for the court proceeding.

TABLE 8

REASONS FOR CONTINUANCES

(Excluding continuance to initial trial date, to preliminary hearing, and to Superior Court Grand Jury)

Diversion Programs	9.2%	
Witness No Show or Appears Unfit	4.4%	
Police Officer No Show	5.3%	
Counsel Unavailable	13.9%	0.6% were government requested 13.3% were defense requested
Counsel Not Prepared	2.7%	0.4% were government requested 2.3% were defense requested
Defendant Unavailable	4.7%	
Defendant No Show - Bench Warrant Issued	14.6%	
Court Backlog	5.5%	
System Problems	5.3%	
Other	34.4%	

TOTAL: 8398 Reasons

e. Pleas and Trials

Cases that are neither no-papered, nolled, dismissed nor ignored by the grand jury result in a plea or verdict of guilty, or a finding of not guilty. In 1973, 22 percent of all felony defendants and 24 percent of all misdemeanor defendants pled guilty. Eleven percent of the misdemeanor defendants and 10 percent of the felony defendants went to trial. Of the misdemeanor defendants who went to trial, 53 percent were found guilty and 47 percent were found not guilty. Two-thirds of the felony defendants who went to trial were found guilty. Based on arrests, the rate of convictions (due to plea or trial) for misdemeanors was 30 percent, and for felonies was 34 percent.

f. Cases Still Pending

In our 1973 data base compiled as of March 1975, six percent of the misdemeanors and 12 percent of the felonies have no final disposition. Those cases have been papered, have not been nolled or dismissed, and show no guilty plea. We suspect that these cases consist primarily of absconsions or very complicated trials.

2. Time in System

The length of time it takes for a case to proceed from one stage of prosecution to the next is of interest for several reasons. First, it can be presumed that justice is enhanced when the delays are held to a minimum. Second, delays impose costs on defendants, victims, witnesses, and agents of the criminal justice system. Third, we can focus both on the factors that create delays and the effects that delays have on other factors--plea rates, no-paper rates, conviction rates, and so on.

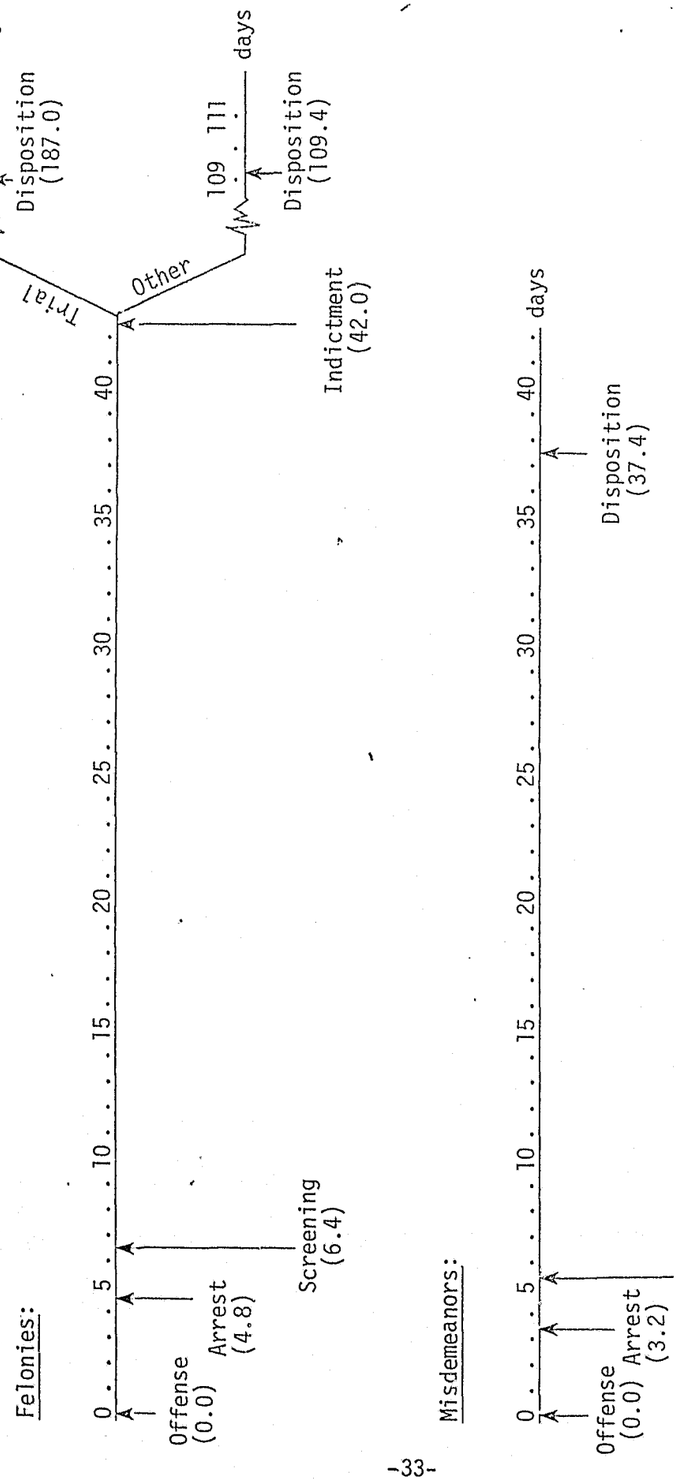
Because time in system occupies such a central role in the prosecution sector, it is appropriate to regard it as an important measure of prosecutor performance.

We can obtain a sense of this important dimension of the performance of the criminal justice system by considering the average number of days that transpire between major events in the system. Chart 11 indicates the mean number of days between major events from date of offense to final court disposition, for felonies and misdemeanors, in 1973. For felonies, an average of 6.4 days transpired from the time of the offense to time of screening by the prosecutor; for those that were indicted, the mean time from screening to disposition was 123.9 days (this is the weighted average of felonies disposed of in trial and other indicted felonies). The pattern for misdemeanors was only slightly shorter before the case came to the prosecutor (5.4 days), but substantially shorter once in the court and accepted for prosecution (37.4 days). (Means are reported because these statistics were a by-product of another computer analysis. Medians will be reported in a subsequent report.) Reflected in Chart 11 is the fact that misdemeanors that go to trial are disposed of on the same day that they would have otherwise been resolved.

3. Characteristics of Prosecutors.

One of the most fundamental areas of policy within the Office of the U.S. Attorney in the District of Columbia has to do with its personnel. What kinds of lawyers should be recruited, how long should they be encouraged to stay, and how should they be assigned to individual cases and to various functions of the office? These are issues of central concern in our analysis of prosecutor operations. Table 9 provides a partial profile of characteristics of the prosecutors who handled felonies

Chart 11. Mean Number of Days Between Major Events in the System*



*Means are based on number of cases that reach the next event.

Table 9

Characteristics of Prosecutors Assigned to Criminal Cases, D.C. Superior Court, 1973

	Misdemeanors	Felonies
Characteristics of screening prosecutor (SP) for all cases brought by police:		
Average length of service	3.8 mos.	7.7 mos.
Percentage male	92.5%	90.0%
Percentage white	90.8%	85.1%
Percentage of cases in which race of SP same as that of defendant	20.9%	18.7%
Percentage of cases in which sex of SP same as that of defendant	74.7%	81.7%
Characteristics of final prosecutor (FP) for cases accepted for prosecution:		
Average length of service	7.2 mos.	32.2 mos.
Percentage male	92.4%	97.4%
Percentage white	80.8%	95.4%
Percentage of cases in which race of FP is same as that of defendant	27.1%	8.9%
Percentage of cases in which sex of FP is same as that of defendant	73.7%	90.1%

and misdemeanors in 1973. It should be noted that the means and percentages shown are computed on the basis of cases rather than prosecutors (for example, "90 percent male" means that 90 percent of the cases cited were handled by male prosecutors, not that 90 percent of the prosecutors who handled cases of that type were males). The figures shown on this table reflect an effort in 1973 to hire larger proportions of women and blacks; note that the more experienced attorneys, who are concentrated in the category of final prosecutors in felony cases, are more predominantly white and male than the attorneys with less experience, who are concentrated in the other categories. These figures also reflect random assignment of cases with regard to the race and sex of the defendants and prosecutors.

Part II

Preliminary Multivariate Results

A. Introduction

As noted at the start of this paper, a first step in our in-depth analysis of relationships among the variables in the data base is to identify data elements to be used in subsequent analyses. This is necessary because the statistical techniques available for rigorous analyses of cause-effect relationships among variables do not permit the inclusion of so large a set of variables as are available to us. By using a simple multivariate technique to identify those variables that are most important with regard to major outcomes, we can subsequently exploit more fully the capabilities of the more powerful statistical techniques.

The technique used here is called "ordinary least squares multiple regression analysis." [11] The outcomes we analyze are binary (e.g., a case is either accepted or not accepted for prosecution; if accepted, the defendant either pleads guilty or he does not; if he does not, the case either goes to trial or is dropped; if it goes to trial, the defendant is found either guilty or innocent), and the dependent variable we estimate is a number between 0 and 1, representing a probability (of case acceptance, plea, trial, guilty verdict, etc.) This number is predicted from the levels of the policy and control variables for each case observed.[12]

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[11] N.R. Draper and H. Smith, Applied Regression Analysis, John Wiley and Sons, New York, 1966; Henri Theil, Principles of Econometrics, John Wiley and Sons, New York, 1971.

[12] Ordinary least squares multiple regression analysis is the same technique that is used by the National Weather Service to estimate the daily

B. Factors Associated with Conviction

In a companion paper we offered a justification for using conviction as a reasonable measure of prosecutor performance.[13] We now investigate what appears to affect whether an arrest ends up as a conviction. We go about this, first, in the aggregate, by looking at all arrests and focusing on relationships between available data elements and conviction. In the following sections we break the analysis into finer parts to see what appears to determine the probability of a case dropping out at the various stages of the prosecution process -- initial screening, indictment (felonies), nolle prosequi, dismissal, and acquittal.

As noted in Part I of this paper, about 30 percent of all arrests in the District of Columbia in 1973 were eventually resolved as convictions. So if we did not know anything at all about a randomly selected arrest,

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probability of precipitation. Those estimates are based on separate sets of multiple regression analyses, one set for April to September and one for October to March, each set using the binary variable whether it rained during a subsequent 6- or 12-hour period of interest. See Harry R. Glahn and Dale A. Lowry, "The Use of Model Output Statistics (MOS) in Objective Weather Forecasting," Journal of Applied Meteorology, volume 11, December 1972, pp. 1203-1211. The robustness of this technique in the estimation of dichotomous dependent variables has been demonstrated in a recent analysis of court data by William M. Landes, "Legality and Reality: Some Evidence on Criminal Procedure," Journal of Legal Studies, volume 3, June 1974, especially pp. 307, 323, and 324. More general discussions of the suitability of using a dichotomous dependent variable in ordinary least squares regression analysis are in Barry R. Chiswick and Stephen J. Chiswick, Statistics and Econometrics: A Problem Solving Text, University Park Press, Baltimore, 1975, pp. 206-207; and V. Kerry Smith and Charles J. Cicchetti, "Regression Analysis with Dichotomous Dependent Variables," presented at the Econometric Society Meeting, Toronto, December 1972.

[13] Brian E. Forst, "Research Design for the Analysis of Prosecutor Operations," Institute for Law and Social Research technical paper, December 1975.

our best estimate of the probability of its being resolved eventually as a conviction (PCONV) would be .30. (Of course, since every arrest ends up either as a conviction (PCONV = 1) or nonconviction (PCONV = 0), we would never predict correctly for a given case by using PCONV = .30. But we can imagine using such a number as .30 to provide a basis to predict how many, out of 100 randomly selected arrests, would have eventually left the court as convictions under the circumstances that prevailed in 1973. We would estimate 30.) However, we can do much better than to use an estimate of .30 for every arrest. We can base our estimate on all the characteristics about the case that are reported in PROMIS--type of crime, number of witnesses, defendant's arrest record, and so on. This use of known predictor variables to estimate the level of an unknown dependent variable is fundamental to multiple regression analysis.

Much better than the estimate ".30" is the following: "To estimate the probability that a felony arrest will eventually terminate as either a guilty plea or guilty verdict, take the number .1316 and add .0766 for each government witness (NWIT), add .0044 for each point scored for this case on the Sellin-Wolfgang crime seriousness scale (CASER), subtract .1139 if any charge constitutes a crime against the person (PPERS), subtract .0044 for each day that transpires between offense and arrest (DLAY1), subtract .0084 for each day between arrest and papering (DLAY2), and so on. The number .1316 is the regression constant, and the remaining numbers are regression coefficients. Taken together, these numbers produce a straight line that has the property of "fitting" the

data better, in a measurable way, than any other straight line. The predictor variables are often referred to as the "independent" or "explanatory" variables.

We are not primarily interested, however, in using this technique for the purpose of prediction. We are mainly concerned about the effects of changes in our policy variables on outcomes, after taking other factors into account. Table 10 displays statistics that shed a faint light on these effects, and does so separately for felonies and misdemeanors. Reported in this table are the mean values, regression coefficients, and significance levels of what appear to be the most important determinants of whether an arrest terminates as a conviction (PCONV). The independent variables are ranked in order of their estimated impact on PCONV, taking account of both the mean value and regression coefficient of each independent variable. We have listed independent variables whose significance levels are less than the arbitrarily selected value .10.[14]

The regression coefficient gives an indication of the amount of impact on the dependent variable of a change in the independent variable, as noted two paragraphs above. The significance level indicates how statistically precise is our estimate of this impact. For example, our finding

[14] We have not reported results for variables representing individual judges, since we are primarily interested in knowing simply whether individual judges affect case outcomes and not who the judges are. Occasionally, results for other variables whose significance levels exceed .10 are reported, generally when the variables are policy related or appear to have a large impact. All of the regression results reported, except those in Table 11, are based on a 50 percent random sample (with missing observations eliminated), out of the 1973 population of cases recorded in PROMIS. Table 11 is based on a 100 percent sample, and was our first regression result. We reduced to 50 percent afterwards because of excessive computational expense and negligible gain in statistical stability associated with the 100 percent sample.

Table 10. Factors Associated With Whether an Arrest Eventually Leaves the Court as a Conviction

	Independent Variable	Mean Value	Regression Coefficient	Level of Significance
Felonies:				
	constant term		.1316	.113
	NWIT	1.144	.0766	.000
	DFAGE	29.258	-.0014	.083
	PPERS	.321	-.1139	.003
n = 2719	* CASER	6.690	.0044	.001
d.f. = 2691	PRCOV	.550	.0505	.006
R^2 = .117	LDLAY1	1.554	-.0133	.049
	PGUN	.267	.0710	.003
	LDLAY2	.464	-.0289	.035
	PVINS	.121	.0795	.004
	PFAM	.060	-.0790	.035
Misdemeanors:				
	constant term		.0726	.461
	PCONS	.469	.2018	.014
	NWIT	.545	.0942	.000
	PDEFM	.791	-.0558	.136
	PRCOV	.624	.0682	.000
n = 3654	* PDARR	.513	.0766	.007
d.f. = 3626	LDLAY2	.787	-.0247	.011
R^2 = .095	LDLAY1	1.148	-.0165	.111
	PGUN	.129	.0133	.000
	CODEF	.397	-.0388	.000
	PSTRA	.270	.0403	.021
	PVINS	.172	.0440	.058

*n = number of observations on which estimates are based.

d.f. = degrees of freedom; for k independent variables, d.f. = n-k-1

R^2 = coefficient of multiple determination; measures the percentage of the variance in the dependent variable that is accounted for by the set of independent variables.

for PFAM is significant at the .035 level in the felony regression. This means that if, in fact, there were no relationship at all between whether the defendant and victim are members of the same family and whether a felony arrest terminates as a conviction, we would have obtained a statistical association between these two variables at least as close as we have, due to random forces alone, about once in 29 samples taken in the manner that we have drawn ours.

The reader will also note in Table 10 that a large percentage of the variance in the dependent variable, as measured by the R^2 statistic, is not explained by independent variables of this analysis. This is due to the combined effect of several factors: (1) omitted "intangibles," such as personality compatibility between the various combinations of people who become involved in the case; (2) measurement inaccuracies in certain variables that have been included in the analysis, such as the type of defense counsel, defendant's criminal history, and the seriousness of the offense; and (3) the effect of using a binary dependent variable. Attempts are now in progress to deal with the second and third of these factors. In any event, low R^2 does not by itself weaken inferences about the effect of an independent variable on a dependent variable. An omitted variable that is highly correlated with an included independent variable is as serious a problem when the explained variance is high as when it is low.

The initial findings of Table 10 indicate that the characteristics of the case itself appear to have much more influence on whether an arrest terminates as a conviction than do the prosecutor policy variables that we include in this regression equation, variables which consist solely of

characteristics of the screening attorney--experience, sex, race, and whether race and sex of the defendant are the same as those of the screening attorney. We have excluded the other policy variables that apply to cases that have been accepted for prosecution; had they been included in the results shown in Table 10, we would have found them to be artificially related to the probability of conviction. Clearly, for example, a case that is continued is more likely to leave the court as a conviction than one that is not accepted for prosecution in the first place. We shall look at the effects of these other policy variables in subsequent sections.

It appears more likely that an arrest will eventually leave the court as a conviction (guilty plea or guilty verdict), other things constant, if there are more government witnesses, if tangible evidence such as stolen property or a weapon is recovered, if there is a short delay between either offense and arrest or arrest and papering, if a gun is involved, or if the victim is a corporation, association, or institution. We find also that felony arrests involving crimes against persons or against members of the same family as the defendant appear less likely than other cases to result in convictions; similarly, misdemeanor arrests in which the victim and defendant are strangers are more likely to leave the court as convictions. It is noteworthy that consensual crimes (drug offenses, prostitution, gambling, etc.) appear so much more likely to be resolved against the defendant than other crimes.

C. The Papering Decision

We now look at the determinants of conviction in more detail by partitioning the analysis of the prosecution system into analyses of the several major stages of the system. The first of these is the papering decision.

As noted in Chart 9, about three-fourths of all arrests were accepted by the prosecutor in 1973--for felonies as well as for misdemeanors. One

might reasonably expect that these decisions to prosecute were made with an eye toward whether the case was likely to eventually leave the court as a conviction.

We see in Table 11 that the determinants of the papering decision do, indeed, resemble closely those of conviction, both for felonies and misdemeanors. This similarity is not too surprising, in view of the fact that the probability of conviction given arrest is dependent upon the decision to accept an arrest for prosecution. We anticipate, moreover, that the probability of conviction is the major criterion in the papering decision.

D. Factors Associated with Felony Indictment.

If any of the charges accepted by the prosecutor is for a felony offense, the case must then go forward for preliminary hearing, at which time the court determines whether there is "probable cause" to believe that that offense was committed by that defendant. If probable cause is found, the case is then "bound over" to the grand jury, which votes on whether to indict the case.

Much has been written to indicate that the grand jury is little more than a servant of the prosecutor, nearly always "rubber stamping" its concurrence with the prosecutor. According to the National Advisory Commission on Criminal Justice Standards and Goals, for example,

> It is unlikely that the grand jury is effective as a buffer between the state and a person suspected of a criminal offense. The presentation of evidence is under prosecutorial control and the grand jury merely agrees to the actions of the prosecutor.15

While this may be an accurate representation of the state of affairs in many jurisdictions, the data we confront give the initial appearance of

15 National Advisory Commission, op.cit., p. 75. See also Walton Coates, "The Grand Jury, The Prosecutor's Puppet. Wasteful Nonsense of Criminal Jurisprudence," Pennsylvania Bar Association Quarterly, vol. 33 (March 1962).

Table 11. Factors Associated with Whether a Case is Accepted for Prosecution

	Independent Variable	Mean Value	Regression Coefficient	Level of Significance
Felonies:				
	constant term		.4544	.000
	NWIT	1.145	.1955	.000
	CASER	6.687	.0071	.000
n = 5458	PPERS	.326	-.1218	.000
d.f. = 5433	PSPM	.900	-.0362	.067
R^2 = .393	PCONS	.113	.1848	.000
	DFSER	8.929	.0023	.029
	PGUN	.267	.0694	.000
	PSTRA	.362	.0329	.001
	PRCOV	.545	.0203	.040
	PFAM	.058	-.1078	.000
Misdemeanors:				
	constant term		.6676	.000
	PDEFM	.796	-.1611	.000
	NWIT	.550	.1830	.000
	PRCOV	.620	.1175	.000
n = 7391	PCONS	.465	.1010	.000
d.f. = 7364	DFSER	6.729	.0042	.000
R^2 = .198	LDLAY1	1.157	-.0182	.004
	PSTRA	.274	.0409	.000
	PGUN	.127	.0768	.000
	LDLAY2	.782	-.0118	.046

a somewhat different situation in the District of Columbia. Recall from Chart 9 that barely half of the arrests that were accepted by the prosecutor as felonies in 1973 were indicted. Our data indicate that about two-thirds of the cases originally accepted as felonies by the prosecutor were bound over to the grand jury in 1973; the grand jury then voted to indict around three-fourths of these cases.

We have learned, however, that most cases bound over to the grand jury but not indicted are pled at that stage or nolled by the prosecutor rather than "ignored" by the grand jury. We are also told that the grand jury is used by the prosecutor in this jurisdiction to decide questionable cases. Hence, we are left with a complex picture of the relationship between the grand jury and the prosecutor.

In Table 12 we present what appear to be primary determinants of whether a papered felony case survives through the grand jury indictment stage. We observe many of the same factors here that showed up also as determinants of conviction--age of the defendant, whether crime against the person, gun charge, and recovered evidence--with similar regression coefficients and identical signs.

E. Factors Associated with Guilty Plea

We noted in Part I that more than three-fourths of all convictions in the District of Columbia in 1973 were the result of guilty pleas. This observation certainly supports the "folklore" element of Landes' comment" "In the folklore of criminal justice a popular belief is that the accused will have this case decided in a trial."[16] It is significant, however,

[16] William M. Landes, op.cit., p. 61.

Table 12. Factors Associated with Whether a Papered Felony Survives Preliminary Hearing and Grand Jury Indictment

Independent Variable	Mean Value	Regression Coefficient	Level of Significance
constant term		.4774	.000
DFAGE	28.437	-.0025	.001
PDCOR	.636	.1076	.000
LDLAY1	1.605	-.0404	.000
PPERS	.268	-.1517	.000
PGUN	.311	.1135	.000
PDARR	.660	.0514	.086
PRCOV	.557	.0480	.004
PDLOC	.634	.0331	.040
PCONS	.114	-.8806	.001
PEXLP	.050	-.1406	.000
PDEFW	.056	-.0886	.044
PVPRV	.038	-.0900	.048
PDAID	.035	-.0832	.047

n = 4040
d.f. = 4011
R^2 = .078

that the ratio of guilty pleas to guilty verdicts, as high as it is in the District of Columbia, is generally even higher elsewhere. Newman estimates that the ratio is approximately nine to one for the country as a whole.[17]

While the detailed mechanics and the implications of plea bargaining are complicated, the basic notion is quite simple. The defendant pleads guilty typically because he perceives that he gets a good deal--a lighter sentence, often by way of a conviction on a lesser charge than a trial might produce. The prosecutor accepts, and generally encourages the plea, because something is in it for him and the court too--less preparation for this case and, as a result, more time to devote to other cases, plus an elimination of the risk of acquittal at trial.

A thorough analysis of plea bargaining is to be done subsequently in the PROMIS Research Project. That analysis will attempt to account for both the probability of a plea and the extent of reduction in charges. It will also incorporate the prosecutor's work load as a factor that potentially affects the plea negotiation process. In the meantime, however, we can begin to look at the plea phenomenon. Preliminary results are shown in Table 13.

One characteristic stands out as being related (negatively) to whether a defendant pleads guilty--time in system (for felonies this is reflected in number of continuances). A serious problem that interferes with the interpretation of this result has to do with the different causal

17 Donald J. Newman, Conviction: The Determination of Guilt or Innocence Without a Trial. Little, Brown and Company, Boston, 1966, p. 3.

Table 13. Factors Associated with Whether a Defendant Pleads Guilty

	Independent Variable	Mean Value	Regression Coefficient	Level of Significance
Indicted felonies:				
	constant term		.5018	.104
n = 988	NCONT	3.157	-.0355	.013
d.f. = 921	DFAGE	27.344	-.0033	.057
R^2 = .117	PPROP	.586	.1290	.071
	CODEF	.551	-.0624	.001
	PVINS	.158	.1401	.002
	PWPNG	.137	.1305	.053
	PDPDS	.123	-.0864	.072
Papered misdemeanors:				
	constant term		.2495	.071
n = 1987	LMDLY	3.634	-.0662	.000
d.f. = 1909	PFSXM	.739	-.0768	.071
R^2 = .242	PRCOV	.670	.0649	.004
	PGUN	.162	.1511	.000
	NWIT	.745	.0274	.020
	LDLAY2	.749	-.0217	.080
	CODEF	.387	-.0341	.005
	PSTRA	.262	-.0444	.048
	PVPRV	.023	-.1175	.008

mechanisms that might lie beneath this statistical relationship. Our finding that less time in the system is associated with a higher probability of a guilty plea might reflect the phenomenon that as a case drags on in the system, a plea becomes less likely because the prosecutor is less willing to reduce the charge or because the case gets weaker. It might also reflect the more prosaic possibility that the causal relationship runs in the opposite direction--if a defendant decides to plead, he may generally do so early, and may not be strongly influenced by how long his case has been in court. The single equation model we use here does not enable us to estimate these various separate effects; we expect to be able to examine such effects in the next stage of the study, by using a simultaneous equations estimation approach.

Another factor that is related to whether the defendant pleads, both for felonies and misdemeanors, is the number of codefendants. Cases with codefendants were less likely to result in pleas in 1973. There are some plausible explanations for this finding. One is that a strong code of ethics among codefendants may militate against "copping out" to the prosecutor. Another is that the prosecutor may be dissuaded by the complexities of cases involving codefendants. Another is that the entire case may be dropped by the prosecutor because the defendant enters a deal with the prosecutor to testify against a defendant in another case. (We are told that this is rare in cases involving "street crimes.") Or that the prosecutor may be inclined to prefer a trial over a negotiation because he feels that he has a stronger case when there are codefendants. We see later evidence to support such a preference.

In spite of these explanations, however, this finding of a negative relationship between pleas and codefendants runs counter to one of the

classic examples in the theory of games, called the "prisoner's dilemma." The prisoner's dilemma is a contrived scenario built around the premise that the district attorney is in a stronger bargaining position precisely when there are codefendants.[18] This scenario assumes that the prosecutor will exploit available opportunities to negotiate where one codefendant would agree to a charge reduction in return for turning state's evidence against other defendants.

Pleas also appear more likely for indicted felony cases when the defendant is youthful, when the crime involved stolen property or attempts, when the victim was an institution or corporation, when a weapon other than a gun was involved, or when the defendant is not represented by a lawyer from the Public Defender Service.

In papered misdemeanor cases, pleas appear more likely when the sex of the defendant differed from that of the prosecutor assigned to the case at the time of disposition, when evidence or stolen property was recovered, when a gun was involved, when there were witnesses, when the time between arrest and papering was brief, when the victim and defendant knew each other prior to the offense, or when the case was heard by certain judges. We note that the judge who hears the case can be an important determinant of whether the defendant pleads guilty.

F. Factors Associated with Nolle Prosequi and Dismissals

In Part I (pp. 20-29) we discussed the case dismissal phenomenon. We now look at the factors in our data base associated with case dismissals.

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[18] Duncan Luce and Howard Raiffa, Games and Decisions, John Wiley & Sons, New York, 1958, pp. 95-97.

We do this separately for dismissals initiated by the prosecutor and by the judge and within each of these categories, separately for felonies and misdemeanors. Tables 14 and 15 give these results.

For indicted felonies, we see that one factor is common to Table 14 and 15. Both the prosecutor and judge appear more likely to drop a case if there are codefendants. This finding is stronger for the judge than for the prosecutor, who may simply be anticipating that the judge will dismiss the case. Higher rates of rejection by both prosecutor and judge may be due to the apparent difficulty in obtaining a plea, joint possession problems, and so on, as noted in the preceding section. One potentially important aspect of this finding becomes evident when we combine it with a result of the next section: cases that go to trial, when they involve codefendants, appear more likely to be decided as guilty verdicts than other cases that go to trial. It is possible that if prosecutors and judges were aware of this, they might be less inclined than they appear to be to drop such cases.

For papered misdemeanors, one factor gives the surprising appearance of being the most important determinant of dismissals by both prosecutor and judge--namely, age of the judge to which the case is assigned. The younger the judge, the more likely it appears that the misdemeanor will be dropped. Most of the independent variables are not consistent across Table 14 and 15 for either indicted felonies or papered misdemeanors; some factors even appear to work in opposite directions. This may reflect divergent perspectives of the prosecutor and judge in this jurisdiction.

Table 14. Factors Associated with Whether Prosecutor Decides to Drop a Case

Independent Variable	Mean Value	Regression Coefficient	Level of Significance
Indicted felonies:			
constant term		.1973	.102
PFPM	.971	-.0917	.094
SPLOS	273.984	-.0001	.119
LDLAY1	1.539	.0093	.074
PGUN	.345	.0289	.054
CODEF	.551	.0140	.049
PPERS	.210	-.0332	.091
PDAID	.027	.0706	.070
n = 988			
d.f.. = 944			
R^2 = .051			
Papered misdemeanors:			
constant term		1.1837	.000
JAGE	50.654	-.0040	.007
JSEX	.910	-.1543	.001
PCONS	.435	-.2137	.068
PDARR	.529	-.1490	.000
PFPW	.811	-.0738	.065
JLOS	4.300	-.0098	.013
PJDC	.365	.1017	.000
PRCOV	.670	.0542	.033
PGUN	.162	-.2204	.000
LDLAY2	.749	.0450	.002
SPLOS	113.837	-.0002	.047
PSTRA	.262	-.0619	.016
PDEFW	.130	.1079	.008
PMVU	.189	-.0472	.120
PFAM	.031	.1530	.020
PVPAR	.018	-.2531	.004
PVPRV	.023	.1696	.031
n = 1987			
d.f. = 1941			
R^2 = .128			

Table 15. Factors Associated with Whether Judge Decides to Dismiss a Case

Independent Variable	Mean Value	Regression Coefficient	Level of Significance
Indicted felonies:			
constant term		-.0143	.929
PSPW	.858	-.2468	.000
NCONT	3.157	.0296	.000
PSRAM	.173	-.1708	.003
CODEF	.551	.0487	.000
PCONS	.106	.1569	.003
PDPDS	.123	.1175	.000
PVINS	.158	-.0635	.019
PFRAM	.099	.0909	.028
n = 988			
d.f. = 944			
R^2 = .135			
Papered misdemeanors:			
constant term		.0569	.434
JAGE	50.654	-.0025	.000
PDEFM	.783	.0858	.008
PJSXM	.738	-.0635	.001
PFPM	.924	.0360	.089
PDARR	.529	.0498	.005
PJWTE	.723	.0310	.057
PRCOV	.670	-.0275	.012
DFSER	7.028	-.0025	.033
FPLOS	214.795	-.0001	.119
LDLAY1	1.154	.0098	.131
PDCOR	.610	.0163	.088
PSTRA	.262	.0235	.035
PMVU	.189	.0238	.070
CODEF	.387	.0108	.074
PEXLP	.035	-.0491	.059
PVPAR	.018	.0686	.070
n = 1987			
d.f. = 1939			
R^2 = .063			

G. Factors Associated with a Guilty Verdict

We now look at cases that go to trial, and focus on the apparent determinants of guilty findings. We recognize the potential importance of the cases that go to trial. At the same time we wish to raise the question: Does the government place the right amount of effort on the cases that go to trial, considering both the gravity of all cases and the fact that around 12 percent of all arrests progress to the trial stage? We can begin to address this question by investigating the factors that appear to influence the outcomes of cases that go to trial. Table 16 displays the results of this preliminary analysis.

For the felony cases analyzed, the prosecutor "won" the case about two-thirds of the time in 1973, as noted in Chart 9. Guilty verdicts appear to have been more likely when the defendant's record was serious, when there were codefendants, when the defendant was white, when the defendant was not represented by a lawyer from the Public Defender Service, and when there was no evidence that the victim participated in the crime.

For misdemeanor cases that went to trial, slightly more than half resulted in guilty verdicts. The defendant appears more likely to have been found guilty, other things constant, when the judge was older, when the defendant was younger, when evidence was recovered, when the defendant had an arrest record, when there was corroborative evidence, or when the case was serious (in terms of personal injury, threats, value of stolen property, and so on).

Table 16. Factors Associated with Whether a Case that Goes to Trial is Found Guilty

Independent Variable		Mean Value	Regression Coefficient	Level of Significance
Felonies:				
	constant term		.5949	.111
n = 567	DFSER	11.177	.0108	.017
d.f. = 517	CODEF	.432	.0545	.043
R^2 = .127	PDEFW	.049	.3636	.084
	PDPDS	.111	-.1557	.024
	PVPAR	.021	-.5135	.001
Misdemeanors:				
	constant term			
n = 350	JAGE	51.217	.0111	.007
d.f. = 302	DFAGE	29.066	-.0048	.061
R^2 = .190	PRCOV	.566	.1704	.006
	PDARR	.657	.1051	.090
	PDCOR	.609	.1006	.073
	CASER	2.511	.0174	.076

H. Factors Associated with Witness Problems

We indicated in Part 1 (pp. 20-28) that many cases dropped out of the system in 1973 due to witness problems recorded in the PROMIS data. We now attempt to learn what factors determine the likelihood that a witness problem will develop in a case.

Witness problems and their causes are not only of interest in themselves: they are particularly important because they affect case outcomes in the short term and subsequent citizen support of the criminal justice system in the long term. Hence, "likelihood of a witness problem" can be regarded as an intermediate factor between the causes of witness problems and the larger performance measures of interest, such as case outcomes. To examine how factors affect case outcomes by way of this intermediate variable, we must use two stages of analysis. One equation will reflect the relationship between whether a witness problem is recorded and a large set of factors that we posit may affect the likelihood that such a problem will develop. A second will reflect the effect of witness problems on case outcomes.[19] For example, more experienced prosecutors may be more successful in obtaining convictions because they can induce greater witness cooperation and for other reasons as well. We find it appropriate to estimate these effects separately.

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[19] We cannot use our measure of the dependent variable of the first stage, whether a witness problem develops, as an independent variable of the second stage, since this measure is artificially correlated to case outcome (if a case drops out due to a witness problem, it is by definition a nonconviction). But by regarding stage one as an estimate of the likelihood of a witness problem, and substituting this estimate for each case as an independent variable in stage two, we can estimate the effects the determinants of witness problems have on case outcomes both directly and through the witness problem variable.

Table 17 reports results for a set of hypothesized determinants of witness problems. We see that none of the explanatory variables appears to have a terribly strong impact on the likelihood of a witness problem. The strongest of the independent variables included are time in system and number of continuances. We caution against placing much stock in the precise coefficients estimated here, since they are likely to be contaminated by the reverse effect of witness problems on delays, which has not been removed.[20] The true effect of delays on witness problems, which may be stronger or weaker than we have estimated here, will be estimated more accurately in subsequent work.

Other factors that appear to increase the likelihood of witness problems for felonies are as follows: if the case involves a crime against the person; if the screening prosecutor indicated the existence of racial confrontation, assault on a public official, or a major violator; if the victim and defendant were members of the same family; or if the police officer indicated that the victim had a physical or health problem. For misdemeanors, witness problems appear to be more likely if the final prosecutor is less experienced, if the defendant's criminal record is serious, if there are few witnesses, if no evidence was recovered by the time of papering, if the victim is unemployed, if a weapon other than a gun was involved, if at time of papering there was indication of

[20] We know, for example, that about ten percent of all reported continuances are due to witness problems. We know also that the number of continuances is correlated with time between indictment and disposition, with a simple correlation coefficient of .21. As independent variables become highly correlated with one another, their regression coefficients become more difficult to interpret.

Table 17. Factors Associated with Whether a Witness Problem Develops in a Case

Independent Variables	Mean Value	Regression Coefficient	Level Significance
Indicted felonies:			
constant term		-.3359	.069
LFDLY2	4.487	.0474	.000
NCONT	3.173	.0437	.000
PPERS	.206	.0556	.104
PPROB	.136	.0491	.047
PFAM	.029	.1652	.001
PVPHY	.028	.0935	.070
n = 792			
d.f. = 724			
R^2 = .184			
Papered misdemeanors:			
constant term		.2628	.182
LMDLY	3.645	.0553	.001
PJMAL	.909	-.1099	.083
FPLOS	210.206	-.0003	.003
DFSER	7.739	.0069	.027
NWIT	1.628	-.0284	.091
PRCOV	.602	-.0752	.007
PVEMP	.356	-.0614	.042
PWPNG	.169	.0968	.068
PFAM	.058	.2193	.000
PVPRV	.043	.1364	.061
n = 910			
d.f. = 845			
R^2 = .204			

provocation by the victim, and, as with felonies, if the victim and defendant are from the same family. These findings are generally consistent with the results of a previous Institute study.[21]

[21] Frank J. Cannavale, Jr., op.cit. We note that there are differences in the way two analyses were carried out--different sets of independent variables, a different dependent variable, a different population, a different time period, and a different sampling strategy.

Appendix A. Alphabetical List of Data Elements

CASER	=	Case seriousness score, based on the Sellin-Wolfgang index*
CODEF	=	number of codefendants
DFAGE	=	years of age of defendant
DLAY1	=	days between offense and arrest
DLAY2	=	days between arrest and screening before a prosecutor
DFSER	=	defendant seriousness score, based on the Gottfredson index**
FDLY1	=	days between felony screening and indictment
FDLY2	=	days between felony indictment and final disposition
FPLOS	=	months that final action prosecutor has served as an Assistant U.S. Attorney at the Superior Court
JAGE	=	years of age of the final action judge
JLOS	=	years final action judge has served at the D.C. Superior Court
L		prefix indicates the natural logarithm of the data element
MDLY	=	days between misdemeanor screening and final disposition
NCONT	=	number of continuances
NWIT	=	number of government witnesses (lay and expert) at time of initial case screening
PCONS	=	1 if none of the charges brought by the police or prosecutor indicate a crime against either person or property; otherwise 0

* See Thorsten Sellin and Marvin Wolfgang, The Measurement of Delinquency, John Wiley and Sons, New York, 1964

** Donald M. Gottfredson, "Development and Operational Use of Prediction Methods in Correctional Work," Proceedings of the Social Statistics Section of the American Statistical Association, 1962.

PCONV = 1 if any charge is disposed as either guilty plea or guilty verdict; otherwise 0

PCORR = 1 if there was corroboration (i.e., evidence that a crime was committed); otherwise 0

PDAID = 1 if any indication that defendant was only an aider or abettor to the crime; otherwise 0

PDALS = 1 if defendant known ever to use an alias; otherwise 0

PDARR = 1 if defendant has an arrest record; otherwise 0

PDEFM = 1 if defendant is male; otherwise 0

PDEFW = 1 if defendant is white; otherwise 0

PDLOC = 1 if defendant's residence is in the District of Columbia; otherwise 0

PDPDS = 1 if defendnat's counsel is from the Public Defender Service; otherwise 0

PDROP = 1 if either an indicted felony or a papered misdemeanor terminates without a conviction on any charge and does not go to trial; otherwise 0

PDVOL = 1 if defendant's counsel was appointed under the Criminal Justice Act and handled at least 75 cases in Superior Court between April 1, 1973 and March 1, 1974; otherwise 0

PEXLP = 1 if any evidence indicates that defendant is innocent; otherwise 0

PFAM = 1 if defendant and victim are members of the same family; otherwise 0

PFPM = 1 if final action prosecutor is male; otherwise 0

PFPW = 1 if final action prosecutor is white; otherwise 0

PFRAM = 1 if defendant and final action prosecutor are either both white or both non-white; otherwise 0

PFSXM = 1 if sex of defendant is same as that of the final action prosecutor; otherwise 0

PGLTF = 1 if case terminates with a guilty verdict on any charge; otherwise 0

PGUN = 1 if any indication that a gun was either present or used (or both) at time of arrest; otherwise 0

PINDT = 1 if felony case is indicted; otherwise 0

PJ1 = 1 if final action judge is judge #1; otherwise 0

PJ2 = 1 if final action judge is judge #2; otherwise 0

PJ58 = 1 if final action judge is judge #58; otherwise 0

PJDC = 1 if final action judge resides in the District of Columbia; otherwise 0

PJMLE = 1 if final action judge is male; otherwise 0

PJRAM = 1 if defendant and final action judge are either both white or both non-white; otherwise 0

PJSXM = 1 if sex of defendant is same as that of the final action judge; otherwise 0

PJWTE = 1 if final action judge is white; otherwise 0

PMVU = 1 if misdemeanor case is assigned to the Major Violators Unit; otherwise 0

PNOLL = 1 if case is dropped by prosecutor (nolle prosequi); otherwise 0

PPAP = 1 if any charge is accepted for prosecution ("papered"); otherwise 0

PPERS = 1 if any charge indicates crime against person and no charge indicates property-motivated crime; otherwise 0

PPLEA = 1 if defendant pleads to at least one charge; otherwise 0

PPROB = 1 if screening prosecutor indicates racial confrontration, assault on public official, or major violator; otherwise 0

PPROP = 1 if any charge indicates property motivated

PRCOV = 1 if property or evidence was recovered; otherwise 0

PSPCL = 1 if person screening case is not an official Assistant U.S. Attorney; otherwise 0

PSPM = 1 if screening prosecutor is male; otherwise 0

PSPW = 1 if screening prosecutor is white; otherwise 0

PSRAM = 1 if defendant and screening prosecutor are either both white or both non-white; otherwise 0

PSSXM = 1 if sex of defendant is same as that of screening prosecutor; otherwise 0

PSTRA = 1 if defendant and victim are strangers; otherwise 0

PTRIL = 1 if case goes to trial; otherwise 0

PURIN = 1 if urinalysis test was positive; otherwise 0

PVEMP = 1 if victim is employed; otherwise 0

PVINS = 1 if victim is a corporation, association or institution; 0 if individual or individuals

PVPAR = 1 if any indication of participation in crime by victim; otherwise 0

PVPHY = 1 if victim is reported to have physical or health problem; otherwise 0

PVPRV = 1 if any indication of provocation by victim; otherwise 0

PVRAC = 1 if
otherwise 0

PWITP = 1 if any witness problem is recorded; otherwise 0

PWPNG = 1 if any indication that a prohibited weapon other than a gun was present or used (or both) at time of arrest; otherwise 0

SPLOS = months that screening prosecutor has served as an Assistant U.S. Attorney at the Superior Court

VAGE = years of age of victim

END