THE MARICOPA COUNTY DEMAND REDUCTION PROGRAM:

AN EVALUATION REPORT

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*Dr. Scott Decker participated in designing the survey instrument and the sampling methodology for the two surveys of uniformed officers. He assisted in the data collection in both 1990 and 1991 and assumed primary responsibility for the analysis and interpretation of these data. He authored the discussion of uniformed officer support for the Demand Reduction Program (found in Section III and Appendix C).

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A. Introduction

Early efforts to call attention to the need for demand reduction emphasized education, prevention and treatment, especially among young people. Law enforcement was not a part of demand reduction, and anyone urging the arrest of drug users was criticized for wanting to redirect police activities away from those who were profiting from the crime -- the drug trafficker and seller. Soon, however, law enforcement and punishment --which had been the exclusive province of the supply-side effort -- became a part of the strategy to reduce demand. "User accountability" took on a special meaning as it was used to publicize and promote this new rationale for arresting users. As greater attention focused on demand reduction generally, the strategy of user accountability gained momentum and legitimacy.

In 1985, Charles Blau, head of the Organized Crime/Drug Enforcement Task Force (first formed by President Reagan in 1982), reported that drug users should be arrested and prosecuted because they are as much a part of a "conspiracy chain" as those who distribute it. At the same time, Attorney General Edwin Meese stated that "there is no such thing as a harmless recreational drug" and that he wants "the individual drug users ... to understand the moral responsibility that they bear" (Inside Drug Law, 1985: 7). Early the next year, the President's Commission on Organized Crime recommended both the repeal of those state laws

which had decriminalized marijuana possession and the prosecution of drug users (Drug Law Report, 1988).

In 1987, Dr. Donald Ian MacDonald, Director of the White House Office of Drug Abuse Policy, stated publicly that the President had agreed to a plan to arrest drug users. In testimony before the House Select Committee on Narcotics Abuse and Control, MacDonald identified three general categories of people with regard to drug use. One category consisted of those who do not use drugs, and the White House policy was to educate these people against future drug use with drug prevention programs. A second category was comprised of those persons already addicted to drugs, for whom treatment was needed. Recreational drug users formed the third grouping, however, and White House policy called for legal sanctions against these occasional users to encourage demand reduction. This policy was clarified by the testimony of Frank Keating, Assistant Secretary of the Treasury for Enforcement: "We, as a law enforcement community, wish to make drug use painful. We wish to make sure that anyone who uses drugs, and who traffic's in drugs, suffers" (O'Connell, 1987:10).

By 1988, the use of criminal sanctions against drug users was gaining momentum. The nature of this impetus for user accountability is evident in the 1988 position paper of the International Association of Chiefs of Police, which also illustrates just how far the IACP had broadened its range of demand reduction activities since its 1986 resolution. IACP Executive Director Gerald Vaughn (1988:18) writes:

While demand reduction strategies primarily focus on

prevention and education, it would prove to be more effective if used in conjunction with a carefully designed and prudent deterrence-oriented strategy that reinforces each citizen's right and responsibility to live, work, and be educated in a drug-free environment by holding those accountable who choose to consume illicit drugs. User accountability programs focus on a punitive approach that seeks to deter drug abuse through criminal and/or social sanctions that send a powerful message that drug use will not be tolerated.

Although the way was prepared by MacDonald, Vaughn, and others, a national policy of user accountability was not established until the passage of the Anti-Drug Abuse Act of 1988 (Koven, 1989). Among the Act's landmark provisions was the creation of a Cabinet-level director of drug policy (i.e., a "drug czar") to oversee the many activities and provisions authorized within the Act. It called for strict drug enforcement and a policy of "zero tolerance" and it increased the arsenal of weapons available in the war against the supply of drugs, including the death penalty for drug kingpins. The 1988 Act also laid out a comprehensive demand reduction strategy which included a "user accountability" provision. Drug users could be denied specific federal benefits, including grants, loans, contracts, or licenses provided by any agency of the federal government: (1) Persons possessing even small amounts of illegal drugs could be fined up to $10,000 by the U.S. Attorney General; (2) the Secretary of Housing and Urban Development was authorized to

evict tenants engaged in any criminal acts, including use of drugs; (3) federal contractors were required to make good faith efforts to maintain a drug-free workplace or risk suspension, termination, or debarment from contracts; (4) driver's license applicants in a four-state pilot program were to be tested for illegal drug use, and those who tested positive could be denied driving privileges for at least one year.

In 1989, the Drug Enforcement Administration's position on user accountability was articulated by DEA Administrator John Lawn. The attention to drug users is warranted, Lawn (1989:49) argued, because "User accountability attacks the idea that there can be any such thing as a casual or recreational user of drugs." To address this problem, Lawn proposed increased public education about the dangers of drug use, greater attention to establishing a drug-free workplace, and appropriate actions to increase the certainty and severity of punishment for illegal drug users.

B. User Accountability and a National Drug Control Strategy

By the end of the decade, the transformation was complete. The Office of National Drug Control Policy, Directed by drug czar William Bennett, issued its first national strategy in 1989, highlighting the central importance of user accountability in future drug control policies.

> There are two ways to influence whether an individual decides to use drugs. One is to make him not want to use them. Information and moral persuasion obviously help shape an individual's preferences, attitudes, and desires. The other approach is to make an individual fear the

consequences and penalties that society will impose for drug use by making it clear that the costs will outweigh whatever temporary benefits drugs can provide. (Office of National Drug Control Policy, 1989: 47).

After noting that drug use should have a price, the 1989 National Drug Control Strategy urges a broad-based range of sanctions against users. Military-style boot camps and halfway houses are called for, as are legal fines, property forfeiture, and denial of federal contracts and benefits. Further, the ONDCP advocates a variety of less formal sanctions, especially for first offenders and occasional users: suspended driver's license, notification of employer, identification in local newspapers, overnight or weekend detention, and forfeiture of cars driven during purchase or use of drugs. For juveniles, accountability can be achieved by notification of parents, suspension from school, community service activities on weekends, and suspension of (or delay in application for) driver's licenses.

What emerges is a national policy designed to bring legal and social sanctions against drug users in general, but the specific target is the recreational or occasional drug user. Many states have enacted laws requiring stiff penalties against casual drug users (Knapp, 1989). For example, Indiana legislated court fees of $100-$400, with the funds to be used to support undercover police units and prosecutors. In New Jersey, persons convicted of any drug offense automatically lose their driving privilege for six months to two years. In Rhode Island, anyone driving under the influence of drugs must pay a $400 fine, an

amount which supports their own treatment. In Florida, driving under the influence of alcohol or drugs will result in a suspended license, and all drivers' license applicants must complete a drug education course.

The most widely adopted approach to date is the "reverse sting." Undercover police make controlled buys from drug sellers working the street, arrest the sellers, and then substitute their own undercover officers as "sellers." Persons who buy (or attempt to buy) illegal drugs from these "sellers" are arrested immediately after the transaction. Operation Sting was begun in Miami, Florida in 1986, and during its first year the program produced 927 felony arrests, 2147 misdemeanor arrests, seizure of 1000 vehicles, and forfeiture of $73,577 (Dickson, 1988). Reverse stings have been used with varying success elsewhere, including Nashville, Tennessee (Drug Enforcement Administration, n.d.), Inglewood, California (Carter and Knowles, 1987), and Washington, D.C. (Drug Law Report, 1988). A variation of this approach has been used by the Los Angeles County Sheriff's Office, which watched known sellers to identify users and then arrested the users a short distance away (DEA, n.d.).

C. Summary and Conclusion

The concept of "User Accountability" asserts a new rationale for treating casual users as a serious legal problem. It redirects discussion away from the long-standing debate over the harmfulness of drugs to their users and whether drug usage is better addressed as a public health problem. User accountability asserts that users -- even casual users -- must be seen as a

criminal justice problem because they provide the customer base for the criminogenic suppliers of these illegal drugs. Drug users are criminal co-conspirators, and legal remedies should impact on both the supply side and the demand side of this conspiracy.

II. THE MARICOPA COUNTY DEMAND REDUCTION PROGRAM

A. Introduction

A consortium of municipal, county, state, and federal law enforcement agencies located in Maricopa County, Arizona initiated the Maricopa County Demand Reduction Program in March, 1989. Immediately it received widespread acclaim and high national visibility. Within six months, it was heralded as a success by DEA Administrator John Lawn (1989). When, in September, 1989 President Bush was asked how to fight a successful war against the casual drug user, he replied: "Go to Phoenix, folks. Take a look at what they're doing there." Soon thereafter, the program was profiled on national television network programs, including CBS's 48 Hours and Morning News, ABC's Primetime Live, and NBC's Today Show, and in the Wall Street Journal and other newspapers nationwide. Legislators, prosecutors, and police administrators have visited Phoenix to see for themselves the inner workings of this program which has captured the national spotlight.

A Task Force comprised of the head of each of the 26 participating agencies proposed ways to address "the escalating problem of illegal drug use" in the City of Phoenix and surrounding metropolitan area. A formal structure of Executive Committee and subcommittees developed (see Figure 2-1) and specific goals were identified. According to the Executive Committee, the mission of the Demand Reduction Program was to:

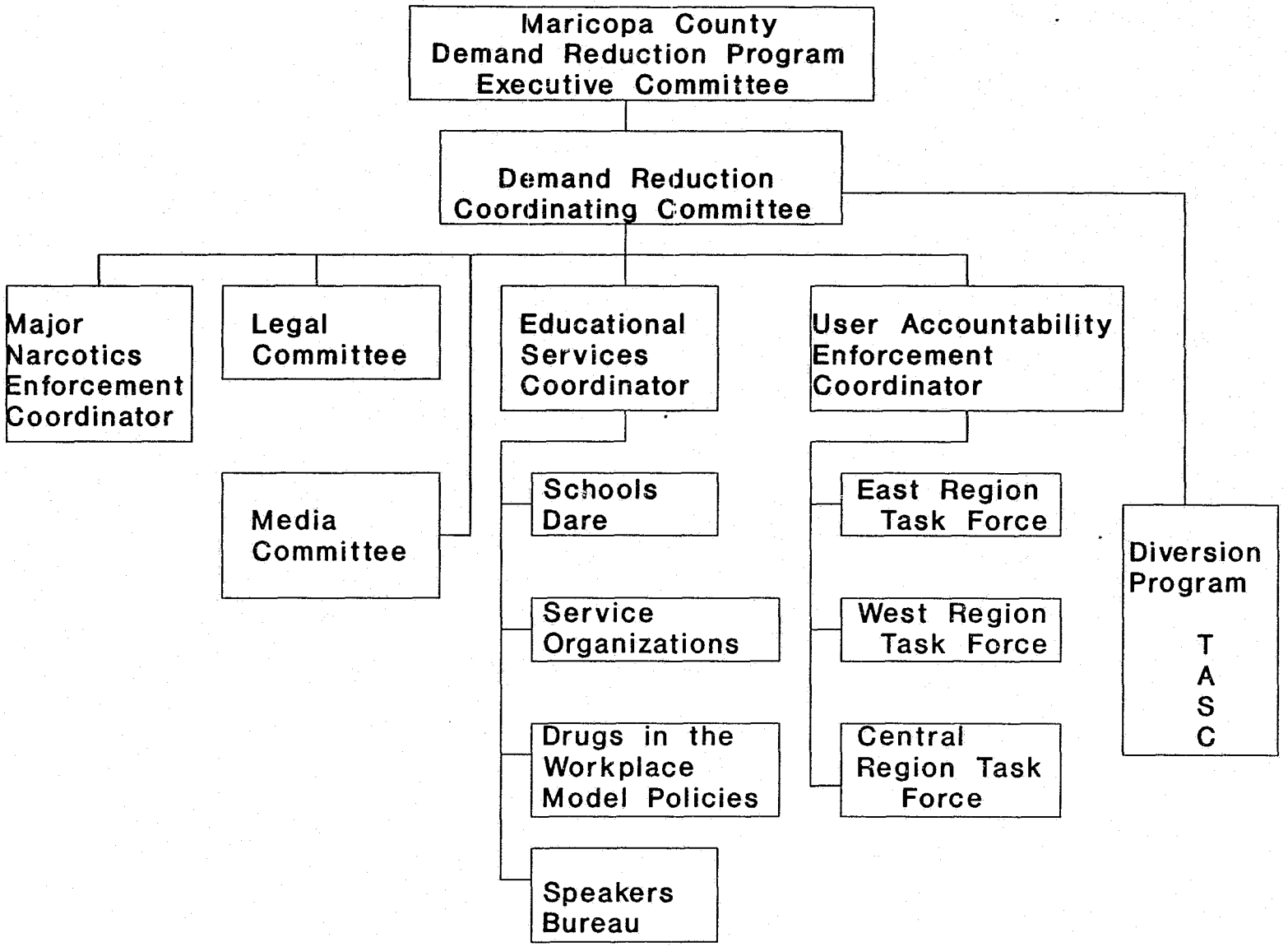
1. promote a wide, community-based commitment toward accomplishing the goal of a drug-free county;

2. increase public awareness of the consequences of illicit drug use;
3. assist public and private sector leaders in backing their commitment to a drug-free work place with effective action;
4. assist in the development and incorporation of educational programs;
5. participate in coordinated programs to identify and target illegal drug users for concentrated enforcement efforts; and
6. provide for low cost counseling and treatment opportunities for drug users.

The first four objectives strive to educate the general population and private sector employers to the fact that drug use is harmful and those who use drugs will be held legally accountable. The goal is to create a community-wide awareness of the severity of the problem -- to develop a moral consensus -- and to alert drug users to the increased risk of legal sanctions.

The final two objectives, in contrast, focus on the arrest, prosecution, and possible diversionary treatment of drug offenders. Here, the emphasis is on increased and coordinated law enforcement activities directed against individual offenders and on special treatment programs in lieu of prosecution. Together, they enlist the criminal justice system to achieve demand reduction via user accountability.

FIGURE 2-1
DEMAND REDUCTION PROGRAM ORGANIZATION



B. Do Drugs. Do Time

In Maricopa County, the message that users are subject to criminal penalty has been widely disseminated through the public campaign slogan "Do Drugs. Do Time." Depending wholly on private sector contributions of time, expertise, money and equipment, a major advertising campaign informs the public that casual drug users are the target of stepped up law enforcement efforts. Placards on city buses, billboards above major streets and highways, and televised public service announcements proclaim that persons who "do drugs" can expect to "do time." The examples included in Appendix B illustrate that this deterrent message is directed at the stereotypical casual or recreational users: white, young adults with a high level of education and a comfortable style of living.

The promise of the "Do Drugs. Do Time." warning may be fulfilled in several ways. At minimum, persons arrested for drug use are expected to spend at least a few hours in the county jail while they are booked and awaiting an initial hearing. It is hoped that the prospect of arrest, formal booking, and short confinement in a holding cell will be a sufficient sanction to deter many of the middle-class casual users targeted by this program. Since possession and use of even the smallest amount of illegal drugs are felonies in Arizona, "Do Drugs. Do Time." also implies that a period of incarceration awaits convicted users. Finally, even those offenders who are diverted to a treatment program can be seen as "doing time" during the 6-24 months they are under the supervision and surveillance of the treatment program.

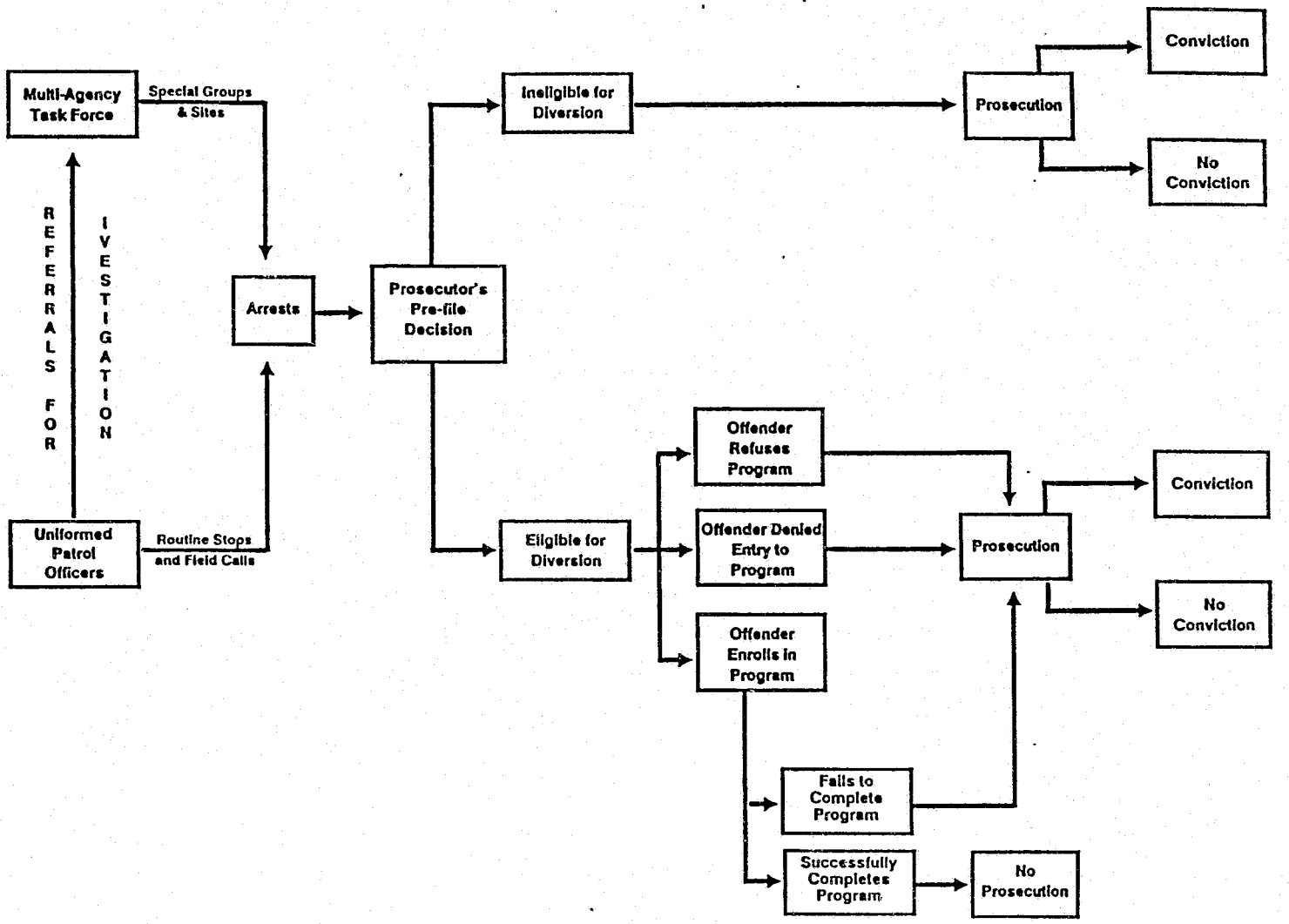
C. Program Components and Process

The user accountability program consists of four separate components, as illustrated in Figure 2-2. Two of these components are heightened law enforcement efforts; one is increased prosecution; and the fourth is diversion to treatment via the Adult Deferred Prosecution Drug Program. Increased enforcement by uniformed patrol officers is expected to result in increased arrests for drug use, as are the coordinated enforcement activities of the Task Force. These arrests, in turn, are assured greater prosecution efforts by the County Attorney. To minimize the added burden on the County Attorney's Office and on the courts, however, eligible offenders may be diverted from prosecution to a drug-specific treatment program.

Task Force Operations. A unique feature of this program is the formation of The Maricopa County Task Force, a committee representing the many law enforcement agencies found within Maricopa County. Each agency has one or more representatives on the Task Force, but the size is made more manageable by dividing the County and its many agencies into three regions: East, Central, and West. Each region has its own Task Force Commander, and these Commanders work with the Task Force Coordinator in obtaining the necessary assistance in personnel and equipment to carry out specific operations in their respective areas.

The Task Force coordinates and conducts two types of operations. One is the "reverse sting," used in an area of street-side drug sales activity. Drug sellers are arrested and replaced by undercover officers, and anyone attempting to buy

FIGURE 2-2
DEMAND REDUCTION PROGRAM: COMPONENTS AND PROCESS



drugs from these undercover officers is arrested. The second type of operation targets known sites of heavy public drug use (e.g., nightclub parking lots, rock concerts, and recreational areas) for surveillance and arrests. In either case, the operations are infrequent and sporadic events, but their high local visibility and media coverage are designed to publicly reinforce the "Do Drugs. Do Time" message.

Uniformed Patrol Officers. Uniformed patrol officers, who encounter the largest number of users through routine traffic stops and field calls, are the backbone of the Program. Officially, of course, full enforcement of drug laws has been the policy and practice for all uniformed patrol officers. Unofficially, however, the reactions of these officers are known to vary -- sometimes enforcing the law, sometimes confiscating the substance without filing charges against the offender, and sometimes just conveniently overlooking the infraction altogether. In general, the officers' practices are thought to reflect their view of the likelihood of prosecution, and arrests are unlikely when subsequent prosecution is unlikely.

In recognition of the crucial role played by uniformed patrol officers, each participating agency has directed its uniformed patrol force to take strong enforcement action against users encountered during the normal course of their duties, and patrol officers are assured that the County Attorney's Office will prosecute or divert each properly founded and documented case.

County Attorney. The Maricopa County Attorney's Office has

assured the law enforcement community that it will prosecute all offenders who don't qualify for, accept, or successfully complete the diversion program. Qualifications vary somewhat by the nature of the drug possessed, but their general purpose is to offer diversion to only casual users with no prior criminal history. For possession of marijuana, for instance, eligibility for diversion is limited to those offenders who do not have: (1) either a referral for any other felony charges or any other felony charges presently pending; (2) a prior drug or marijuana felony conviction; (3) a prior drug or marijuana misdemeanor conviction within the past year; (4) felony probation or parole status; (5) prior participation in a felony or misdemeanor diversion program; or (6) transient status.

Eligible offenders may reject the diversion program, but those who enter the program must agree to certain conditions. Random urinalysis tests are required, for example, as is attendance at all required seminars, lectures, and counseling sessions. Most controversial, perhaps, is the requirement that all offenders, other than those charged with possession of marijuana, must provide a written statement of facts admitting the instant offense and agreeing that this statement will be admissible in a court of law should the offender fail to complete the diversion program.

Adult Deferred Prosecution Drug Program. This TASC Program is designed to remove first-time felony offenders from the prosecutor's caseload and the court's calendar, and provide a community-based treatment program designed to reduce subsequent

drug use. There are four drug-specific treatment programs, which vary in duration, objectives, and methods used to achieve those objectives, but all involve some combination of random urine testing and an educational seminar and all but the program for marijuana possession involve some degree of individual or group counseling sessions.

In addition to meeting all requirements of the diversion program, successful completion requires full payment of all fees assessed the offender. Each offender booked and held at the County jail must pay a Jail House processing fee of $50. The offender also must pay an Arizona Drug Enforcement Fund fee which varies by drug type from $500 for possession of marijuana to $1200 for possession of cocaine. Finally, the offender is assessed a fee equal to the costs of the diversion program, which range from $135 for the 90-day possession of marijuana program to more than $1600 per year for the 12-24 month programs for either cocaine or illegal prescription drugs. A sliding schedule of fees is used for lower income offenders, and a total waiver of all fees is available for indigent cases. Because total fees may amount to $685 - $5000, as is illustrated in Figure 2-3, the payment of fees may be stretched over 24 months.

D. Public Opinion and Public Support

Local public opinion about drug use can not be attributed to the Demand Reduction Program. After all, public knowledge and opinions formed about drug use are influenced by a large number of local, national, and international events; by television and films; by nationally sponsored anti-drug public service

FIGURE 2-3

SCHEDULE OF FEES AND FINES PAID BY PERSONS DIVERTED TO TREATMENT *

	TYPE OF DRUG CHARGE			
	POSSESS MARIJUANA	POSSESS COCAINE	OBTAIN DANGEROUS DRUGS-FRAUD	OTHER DRUGS
OFFENDER PAYS:				
JAIL HOUSE FEE	$50	$50	$50	$50
AZ DRUG ENFORCEMENT FUND	$500	$1200	$750	$750-$1200 @
TREATMENT PROGRAM FEE	$135	$1595/yr	$1685	$805
TOTAL COST:	$685	$2485/$4080	$2485	$1605/$2055
PROGRAM LENGTH:	3-6 MOS.	1-2 YRS.	1-2 YRS.	1-2 YRS.

* ARIZONA DRUG ENFORCEMENT FUND AND TREATMENT PROGRAM FEES ARE WAIVED FOR PERSONS WHO MEET STATE STANDARDS OF INDIGENCY

@ ACTUAL AMOUNT OF FUND FEE VARIES BY TYPE OF DRUG.

announcements; by political rhetoric and political campaigns; and by a variety of other "messages" communicated almost daily. Yet, these publicly held attitudes are important because they provide a measure of the social context into which the program was introduced and of the general level of support for the objectives of the program.

In 1988, the Arizona Criminal Justice Commission conducted a statewide survey of adults in Arizona, asking respondents a short series of questions to determine their attitudes about the drug problem. Their responses serve as a crude baseline measure of the level of public awareness and concern prior to the Demand Reduction Program. A comparison measure of these citizen attitudes was then obtained as part of this evaluation when a survey of 393 adult residents of Maricopa County was conducted in January, 1990 -- fully ten months following the beginning of the Demand Reduction Program.

The 1990 poll revealed that citizen attitudes regarding drug use were very conservative. Of those surveyed, 88 percent felt that drug use was a "very serious" problem, 85 percent believed drug use was "very" or "quite" morally wrong, and nearly 90 percent indicated that drug use caused physical harm and psychological harm. Similarly, more than 90 percent of these respondents felt that drug use has a substantial negative impact on productivity at work or school, on safety in the workplace, and on family relationships.

It is apparent that there was a highly conservative consensus of public sentiment in early 1990. These attitudes,

however, appear to be no more conservative in 1990 than they were in 1988. In that 1988 survey, 86 percent of the respondents believed drug use was a "very serious" problem, and 84 percent agreed with the statement that youth involvement in drugs is a dangerous threat to our society. Table 2-1 reports the results obtained in each survey to five identically worded questions, four of which address the question of how drug users should be handled. Opinion is divided, although the 1990 survey finds a somewhat greater proportion of the population supporting medical treatment over law enforcement. Yet, there is little apparent difference between the two surveys in either choice of method to fight drug abuse or interest in legalization of drugs. In general, the responses to these items indicate a desire to retain current laws while attempting to address the problem from a variety of strategies. Finally, the majority of respondents in both surveys were willing to increase their taxes to wage war on drugs.

In summary, responses from the 1988 and 1990 surveys can not be used to gauge the effect of the Demand Reduction Program on public opinion. What we can conclude is that the Demand Reduction Program was introduced into a community whose attitudes about the severity of the drug problem and whose beliefs about the appropriate course of action were consistent with the program's philosophy, procedures, and goals. Demand Reduction was designed to expand the net beyond the drug seller and drug addict to focus on the casual drug user, and to address this offender group with a mixture of public education (via the media campaign), law enforcement, and selective treatment. The public opinion polls

TABLE 2-1
CITIZEN ATTITUDES ABOUT ILLEGAL DRUG USE,
1988 AND 1990[a]

Item	1988 %	1990 %
1. How serious a problem is drug use?		
a) very serious	86	88
b) somewhat serious	11	9
c) not serious	2	3
2. How should we handle people who use illegal drugs?		
a) arrest and prosecute	46	36
b) treat medically	46	56
c) leave them alone	3	4
d) don't know	5	5
3. Which method of combating drug abuse should receive the most money and effort?		
a) treatment and rehabilitation	14	14
b) arrest and prosecution	14	14
c) education and prevention	42	37
d) interdiction of supply	26	31
e) don't know	4	4
4. What should be done about the question of legalizing drugs?		
a) keep laws unchanged	73	70
b) legalize marijuana only	13	8
c) legalize some drugs	7	16
d) legalize all drugs	4	5
e) don't know	3	1
5. How much would you be willing to raise your taxes to fight the drug problem?		
a) no increase	24	33
b) $50 per year	50	47
c) $150 per year	NA	9
d) more than $150 per year	NA	7
e) $300 per year	10	NA
f) more that $300 per year	6	NA
g) don't know	10	4

a The 1988 Arizona Criminal Justice Commission study is a random-digit dialed telephone survey of 1009 adults in Arizona, stratified by county to ensure proportionate representation statewide. The 1990 Arizona Institute for Criminal Justice study is a random-digit dialed telephone survey of 392 adults in Maricopa County. Each survey was conducted by the Media Research Program of the Walter Cronkite School of Journalism and Telecommunications at Arizona State University.

supported this attention to the drug problem generally, and to the casual drug user specifically.

The 1990 poll also revealed that 85 percent of the Maricopa County residents had heard of the "DO DRUGS.DO TIME" program. Public opinion was so stable between 1988 and 1990 - and there was so little variation found in citizen attitudes toward drug use in 1990 - that the evaluation dropped plans to conduct a third survey in 1991 on the grounds that such a survey would be unlikely to show any changes since 1990.

Additional information about the social climate into which the Demand Reduction Program was introduced is available by reviewing the Arizona Criminal Justice Commission's 1988, 1989, and 1990 surveys of Arizona's high school students. Administered in the schools, the questionnaire sought the respondents' attitudes toward drugs and their level of drug use. A comparison of student responses in Maricopa County to select items, presented in Table 2-2, reveals a remarkable constancy during this three-year period with regard to drug use, approval of drugs, and perceived availability of drugs. These findings indicate that, despite the general availability of drugs reported by these students, most of the respondents indicate they have not used drugs in the past year. Indeed, very few of the students can be said to be "regular" or even "occasional" users of either marijuana or cocaine, perhaps because the level at which drug users are disapproved is uniformly high each year. As with the adult survey, the high school survey results suggest that the Demand Reduction Program was introduced into a community which

TABLE 2-2
HIGH SCHOOL STUDENT SURVEY RESPONSES,
A THREE-YEAR COMPARISON[a]

Item	1988 (N=8699) %	1989 (N=7887) %	1990 (N=5643) %
DRUG USE			
1. How many times have you used marijuana in the last year?			
a) 40 or more times	6	6	4
b) 10 - 39 times	6	6	6
c) 3 - 9 times	7	7	6
d) 1 or 2 times	9	8	7
e) have not used marijuana in the last year	72	73	77
	100%	100%	100%
2. How many times have you used cocaine in the last year?			
a) 40 or more times	2	2	1
b) 10 - 39 times	2	2	1
c) 3 - 9 times	3	2	2
d) 1 or 2 times	3	3	3
e) have not used cocaine in the last year	90	91	93
	100%	100%	100%
APPROVAL			
3. How do you feel about someone your age using marijuana (pot or grass)?			
a) approve	4	4	6
b) don't care	28	28	28
c) disapprove	22	22	22
d) strongly disapprove	40	41	40
e) don't know	6	5	4
	100%	100%	100%
4. How do you feel about someone your age using cocaine (snow, coke, crack)?			
a) approve	1	2	NA
b) don't care	13	14	14
c) disapprove	17	15	17
d) strongly disapprove	65	65	64
e) don't know	4	4	5
	100%	100%	100%

TABLE 2-2 (continued)
HIGH SCHOOL STUDENT SURVEY RESPONSES,
A THREE-YEAR COMPARISON[a]

Item	1988 (N=8699) %	1989 (N=7887) %	1990 (N=5643) %
AVAILABILITY[b]			
5. If you had enough money and wanted to buy marijuana, could you?			
a) Yes, easily	50	53	NA
b) Yes, with difficulty	7	9	NA
c) Maybe	15	14	NA
d) No, I wouldn't know where to go	28	24	NA
	100%	100%	100%
6. If you had enough money and wanted to buy cocaine, could you?			
a) Yes, easily	27	31	NA
b) Yes, with difficulty	12	12	NA
c) Maybe	20	21	NA
d) No, I wouldn't know where to go	41	36	NA
	100%	100%	100%

a Each state-wide survey was conducted by The Arizona Criminal Justice Commission. Only respondents attending high schools in Maricopa County are included in this analysis. The 1988 survey was conducted approximately six months before the Demand Reduction Program was initiated. The 1989 and 1990 surveys occurred late in the year, about 8 months and 20 months, respectively, following the initiation of the Maricopa County Demand Reduction Program.

b The 1990 survey did not ask the same availabilty questions as were used in 1988 and 1989.

had strong opinions against drug use.

E. Features of the Demand Reduction Program

In general, the Maricopa County Demand Reduction Program is characterized by five features.

First and foremost, this is a comprehensive program. Whereas many programs rely on a single approach, the Maricopa County program integrates education, law enforcement, and treatment into a unified campaign against casual drug use. Preventive education is targeted to schools, churches, and civic groups, and employers are singled out for special information about establishing a drug-free workplace. Attempts to deter drug use rely on placards, billboards, and televised public service announcements to spread the message that drug users are criminals who will be arrested and prosecuted, and by frequent media coverage of high profile Task Force stings and sweeps designed to reinforce this perception by the public. Deterrence also is the objective of increased law enforcement by uniformed police officers. Finally, treatment is available for those who meet the eligibility criteria.

Another feature is the complete participation of all law enforcement agencies in the affected area. Anything less than a united effort by all local police departments, it was felt, would send a mixed message to the community and may result in gaps in coverage, with a subsequent displacement effect on drug sellers and users. It also provides a singular voice and a unified program plan and creates a pool of personnel, equipment, information, and other resources designed specifically for this

program.

Third, the program is distinguished by a high level of community support. Public opinions favored increased education about drugs and tough actions against drug users. Local media provided support by extensive news coverage and favorable editorials. Most unusual, perhaps, is the high level of financial support received from the private sector, which provided more than $500,000 in donated time, equipment, and materials to produce and distribute the "Do Drugs. Do Time" posters and television announcements during the first nine months of the program. In 1991, the private sector prepared and financed a more narrowly focused "Put Drugs Out of Work" advertising campaign to promote a drug-free workplace.

Fourth, the Maricopa County program is aided by tough laws. In Arizona, any illicit drug use is a felony. Use or possession of even the smallest amount of marijuana, for instance, is a Class 6 felony (the lowest level), and anyone convicted of this offense may be sentenced to prison for up to 18 months and/or fined the greater amount of $750 or three times the value of the marijuana possessed. The threat of a felony conviction provides more latitude to the prosecutor and increases the likelihood that offenders will accept diversion to the treatment program.

A fifth feature is the program's ability to generate revenues to offset some of its financial costs (see Figure 2-4). Such funds are collected from only those who enter the diversionary treatment program, and then the amounts vary according to the offender's ability to pay. Nonetheless, during

FIGURE 2-4

MARICOPA COUNTY DEMAND REDUCTION PROGRAM

FEES COLLECTED, 1989-90 AND 1990-91

	YEAR 1	YEAR 2	TOTAL
ARIZONA DRUG ENFORCEMENT FUND	$399,831	$450,580	$850,411
COUNTY JAIL FEES	$ 17,808	$ 21,534	$ 39,342

the first twenty-four months of operation, a total of $39,342 was collected in Jail House processing fees and $850,411 was collected in the Arizona Drug Enforcement Fund. These funds are independent of the fees assessed to cover the costs of the user's participation in the treatment program.

Since data on the costs of the Program, as measured in terms of personnel and resources, are not known, we can not determine how much of the Program's costs are "recovered" by the fees collected. With the exception of the smaller sum of funds collected as Jail House processing fees, the Program "costs" to the agencies are not recovered at all: whereas the participating local, county, state, and federal agencies absorb the personnel and resources costs of the Program, the revenue generated by the fees paid to the Arizona Drug Enforcement Fund is placed in the general fund of Maricopa County.

F. Evaluation Strategy

The evaluation of the Maricopa County Demand Reduction Program does not assess the larger policy issues involved in making the decision to enforce drug laws. We do not examine, for example, arguments about what is the best approach to prevent and deter drug use or arguments about whether casual drug use is a crime serious enough to warrant special attention by the criminal justice system. Nor do we assess the wisdom of a "zero-tolerance" policy toward drug users or the decision of the Executive Board to establish the eligibility criteria for deferred prosecution is such a way that the option of treatment is not available to long-term, serious drug users.

This evaluation focuses on the ability of the Maricopa County Demand Reduction Program to meet its stated objectives. Was the Program implemented as designed? Did the operation of the program conform to the standards established by the Executive Committee? Did the Program result in significant changes in arrests, bookings, and prosecutions? Did decisions to defer prosecution pending TASC treatment adhere to stated eligibility criteria? What was the impact of the Program?

A quasi-experimental research design is used, employing repeated observations over time, to assess the impact of the Program on such factors as the volume of arrests; the percentage of cases formally booked; the proportion of cases accepted for prosecution; the use of deferred prosecution; and prosecution outcomes (Section IV). A detailed caseflow analysis is used to document the process by which cases enter and proceed through the Demand Reduction Program (Section V). Multivariate analyses are used to rigorously examine the determinants of prosecutorial decision making (Section VI) and recidivism (Section VII).

These analyses will provide a substantial evaluation of the implementation, operations, and impact of the Program. However, a definitive statement of the impact of the Program is not possible with this evaluation. In the absence of random assignment of some offenders to the Program (and others to some other routine procedure for case processing), and without thenrandomly assigning some of those in the Program to TASC treatment and some to be prosecuted, we can not determine how much of the observed "effects" or outcomes are due to the Program. Other factors --

factors outside the boundaries of the Program -- may be operating on the offenders and their behavior, such that their behavior may have changed even if they had not been a part of the Program or if they had not received the TASC treatment.

G. Summary and Conclusion

The concept and premise of "User Accountability" has been developed at the national level, but its survival depends on local implementation. The Maricopa County Demand Reduction Program contains a rather comprehensive and integrated user accountability program, and it illustrates the general principles and criteria of such a program. It has generated strong national and local support, and it has been heralded as a model for others to follow. Indeed, it has been called a success simply on the basis of the strong local support received, the large number of cases processed, and the high revenue generated. A more informed judgment of the program's strengths and weaknesses, however, requires a more detailed and critical evaluation.

III. POLICE IMPLEMENTATION AND SUPPORT

A. Introduction

The cooperation and participation of police departments in Maricopa County is critical to the success of the Demand Reduction Program. Since most arrests for drug use are initiated by uniformed officers, it is important that these officers understand and agree with the goals of the Demand Reduction Program and, consequently, that they take a strong enforcement stance whenever drug use violations are encountered. In addition, the program's success depends to some degree on the viability and effectiveness of the Task Force and its ability to target and apprehend identified groups of drug users. For these reasons, the evaluation of the Maricopa County Demand Reduction Program must begin with an examination of the police role.

B. Knowledge and Support by Uniformed Officers Knowledge of the program, support for its goals, and behavior consistent with those goals are essential elements in the implementation of the Demand Reduction Program. To assess the level to which this knowledge, support and behavior existed among uniformed officers, a two-wave survey was conducted. The methodology (discussed in Appendix C) called for the first wave in early 1990, approximately one year after the program was implemented. The second wave occurred one year later, shortly after the second anniversary of the program. Questionnaires were completed by 1,181 officers in 1990 and 1,216 officers in 1991, providing responses to a number of questions about program implementation among uniformed officers.

Program Knowledge. The most elemental level of program success requires at least that officers have heard of the program. Without such basic knowledge, the prospects for successfully meeting the ambitious agenda set out by the Demand Reduction Program would be slim. The results presented in Table 3-1 reveal that 79 percent of the officers indicated that they had heard of the program at the end of its first year of operation and that 84 percent had heard of the program by the end of its second year of operation. There were no systematic differences in program knowledge by police department. It is noteworthy that those officers who knew about the program were significantly more likely to feel that their own efforts in drug enforcement had increased. Knowledge of the program, then, is of particular importance in obtaining the desired enforcement efforts.

The data in Table 3-1 also indicate that only about half of the officers in 1990 and slightly less than two-thirds in 1991 had learned about the program from departmental sources. Publicity about the program was high throughout this period, and it accounts for the means of learning about the program by over one-fifth of the officers. Understandably, it is desirable that all officers receive the information directly from their supervisors. It also is desirable that officers receive the level of training or information about the program that is suitable for their needs. Yet, as the responses to the question in Table 3-1 reveal, less than half of the officers surveyed in 1990, and fewer than a fourth of the officers in 1991, felt the

TABLE 3-1
LEVEL OF UNIFORMED OFFICERS' KNOWLEDGE AND TRAINING

Item	1990 (N=1181) %	1991 (N=1216) %
1. Have you heard of the Maricopa County Demand Reduction Program?		
a) Yes	79	84
b) No	21	16
	100%	100%
2. How did you first hear about the program?		
a) Newsletter/briefing	37	44
b) Other Work Related Source	16	20
c) T.V. or Newspaper	18	15
d) Billboard	1	*
e) Commercial T.V., radio, paper	5	5
f) Other Source	4	4
g) None of the Above	19	11
	100%	100%
3. How good was the training/ information you received regarding the program?		
a) Detailed and Thorough	43	23
b) Sketchy & ineffective	28	42
c) None Received	29	35
	100%	100%

* less than 1%

information received was detailed and thorough. This change mirrors the increase between 1990 and 1991 in the percent of officers indicating that the training received was sketchy and ineffective. The findings suggest that a greater training effort was needed initially and that continued support for the program necessitates periodic reviews and reorientations to keep officers apprised of the program's operation.

This need for renewed training efforts is further underscored by the finding that officers who had received adequate training were more likely than other officers to report an increase in their own individual enforcement efforts and in the efforts of their department. Ostensibly, officers seek a consistency between their own behavior and that of their department. No measure was available to help understand why the negative evaluation of the training received was expressed. Perhaps the publicity and emphasis received by the program was so extensive that officers felt that the training they received initially was unsuitable for an effort which had garnered such attention and publicity. Whatever the reason, future training efforts for the Demand Reduction Program should be carefully examined and evaluated.

Program Goals. Table 3-2 reports the responses to four measures of support for the general goals of the Demand Reduction Program. The first of these revolves around the issue of overcrowded jails and prisons -- a local issue which had received substantial publicity -- and the effect of increased enforcement of drug laws on prison capacity. Nearly three-fourths of the respondents in each year agreed that programs like this are

TABLE 3-2
LEVEL OF UNIFORMED OFFICERS'
SUPPORT FOR PROGRAM GOALS

Item	1990 (N=1181) %	1991 (N=1216) %
1. Are programs like these needed because courts and prisons can't handle the large number of drug cases?		
a) Yes	73	71
b) No	27	29
	100%	100%
2. Do first offenders deserve the chance to be diverted from prosecution?		
a) Yes	71	69
b) No	29	31
	100%	100%
3. Do you feel treatment of casual users is as effective as prosecution?		
a) Yes	49	47
b) No	51	53
	100%	100%
4. Do you feel this program will help deter casual users?		
a) Yes	47	43
b) No	53	57
	100%	100%

needed to alleviate the crowded court dockets and prisons. Similarly, each year over two-thirds of the officers indicated support for diverting first offenders from prosecution and about one-half of the officers agreed that treatment of casual users is as effective as prosecution. Diversion to treatment as a dispositional alternative to prosecution seldom is popular among police, but in this case the use of diversion as an integral part of the Demand Reduction Program appears to have widespread support.

The final measure of support for program goals asked about the deterrent effect of the Demand Reduction Program. In a sense this question seeks their views about the central issue of the entire program; it asks about the program's effects on those drug users who are not arrested and either prosecuted or diverted to treatment. Their responses indicate that uniformed officers are uncertain about the deterrent effect of this program for casual users, with fewer than half believing that the program will have a deterrent effect. To the extent that one may wish for a much higher level of support among police for the program goals, these numbers may be disappointing. Yet, these figures may be viewed as being rather indicative of support for the program inasmuch as police tend to be rather pessimistic about most programs.

Enforcement Efforts. If uniformed officers are to fully implement the Demand Reduction Program, they must believe that their efforts will be supported by their supervisors and other law enforcement agencies. Accordingly, the survey asked respondents several questions designed to measure the officers'

TABLE 3-3
LEVEL OF ENFORCEMENT EFFORTS
REPORTED BY UNIFORMED OFFICERS

Item	1990 (N=1181) %	1991 (N=1216) %
1. Since the program began have you noticed any changes in how the Prosecutor's Office has handled drug cases?		
a) More Aggressive	20	23
b) No Change	74	66
c) More Lenient	6	11
	100%	100%
2. What effect has the program had on the actions of the prosecutor to divert eligible cases to treatment?		
a) Increased	16	27
b) Stayed the Same	78	70
c) Decreased	6	3
	100%	100%
3. Have you participated in task force operations as part of the program?		
a) Yes	12	16
b) No	88	84
	100%	100%
4. Have your own efforts in the drug enforcement area increased?		
a) Yes	19	21
b) No	81	79
	100%	100%
5. Have you increased your efforts to arrest users with small amounts of drugs in their possession?		
a) Yes	42	44
b) No	58	56
	100%	100%
6. Since the program began, has your department increased the attention paid to casual drug users?		
a) Yes	55	56
b) No	45	44
	100%	100%

TABLE 3-3 (continued)
LEVEL OF ENFORCEMENT EFFORTS
REPORTED BY UNIFORMED OFFICERS

Item	1990 (N=1181) %	1991 (N=1216) %
7. What has been the effect of the program on support from supervisors for small drug possession arrests?		
a) Increased	27	23
b) Same	72	75
c) Decreased	1	1
	100%	100%
8. What effect has the program had cooperation between police departments in the valley?		
a) Increased	34	40
b) Stayed the Same	65	58
c) Decreased	1	2
	100%	100%

perceptions of their efforts. The results reported in Table 3-3 indicate two overall patterns. First, most officers indicate little change in enforcement due to the Demand Reduction Program, but those changes which did occur are in a direction consistent with the program's objectives. Second, there was a remarkable stability in responses between the two waves of the survey.

When asked whether there had been any change in the handling of cases by the County Attorney, for example, most officers noted no change since the program began. When change was observed, however, officers were more likely to view the prosecutor's actions as becoming more aggressive rather than more lenient. Similarly, most officers indicate at each wave of the survey that their own efforts in regard to drug offenses have not increased. Yet, a substantial percentage of these officers report an increase of their efforts with regard to both drug offenses generally (about 20 percent) and drug users with small quantities (about 43 percent). In addition, the questions pertaining to supervisory or departmental support indicate that officers feel there is an increased level of departmental attention paid to casual drug users (about 55 percent) and supervisory support for arrests on the basis of possession of small amounts of drugs (about 25 percent). Finally, the Demand Reduction Program is viewed as having had a positive effect on inter-agency cooperation by over one-third of all respondents.

Police Effort and Attitudes: An Overview. Questionnaire items were used to construct four scales of attitudes (see

Appendix C) regarding (1) police effort, (2) inter-agency cooperation, (3) the harm involved in drug usage, and (4) support for diversion to treatment. The inter-relationships between these variables, particularly the relationship between effort and the three attitudinal measures, provide valuable insights into the importance of uniformed officers in the implementation of the Demand Reduction Program.

The correlation coefficients presented in Table 3-4 are based on only the data collected during the 1991 survey, in part because these are the most recent data and in part because we have failed to find systematic differences between the two surveys. Given the large sample size, it is not surprising that each of the correlations is statistically significant. What is of interest is the pattern of relationships that emerges.

The level of police effort is directly related to the level of inter-agency cooperation and support for treatment and inversely related to the perceived harmfulness of drug use. Clearly, these results suggest that the greater the acknowledged effort of the police agency to highlight the program and increase enforcement, the greater the inter-agency cooperation and the greater the support for treatment of users. This finding suggests that departments where program activity is greatest have managed to generate the greatest support for the program's goals.

The negative relationship of drug attitudes to each of the other scales is interesting. The more the officers view illegal drug use as physically and morally harmful, the greater their support for treatment and the less they perceive there to have

TABLE 3-4
CORRELATION MATRIX FOR SELECTED SCALES,
1991 UNIFORMED OFFICER SURVEY DATA

	COOPERATION	ATTITUDES TOWARD DRUG USE	SUPPORT FOR TREATMENT
Effort	.57**	-.11**	.20**
Cooperation		-.11**	.22**
Drug Attitudes			.06*

**Significant at .001
*Significant at .05

been an increased level of effort or cooperation to address the issue of drug use. This suggests that, at least for the extreme cases in which drug use is seen in absolutist terms, the program was not viewed as going far enough, or that alternatives to arrest and prosecution are unacceptable.

In summary, there appears to be a reasonable foundation of knowledge of and support for the program among uniformed police officers. The majority of officers were aware of the program, and most of them learned about the program through departmental sources. However, a deficiency was reported in the training many officers received. Although most officers perceived no increased levels of prosecution against casual drug users, a majority of officers felt that diversion of cases to treatment had occurred. Many officers also indicated they had increased their own enforcement efforts, and an even larger number felt that their department was making a greater effort in the enforcement of laws against casual drug use.

C. Task Force Operations

A small but highly visible role was delegated to the Task Force. These few representatives of the many police agencies in Maricopa County worked closely with representatives of the County Attorney's Office to plan and carry out sweeps of public and semi-public areas (e.g., recreational parks, festivals, concerts, sporting events and commercial parking lots) and drug-selling "reversals" at various drug-marketing locations. On two occasions, the Task Force served warrants on outstanding cases, thereby bringing persons previously arrested and charged back

into the system.

During the first two years of the program's operation, the Task Force conducted a total of 38 operations, producing a total of 730 arrests. Table 3-5 points out that these operations were nearly evenly divided between sweeps and reversals, with reversals accounting for a somewhat higher proportion of the total number of persons arrested by the Task Force. Almost half of all operations occurred in the Central region, accounting for more than half of all persons arrested by the Task Force. The number of operations in the East and West Regions is almost equal, yet there were more than twice as many arrests coming from the East Region as from the West Region.

Perhaps this variation in number of arrests reflects regional variation in type of operation conducted. The East Region conducted 5 sweeps and 4 reversals, the Central Region used more reversals than sweeps (10 to 7), but the West Region had twice the number of sweeps (6) as reversals (3). Since more arrests followed reversals than sweeps, the higher number of arrests found in the East Region, compared to the West Region, may reflect the greater use of reversals in the East Region.

Attempt to possess a narcotic drug is the most frequently cited charge, accounting for 41 percent of the 730 Task Force operation cases. Possession of marijuana also is common, representing 32 percent of all cases. The type of drug charge is related to the type of Task Force operation: sweeps account for 96 percent of all persons charged with possession, whereas reversals netted 99 percent of those charged with attempt to

TABLE 3-5
SUMMARY OF TASK FORCE OPERATIONS
MARCH, 1989 - FEBRUARY, 1991

	NUMBER OF OPERATIONS	ARRESTS N	ARRESTS %
OPERATION TYPE			
Sweep	19	308	42.2
Reversal	17	391	53.6
Warrant	2	31	4.2
	38	730	100.0
OPERATION REGION			
East	9	201	27.5
Central	17	397	54.4
West	10	77	10.6
Multi-Region	2	55	7.5
	38	730	100.0
CHARGE TYPE			
Possess Marijuana		234	32.0
Possess Narcotic Drug		78	10.7
Possess Dangerous Drug		15	2.0
Attempt-Possess Narcotic Drug		300	41.1
Sale/Offer for Sale		56	7.7
Drug Paraphernalia		7	1.0
Other Drug Charge		5	0.7
Non-Drug Charges		33	4.5
No Charges		2	0.3
TOTAL:		730	100.0
CASE OUTCOME			
Not Submitted to County Attorney		76	10.9
Submitted to Other Unit at County Attorney		71	10.2
Further	3		4.2
Turndown	16		22.5
File	41		57.8
Unknown	11		15.5
Submitted to Demand Reduction Program		552	78.9
Further	10		1.8
Turndown	85		15.4
File	154		27.9
Divert TASC	303		54.9
TOTAL:		699	100.0

possess, 82 percent of those charged with sales or offering for sale, and 82 percent of those charged with non-drug offenses.

The outcome of the initial reviewing decision for Task Force cases also is presented in Table 3-5. Since 31 of these were due to a roundup of persons with outstanding warrants, the analysis includes only the 699 cases which were originated by either a reversal or a sweep. Of these Task Force cases, 79 (or 11 percent) were not submitted to the County Attorney for review, and another 71 cases (or 10 percent) were submitted to another unit within the County Attorney's Office. Of the 552 cases submitted to the Demand Reduction Program, about 17 percent were turned down or returned for further information, 55 percent were referred to TASC for treatment, and 28 percent were filed on.

D. Summary and Conclusion

This evaluation has suggested that a crucial goal of the Demand Reduction Program has been achieved. Police officers report that they generally support the goals of this program and that they have acted in a manner consistent with those goals. To maintain the necessary support from uniformed officers, as well as to further institutionalize the program's principles and goals within local police departments, uniformed officers should receive (1) periodic information and training sessions regarding the program and (2) regular updates on the operations of the program and the outcome of cases submitted by that agency.

If the value of Task Force operations were based simply on the number of persons arrested and either prosecuted or diverted to TASC, this number could not justify the Task Force's very high

costs in time, resources, and personnel. But the value of the Task Force resides in its ability, especially when aided by local electronic and print media, to provide the requisite high-profile activities designed to alert the public that drug users are being legally sanctioned. Occurring at a rate of more than one per month, these operations are sufficiently frequent within, and geographically dispersed around, Maricopa County to achieve their intended purpose. In sum, Task Force operations are the visible personification of the "DO DRUGS.DO TIME." campaign.

IV. A TIME-SERIES ANALYSIS

A. Introduction

Before turning to the analysis of the internal operation of the program and the program's impact on individual client-users, it is helpful to use aggregated data to determine changes over time which may be attributed to the program. Our analysis relies on data, aggregated by month, for the 62-month period January, 1986 through February, 1991. Since the Demand Reduction Program was initiated in early March, 1989, this timeframe permits an analysis of the baseline patterns occurring during the 38 months immediately preceding the program's startup and any changes in those patterns during the first 24 months following implementation of the program.

Data were obtained from the Law Enforcement Justice Information System (LEJIS) for this sixty-two month period. Because the emphasis of the program is on drug users -- and more specifically on persons charged with drug use and no other, more serious felony -- this type of offense charge was distinguished from other drug offense charges. This analysis rests on four types of drug offenses, based on the criminal charges at the time the case is submitted to the Office of the County Attorney for prosecutorial review.

(1) "user, drug only" offenses: this group contains only those cases in which the offense at submission is simple possession or use of drugs and there is no other non-drug charge submitted simultaneously. This is the pure type for which the Demand Reduction Program is designed.

(2) "user, mixed charge" offenses: all cases in which the offense at submission is simple possession or use of drugs and there is at least one other charge for a non-drug offense, such as theft, assault, or prostitution. Offenses of this type may be eligible for the Demand Reduction Program, depending on the severity of the non-drug offense.

(3) "non-user, drug only" offenses: this grouping is comprised of all cases in which the charge at submission is for a drug charge other than use or possession, such as sale, possession for sale, or trafficking, and in which there is no other charge for a non-drug offense. Persons charged with drug sales and trafficking are not eligible for the Demand Reduction Program.

(4) "non-user, mixed charge" offenses: these are all cases which involve at least one non-user drug charge, such as sales and possession for sale, and one other charge for a non-drug offense. These cases are considered ineligible for the Demand Reduction Program.

Each of the four groups includes submitted cases involving a drug charge; combined, the four groups account for all cases submitted to the County Attorney's Office for drug offenses during the period under review. By including each of the four groups, we can examine the changes in the "user, drug only" group over time in the context of changes which may be occurring within the other types of drug offenses.

B. Trends in Drug Offense Enforcement

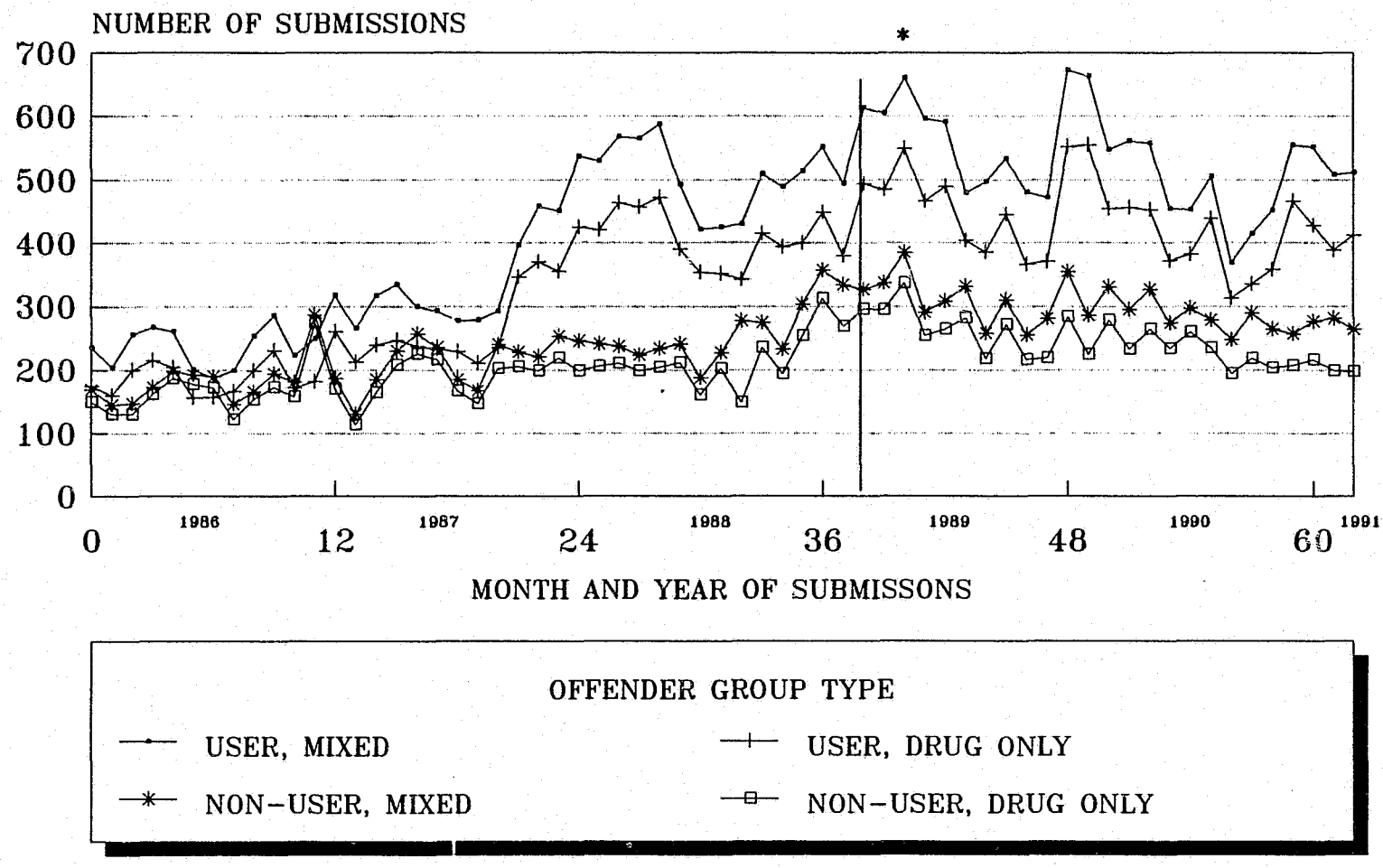
Changes in the monthly number of arrests submitted to the County Attorney's Office, by type of drug offense, are

illustrated rather dramatically in Figure 4-1. It is evident that the number of arrests submitted for the two user groups began to increase rather substantially in late 1987, receded in mid-1988, and then increased again in late 1988 and early 1989. This last surge occurred as the Demand Reduction Program was being finalized and formally and publicly implemented, in March, 1989. This increase was not sustained however, and by mid-1990 the number of submissions per month had decreased to a level approximately equal to that of mid-1988. Interestingly, this pattern of late-1988 surge and subsequent leveling in the user cases is also reflected, albeit at a lower level of volume, in the pattern of arrests for non-use drug offenses.

These data indicate that substantial law enforcement attention had been given to drug users well before the Demand Reduction Program was initiated. This increase in submissions in late 1987 and early 1988 corresponds to an administrative change at that time which shifted those cases charging possession of a small amount of illegal drugs from the Office of the City Prosecutor to the Maricopa County Attorney's Office.

The introduction of the Demand Reduction Program did not have a sustained effect on the number of arrests for drug use. The trend data point to a surge of submissions related to the advent of the program, actually beginning in late 1988 and continuing through mid-1989. After another brief increase in late 1989, the number of submissions returns to a level which is equal to or less than that which existed prior to the program.

FIGURE 4-1
TOTAL NUMBER OF SUBMISSIONS BY MONTH, BY
OFFENDER GROUP, JAN. 1986 - FEB. 1991



* MARCH '89 PROGRAM IMPLEMENTED

Figure 4-1 also suggests that the attention to the program in early 1989 had the unintended effect of increasing the number of submittals for non-user offenses. This increase among non-users (for both drug only and mixed cases) is partly a result of the sweeps and stings conducted as part of the program and partly a residue of the program's high visibility and call for strict enforcement of drug laws generally.

Figure 4-2 provides a breakdown of submissions by local law enforcement agency. Phoenix Police Department and the Maricopa County Sheriff's Office are the two largest agencies in the county, but while the former patrols the densely populated urban area of Phoenix, the later patrols the sparsely populated unincorporated, more rural sections of the county. Submissions from suburban police and other local agencies are combined to form the third grouping.

These data lead to four conclusions. First, the majority of all submittals originate in Phoenix. Second, the early increase in arrests of drug users was spearheaded by the Phoenix Police Department. The number of submittals from Phoenix more than doubles between 1987 and 1988, but the number of submittals from other agencies increases only slightly during that time. Given the administrative change which occurred in Phoenix at this time in how such cases were handled, it is not clear whether this increase represents a real increase in arrests or merely reflects a change in policy. Either way, it is evident that there is a reported increase in volume in Phoenix prior well before the Program. Third, the start of the program had no effect on the

FIGURE 4-2
TOTAL SUBMISSIONS BY DEPARTMENT, BY MONTH, FOR EACH OFFENDER GROUP

FIGURE A
SUBMISSIONS FOR USER, DRUG ONLY CHARGES.

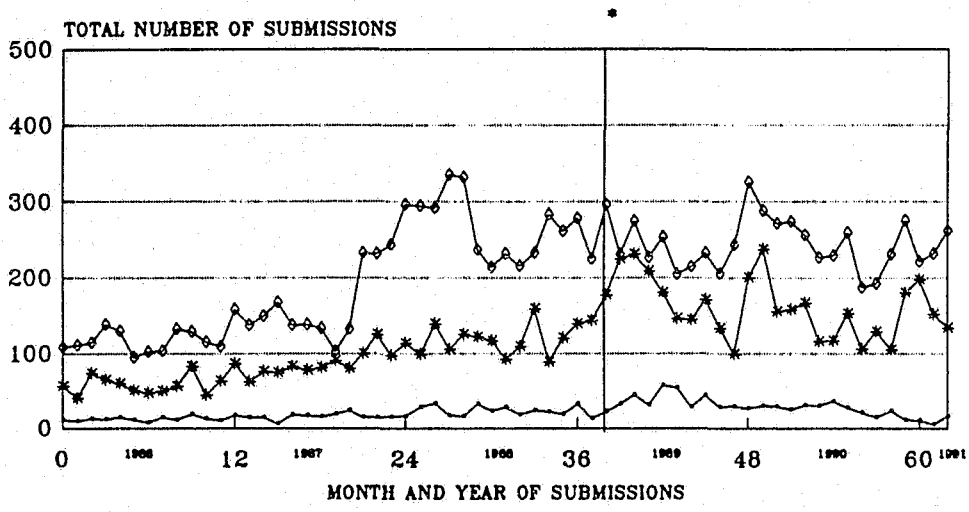
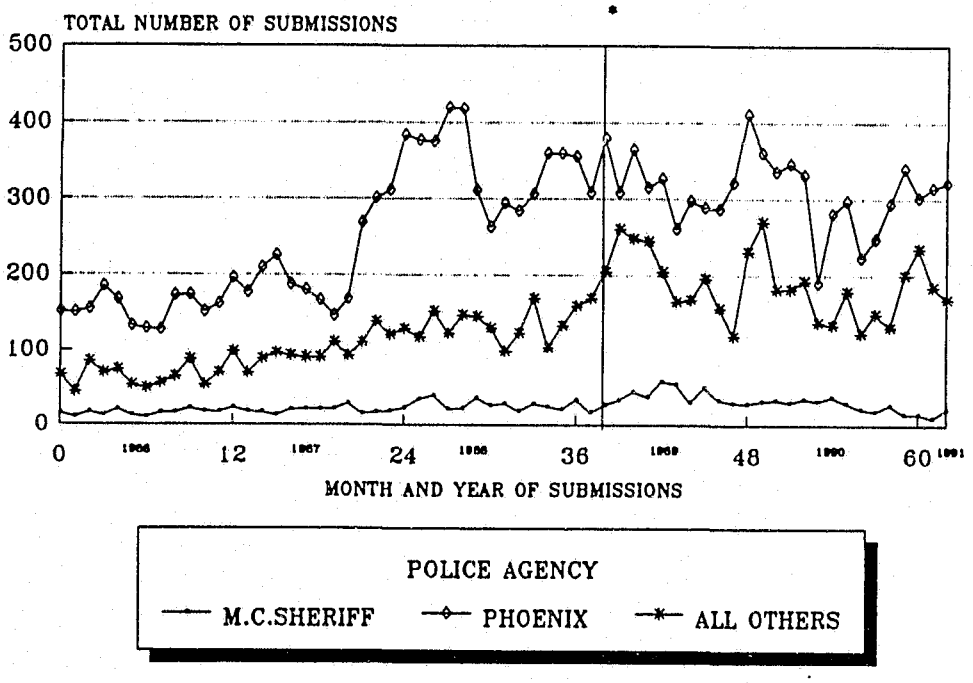


FIGURE B
SUBMISSIONS FOR USER, MIXED CHARGES.



* MARCH '89 PROGRAM IMPLEMENTED

FIGURE 4-2 (continued)
TOTAL SUBMISSIONS BY DEPARTMENT, BY MONTH, FOR EACH OFFENDER GROUP

FIGURE C
SUBMISSIONS FOR NON-USER
DRUG ONLY CHARGES.

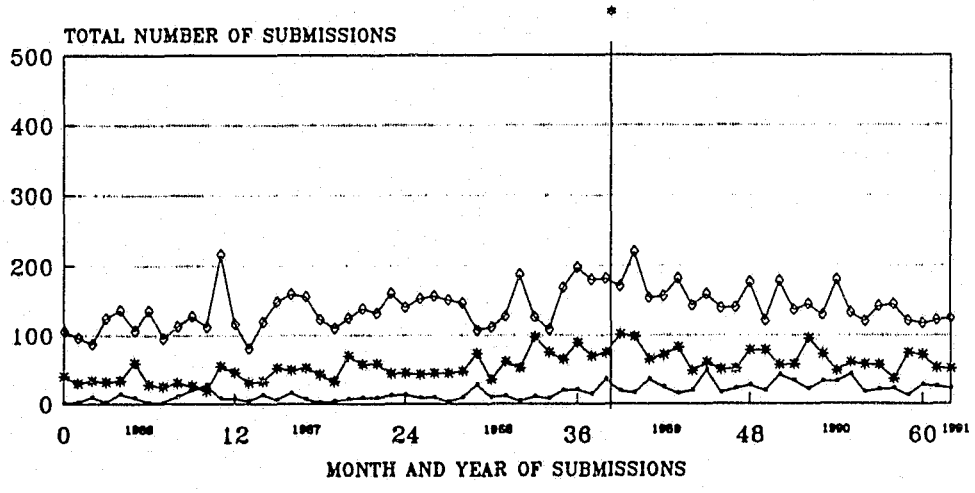
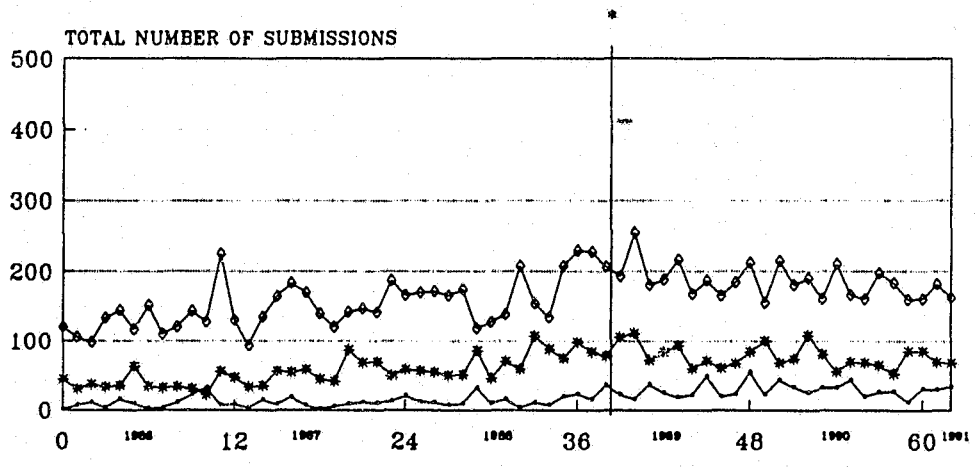
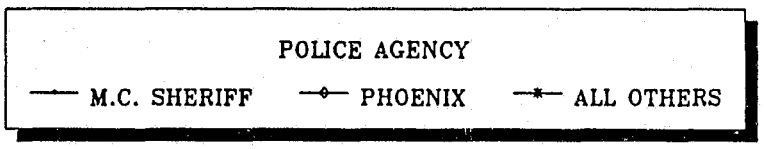


FIGURE D
SUBMISSIONS FOR NON-USER,
MIXED CHARGES.



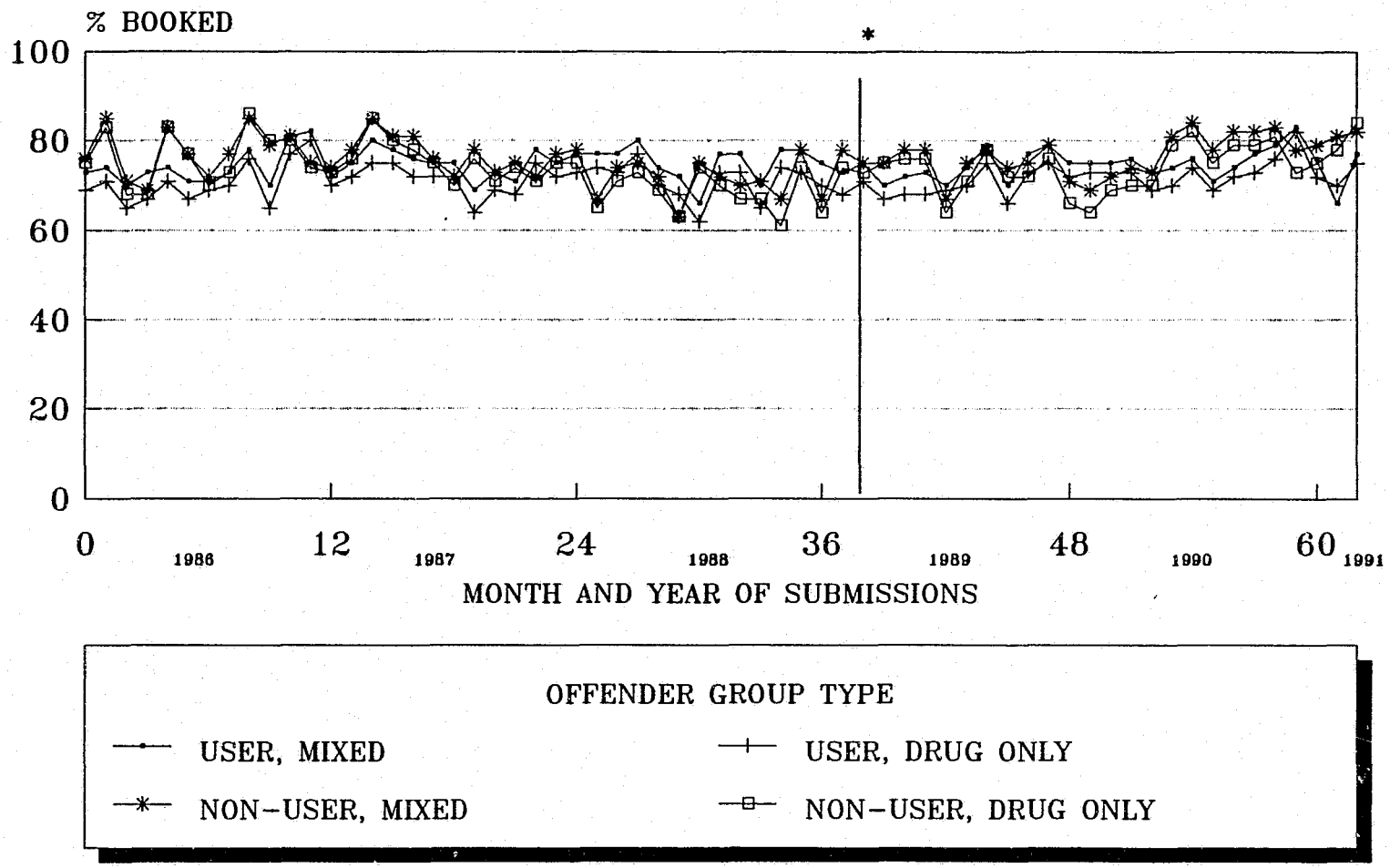


* MARCH '89 PROGRAM IMPLEMENTED

number of submittals for drug use offenses from Phoenix. In fact, there is a short-term decrease in submittals of user, drug only cases throughout 1989 and a longer-term decrease in user, mixed charge cases throughout 1989 and 1990. Fourth, there is a noticeable change in submissions from suburban agencies. There is a sudden and sharp increase in submittals of drug use offenses by suburban police agencies which begins at the time the program is implemented. This increase is not sustained, however, and the number of submissions among suburban agencies decreases to a level that, by 1990, is only slightly greater than its pre-program level.

The Demand Reduction Program assumes that each person charged with drug use will be officially booked by the County Sheriff's Office, which will result in a brief period of detention in the County jail. This "jail time" is part of the promise to DO TIME, even if only a matter of a few hours. It is hoped that the experience in jail will be a deterrent to continued drug use for some offenders, and anyone enrolling in the treatment program must pay a jail processing fee to compensate the Sheriff's office for the expenses involved in the booking. For these reasons, booking is integral to the program. Figure 4-3 reports the percent of cases each month which are formally booked. Somewhere between 70 and 80 percent of all cases are booked monthly, although drug user cases tend to be slightly less likely to be booked than non-user drug cases. What is noteworthy is the finding that there has been no change in the likelihood of a case being formally booked since the implementation of the program.

FIGURE 4-3
PERCENT OF TOTAL SUBMISSIONS BOOKED, BY MONTH, BY GROUP, JAN. 1986 - FEB. 1991



* MARCH '89 PROGRAM IMPLEMENTED

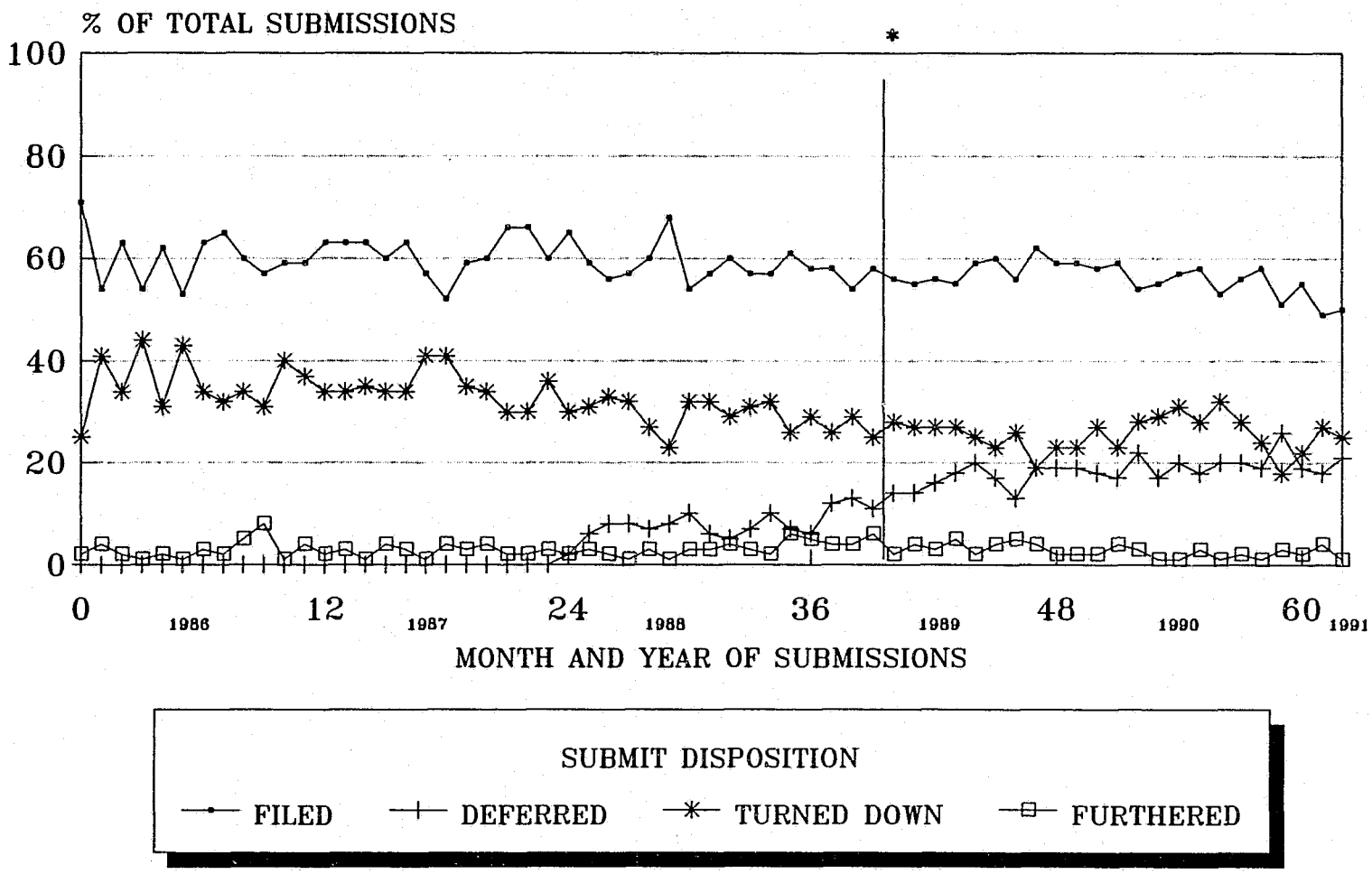
C. Trends in Prosecutorial Response

Figures 4-4 through 4-7 report the prosecutor's disposition of the cases submitted during this period, by type of offense grouping. Interesting trends appear in Figure 4-4, which reports the disposition of cases charged with drug use only. There is no change over time in the percent of cases which are "furthered," or returned to the police for further information or supportive evidence. The likelihood that the prosecutor's office will file charges and prosecute decreases slightly over this period, but the change is unrelated to the start of the program. A more dramatic decrease occurs in the percentage of cases turned down, declining from nearly 40 percent of all cases submitted in 1986 to less than 30 percent of all submissions in 1990.

These reductions in cases filed and cases turned down correspond with the advent and use of a diversion program. When begun in 1987, the diversion program accepted only possession of marijuana cases. It quickly leveled off at about 10 percent of all submittals, but then increased as deferred prosecution was extended through the Demand Reduction Program to a broader group of cases. Since the end of 1990, about 20 percent of all cases submitted to the County Attorney are diverted to treatment.

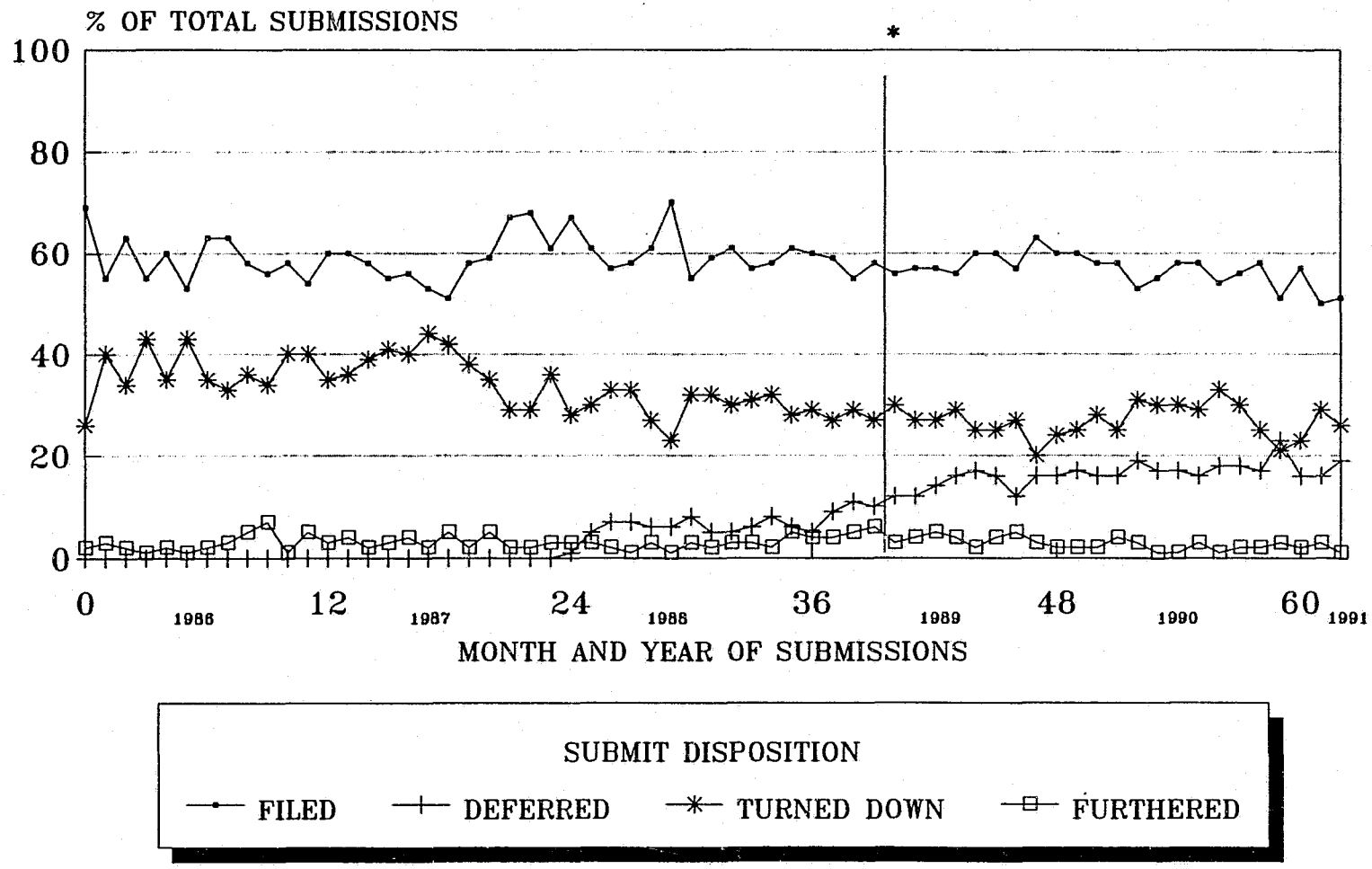
This pattern also occurs in Figure 4-5, which charts the outcome for user cases with other charges. Over the observation period, there is a gradual and slight decrease in the percent of cases filed and a sharper decrease in the disposition by turndown. The use of diversion increases rapidly following program implementation.

FIGURE 4-4
SUBMISSION DISPOSITION, BY MONTH,
USER, DRUG ONLY CHARGES.



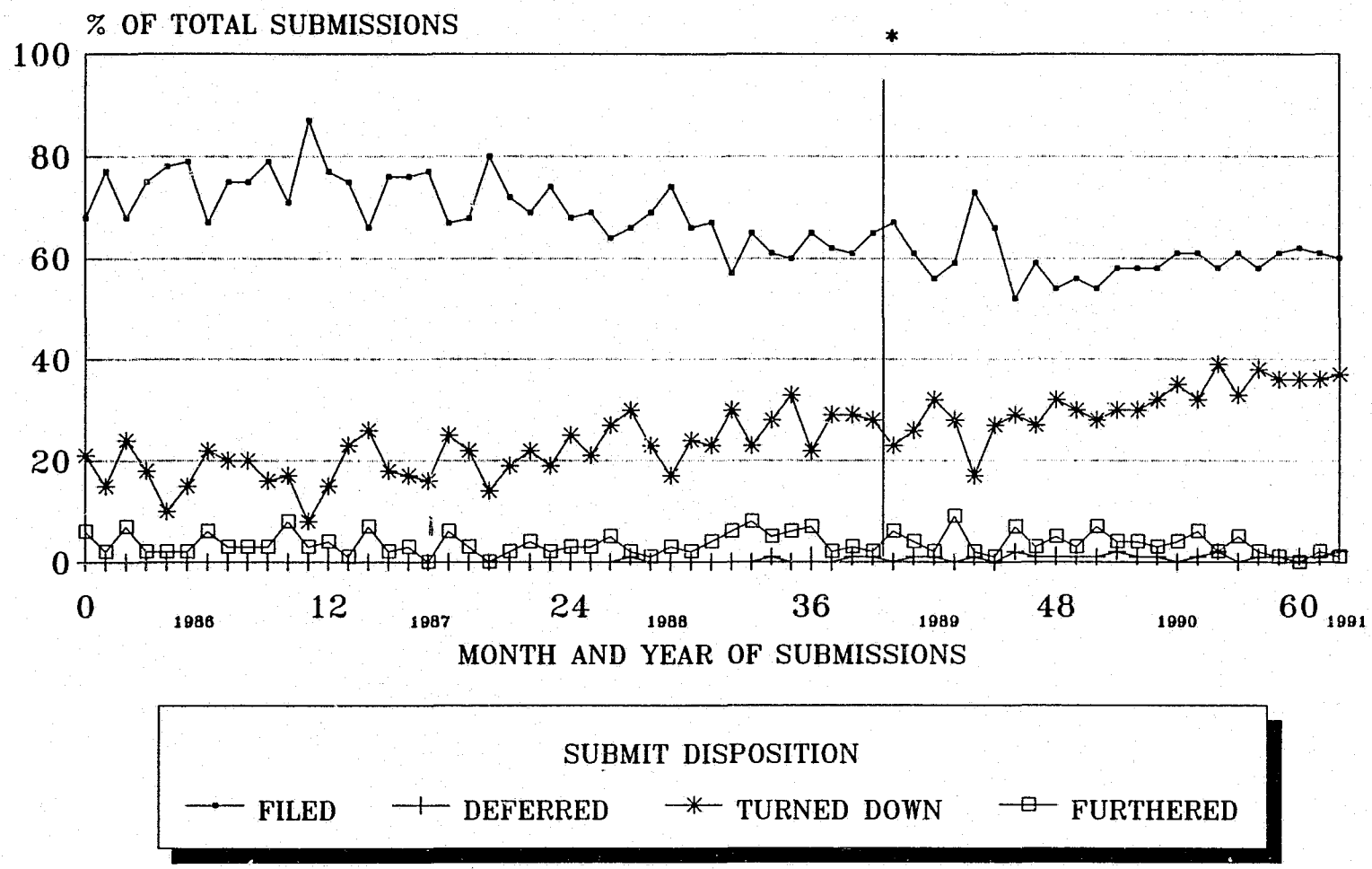
* MARCH '89 PROGRAM IMPLEMENTED

FIGURE 4-5
SUBMISSION DISPOSITION, BY MONTH,
USER, MIXED CHARGES.



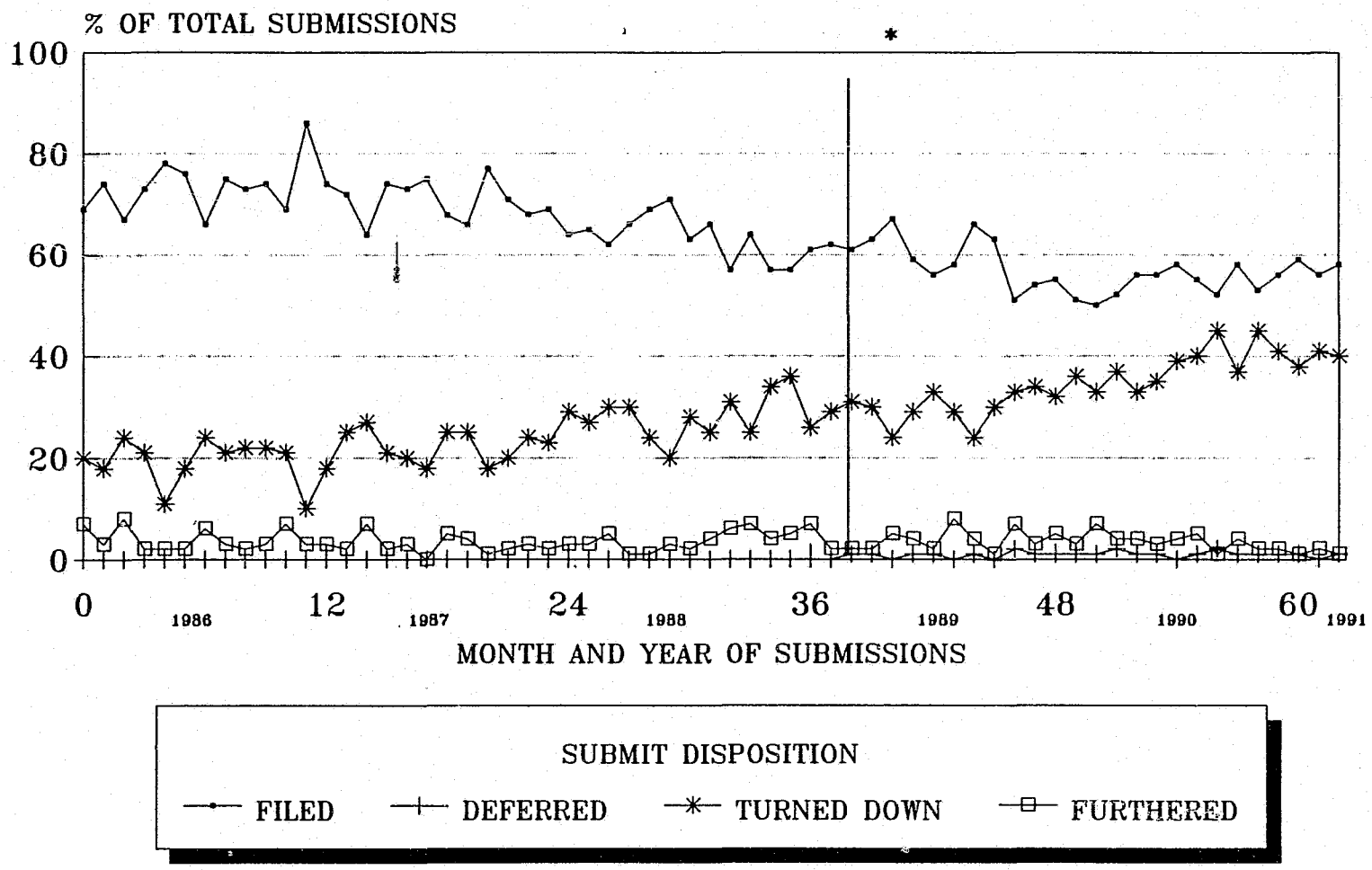
* MARCH '89 PROGRAM IMPLEMENTED

FIGURE 4-6
SUBMISSION DISPOSITION, BY MONTH,
NON-USER, DRUG ONLY CHARGES.



* MARCH '89 PROGRAM IMPLEMENTED

FIGURE 4–7
SUBMISSION DISPOSITION, BY MONTH,
NON–USER, MIXED CHARGES.



* MARCH '89 PROGRAM IMPLEMENTED

The patterns in cases filed and cases turned down observed in regard to drug use offenses become more interesting when contrasted to the trends among non-use offenses. At a time when durg use offenses show a steady-but-very slight decline in thepercentage of cases filed, drug non-user offenses show a steady-and-very strong decline in the percentage of cases filed. Similarly, the increase in percentage of cases turned down is greater among non-user cases than among user cases. In the absence of a deferred prosecution program for the drug offenders represented in the non-user cases, the pattern is one of a steadily increasing likelihood of a turndown and a corresponding decrease in the likelihood that charges are filed. The implementation of the Demand Reduction Program does not appear to be relevant to the pattern of prosecutor dispositions for non-user drug cases, however.

In reviewing Figures 4-4 through 4-7, two important conclusions are reached. First, at a time when the likelihood of filing charges decreased steadily and substantially for cases involving non-use drug offenses, there was only a slight decrease in the likelihood of filing charges in those cases involving the use of drugs. These trends, however, appear to be unaffected by the Demand Reduction Program. Second, the Demand Reduction Program affected the disposition of drug-use cases by providing an alternative to rejecting the case. Note that the Demand Reduction Program did not affect the likelihood of filing charges -- neither an increase that might be due to a "get tough" stance nor a decrease that might be due to the diversion of cases to

treatment. Instead, it is the percentage of cases turned down which is affected, as more of these cases begin to be diverted to treatment.

This effect of the Demand Reduction Program on drug user cases is better illustrated in Figures 4-8 and 4-9, which include data only for those cases which were not filed. For both user groups -- those with drug use only charges and those with both drug use and other charges -- there are four clear phases in the use of pre-file diversion to treatment:

(1) a sudden shift to pre-file diversion to treatment occurring in early 1988, when in only a few months such cases grew from none at all to a point at which they accounted for fully 20 percent of all cases not filed by the prosecutor's office;

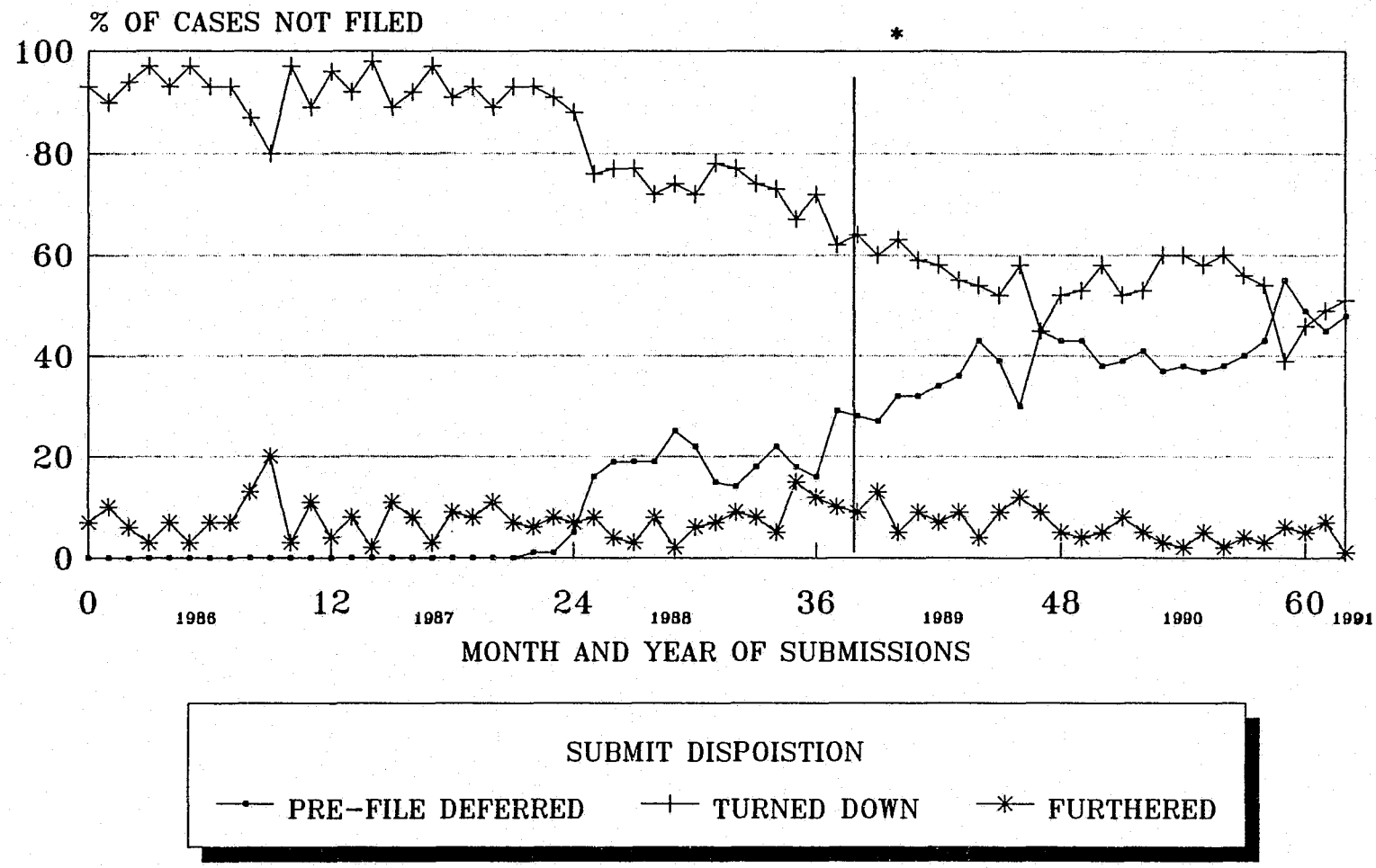
(2) a steady level of cases, approximately 20 percent, diverted to treatment, which exists until the end of 1988;

(3) the rapid growth between early 1989, when the program is about to begin officially (and has already begun operation informally), and late 1989, during which the percentage of not-filed cases which are diverted to treatment doubles to approximately 40 percent; and

(4) the period since 1989, when the near-40 percent level has been maintained.

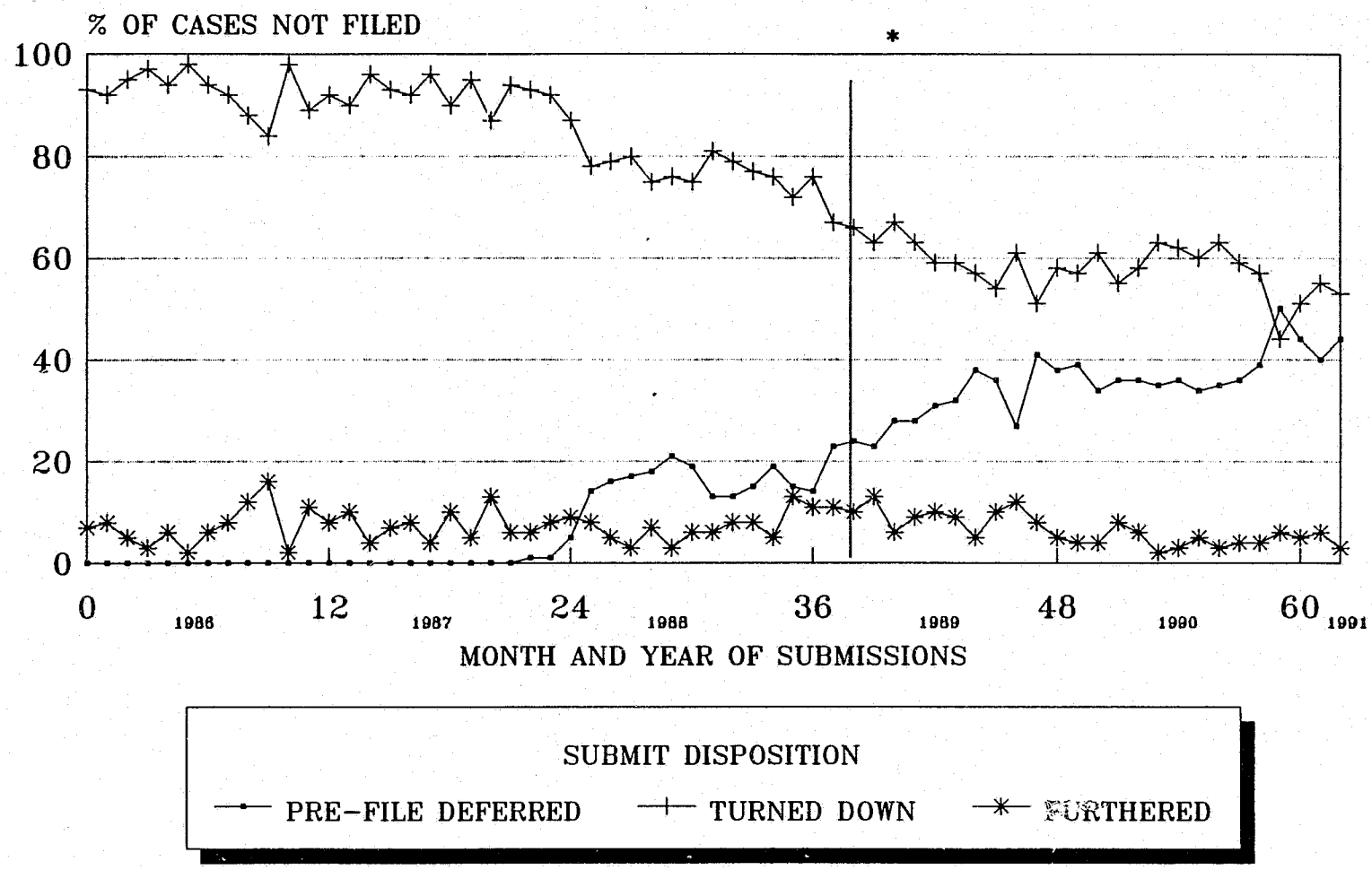
Since each of these increases is reflected in a concomitant decrease in the percent of cases turned down, it further suggests that these diverted cases came from the "pool" of cases that would have been turned down rather than from the "pool" of cases

FIGURE 4-8
PROSECUTOR DISPOSITION, CASES NOT FILED,
USER, DRUG ONLY CHARGES, BY MONTH.



* MARCH '89 PROGRAM IMPLEMENTED

FIGURE 4-9
PROSECUTOR DISPOSITION, CASES NOT FILED,
USER, MIXED CHARGES, BY MONTH.



* MARCH '89 PROGRAM IMPLEMENTED

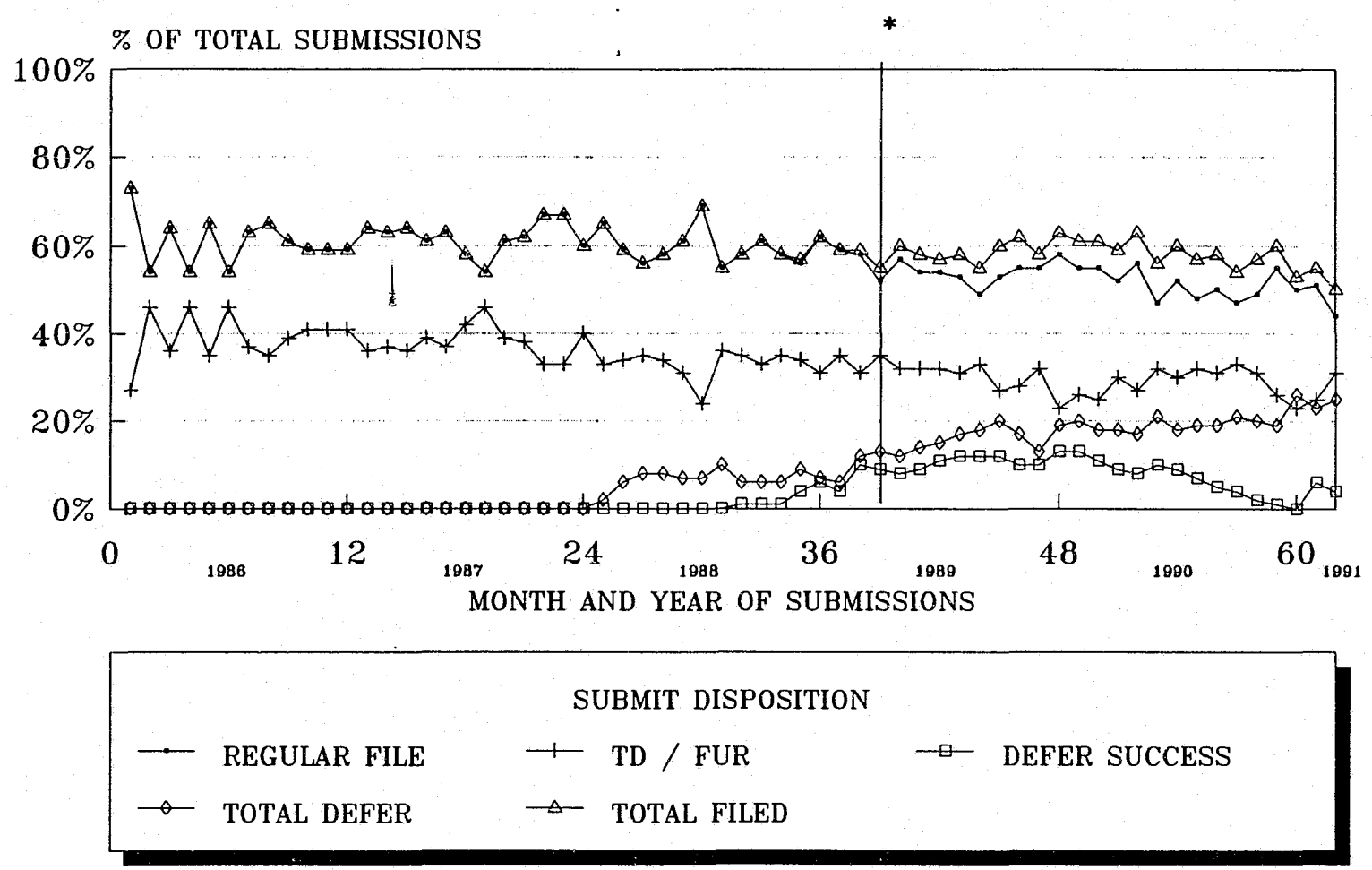
that would have been filed.

Further information about changes over time in the disposition of user, drug only cases and user, mixed charge cases is summarized in Figures 4-10 and 4-11, respectively. In these Figures, "regular file" cases are those that are filed upon submission because they are ineligible for diversion, and "total filed" represents the sum of the regular file cases and those cases filed after they first were awarded deferred prosecution pending successful treatment. Also, "total defer" is the total of all cases deferred at submission, whereas "defer success" consists of only those deferred cases which successfully completed tretment. Presumably, cases which are unsuccessfully deferred will then be filed on.

In Figures 4-10 and 4-11 it is apparent that the percentage of all cases which are deferred ("total defer") exceeds the percentage of all cases which are deferred successfully ("defer success"). A difference is not unexpected. But a cautionary note is needed to point out that the increased width of this difference in late-1990 and 1991 cases is an artifact of data collection: the difference between total deferred and successful deferred includes both failed cases and open cases, and the cases which were submitted and deferred during the end of the observation period were least likely to be closed at the time of final data collection.

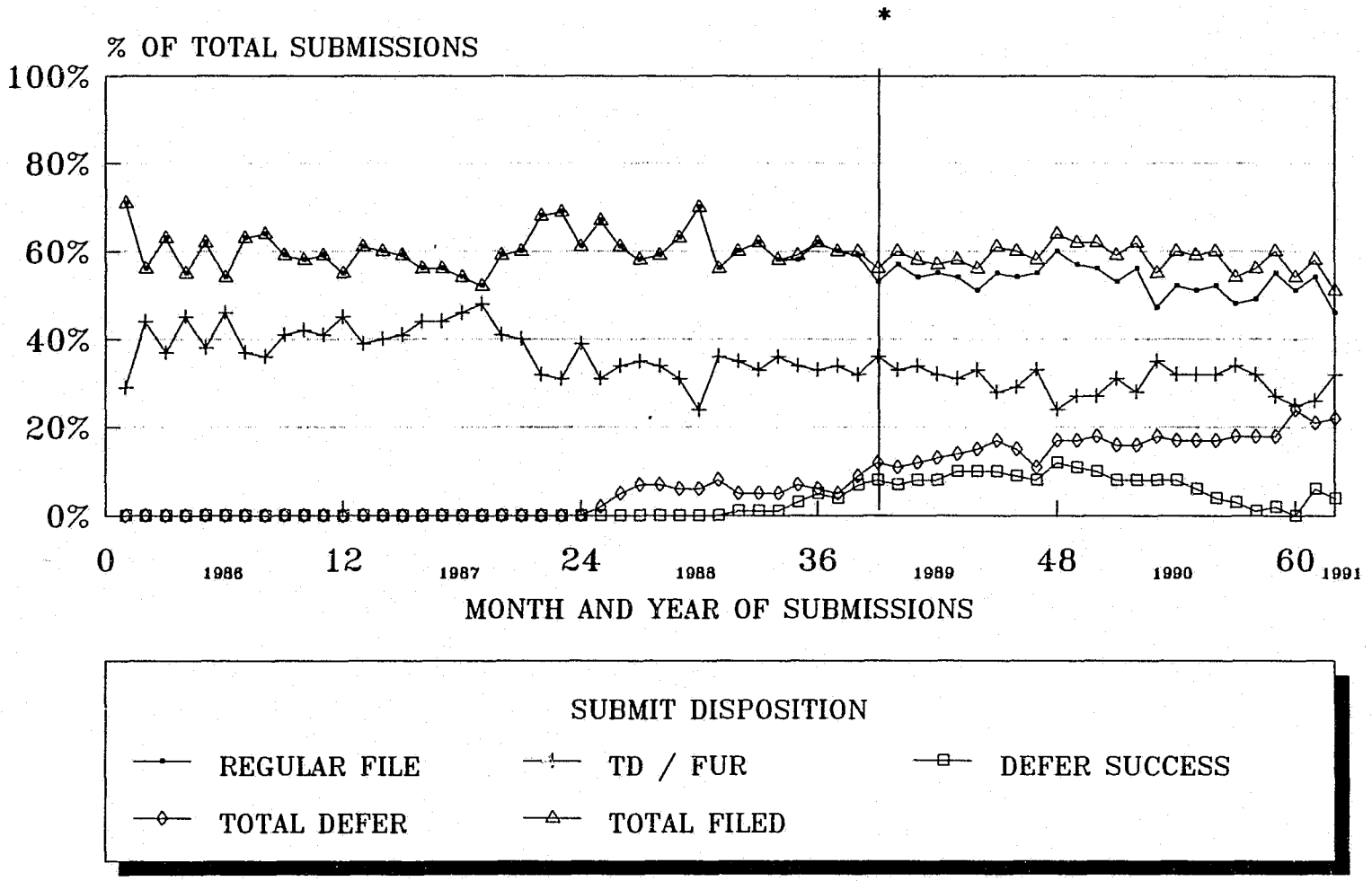
Since the time of program implementation, there is a small but substantial difference in the percentages of cases disposed by regular file and total file. This could not have occurred

FIGURE 4-10
SUBMISSION DISPOSITION, BY MONTH,
USER, DRUG ONLY CHARGES.



* MARCH '89 PROGRAM IMPLEMENTED

FIGURE 4-11
SUBMISSION DISPOSITION, BY MONTH,
USER, MIXED CHARGES.



* MARCH '89 PROGRAM IMPLEMENTED

before the Demand Reduction Program, when diversion occurred after charges were filed. Within the framework of the program, however, this difference indicates the degree to which charges are being filed on those cases which do not succeed in treatment. It is apparent that, while the total of all cases filed remains somewhat constant over time, there is a decline in the percentage of regular file cases since the program began. This decline in regular file cases, together with the decline in cases turned down, corresponds to the observed increase in the diversion to treatment.

Finally, Figure 4-12 examines the conviction rate for each offense type during this 62-month period. On the one hand, one might anticipate a higher rate of conviction due to the higher priority assigned to these cases. On the other hand, the increased number of cases and the retention of weaker cases in the system might produce a lower rate of conviction. Using only those cases which have been closed following prosecution (i.e., which terminate in either a "conviction" or a "no conviction"), the results indicate that the Demand Reduction Program has had little, if any, impact on the conviction rate by the County Attorney's Office. Apparent increases in early 1991 are discounted as an effect of the May 1, 1991 cut-off point for data collection, when the greater number of open cases undermine the reliability of the conviction rate data. There has been a rather steady rate of conviction for each of the four offender groups analyzed, wherein the County Attorney's office obtained convictions in 75-80 percent of both the user, drug only cases

FIGURE 4-12
CONVICTION RATE, BY MONTH, FOR EACH OFFENDER GROUP

FIGURE A
USER, DRUG ONLY CHARGES

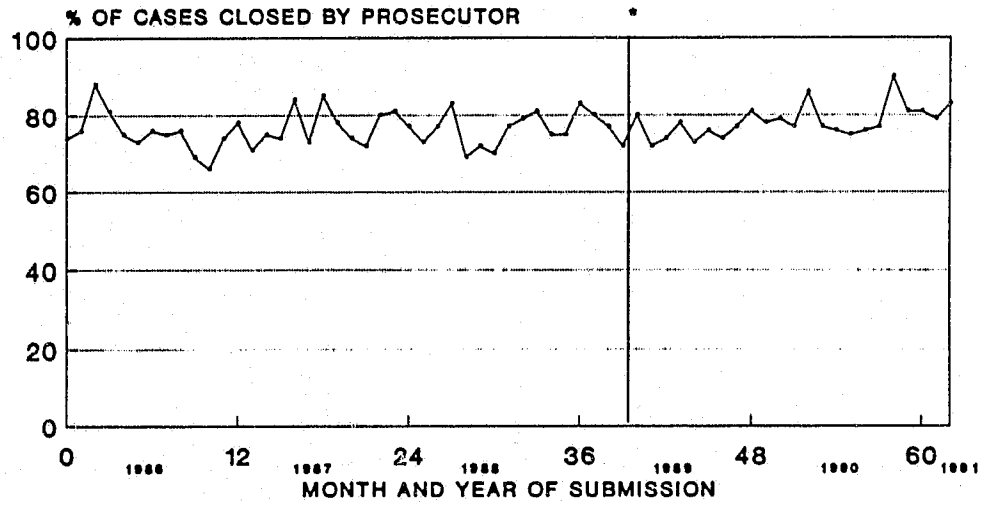
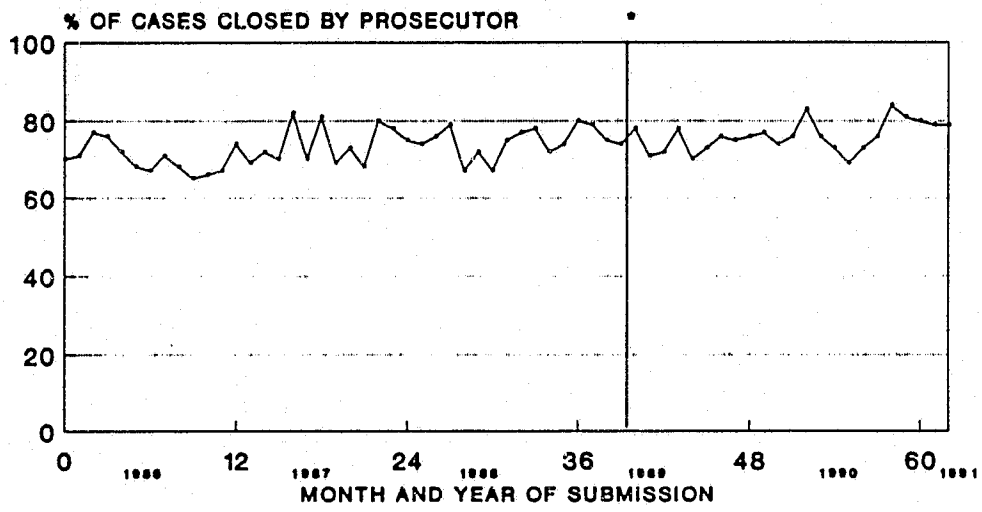
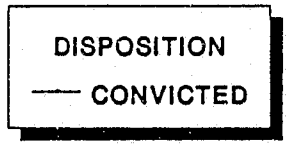


FIGURE B
USER, MIXED CHARGES





* MARCH '88 PROGRAM IMPLEMENTED

FIGURE 4-12 (continued)
CONVICTION RATE, BY MONTH, FOR EACH OFFENDER GROUP

FIGURE C
NON-USER, DRUG ONLY CHARGES

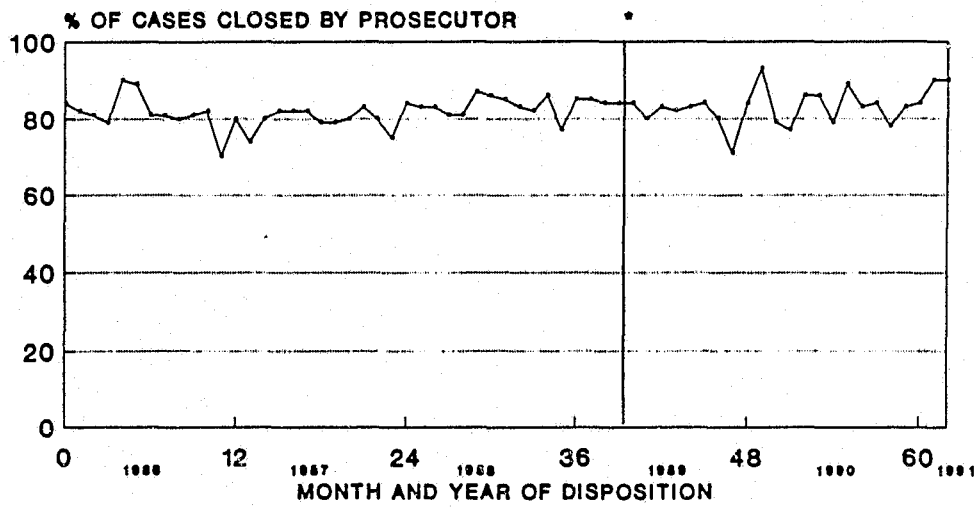
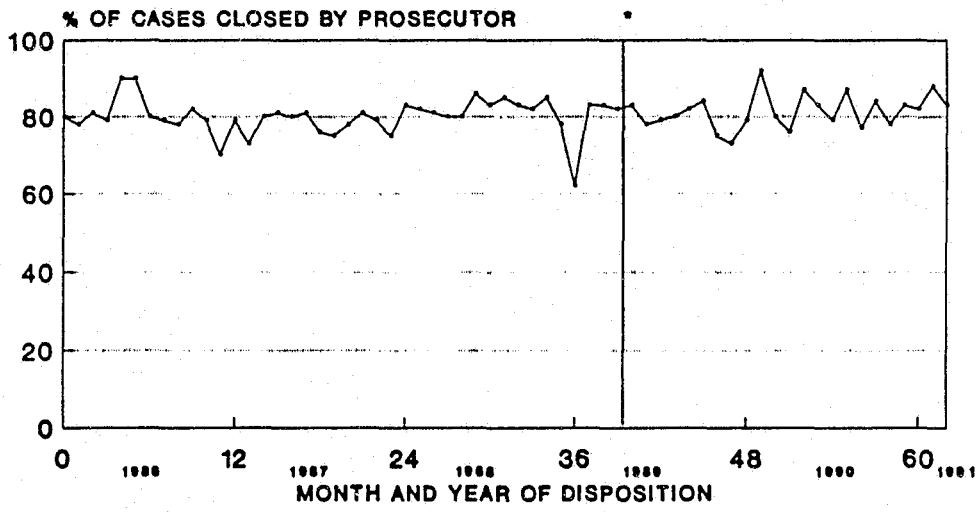
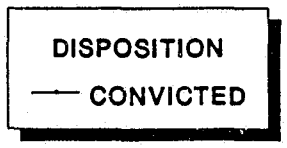


FIGURE D
NON-USER, MIXED CHARGES





• MARCH '88 PROGRAM IMPLEMENTED

and the user, mixed offense cases and 80-85 percent of both the non-user, drug only cases and the non-user, mixed offense cases.

D. Summary and Conclusion

This time-series analysis of aggregate data reveals important information about the effects of the Demand Reduction Program on the response to persons charged with offenses of drug use. A general conclusion from these trend data is that the only visible change which can be attributed to the Demand Reduction Program is an increase in the use of diversion to treatment for drug use cases. More specific conclusions are summarized below.

1. The number of arrests and submittals for drug use increased only slightly, and for a short period, as a result of the program. There was a substantial increase in arrests and submissions for drug use beginning in January, 1988, approximately 15 months prior to the program's implementation. There also was an apparent increase in submissions of all drug offense types for the first six months of the program, due largely to increases by suburban police agencies, but the number of submissions then returned to the lower, pre-program level.

2. There has been no visible increase in the likelihood that a drug use case (or any other drug involved case) will be formally booked. Nearly three-fourths of all cases are formally booked, but this proportion has not changed during the period under review.

3. The Demand Reduction Program has had little effect on the likelihood that charges will be filed in drug use cases. The proportion of all cases which are filed clearly has not

increased, as might be expected with a get tough stance. There does appear to be a slight decrease in the percentage of cases filed at initial review due to diversion to treatment, consistent with program goals. Yet, because charges are later filed on those deferred cases which do not complete the treatment program, the percent of all cases which eventually are filed on and prosecuted remains unchanged since the program was implemented. In short, there has been neither an increase nor a reduction in the percentage of drug use cases handled by the County Attorney's Office.

4. The Demand Reduction Program was consistent with the County Attorney's Office growing practice of deferred prosecution and referral to treatment. This practice began about one year before the program was implemented, but the program provided an institutionalized mechanism for handling such cases. The number of cases referred to treatment increased substantially due to the expanded eligibility criteria used in the program.

5. The program served to "widen the net" of the criminal justice system. The decrease in the percentage of cases filed on at submission suggests that some cases were truly being diverted from prosecution. Yet, the decrease in the percentage of cases turned down at submission suggests that many diverted cases would not have been retained in the system were it not for the diversion option. Since unsuccessfully deferred cases are to be prosecuted, the effect is to retain in the system cases which might otherwise have been turned down. The inclusion of these cases widens the net in terms of both the number and types of

offenders.

6. There is no apparent change in the conviction rate of drug offense cases due to the Demand Reduction Program. For each of the four offense types studied, the rate of convictions (versus no convictions) remains rather stable throughout the period examined. Consequently, it appears that any changes in the number or type of cases received did not affect the rate at which the cases are closed with a conviction.

V. PROGRAM IMPACT -- CASE PROCESSING AND OUTCOMES

A. Introduction

The evaluation of the operations and impact of the Maricopa County Demand Reduction Program uses cases initiated during the program's first twenty-four months, from March, 1989 through February, 1991. The unit of analysis is the individual person against whom criminal charges were submitted to, and initially reviewed by, the County Attorney's Demand Reduction Program office. These persons -- to be referred to herein as offenders as a matter of ease in communication rather than as a statement of guilt -- are included for study only if their arrest and initial prosecutorial review occurred during this 24-month period. Thus, we excluded from study those early cases in which the arrest occurred prior to March, 1989 -- perhaps months before the program was implemented -- but which were reviewed after the program was implemented. The analysis also excludes those cases wherein the arrest occurred prior to March 1, 1991 but was not submitted to the County Attorney's Office for review by this date.

Data collection was terminated on May 1, 1991. The result is a 26-month follow-up period for those cases submitted to the program soon after its implementation, but only a two-month follow-up for those cases submitted late in the observation period. For early cases, then, the evaluation can track their progress through the program over an extended period; for late cases, the brief follow-up period is long enough to learn the outcome of initial reviewing decisions but far too short to

learn of the final program outcome. Without a much longer interval before follow-up, there is going to be a substantial proportion of cases yet to be closed. This variation in time also must be taken into consideration in examining subsequent criminal behavior following entry to the program since the length of time "at risk" will vary considerably between early and late entrants to the program.

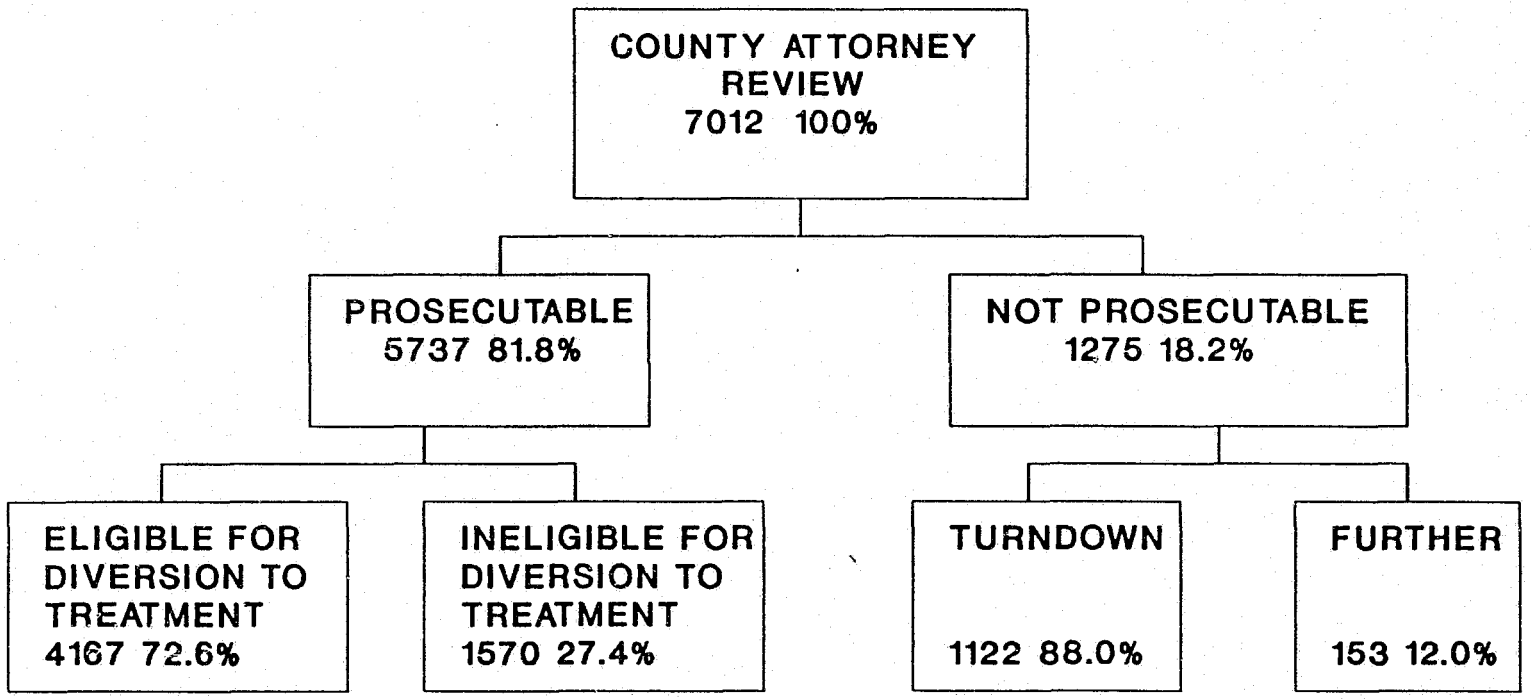
B. Prosecutorial Review

Within this timeframe, there were 7012 persons against whom criminal charges were submitted and reviewed by the Office of the Maricopa County Attorney as part of the Maricopa County Demand Reduction Program. Of these, 475 offenders, or fewer than 7 percent of the total, were arrested as a result of Task Force operations; all the others were brought to the attention of the Demand Reduction Program through routine law enforcement activities.

The information summarized in Figure 5-1 indicates the outcome of the initial review by the Office of the County Attorney. Of all cases submitted for review, fewer than one-fifth were rejected by the County Attorney's Office. When cases were rejected, they were overwhelmingly likely to be turned down rather than returned for further information. Cases were most likely to be rejected because, given the available evidence and the nature of the case, no conviction was likely (70.7 percent); another 21.5 percent of the cases were rejected on the basis of search and seizure and other legal issues; and 7.8 percent of the cases were rejected only to be referred out to another agency

FIGURE 5-1

INITIAL REVIEWING DECISION OUTCOMES, ALL CASES, MARCH, 1989 - FEBRUARY, 1991



* OUTCOMES EFFECTIVE MAY 1, 1991

(e.g., probation) or jurisdiction (e.g., city prosecutor). Among cases which were acceptable for prosecution, nearly three-fourths were eligible for diversion to treatment. These data suggest that the program was receiving sound cases of the type for which the program was designed.

Select offender and offense characteristics are presented in Table 5-1. The right-most column of Table 5-1 indicates that persons referred to the program tend to be male, young, Anglo, and first offenders. As might be expected, the majority of the cases originated from the Phoenix Police Department, charged the person with a single count, and charged possession of either marijuana or cocaine.

A breakdown of offender and offense characteristics by reviewing decision outcome reveals important differences. Prior arrest record is a factor in determining eligibility for diversion to treatment, so it is not unexpected to find that cases referred to TASC contain a much higher percentage of first offenders than cases filed (78 percent versus 47 percent, respectively). Nature and history of drug use also is part of the eligibility criteria, which may account for the finding that those cases referred to TASC are much more likely to be charged with marijuana and much less likely to be charged with cocaine or another drug than those cases filed. Similarly, the TASC referrals have a fewer number of charges submitted. In addition, cases diverted to TASC are slightly more likely than cases filed to involve younger offenders and Anglos.

TABLE 5-1
OFFENDER AND OFFENSE CHARACTERISTICS,
BY REVIEWING DECISION OUTCOME

CHARACTERISTICS	REFER TO TREATMENT		FILE CHARGES		TURNDOWN/ FURTHER		TOTAL CASES	
	N	%	N	%	N	%	N	%
Gender								
Male	3381	81	1314	84	1057	83	5752	82
Female	786	19	256	16	218	17	1260	18
Age Group								
17 - 21	1019	25	205	13	294	23	1518	22
22 - 25	911	22	277	18	287	23	1475	21
26 - 30	1017	24	430	28	300	24	1747	25
31 - 40	983	24	531	34	319	25	1833	26
41 and Older	236	6	123	8	70	6	429	6
Ethnicity								
Anglo	2996	72	1029	66	813	64	4838	69
Hispanic	639	15	295	19	245	19	1179	17
African American	394	10	212	14	190	15	796	11
Other	138	3	34	2	27	2	199	3
Prior Arrests								
None	3234	78	735	47	834	65	4803	69
One	612	15	335	21	197	16	1144	16
Two or More	321	8	500	32	244	19	1065	15
Most Recent Prior Offense								
Drug	257	28	269	32	135	31	661	30
Property	340	36	306	37	160	36	806	36
Person	165	17	132	16	65	15	362	16
Other	171	18	128	15	81	18	380	17
Arresting Agency								
Phoenix P.D.	2427	58	1012	65	806	63	4245	61
County Sheriff	273	7	67	4	88	7	428	6
Mesa P.D.	301	7	121	8	45	4	467	7
Tempe P.D.	312	8	73	5	39	3	424	6
Scottsdale P.D.	77	2	18	1	22	2	117	2
Glendale P.D.	216	5	82	5	54	4	352	5
Other Agencies	561	14	197	13	191	15	949	14

TABLE 5-1 (continued)
OFFENDER AND OFFENSE CHARACTERISTICS,
BY REVIEWING DECISION OUTCOME

CHARACTERISTICS	REFER TO TREATMENT		FILE CHARGES		TURNDOWN/ FURTHER		TOTAL CASES	
	N	%	N	%	N	%	N	%
Offense Charged								
Poss. Marijuana	2746	66	758	48	613	48	4117	59
Poss. Cocaine	719	17	399	25	347	27	1465	21
Drug Paraph.	102	2	114	7	109	9	325	5
Other Drug	598	14	295	19	186	15	1079	15
Non-Drug Offense	2	1	4	1	20	2	26	1
Number of Charges Submitted								
One	2855	69	936	60	890	70	4681	67
Two	1106	27	475	30	329	26	1910	27
Three or More	206	5	159	10	56	4	421	6
Type of Secondary Charge								
None	2855	69	936	60	890	70	4681	67
Drug Only	947	23	442	28	285	22	1674	24
Non-Drug	303	7	161	10	84	7	548	8
Unknown	62	1	31	2	16	1	109	1

C. Processing Cases Toward Closure

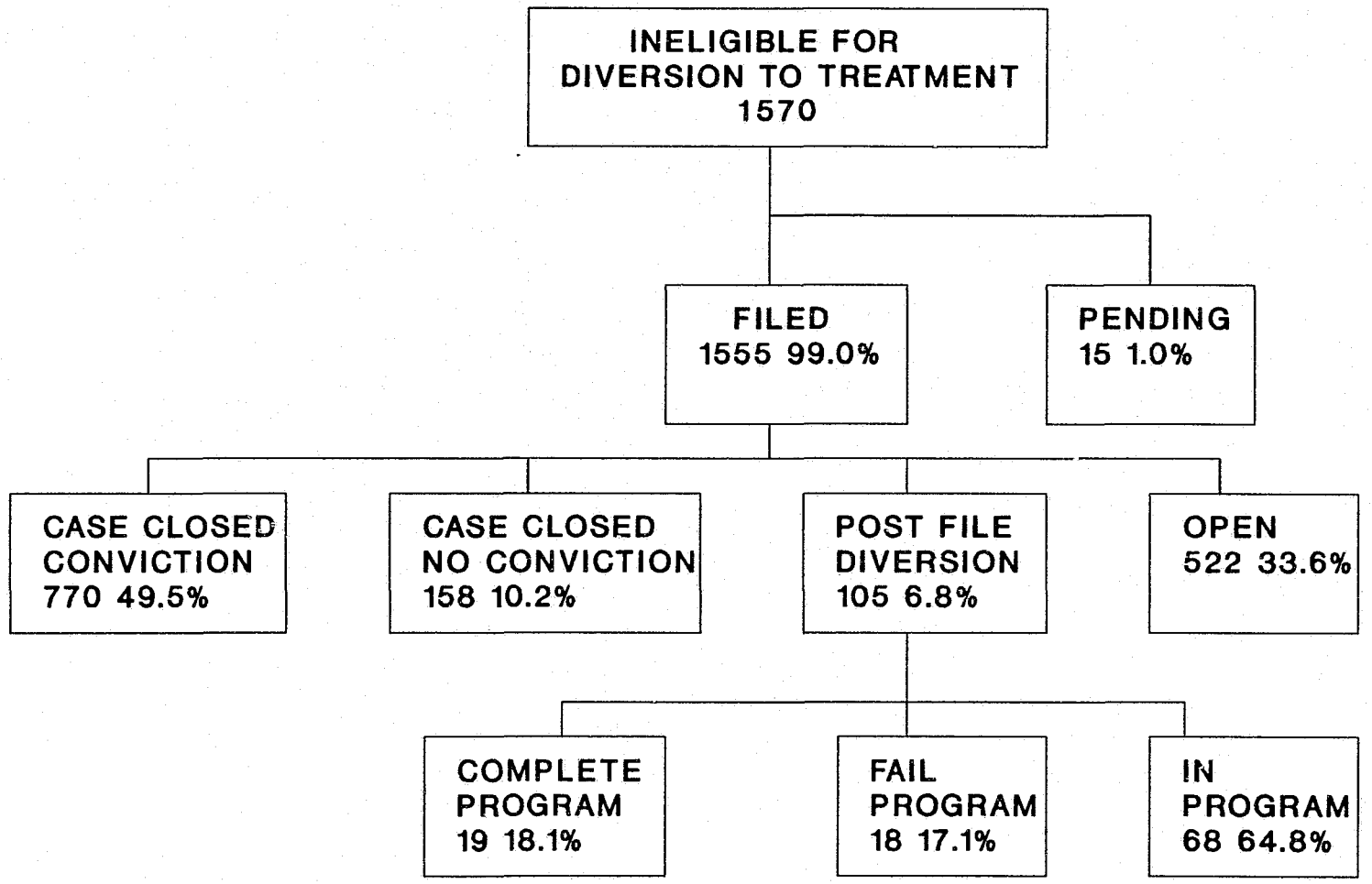
Figures 5-2 and 5-3 depict the flow of prosecutable cases through the Demand Reduction Program.The movement of those cases deemed ineligible for diversion is presented in Figure 5-2. Charges were filed in virtually every case, and only a few cases were allowed to enter the TASC treatment program thereafter. Although many cases remain open at the time of data collection, nearly 60 percent had been closed -- with a 4.9:1 ratio of cases closed with a conviction to cases closed with no conviction.

Figure 5-3 reports the movement through the program of those cases deemed eligible for diversion to treatment. It is important to note that, although nearly 73 percent of the prosecutable cases are eligible for diversion, only 35 percent of those eligible accept the initial offer to be diverted to treatment. That is, only 1452 (or about 25 percent) of the 5737 prosecutable cases are both eligible for and accept the offer of treatment. A very large number of cases which could have been handled by TASC do not leave the Office of the County Attorney.

Relatively few persons directly refuse the treatment option. It is far more likely that these eligible cases fail to enter TASC because they simply fail to respond to the letters of information about the diversion program sent by the County Attorney. Often, the accused simply receives the letter and dismisses it. Occasionally, the accused actively refuses to take delivery of the letters. In many cases, however, there is no response to the letter because police submittal forms provide incomplete or inaccurate information which results in returned

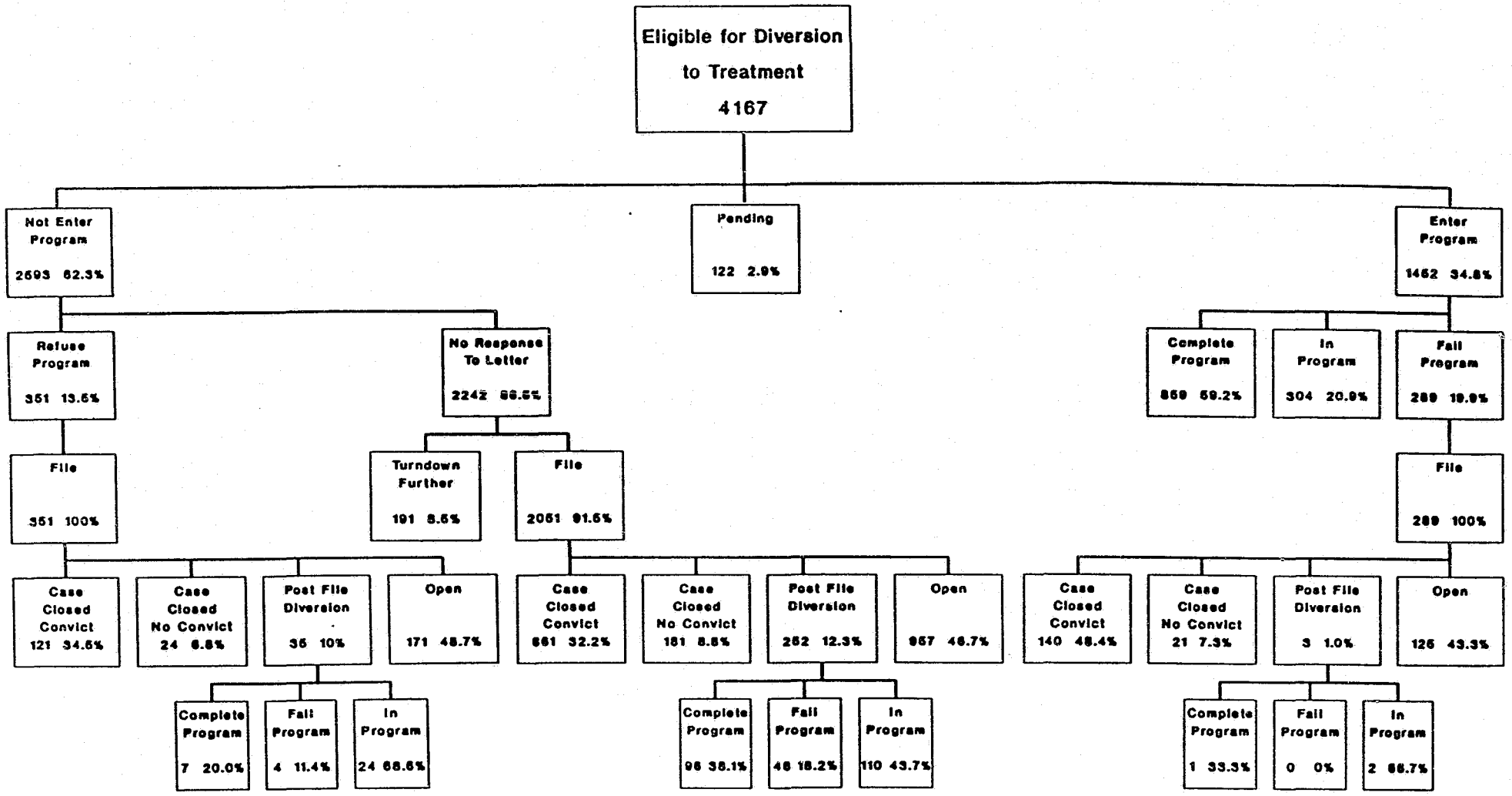
FIGURE 5-2

CASE OUTCOMES, INELIGIBLE FOR DIVERSION TO TREATMENT PROGRAMS, ALL CASES *



* OUTCOMES EFFECTIVE MAY 1, 1991

FIGURE 5-3
CASE OUTCOMES, ELIGIBLE FOR DIVERSION TO TREATMENT PROGRAM, ALL CASES *



* OUTCOMES EFFECTIVE MAY 1, 1991

letters designated as addressee unknown or no such address. Regardless of the reason for a failure to respond to the letters, these cases are then filed and warrants are issued. Until they are re-arrested, usually in connection with some other investigation, many of these cases will represent a substantial proportion of the "open" cases. They may be listed as filed and "in prosecution" but they are inactive cases.

Charges should be filed on <u>all</u> persons who fail to enter the diversion to treatment. They were not filed for 191 cases, virtually all of which occurred during the first six months of the program. These cases are rare, comprising only 8.5 percent of the 2242 cases which did not respond to the letters or 7.4 percent of all 2593 cases which failed to enter the program to which they have been diverted. Thirty-one of these cases were referred out, perhaps as an aid to prosecution of another case, but 34 were rejected on the basis of legal issues in criminal procedure and the remaining 126 were judged to be weak cases unlikely to result in a conviction. Of the 191 cases, then, all but 31 should have been turned down at initial review.

Offense and offender characteristics of treatment eligible cases are presented in Table 5-2. Compared to those who refuse TASC, those who accept TASC are more likely to be male, younger, and Anglo. Fewer of those who accept TASC have a prior arrest and, among those with a prior arrest, those who accept TASC are more likely to have committed a drug offense and less likely to have committed a property offense. Finally, those who accept TASC are much more likely to have been charged with possession of

TABLE 5-2
OFFENDER AND OFFENSE CHARACTERISTICS OF
TREATMENT ELIGIBLE CASES, BY RESPONSE GROUP

CHARACTERISTICS	ACCEPT TASC (N=1452) %	REFUSE TASC (N=351) %	NO RESPONSE TO LETTER FILE (N=2051) %	NO RESPONSE TO LETTER TURNDOWN/ FURTHER (N=191) %	TOTAL (N=2242) %
Gender					
Male	82	74	81	86	82
Female	18	26	19	14	18
Age Group					
17 - 21	28	18	23	25	23
22 - 25	19	24	23	22	23
26 - 30	24	25	25	23	25
31 - 40	23	27	24	22	23
41 and Older	6	6	5	8	6
Ethnicity					
Anglo	81	65	68	62	68
Hispanic	12	15	17	23	17
African American	5	15	11	11	11
Other	2	5	4	4	4
Prior Arrests					
None	86	75	73	70	73
One	10	17	17	20	17
Two or More	4	8	10	10	10
Most Recent Prior Offense					
Drug	33	17	26	38	28
Property	30	43	39	26	37
Person	19	23	16	15	16
Other	18	17	19	21	21
Charge					
Poss. Marijuana	75	50	63	60	63
Poss. Cocaine	12	26	19	14	19
Drug Paraph.	2	3	3	3	3
Other Drug	11	21	15	22	15
Non-Drug Offense	0	0	0	1	*
Number of Charges Submitted					
One	70	71	68	68	68
Two	26	22	27	28	27
Three or More	4	7	5	4	5

TABLE 5-2 (continued)
OFFENDER AND OFFENSE CHARACTERISTICS OF
TREATMENT ELIGIBLE CASES, BY RESPONSE GROUP

CHARACTERISTICS	ACCEPT TASC (N=1452) %	REFUSE TASC (N=351) %	NO RESPONSE TO LETTER TURNDOWN/ FILE (N=2051) %	NO RESPONSE TO LETTER TURNDOWN/ FURTHER (N=191) %	TOTAL (N=2242) %
Type of Secondary Charge					
None	70	71	68	68	68
Drug Only	23	21	22	22	22
Non-Drug	6	7	8	8	8
Unknown	1	1	2	2	2

* less than .5%

marijuana and much less likely to have been charged with possession of either cocaine or another drug.

Those offenders who do not respond to the letters also differ from those who accept TASC on important characteristics. Compared to those who do not respond to the letters, those who accept TASC are somewhat younger and more likely to be Anglo. They are less likely to have a prior arrest record and, if arrested previously, more likely to have been arrested for a drug offense. Offenders who accept TASC also are more likely than those who failed to respond to the letter to be charged with possession of marijuana.

Data presented in Table 5-2 also enables a comparison of select characteristics between those cases which failed to respond and were filed and those cases which failed to respond and were turned down or furthered. Filed cases appear to be only somewhat more likely to be male, Anglo, and with no prior arrests. Among cases with a prior arrest, filed cases were less likely to have a prior drug offense and more likely to have a prior property offense than those cases rejected for further prosecution.

The information summarized in Figure 5-3 reveals that "post-file diversion" to treatment is permitted for a small percentage of cases which did not enter TASC initially. Among those cases which had refused TASC as a pre-file diversion, 10 percent were diverted to TASC after charges were filed, over one-third were closed with a conviction, about 7 percent were closed with no conviction, and the remainder are unresolved at the end of data

collection. The case outcome of those who did not respond to the letter is similar: 12 percent were referred to TASC after charges were filed, 32 percent were closed with a conviction, 9 percent were closed with no conviction, and 47 percent remain open.

The right side of Figure 5-3 traces the flow of those cases which enter TASC initially. Of those who enter the treatment program directly, the ratio of success to failure is nearly 3 to 1. Charges are filed on those who fail TASC's program, and most cases which are closed have been closed by a conviction. A note of caution is warranted in discussing conviction rates. The observed conviction to non-conviction ratio varies somewhat by group: 5.0:1 among those who refuse TASC; 3.7:1 among those who do not respond to the offer; 6.7:1 among those who fail TASC; and 4.9:1 among those who were ineligible for TASC. Yet, it is likely that the greatest probability of conviction occurs among cases that are settled quickly. If so, then the large numbers of cases still open may, when eventually closed, be disproportionately closed with no conviction. That is, we should not assume that the likelihood of conviction for cases which require more time will be the same as for those cases closed quickly.

D. Treatment Outcomes

Offense and offender characteristics of those cases which enter treatment at TASC as a pre-file diversion from prosecution are presented in Table 5-3, grouped by case outcome at TASC. There is no apparent difference between those who succeed and those who fail by gender or age, but those who succeed are more

TABLE 5-3
OFFENSE AND OFFENDER CHARACTERISTICS
OF ALL PRE-FILE DIVERSION CASES TO
ENTER TREATMENT, BY TREATMENT OUTCOME

CHARACTERISTICS	OF CASES WHICH ENTER TASC: OPEN (N=304) %	FAIL (N=289) %	SUCCESS (N=859) %
Gender			
Male	79	84	82
Female	21	16	18
Age Group			
17 - 21	19	28	30
22 - 25	18	23	19
26 - 30	27	26	23
31 - 40	29	21	22
41 and Older	7	2	6
Ethnicity			
Anglo	81	71	84
Hispanic	12	15	11
African American	5	10	3
Other	2	4	2
Prior Arrests			
None	80	82	89
One	14	13	8
Two or More	6	5	3
Most Recent Prior Offense			
Drug	37	29	33
Property	23	31	34
Person	23	17	18
ther	17	23	15
Charge			
Poss. Marijuana	66	62	83
Poss. Cocaine	17	19	8
Drug Paraph.	1	3	1
Other Drug	16	16	8
Non-Drug Offense	0	0	0
Number of Charges Submitted			
One	64	68	73
Two	28	28	24
Three or More	8	4	3

TABLE 5-3 (continued)
OFFENSE AND OFFENDER CHARACTERISTICS
OF ALL PRE-FILE DIVERSION CASES TO
ENTER TREATMENT, BY TREATMENT OUTCOME

CHARACTERISTICS	OF CASES WHICH ENTER TASC		
	OPEN (N=304) %	FAIL (N=289) %	SUCCESS (N=859) %
Type of Secondary Charge			
None	64	68	73
Drug Only	27	25	21
Non-Drug	7	6	5
Unknown	2	1	1

likely to be Anglo -- and less likely to be minorities -- than those who fail. Those who succeed also have a higher percentage of first offenders who have been charged with only one count. A major difference appears with charge at arrest, with marijuana possession charged in nearly 20 percent more of the cases which succeed than in the cases which fail TASC.

One measure of the importance of the nature of the drug use in the outcome of treatment is gained from the information summarized in Table 5-4. Marijuana users were significantly more likely to be eligible for diversion than were users of other drugs, especially users of cocaine. Among those eligible for diversion, marijuana users were more likely than users of other drugs to enter the treatment program. Finally, marijuana users were more likely to complete the program they entered than were either cocaine users or users of other drugs.

This greater involvement and success among marijuana users may be due to various influences. One possible influence is a differential in the effect of the drug on its user: cocaine users become more intractable than marijuana users about entering and completing treatment because the two drugs have different effects on the user's ability to stay drug-free and to adhere to the rules and regimen of treatment. A second possibility is that the observed differences in program entry and success are due to differences in the two programs: the marijuana program is less expensive and of shorter duration than programs for other drugs, making it both a more attractive alternative to prosecution and an easier program to successfully complete. Perhaps both

TABLE 5-4
TREATMENT PROGRAM OUTCOME BY DRUG CHARGE,
PRE-FILE DIVERSION CASES ONLY[a]

	DRUG CHARGE					
	POSSESS MARIJUANA (N=4129)		POSSESS COCAINE (N=1470)		POSSESS OTHER DRUG (N=1076)	
	N	%	N	%	N	%
Of All Cases, Total Eligible for Diversion	2746	67	719	49	598	56
Of All Eligible Cases, Total Entering Program	1088	40	180	25	158	26
Of All Cases to Enter Program, Outcome:						
1) Complete Program	709	65	72	40	65	41
2) Fail Program	178	16	56	31	46	29
3) Open	201	19	52	29	47	30

[a] Outcomes Effective May 1, 1991

factors operate to explain the differences between marijuana users and users of other drugs.

E. Final Case Status

The importance of open cases becomes more evident in Table 5-5, which provides a breakdown of the final status of each case by the year in which the case entered the program. As expected, there are fewer open cases remaining from the first year than from the second year. Among prosecutable cases which had been closed by May 1, 1991, the ratio of conviction to no conviction outcomes is 5.9:1 among cases entering during the second year but only 3.8:1 among the cases entering during the first year. As more time elapses, and as more cases are closed, the conviction ratio of the second year should approximate that of insert table the first year.

Final case status by drug charge is presented in Table 5-6. Marijuana cases are more likely to be closed than are cases charged with any other drug offense. This difference reflects the finding that marijuana cases are much more likely than other cases to have successfully completed the pre-file diversion treatment program. Interestingly, there is no difference in likelihood of conviction between marijuana, cocaine, and other drug charge cases.

F. Recidivism

For our purposes, recidivism is defined as any new charge submitted to the County Attorney's Office after the initial offense which first brought the offender to the attention of the Demand Reduction Program. This operational definition has several

TABLE 5-5
FINAL CASE STATUS, BY YEAR[a]

CASE STATUS	YEAR1 N	YEAR1 %	YEAR2 N	YEAR2 %	TOTAL N	TOTAL %
All Cases Reviewed						
1. Turndown or Further	879	22	587	19	1466	21
2. Case Closed	2065	52	993	33	3058	44
3. Case Open	1022	26	1466	48	2488	35
	3966	100	3046	100	7012	100
All Cases Prosecutable[b]						
1. Case Closed	2065	67	993	40	3058	55
a) Conviction	1047	34	645	26	1692	31
b) No Conviction	275	9	109	4	384	7
c) Complete Program Pre-File	626	20	233	10	859	15
d) complete Program Post-File	117	4	6	*	123	2
2. Case Open	1033	33	1466	60	2488	45
a) In Program, Pre-File	30	1	274	11	304	6
b) In Program, Post-File	117	4	87	4	204	4
c) In Prosecution	884	27	999	41	1843	33
d) In Between	31	1	106	4	137	2
	3966	100	2459	100	5546	100

[a] Outcomes Effective May 1, 1991

[b] Excludes All Turndown or Further Cases

* less than .5%

TABLE

FINAL CASE STATUS, BY DRUG CHARGE[a]

	DURG CHARGE							
	POSSESS MARIJUANA		POSSESS COCAINE		POSSESS OTHER DRUG		DRUG PARAPHERNALIA	
CASE STATUS	N	%	N	%	N	%	N	%
Case Closed	2021	49	513	35	412	38	110	34
1) Conviction	1001	24	344	24	269	25	76	23
2) No Coviction	215	5	88	6	65	6	16	5
3) Complete Program Pre-File	709	17	72	5	65	6	13	4
4) Complet Program Post-File	96	3	9	*	13	1	5	2
Case Open	1368	33	578	39	439	41	101	31
1) In Program Pre-File	201	5	52	3	47	4	4	1
2) In Program Post-File	87	2	61	4	47	4	8	2
3) In Prosecution	996	24	440	30	320	30	86	27
4) In Between	84	2	25	2	25	3	3	1
Turndown/Further	728	18	374	26	228	21	114	35
	4117	100	1465	100	1079	100	325	100

[a] Outcomes Effective May 1, 1991

* less than .5%

important components. First, it includes any charge submitted to any part of the County Attorney's Office, not just drug charges brought back to the Demand Reduction Program. Second, this definition relies on charges submitted, which is a more liberal definition than if we had used charges filed or convictions. Defining recidivism in terms of arrests or charges submitted is widely practiced, but it rests on the assumption that arrests signify criminal activity. Third, the timeframe for analysis begins at the time when the initial case is submitted for review to the Demand Reduction Program. Point of entry is used rather than point of exit because it signifies the time at which the offender's involvement with the program should begin to show the desired effects. Fourth, the length of time at risk is not the same for all persons. Since data collection terminated May 1, 1991, those who entered the program early have a much longer time at risk than those who entered late.

Information on recidivism is presented in Table 5-7. Looking first at the total number of cases, only 21 percent of all offenders referred to the Demand Reduction Program were arrested for a subsequent offense during the period of observation. Of those who were, 44 percent were charged with a drug offense, 29 percent were charged with a property offense, 12 percent were charged with a crime against a person, and 15 percent were arrested for some other type of offense. When a subsequent crime did occur, the mean length of time between entry to the Demand Reduction Program and recidivism was 177 days.

The effect of differences in time at risk appears when

TABLE 5
RECIDIVISM, BY GROUPING, FOR ALL CASES,
BETWEEN CASE SUBMISSION AND MAY 1, 1991*

	TOTAL			INITIAL REVIEW DECISION				ELIGIBILITY DECISION			
				TURNDOWN/ FURTHER		PROSECUTABLE		ELIGIBLE		INELIGIBLE	
	YR1	YR2	TOTAL	YR1	YR2	YR1	YR2	YR1	YR2	YR1	YR2
Number of Cases	3966	3046	7012	716	559	3250	2487	2509	1658	741	829
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Amount of Recidivism											
None	75	84	79	72	80	76	84	79	87	67	79
One	16	12	14	17	13	16	12	14	10	20	15
Two or More	9	4	7	11	7	8	4	7	3	13	6
Type of Recidivism											
Person Offense	13	10	12	12	10	14	10	13	13	15	6
Property Offense	28	30	29	33	35	26	29	27	24	26	36
Drug Offense	45	43	44	41	44	46	42	46	43	46	42
Other Offense	14	17	15	14	12	14	19	14	20	13	16
Mean Length of Time to Recidivism, In Days	229	125	177	232	110	228	129	242	148	198	107

* The date of case submission is the date at which the case entered the County Attorney's Office for initial review and screening, so these data examine recidivism at any time after the case first comes to the attention of the Demand Reduction Program, regardless of programmatic processing of those cases. Since the data collection terminates at May 1, 1991 the length of "time at risk" varies considerably between those who entered early and those who entered late.

** less than .5%

TABLE 5-7 (continued)
RECIDIVISM, BY GROUPING, FOR ALL CASES,
BETWEEN CASE SUBMISSION AND MAY 1, 1991*

	PROGRAM ENTRY STATUS						PROGRAM SUCCESS			
	REFUSE		NO RESPONSE		ENTER TASC		COMPLETE TASC		FAIL TASC	
	YR1	YR2	YR1	YR2	YR1	YR2	YR1	YR2	YR1	YR2
Number of Cases	133	218	1516	726	839	613	626	233	183	106
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Amount of Recidivism										
None	82	88	74	82	89	93	92	94	75	86
One	14	10	17	12	10	7	7	6	22	14
Two or More	4	2	9	6	1	**	4	0	3	1
Type of Recidivism										
Person Offense	8	12	12	14	18	11	15	14	15	13
Property Offense	46	24	25	26	29	18	34	7	26	34
Drug Offense	33	44	49	40	41	49	36	43	48	40
Other Offense	13	20	14	20	12	21	15	26	11	13
Mean Length of Time to Recidivism, In Days	270	162	234	139	271	181	270	180	281	217

comparing the results of those offenders processed in year one to those offenders processed in year two of the Demand Reduction Program. With their greater time at risk, year one offenders have a higher recidivism level (25 percent compared to 16 percent) and a longer mean length of time to recidivism (229 days to 125 days). The longer the offenders are at risk, the greater the likelihood of subsequent criminal activity. Interestingly, there appears to be no difference in the type of crime they commit.

Table 5-7 also reports the recidivism data for comparison groups, by year. There is, for example, only a slightly higher level of recidivism among those who were turned down or furthered than among those accepted into the Demand Reduction Program during each of the two years. Among cases submitted in year one, recidivism occurred in 28 percent of the cases which were turned down or furthered and 24 percent of the cases which were deemed prosecutable. Similarly, there is a 4 percent difference in year two between the recidivism rate of turndown and further cases (20 percent) and that of those cases accepted into the program (16 percent).

A more meaningful difference in recidivism is found in comparing the outcome of the eligible and ineligible cases. In light of the criteria of eligibility, we would expect a significant difference in recidivism between these two groups -- and a difference is found to exist. Among year one cases, recidivism occurred among 21 percent of those eligible for diversion and among 33 percent of those ineligible for diversion.

In year two cases, recidivism occurs among 13 percent and 21 percent of the eligible and ineligible cases, respectively. Moreover, when recidivism does occur, the average time before recidivism is shorter among the ineligible cases than among the eligible cases (198 vs 242 days in year one, and 107 vs 148 days in year two). Once again, there is no difference between the two groups on type of recidivism.

The degree of recidivism among those who are eligible for diversion to treatment is further analyzed in Table 5-7. A comparison of those who refuse to enter TASC, those who agree to enter TASC, and those who fail to respond to the letter reveals marked differences in recidivism. Of course, these differences have to be viewed in terms of the likely existence of selection bias: the reasons which lead some people to agree to enter the TASC program and others to refuse this option may also account for why those who did enter the program are less likely to commit subsequent crimes than those who refused to enter the program. In other words, we are unable to determine whether any difference in recidivism is due to the initial reasons some persons accept and others reject the program or to the effects of the program itself.

For year one cases, recidivism occurs among 11 percent of those who enter TASC, 18 percent of those who refuse TASC, and 26 percent of those who did not respond one way or the other. Similar, but less intense, differences are found among year two cases. There also are differences in type of recidivism, with higher levels of property offenses occurring among those who

refuse TASC and higher levels of drug offenses occurring among those who fail to respond and those who enter TASC.

The final analysis in Table 5-7 compares those who enter and succeed at TASC to those who enter and fail the TASC program. Again, a selection bias is likely to operate here: some of those who enter the treatment program "elect" to succeed while others "elect" to fail. For year one cases, recidivism occurs among 25 percent of those who fail TASC and 8 percent of those who successfully complete TASC. For year two cases, recidivism occurs among 6 percent of those who complete TASC and 14 percent of those who fail TASC. Interestingly, there is no difference by program success in the mean length of time until recidivism for first year cases, and the difference for second year cases is other than expected (180 days for those who succeed and 217 days for those who fail).

In summary, there appears to be a "signal effect" inasmuch as individuals less likely to recidivate self-selected into, and successfully completed, the TASC program. While we can not determine how much of the difference in recidivism is due to this self-selection, vs the amount of difference that is due to the treatment program, it is clear that the defendant's willingness to enter TASC, and then to complete TASC's treatment program, signals a lower probability of subsequent criminal activity.

G. Summary and Conclusion

During its first two years of operation, the Maricopa County Demand Reduction Program reviewed and processed a large number of cases. More than 80 percent of the cases submitted for review

were accepted for prosecution, and nearly three-fourths of those cases were eligible for deferred prosecution pending diversion to treatment. Two problems arise at this point. One is the large number of cases which remain open. Warrants are filed on unresponsive offenders, but prosecution is stalled.

The second problem is that most persons eligible for diversion fail to accept this alternative and enter the treatment program. As a result, the County Attorney's Office must deal with a large number of cases which could have been diverted from prosecution. Of the 5737 prosecutable cases studied, the prosecutor's office became involved in the 1570 cases which were ineligible for diversion to treatment and 2593 cases which failed to enter the diversion program, or a total of 4166 of the 5737 prosecutable cases. That is, the County Attorney's Office filed charges on 72.6 percent of the 5737 prosecutable cases, despite the fact that exactly 72.6 percent of these prosecutable cases were eligible for deferred prosecution and diversion to TASC.

Diversion cannot be forced on offenders, and the results suggest that offenders do not find it to be an attractive option to prosecution. Yet, if this program is to have a viable treatment capacity, and if this program is not going to place a heavy burden on the Office of the County Attorney, then the Demand Reduction Program may wish to consider strategies by which eligible offenders will be more willing to accept diversion to treatment.

During these first two years of operation, the offenders brought to the attention of the program tend to be young, male,

Anglo, first offenders, and charged with possession of marijuana or, to a lesser extent, cocaine. As these offenders move through the stages of the program, we find that these same characteristics increasingly denote those who are eligible (versus ineligible) for diversion, those who accept (versus reject) this diversion to treatment, and then those who succeed (versus fail) in the treatment program.

It also is noted that the level of recidivism varies by stage of the program. Recidivism within the observation period occurred in 21 percent of all cases referred to the County Attorney's Office. There is little difference in recidivism between those cases accepted into the program (i.e., prosecutable) and those cases which were turned down and furthered, but differences in recidivism exist at other stages. Recidivism was higher, and occurred more quickly, among those who were ineligible for deferred prosecution than among those who were eligible for this diversion to treatment. Among those persons eligible for deferred prosecution, recidivism was higher for those who did not enter TASC than it was for those who failed to enter TASC. Finally, recidivism was higher among those who entered and failed TASC than it was among those who entered and completed the TASC program.

Discovering different offender characteristics and different outcomes at various stages of the process raises important questions. One set of questions addresses the issue of why certain offender and offense characteristics predominate among those who are eligible for, accept, and complete treatment. That

is, to what extent is this outcome produced by the legal criteria involved, such as prior offense record and type of drug use charged? Another set of questions examines the degree to which the different outcomes in recidivism are due to the differences in the characteristics of the offenders. For example, does the observed difference in recidivism between those who agree to enter TASC and those who do not enter TASC represent the strengths of the TASC program, or is this difference due to the fact that those who accept the TASC program are more likely than those who do not to be young, Anglo, first offenders, charged with possession of marijuana? These key issues require a rigorous multivariate statistical analysis of the data, as is presented in Sections VI and VII.

VI. DETERMINANTS OF PROSECUTORIAL DECISION MAKING IN THE MARICOPA COUNTY DEMAND REDUCTION PROGRAM

A. Introduction

Two types of prosecutorial decisions are at the heart of the Demand Reduction Program. One is the initial decision to prosecute: upon review of the available information, the decision is made that the case is or is not prosecutable. Cases which are not prosecutable are returned to the submitting agency and no additional action is taken by the County Attorney's Office unless and until the cases are resubmitted. Following this decision to prosecute, the prosecuting attorney then makes the decision of eligibility for deferred prosecution: prosecutable cases are examined in terms of the stated criteria of eligibility to determine which cases are eligible for deferred prosecution pending successful treatment at TASC. Eligible cases are offered the treatment option; ineligible cases are prosecuted. Because these two decisions control the number and type of cases entering into and moving through the Demand Reduction Program, the evaluation examines the factors which affect both the decision to prosecute (vs turndown/further) and the decision of eligibility (vs ineligibility) for deferred prosecution and referral to TASC.

First, a series of logistic regression equations is used to estimate the main effects of select defendant characteristics, offense characteristics, and process information on the initial decision to prosecute during the first two years combined. Then a we examine whether the factors found to predict the decision to prosecute differ substantially between the first and second years

of the program or whether they are stable over time (i.e., testing the null hypothesis of invariance of parameter estimates across the first two years of the program). Our analysis of the decision to prosecute is extended further to re-estimate the full sample equation and the year-specific equations with dummy variables that disaggregate the defendant's minority status effect into three ethnic contrasts with the reference category of Anglo defendants. This procedure tests the null hypothesis of no difference in ethnic effects on the decision to prosecute across the groups originally collapsed into the minority status variable.

Then, a similar analysis examines the affect of select defendant characteristics, offense characteristics, and process information on the prosecuting attorney's decision to offer defendants the option of diversion from prosecution. Again, a full sample equation of the variables affecting the likelihood of diversion is estimated, followed by a separate estimation by year of the effects of each of the independent variables included in the original equation. As noted earlier, this procedure allows an examination of possible changes in the relative influence of the decision criteria during the first two years of the program. The analysis extends further to explore the question of whether the defendant's record of prior arrests conditions the effect of these predictor variables on the likelihood of diversion. Prior record is a significant factor in the formal criteria of eligibility for diversion to treatment. It also may condition the effect of other variables included in the analysis. Similar to

the analysis of the decision to prosecute, our analysis of the decision to divert involves re-estimating the full sample equation, the year-specific, and prior record-specific equations with the inclusion of three ethnic dummy variable contrasts with the reference category of Anglo defendants. Again, the purpose of pursuing this line of inquiry is to test the null hypothesis of no ethnic difference in the likelihood of diversion.

B. The Decision to Prosecute

Table 6-1 provides descriptive statistics and coding for each of the variables included in the analysis of the decision to prosecute. The dependent variable is coded `1' if the prosecuting attorney decided to prosecute and `0' if the case was turned down or furthered. The focus is on estimating the probability that the dependent variable equals 1. Drawing from Hosmer and Lemeshow (1989) and Aldrich and Nelson (1984), the dependent variable is assumed to depend on K observable variables that account for variation in the probability that P=1. The assumptions guiding the analysis of the decision to prosecute and the decision to divert are those associated with a logit model defined as:

$$P(Y=1\ X) = \exp(\ b_k X_k)/[1+\exp(\ b_k X_k)],$$

where,

$$Y_i \quad (0,1), \quad i=1,\ldots,N,$$

$Y_1, Y_2, \ldots Y_N$ are statistically independent,

and no exact or near linear dependencies exist among the X_{ik}'s across K.

Table 6-1 indicates that eighty-two percent of the 6977 drug cases were deemed prosecutable. Table 6-1 also indicates that

TABLE 6-1
DESCRIPTIVE STATISTICS AND CODING FOR VARIABLES INCLUDED IN DECISION TO PROSECUTE EQUATION - FULL SAMPLE

	CODING	N	%
DEFENDANT CHARACTERISTICS			
Minority Status	1 = African American, Hispanic, Indian, Asian, Other	2160	31
	0 = Anglo	4817	69
Age - Young	1 = 16-23 yrs	2231	32
	0 = other	4746	68
Age - Middle	1 = 24-30 yrs	2494	36
	0 = other	4483	64
Gender	1 = male	5722	82
	0 = female	1255	18
Record of Prior Arrest	1 = yes	1694	24
	0 = no	5283	76
OFFENSE CHARACTERISTICS			
# of Charges	1 = 2 or more	2319	33
	0 = 1 charge	4658	67
Marijuana	1 = poss. marijuana	4112	59
	0 = other drug type	2865	41
Cocaine	1 = poss. cocaine	1462	21
	0 = other drug type	5515	79
Paraphernalia	1 = poss. paraph.	325	5
	0 = other drug type	6652	95
PROCESS INFORMATION			
Year of Arrest	1 = 2nd year	3027	43
	0 = 1st year	3950	57
Booked	1 = defendant booked	5279	76
	0 = not booked - other	1698	24
Booked-Missing	1 = def. booked-missing	899	13
	0 = not booked - other	6078	87
DEPENDENT VARIABLE			
Decision to Prosecute	1 = prosecutable	5726	82
	0 = turndown or further	1251	18
Total		6977	100

sixty-nine percent are non-minority Anglo defendants and eighty-two percent are male. Over half the defendants were arrested for a drug offense involving the use or possession of marijuana, and cocaine arrests account for another one-fifth of the total. Thirty-two percent of the defendants are between 16 and 23 years old, thirty-six percent are between 24 and 30 years old, and the reference category of defendants older than 30 years comprise the remaining thirty-two percent. Of the 6977 defendants included in the analysis, fifty-seven percent were arrested during the first year of the Demand Reduction Program. First offenders comprise about three-fourths of all defendants. Finally, Table 6-1 indicates that sixty-seven percent of the defendants were charged with only one offense.

The correlation matrix for the variables included in the analysis of the decision to prosecute is found in Table D-1, Appendix D. Table 6-2 reports the logistic regression estimates, standard errors, and odds for the variables included in the decision to prosecute equation. Findings reported in Table 6-2 indicate that 16-23 year old defendants, compared to defendants aged thirty and older, have a significant reduction in the log of the odds of prosecution ($b = -.23$; $p < .01$). This reduction corresponds to a .58:1 odds of prosecution. The dummy variable contrast of 24-30 year old defendants to the oldest defendant group fails to produce a significant effect on the decision to prosecute. In summary, the decision to prosecute is affected by the defendant's age: persons in the youngest age category of 16-23 are less likely to be prosecuted than are persons in the other

two age categories, other things being equal.

Table 6-2 also indicates that minority status defendants, compared to non-minority Anglo defendants, have a significant reduction (b=-.25; p<.01) in the log of the odds of prosecution. This reduction corresponds to .56:1 odds of prosecution. Defendants who were booked after arrest and defendants who have a record of prior arrests also have a significant decrease in the log of the odds of prosecution (b= -3.87, p<.01; and b= -.28, p<.01, respectively).

Type of drug offense is coded into three dummy variable contrasts, using the reference category of general "other drug" offenses (refer to Table 6-1). Table 6-2 indicates that each of the drug contrasts produces a net significant effect of the likelihood of prosecution. However, the direction of the effect varies. Defendants charged with an offense involving the use or possession of cocaine or drug paraphernalia, compared to the reference category, have a significant decrease (b= -.41; p<.01); b= -1.06; p<.01, respectively) in the likelihood of prosecution. The logistic estimate for defendants charged with a drug offense involving the use or possession of cocaine corresponds to a .39:1 chance of prosecution. For defendants charged with drug offense involving the use or possession of paraphernalia, the estimate corresponds to only a .09:1 odds of prosecution. However, for defendants charged with use or possession of marijuana, the likelihood of prosecution is significantly increased (b= .28, p<.01), and the odds are 1.91:1 of being prosecuted.

The only other variable that produces a significant increase

TABLE 6-2
LOGISTIC REGRESSION ESTIMATES, STANDARD ERRORS, AND ODDS FOR THE VARIABLES INCLUDED IN THE DECISION TO PROSECUTE EQUATION
FULL SAMPLE (N=6977)

	ESTIMATES	S.E	ODDS[a]
DEFENDANT CHARACTERISTICS			
Minority Status	-.25[c]	.07	.56
Age - Young	-.23[c]	.08	.58
Age - Middle	-.09	.08	
Gender	-.17[b]	.08	.68
Reocrd of Prior Arrest	-.28[c]	.07	.52
OFFENSE CHARACTERISTICS			
# of Charges	.23[c]	.08	1.70
Marijuana	.28[b]	.10	1.91
Cocaine	-.41[c]	.11	.39
Paraphernalia	-1.06[c]	.15	.09
PROCESS INFORMATION			
Year of Arrest	.02	.07	
Booked	-3.87[c]	.57	.00013
Booked-Missing	-5.29[c]	.58	
Constant	5.84[c]	.58	
-2 Log Likelihood	5834.12	df= 6964	p = .000
Model Chi Square	728.95	df= 12	p = .000
% observations correctly classified by model	82.83%		

a Reported for statistically significant and substantively meaningful estimates $P \leq .05$

b Significant $.01 < P \leq .05$

c Significant $P \leq .01$

in the probability of prosecution is the contrast between being charged with more than one offense, compared to only one offense. The effect of this variable is b= .23 ($p<.01$), which corresponds to a 1.70:1 odds of prosecution. Table 6-2 indicates that the likelihood of prosecution is not significantly affected by the year of arrest. In the section below, we turn to a further examination of the effect of year of arrest as a variable that conditions the effect of defendant characteristics, process information, and offense characteristics on the decision to prosecute. Finally, there is a significant main effect on decision to prosecute for cases with missing data on whether or not the defendant was booked. We are unable to interpret this observed effect at this time, unfortunately, but its significance requires that subsequent equations control for the effects of this variable.

In summary, Table 6-2 indicates that younger, male, minority status defendants have a significantly lower likelihood of prosecution, as do defendants who are booked and who have a record of prior arrests. In addition, being charged with an offense involving cocaine or drug paraphernalia results in a reduced probability of prosecution. An increased probability of prosecution is associated with being charged with more than one offense and being charged with use or possession of marijuana. The variables included in the equation of the probability of prosecution produce a chi-square value of 728.95 with 12 degrees of freedom, which reflects the amount of improvement in model fit when the above variables are included. Finally, Table 6-2

indicates that the model correctly predicted 82.83 percent of the observation of prosecutorial decision making included in the analysis.

The reported percentage of correctly classified observations under the model can be translated into an R^2 (familiar to OLS regression users) of approximately .85 (Michael, 1966). We note this approximation out of a concern that our model of prosecutorial discretion does not include measures of the effect of evidence. Data on evidence was too sparse to allow inclusion in the analysis. Given the percentage of correctly classified observations and the R^2 approximation, we conclude that the exclusion of evidence does not result in a misspecified model.

It is conceivable that the effect of defendant characteristics, offense characteristics, and whether the defendant was booked may affect prosecutorial decision making differently across the two years of the Demand Reduction Program. To investigate possible interaction effects with year of arrest, the decision to prosecute equation is estimated separately for each of the two years studied. Table D-2 (Appendix D) provides descriptive statistics and coding for the variables included in the year-specific analysis. The percent of cases prosecuted each year is identical (82.1 percent). Compared to first-year defendants, defendants in the second year of the program are somewhat more likely to be minority status, to be older, to have a prior arrest record, and to be charged with cocaine rather than marijuana. The correlation matrix for each year is reported in Table D-3, Appendix D, and the range of these coefficients

permits us to dismiss concerns for multicollinearity.

Table 6-3 reports the logistic regression estimates, standard errors, and odds for the variables included in the decision to prosecute equation estimated separately by year of program involvement. Comparing the logistic regression estimates for each of the variables across the two time periods indicates differences in the effect of eight variables. In the first year, the effect of the defendant's minority status reduces significantly ($b = -.31$, $p < .01$) the likelihood of prosecution. This corresponds to a .49:1 odds of prosecution. In the second year, however, the effect of defendant's minority status fails to reach statistical significance (at $p = .05$). For both years, the effect of having a record of prior arrest on the decision to prosecute is significant and similar in the magnitude of its effect ($b = -.31$, $p < .01$ and $b = -.26$, $p = .02$, respectively).

Table 6-3 also reveals that the effect of each of the three drug type offense contrasts on the decision to prosecute varies across the two time periods. Being charged with an offense involving the possession or use of marijuana significantly increases ($b = .36$, $p = .01$) the likelihood of prosecution (with 2.29:1 odds) during only the first year; there is no significant effect during the second year. It appears that, net of the other variables included in the analysis, the aggressive prosecution of offenses involving the use or possession of marijuana observed for the first year of program implementation was absent during the second year. Table 6-3 also reveals that the effect of being charged with the use or possession of cocaine on the prosecution

TABLE 6-3

LOGISTIC REGRESSION ESTIMATES, STANDARD ERRORS, AND ODDS FOR THE VARIABLES INCLUDED IN THE DECISION TO PROSECUTE EQUATION - ESTIMATED SEPARATELY BY YEAR

	YEAR = 0			YEAR = 1		
	ESTIMATES	S.E	ODDS[a]	ESTIMATES	S.E	ODDS[a]
DEFENDANT CHARACTERISTICS						
Minority Status	-.31[c]	.09	.49	-.19	.11	
Age - Young	-.20	.11		-.26[c]	.12	.55
Age - Middle	-.13	.11		-.03	.12	
Gender	-.16	.12		-.17	.13	
Record of Prior Arrest	-.31[c]	.11	.49	-.26[c]	.11	.55
OFFENSE CHARACTERISTICS						
# of Charges	.35[c]	.10	2.24	.09	.11	
Marijuana	.36[c]	.13	2.29	.18	.15	
Cocaine	-.24	.15		-.61[c]	.17	.25
Paraphernalia	-1.27[c]	.21	.05	-.77[c]	.25	.17
PROCESS INFORMATION						
Booked	-3.80[c]	.70	.0002	-3.98[c]	.99	.0001
Booked-Missing	-5.28[c]	.71		-5.33[c]	.99	
Constant	5.70[c]	.72		6.06[c]	.99	
-2 Log Likelihood	3238.26	df=3930	p=.000	2582.22	df=3015	p=.000
Model Chi Square	476.64	df= 11	p=.000	265.95	df= 11	p=.000
% observations correctly classified by model	83.29%			82.49%		

a Reported for statistically significant and substantively meaningful estimates $P \leq .05$

b Significant $.01 < P \leq .05$

c Significant $P \leq .01$

decision varies by year. Although there is no significant effect during the program's first year, a cocaine charge substantially decreases (b= -.61, p<.01) the likelihood of prosecution during the second year. A difference in likelihood of prosecution also is noted over time for persons charged with possession of drug paraphernalia (b= 1.27, p<.001 in year one, b= -.77, p<.001 in year two). This observation suggests that the strong reluctance to prosecute such offenses (odds are .05:1) in the first year diminished in the second year (odds are .17:1) of the program.

Table 6-3 indicates that the effect of defendant's age on the likelihood of prosecution differs across the two one-year periods for defendants in the young age category (16-24). More specifically, younger defendants, compared to the reference category of older defendants, have a lower probability of prosecution for both years, but the effect reaches statistical significance in only the second year (b= -.26; p<.04). Note that neither coefficient measuring the effect of the middle age (24-30) category of defendants, compared to the older group (over 30) of defendants, is significant. Age is not salient to the decision to prosecute for defendants in the 24-30 age group. From these age comparisons, it appears that, except for defendants between 16-23 who were arrested during the second year, defendant's age is not systematically important in the decision to prosecute.

The final variable that operates differently across the first two years of program implementation is information on the number of charges filed at the time the case is submitted to the

County Attorney. Table 6-3 indicates that being charged with more than one offense significantly increases the likelihood of prosecution in the first year, but it fails to exert a substantial and significant effect on the decision to prosecute in the second year. Finally, the percent of correctly classified observations (Table 6-3) under the estimated year-specific models indicates only a small and inconsequential difference in the model fit of the two equations. The model works only slightly better in classifying observations in the first year (83.29%) compared to the second year (82.49%). Taken together, the above findings indicate that program year conditions the effect of some defendant characteristics and offense characteristics on the decision to prosecute. The effect of type of drug, defendant's age (16-23 years), and the number of charges on the decision to prosecute depends on the year the defendant is arrested.

Further exploration of the decision to prosecute is informative. The strategy used to this point in the analysis assumes that all minority defendants are treated similarly, allowing a single regression coefficient to capture the contrast of this group of offenders with the non-minority Anglo group. Yet, that assumption may not be supported empirically. To explore the question of the presence of ethnic differences in the likelihood of prosecution, the equations discussed thus far are re-estimated with the inclusion of a dummy variable contrast between Hispanic offenders and Anglo offenders, a contrast between African-American offenders and Anglo offenders and, finally, a contrast between American Indian offenders and Anglo

offenders. Disaggregating the defendant's minority status this way into three dummy variable contrasts with non-minority Anglo defendants permits a test of the null hypothesis of no difference in the effect of ethnicity on the likelihood of prosecution.

Descriptive statistics for the ethnic dummy variable contrasts are provided in Table D-4 of Appendix D. Table 6-4 reports the logistic regression estimates, their standard errors, and the odds for the variables including in the decision to prosecute equation. Note that this equation is similar to the equation reported in Table 6-2 except for disaggregating the three ethnic offender groups that were collapsed in the original minority status variable. After a discussion of the findings from the main effects equation, the defendant sample is split by year and re-estimated for the purpose of testing the hypothesis of invariance of the parameter estimates across the two time periods of the Demand Reduction Program.

The findings reported in Table 6-4 allow a rejection of the null hypothesis that the effect of ethnic group on the probability of prosecution is invariant. More specifically, the findings suggest that for African-American defendants and Hispanic defendants, compared to Anglo defendants, there is a significant decrease ($b= -.34$, $p<.01$; $b= -.20$, $p=.02$, respectively) in the likelihood of prosecution. This corresponds to a .63:1 odds of prosecution for Hispanic defendants and an even lower .46:1 odds of prosecution of African-American defendants. The findings differ for American Indians, for whom there is a substantial increase ($b= .44$, $p<.01$) in the

TABLE 6-4
LOGISTIC REGRESSION ESTIMATES, STANDARD ERRORS, AND ODDS FOR THE VARIABLES INCLUDED IN THE DECISION TO PROSECUTE EQUATION - ESTIMATED WITH THE INCLUSION OF ETHNIC DUMMY CONTRASTS - FULL SAMPLE

	ESTIMATES		S.E	ODDS[a]
DEFENDANT CHARACTERISTICS				
Hispanic	-.20[b]		.08	.63
African American	-.34[c]		.09	.46
American Indian	.44[c]		.13	2.75
Age - Young	-.24[b]		.08	
Age - Middle	-.10		.08	
Gender	-.17		.09	.68
Record of Prior Arrest	-.28[c]		.08	.52
OFFENSE CHARACTERISTICS				
# of Charges	.24[b]		.07	1.74
Marijuana	.26[b]		.10	1.82
Cocaine	-.41[c]		.11	.39
Paraphernalia	-1.07[c]		.16	.09
PROCESS INFORMATION				
Year of Arrest	.02		.06	
Booked	-3.86		.57	.0001
Booked-Missing	-5.28		.57	
Constant	5.84		.58	
-2 Log Likelihood	5826.04	df = 6962	p = .000	
Model Chi Square	737.02	df = 14	p = .000	
% observations correctly classified by model	82.90%			

a Reported for statistically significant and substantively meaningful estimates $P \leq .05$

b Significant $.01 < P \leq .05$

c Significant $P \leq .01$

probability of prosecution, corresponding to a 2.75:1 odds of prosecution.

Of the three ethnic group effects, the strongest in magnitude is for the American Indian defendant group. The effects of the remaining defendant characteristics, the offense characteristics, and the early processing decision by the police to book the defendant are unchanged from those reported in Table 6-2. Clearly, failing to disaggregate minority status results in an incomplete understanding of how ethnic membership influences prosecutorial decision making. The estimated model of prosecution produces a chi-square value of 737.02 with 14 degrees of freedom. Approximately eighty-three percent of the observations on the dependent variable were correctly classified under the model.

Table D-5 (Appendix D) provides descriptive statistics for variables included in the year-specific analysis, and the information reported in Table 6-5 permits an examination of the question of invariance in the effects of the three ethnic contrasts with Anglo defendants across the two one-year periods of program operation. The data indicate that the effects of being an Hispanic defendant or an African-American defendant, compared to being an Anglo defendant, do vary across the two time periods. For Hispanic defendants, there is a significant reduction (b= -.26; p=.02) in the likelihood of prosecution during the first year, with .55:1 odds of prosecution, but the effect fails to reach statistical significance (at p=.05) in the second year. For African-American defendants, the first-year

TABLE 6-5

LOGISTIC REGRESSION ESTIMATES, STANDARD ERRORS, AND ODDS FOR THE VARIABLES INCLUDED IN THE DECISION TO PROSECUTE EQUATION - ESTIMATED SEPARATELY FOR YEAR - INCLUSION OF ETHNIC DUMMY CONTRAST

	YEAR = 0			YEAR = 1		
	ESTIMATES	S.E	ODDS[a]	ESTIMATES	S.E	ODDS[a]
DEFENDANT CHARACTERISTICS						
Hispanic	-.26[b]	.10	.55	-.12	.12	
African-American	-.24	.13		-.42[c]	.13	.38
American Indian	.36[b]	.18	2.29	.56[c]	.20	3.63
Age - Young	-.20	.11		-.30[c]	.13	.50
Age - Middle	-.13	.11		-.06[b]	.12	
Gender	-.17	.12		-.19	.13	
Record of Prior Arrest	-.32[c]	.11	.48	-.24[c]	.11	.58
OFFENSE CHARACTERISTICS						
# of Charges	.36[c]	.10	2.29	.11	.11	
Marijuana	.34[c]	.13	2.19	.17	.15	
Cocaine	-.26	.15		-.57[c]	.17	.27
Paraphernalia	-1.28[c]	.21	.05	-.79[c]	.25	.16
PROCESS INFORMATION						
Booked	-3.81[c]	.70	.0002	-3.96[c]	.98	.0001
Booked-Missing	-5.27[c]	.71		-5.30[c]	.99	
Constant	5.70[c]	.72		6.06[c]	.99	
-2 Log Likelihood	3235.88	df=3936	p=.000	2574.21	df=3013	p=.000
Model Chi Square	479.01	df= 13	p=.000	273.93	df= 13	p=.000
% observations correctly classified by model	83.34%			82.52%		

a Reported for statistically significant and substantively meaningful estimates $P \leq .05$

b Significant $.01 < P \leq .05$

c Significant $P \leq .01$

effect is not significant, but there is a significant reduction (b= -.42; p<.01) in the probability of prosecution during the second year, when the odds of prosecution are .38:1.

For American Indians, the ethnic effect is significant in both years, although it is substantially stronger in the second year than in the first year, and increases the likelihood of prosecution. Compared to Anglo defendants, American Indian defendants had an increased probability of prosecution in both year one (b= .36, p<.05) and year two (b= .56, p<.01). This effect corresponds to an odds of prosecution for American Indians of 2.29:1 in the first year and 3.63:1 in the second year.

From the estimates reported in Table 6-5, it is clear that the effect of defendant's ethnicity varies across the two years studied. The data suggest that, compared to Anglo defendants, Hispanic defendants were less likely to be prosecuted during the first year, that African-American defendants were less likely to be prosecuted during the second year, and that American Indian defendants were more likely to be prosecuted in each year (and even more so in the second year than in the first). The equation estimated for the first year of the program produces a chi-square equal to 479.01 with 13 degrees of freedom. Eighty-three percent of the observations on the dependent variable are correctly classified under the model. The equation estimated for the second year produces a chi-square value of 273.96 with 13 degrees of freedom. Under the model, eighty-three percent of the observations of prosecutorial decision making are correctly classified.

C. The Decision to Divert

This analysis of the variables that affect the decision to divert defendants into the TASC treatment program parallels the questions posed in the analysis of the decision to prosecute. The dependent variable is coded `1' if the defendant is offered the option of deferred prosecution pending successful treatment at TASC and `0' if diversion is not offered and charges are filed. The assumptions underlying the logit model noted earlier apply for the analysis of the decision to divert.

The first equation estimates the net effects of defendant characteristics, offense characteristics, and process information on the likelihood the prosecuting attorney diverts the defendant from prosecution into a TASC treatment program. This analysis is followed by a re-estimation of the equation separately by year of arrest, and then separately by categories of the defendant's record of prior arrests. As before, estimating the diversion equation separately for each of the two years allows a comparison over time of the relative, net effects of defendant characteristics, offense characteristics, and process information on the probability of diversion. By pursuing an extended analysis of the presence of interaction effects between the above variables and year of arrest, it is possible to empirically test the underlying assumption of an invariance of variable effects over time.

As noted earlier, the analysis of prosecutorial discretion to divert offenders into a TASC treatment program is extended to include an additional re-estimation of the original equation

separately for each of the categories of defendant's record of prior arrests. The nature of the defendant's prior arrest record is a formally recognized criterion of eligibility for diversion, so the analysis examines whether having a record of prior arrests conditions the effect of other defendant characteristics, offense characteristics, and process information on the probability of diversion.

Finally, the analysis of the decision to divert includes an examination of the usefulness of disaggregating the minority status variable into three dummy variables measuring the effect of each ethnic group compared to the reference category, that of non-minority Anglo defendants. This procedure will be followed at each stage of analysis in order to identify the presence of ethnic differences in the probability of diversion.

Table 6-6 provides descriptive statistics for the variables included in the diversion equation. Nearly three-fourths of the 5726 prosecutable defendants were offered the option of deferred prosecution pending successful completion of a TASC treatment program. The largest percentage of cases involve non-minority, first offenders charged with only one offense. Sixty-one percent of the defendants were charged with a drug offense involving the use or possession of marijuana. Finally, Table 6-6 reports that slightly over half of all defendants were arrested during the first year of the Demand Reduction Program.

The diversion equation results are reported in Table 6-7, with the correlation matrix for those results appearing in Table D-6, Appendix D. It is apparent that both the young (16-23 years

TABLE 6-6
DESCRIPTIVE STATISTICS AND CODING FOR VARIABLES INCLUDED IN DECISION TO DIVERT EQUATION - FULL SAMPLE

	CODING	N	%
DEFENDANT CHARACTERISTICS			
Minority Status	1 = African American, Hispanic, Indian, Asian, Other	1710	30
	0 = Anglo	4016	70
Age - Young	1 = 16-23 yrs	1802	32
	0 = other	3924	68
Age - Middle	1 = 24-30 yrs	2055	36
	0 = other	3671	64
Gender	1 = male	4686	82
	0 = female	1040	18
Record of Prior	1 = yes	1340	23
Arrest	0 = no	4386	77
OFFENSE CHARACTERISTICS			
# of Charges	1 = 2 or more	1943	34
	0 = 1 charge	3783	66
Marijuana	1 = poss. marijuana	3501	61
	0 = other drug type	2225	39
Cocaine	1 = poss. cocaine	1117	20
	0 = other drug type	4609	80
Paraphernalia	1 = poss. paraph.	216	4
	0 = other drug type	5510	96
PROCESS INFORMATION			
Year of Arrest	1 = 2nd year	2484	43
	0 = 1st year	3242	57
Booked	1 = defendant booked	4396	77
	0 = not booked - other	1330	23
Booked-Missing	1 = def. booked-missing	534	9
	0 = not booked - other	5192	91
DEPENDENT VARIABLE			
Decision to Divert to TASC	1 = does divert	4164	73
	0 = does not divert	1562	27
Total		5726	100

of age) and the middle (24-30 years old) defendants, compared to older defendants (over age 30), have a statistically significant increase (b= .75, p<.01; b= .32, p<.01, respectively) in the likelihood of diversion, net of the variables included in the equation. This translates to a 5.62:1 odds of diversion for the youngest category of defendants and a 2.09:1 odds of diversion for the middle age category of defendants. In addition, defendants who were booked (b=.19, p<.05) and those who were charged with a drug offense involving the use or possession of marijuana (b= .58, p<.01) have an increased likelihood of being diverted into a TASC treatment program. For marijuana cases, the odds of diversion to TASC are 3.80:1.

It is important to note the effect of those factors which are formal criteria of eligibility for diversion. The guidelines of the Demand Reduction Program explicitly state that eligibility for diversion to treatment is determined on the basis of the nature of the defendant's record of prior arrests and the presence of secondary, non-drug felony charges. In addition, the absence of a treatment program for persons charged solely with possession of drug paraphernalia limits the use of diversion for these offenders. The data reported in Table 6-7 indicate that the likelihood of diversion is significantly decreased if the defendant has a record of prior arrests (b= -1.17, p<.01), is charged with more than one charge (b= -.37, p<.01), or is charged with a drug offense involving the use or possession of drug paraphernalia (b= -.49, p<.01). The prior record effect corresponds to a .07:1 odds of diversion.

TABLE 6-7
LOGISTIC REGRESSION ESTIMATES, STANDARD ERRORS, AND ODDS FOR THE VARIABLES INCLUDED IN THE DECISION TO DIVERT EQUATION - FULL SAMPLE

	ESTIMATES	S.E	ODDS[a]
DEFENDANT CHARACTERISTICS			
Minority Status	-.08	.07	
Age - Young	.75[c]	.08	5.62
Age - Middle	.32[c]	.07	2.09
Gender	-.30[c]	.09	.50
Record of Prior Arrest	-1.17[c]	.07	.07
OFFENSE CHARACTERISTICS			
# of Charges	-.37[c]	.07	.43
Marijuana	.58[c]	.09	3.80
Cocaine	.13	.11	
Paraphernalia	-.49[c]	.17	.32
PROCESS INFORMATION			
Year of Arrest	-.44[c]	.06	.36
Booked	.19[b]	.09	1.55
Booked-Missing	3.86[c]	.51	
Constant	.98[c]	.13	
-2 Log Likelihood	5776.65	df = 5713	p = .000
Model Chi Square	934.39	df = 12	p = .000
% observations correctly classified by model	75.11%		

a Reported for statistically significant and substantively meaningful estimates $P \leq .05$

b Significant $.01 < P \leq .05$

c Significant $P \leq .01$

Table 6-7 also indicates that the year the defendant is arrested significantly affects the likelihood of diversion. Defendants arrested during the second year are less likely to be diverted (b= -.44, p<.01). Of interest is the finding that defendant's minority status does not significantly affect the prosecuting attorney's decision to divert. As noted earlier, further analysis is conducted to examine whether this non-significant effect characterizes the treatment of each of the ethnic groups that are collapsed into the minority status variable. In addition, it is of interest that being charged with the use or possession of cocaine, compared to the reference group, fails to significantly influence the decision to divert. The estimated model of the prosecuting attorney's decision to divert a defendant from criminal prosecution into TASC treatment produces a chi-square statistic of 934.39 with 12 degrees of freedom. The model correctly classifies 75.11% of the observations on the dependent variable.

The next phase of the analysis involves a re-estimation of the above equation separately for each of the two years of program operation. Table D-7 (Appendix D) provides descriptive statistics for variables included in the equation separately by year and Table D-8 provides the correlation matrix for each of the equations. Again, an examination of the coefficient values indicates that multicollinearity does not pose a problem for the estimation of the logistic regression coefficients. The logistic estimates, standard errors, and odds for the variables included in the two regression equations, estimated separately by year,

are reported in Table 6-8.

Some year-specific effects are observed. Being a minority member significantly decreases (b= -.26, p<.01) the probability of diversion during the first year (corresponding to .55:1 odds), but defendant's minority status fails to exert a significant effect during the second year. In addition, male defendants, those with a record of prior arrests, and defendants charged with more than one offense have a significant decrease in the probability of being diverted to TASC each year, but the magnitude of the reduction is greater in the second year. For example, having a record of prior arrests decreases (b= -1.12, p<.01) the likelihood of diversion in the first year, but this decrease becomes greater (b= -1.21, p<.01) in the second year.

Age is another defendant characteristic whose effect is conditioned by year. During the first year of the program, the effect of being a younger defendant (16-23 years) significantly (b=.66, p<.01) increases the likelihood of diversion. This corresponds to a 4.57:1 odds of diversion. This effect is even greater in the second year (b= .85, p<.01), corresponding to a 7.08:1 odds of diversion. The effect for middle age defendants (24-30 years), compared to the older group (over 30), exhibits a similar yet less dramatic change in magnitude. Defendants aged 24-30, compared to those over 30 years old, have an increased likelihood of diversion in the first year (b= .25, p<.05) and a substantially greater likelihood of diversion (b= .39, p<.01) in the second year.

Taken together, findings from the year-specific analysis

TABLE 6-8

LOGISTIC REGRESSION ESTIMATES, STANDARD ERRORS, AND ODDS FOR THE VARIABLES INCLUDED IN THE DECISION TO DIVERT EQUATION - ESTIMATED SEPARATELY BY YEAR

	YEAR = 0			YEAR = 1		
	ESTIMATES	S.E	ODDS[a]	ESTIMATES	S.E	ODDS[a]
DEFENDANT CHARACTERISTICS						
Minority Status	-.26[c]	.10	.55	.09	.10	
Age - Young	.66[c]	.12	4.57	.85[c]	.12	7.08
Age - Middle	.25[b]	.10	1.78	.39[c]	.11	2.45
Gender	-.24[b]	.12	.58	-.34[c]	.13	.45
Record of Prior Arrest	-1.12[c]	.10	.08	-1.21[c]	.10	.06
OFFENSE CHARACTERISTICS						
# of Charges	-.33[c]	.10	.47	-.40[c]	.10	.40
Marijuana	.59[c]	.13	3.89	.56[c]	.13	3.63
Cocaine	.04	.15		.21	.15	
Paraphernalia	-.51[b]	.25	.31	-.48[b]	.24	.33
PROCESS INFORMATION						
Booked	.20	.12		.18	.14	
Booked-Missing	3.34[c]	.58		4.62[c]	1.00	
Constant	1.03[c]	.18		.48[c]	.18	
-2 Log Likelihood	3053.72	df=3230	p=.000	2710.74	df=2472	p=.000
Model Chi Square	416.99	df= 11	p=.000	450.07	df= 11	p=.000
% observations correctly classified by model	78.32%			71.98%		

a Reported for statistically significant and substantively meaningful estimates $P \leq .05$

b Significant $.01 < P \leq .05$

c Significant $P \leq .01$

suggest that defendant's age, gender, and record of prior arrests become increasingly more important as criteria upon which defendants are declared eligible for diversion into TASC treatment. Over time, defendants are less likely to be diverted if there is a history of prior arrests, if the defendant is charged with more than one offense, and if the defendant is male. Minority status significantly decreased the odds of diversion in the first year, but it was much less important in the second year.

Attention now turns to an examination of whether the defendant's record of prior arrests conditions the effect of other defendant characteristics, offense characteristics and process information on the probability of diversion. As noted in Table 6-7, having a record of prior arrests significantly reduced ($b= -1.17$, $p<.01$) the odds that the defendant was diverted to TASC. Nature of prior record is a formal criterion of diversion eligibility, of course, but it also may be a context within which other information about the case is assessed in the decision to divert to treatment. If this is the case, one would expect to find the effect of other defendant characteristics, offense characteristics, and process information on the likelihood of diversion to vary between those defendants with and those defendants without a record of prior arrests. Tables D-9 and D-10 in Appendix D contain the descriptive statistics and coding information for the variables included in the equations and the correlation coefficient matrices, respectively. The logistic regression estimates, standard errors and odds of diversion are

reported in Table 6-9.

The findings indicate that defendant's prior record of arrests does condition the effect of a number of variables on the likelihood of diversion. More specifically, defendants aged 16-23 who are first offenders, compared to 16-23 year old defendants with a prior record, have a substantially higher likelihood of diversion to a TASC program (b= .79, p<.01 and b= .68, p<.01, respectively). This relatively greater likelihood of diversion for younger defendants without a prior record does not apply for middle age first offenders, for whom the effect among first offenders (b= .28, p<.01) is lower than the effect for defendants with a record of prior arrests (b= .39, p<.01).

Information on prior record also conditions the effect of defendant's gender and minority status on the likelihood of diversion. Table 6-9 indicates that male first offenders have a significant (b=-.30; p<.01) decrease in the likelihood of diversion, yet the effect is not significant for male offenders with a record of prior arrests. A similar finding is evidenced in the conditioning effect of record of prior arrests for minority defendants: minority status has a significant effect on the decision to divert among first offenders (b= -.18, p<.05), but a nonsignificant effect among those with a prior arrest record.

Defendant's arrest record also conditions the effect of drug type on the likelihood of diversion into TASC treatment. More specifically, there is an increase in the likelihood of diversion for first offenders charged with use or possession of marijuana

TABLE 6-9

LOGISTIC REGRESSION ESTIMATES, STANDARD ERRORS, AND ODDS FOR THE VARIABLES INCLUDED IN THE DECISION TO DIVERT EQUATION - ESTIMATED SEPARATELY BY PRIOR RECORD

	PRIOR RECORD = 0			PRIOR RECORD = 1		
	ESTIMATES	S.E	ODDS[a]	ESTIMATES	S.E	ODDS[a]
DEFENDANT CHARACTERISTICS						
Minority Status	-.18[b]	.09	.66	.10	.12	
Age - Young	.79[c]	.10	6.17	.68[c]	.15	4.79
Age - Middle	.28[c]	.09	1.91	.39[c]	.13	2.45
Gender	-.30[c]	.10	.50	-.26	.16	
OFFENSE CHARACTERISTICS						
# of Charges	-.38[c]	.09	.42	-.36[c]	.12	.44
Marijuana	.61[c]	.11	4.07	.49[c]	.17	3.09
Cocaine	.15	.13		.09	.19	
Paraphernalia	-.55[c]	.20	.28	-.35	.31	
PROCESS INFORMATION						
Year of Arrest	-.42[c]	.08	.38	-.47[c]	.12	2.95
Booked	.17	.11		.24	.17	
Booked-Missing	4.79[c]	.95		2.82[c]	.62	
Constant	1.01[c]	.15		-.28	.25	
-2 Log Likelihood	4026.85	df=4374	p=.000	1738.61	df=1328	p=.000
Model Chi Square	444.05	df= 11	p=.000	118.35	df= 11	p=.000
% observations correctly classified by model	79.43%			62.24%		

a Reported for statistically significant and substantively meaningful estimates $P \leq .05$

b Significant $.01 < P \leq .05$

c Significant $P \leq .01$

(b=.61, p<.01), but the effect for defendants with a prior record who are charged with the same offense is substantially lower in magnitude (b= .49, p<.01). Referring to Table 6-9, we see that the effect of being charged with a drug offense involving the use or possession of paraphernalia on the probability of diversion is significant (b= -.55, p<.01) for only defendants with no prior record. Finally, Table 6-9 reports that the effect of being charged with a drug offense involving the use or possession of cocaine on the likelihood of diversion is invariant across categories of prior record of arrests.

Given the findings of ethnic differences in the decision to prosecute (reported in Tables 6-4 and 6-5), the logistic regression equations of the prosecutor's decision to divert are re-estimated with three ethnic dummy variable contrasts. Table D-11, Appendix D, provides descriptive statistics for variables included in the re-estimation analysis, and Table 6-10 reports the logistic regression estimates, standard errors, and odds for the diversion equation. Comparing the parameter estimates for the ethnic contrasts with the reference group, Anglo defendants, reveals that collapsing Hispanic, African-American, and American Indian defendants into a single minority status group conceals the differential effect of being an American Indian on the likelihood of diversion. American Indian defendants have a significant increase (b= .28, p<.01) in the probability of diversion into a TASC treatment program. The estimate corresponds to a 1.91:1 odds of diversion. Of the three ethnic groups included in the minority status variable, only the effect

TABLE 6-10
LOGISTIC REGRESSION ESTIMATES, STANDARD ERRORS, AND ODDS FOR THE VARIABLES INCLUDED IN THE DECISION TO DIVERT EQUATION - DISAGGREGATED MINORITY STATUS

	ESTIMATES	S.E	ODDS[a]
DEFENDANT CHARACTERISTICS			
Hispanic	-.14	.08	
African American	-.05	.09	
American Indian	.28[b]	.13	1.91
Age - Young	.75[c]	.08	5.62
Age - Middle	.32[c]	.07	2.09
Gender	-.29[c]	.09	.51
Record of Prior Arrest	-1.16[c]	.07	.07
OFFENSE CHARACTERISTICS			
# of Charges	-.37[c]	.07	.43
Marijuana	.56[c]	.09	3.63
Cocaine	.12	.10	
Paraphernalia	-.49[c]	.17	
PROCESS INFORMATION			
Year of Arrest	-.44[c]	.06	.36
Booked	.19[b]	.09	1.55
Booked-Missing	3.86[c]	.51	
Constant	.98[c]	.13	
-2 Log Likelihood	5772.00	df = 5711	p = .000
Model Chi Square	939.04	df = 14	p = .000
% observations correctly classified by model	75.22%		

a Reported for statistically significant and substantively meaningful estimates $P \leq .05$

b Significant $.01 < P \leq .05$

c Significant $P \leq .01$

of American Indian is significant in the decision to divert.

Estimating the regression equation separately by year (see Tables D-12 and 6-11) reveals that the significant American Indian effect noted above is actually specific only to the first year of the Demand Reduction Program (b= .48, p<.01). The effect corresponds to a 3.02:1 odds of diversion. The effect is positive in the second year, but it fails to reach statistical significance (at p=.05). Table 6-11 also reveals a significant effect (b= -.31, p<.05) among African-American defendants in only the first year and a nonsignificant effect for Hispanic defendants in both years.

Finally, we re-estimate the above regression equation separately for first offenders and offenders with a prior record of arrests (see Table D-13, Appendix D). Table 6-12 provides the logistic regression estimates, standard errors, and odds for the diversion equation estimated separately for the two offender groups. Two findings emerge from a comparison of the parameter estimates. First, the effect of being Hispanic on the likelihood of diversion is conditioned by information on prior record of arrests. That is, Hispanic defendants who are first offenders have a significant decrease (b= -.23, p<.05) in the likelihood of diversion, but the effect of being Hispanic for defendants with a prior record fails to produce a significant effect on the likelihood of diversion. Second, American Indian defendants who are first offenders have a significant increase (b= .38, p<.01) in the likelihood of diversion to treatment, and the effect of being American Indian is not significant for

TABLE 6-11

LOGISTIC REGRESSION ESTIMATES, STANDARD ERRORS, AND ODDS FOR THE VARIABLES INCLUDED IN THE DECISION TO DIVERT EQUATION- ESTIMATED SEPARATELY BY YEAR - DISAGGREGATED MINORITY STATUS

	YEAR = 0			YEAR = 1		
	ESTIMATES	S.E	ODDS[a]	ESTIMATES	S.E	ODDS[a]
DEFENDANT CHARACTERISTICS						
Hispanic	.20	.11		-.04	.12	
African American	-.31[b]	.13	.49	.26	.14	
American Indian	.48[c]	.18	3.02	.24	.25	
Age - Young	.65[c]	.12	4.47	.88[c]	.13	7.59
Age - Middle	.24[b]	.10	1.74	.41[c]	.11	2.57
Gender	-.25[b]	.12	.56	-.32[c]	.13	.48
Record of Prior Arrest	-1.13[c]	.10	.07	-1.21[c]	.10	.06
OFFENSE CHARACTERISTICS						
# of Charges	-.32[c]	.10	.48	-.41[c]	.10	.39
Marijuana	.56[c]	.13	3.63	.55[c]	.13	3.55
Cocaine	.04	.15		.18	.15	
Paraphernalia	-.51[b]	.24	.31	-.48[b]	.24	.33
PROCESS INFORMATION						
Booked	.19	.12		.17	.14	
Booked-Missing	3.35[c]	.58		4.63	1.01	
Constant	1.04[c]	.18		.47[c]	.19	
-2 Log Likelihood	3050.79	df=3228	p=.000	2702.59	df=2470	p=.000
Model Chi Square	419.92	df= 13	p=.000	458.23	df= 13	p=.000
% observations correctly classified by model	78.35%			72.22%		

a Reported for statistically significant and substantively meaningful estimates $P \leq .05$

b Significant $.01 < P \leq .05$

c Significant $P \leq .01$

TABLE 6-12
LOGISTIC REGRESSION ESTIMATES, STANDARD ERRORS, AND ODDS FOR THE VARIABLES INCLUDED IN THE DECISION TO DIVERT EQUATION - ESTIMATED SEPARATELY BY PRIOR RECORD - DISAGGREGATED MINORITY STATUS

	PRIOR RECORD = 0			PRIOR RECORD = 1		
	ESTIMATES	S.E	ODDS[a]	ESTIMATES	S.E	ODDS[a]
DEFENDANT CHARACTERISTICS						
Hispanic	-.23[b]	.10	.59	.08	.14	
African American	-.10	.12		.09	.16	
American Indian	.38[c]	.16	2.40	.33	.34	
Age - Young	.79[c]	.10	6.17	.67[c]	.15	4.68
Age - Middle	.28[c]	.09	1.91	.38[c]	.13	2.40
Gender	.30[c]	.11	.50	-.25	.16	
OFFENSE CHARACTERISTICS						
# of Charges	-.37[c]	.08	.43	-.36[c]	.13	.44
Marijuana	.59[c]	.11	3.89	.48[c]	.17	3.02
Cocaine	.14	.13		.09	.19	
Paraphernalia	-.56[c]	.20	.28	-.35	.31	
PROCESS INFORMATION						
Year of Arrest	-.43[c]	.08	.37	-.47[c]	.12	.34
Booked	.16	.11		.24	.17	
Booked-Missing	4.80[c]	.95		2.82[c]	.62	
Constant	1.00[c]	.15		-.26	.25	
-2 Log Likelihood	4023.45	df=4372	p=.000	1736.96	df=1326	p=.000
Model Chi Square	447.45	df= 13	p=.000	120.01	df= 13	p=.000
% observations correctly classified by model	79.43%			62.46%		

a Reported for statistically significant and substantively meaningful estimates $P \leq .05$

b Significant $.01 < P \leq .05$

c Significant $P \leq .01$

defendants with a prior record of arrest.

Taken together, these findings suggest that the effect of ethnicity for American Indian defendants and Hispanic defendants is salient to prosecutorial decision making to divert, but only for first offenders. For defendants with a record of prior arrests, ethnicity is unimportant. For first offenders, however, ethnicity effects are significant and in opposite directions: compared to Anglo defendants, American Indians are more likely, Hispanics are less likely, and African-Americans are equally likely to be diverted from prosecution to treatment. Clearly these findings indicate the value of disaggregating measures of minority status in this analysis of the determinants of prosecutorial discretion to divert defendants into drug treatment programs.

D. Summary and Conclusion

Logistic regression equations are used to estimate the main effects of select defendant characteristics, offense, characteristics, and process information on the decision to prosecute and the decision to divert. Relative to the contrast groups, there is a decreased likelihood of prosecution for defendants who are minority members, in the youngest age category, and male, and for those defendants who have a prior record of arrest and are charged with either a cocaine or drug paraphernalia offense. An increased likelihood of prosecution occurs among defendants charged with more than one offense and defendants charged with a marijuana offense. Some differences between the first year and the second year of the program are

observed. The decreased likelihood of prosecution for minority members occurs only in year one and the decreased likelihood of prosecution for the youngest age defendants and those charged with cocaine occurs only in year two. The effect of number of charges and of marijuana to increase the likelihood of prosecution occurs only in the first year. Finally, the analysis reveals important differences among minority defendants, with an increased likelihood of prosecution for American Indian defendants and a decreased likelihood of prosecution for Hispanic and African-American defendants.

Offense and offender characteristics also are found to have significant effects on the decision to divert the defendant from prosecution to treatment at TASC. Not surprisingly, defendants with a prior record of arrest, defendants charged with more than one offense, and defendants charged with a drug paraphernalia offense had a reduced likelihood of being diverted to treatment, consistent with the formally stated eligibility criteria. In addition, male defendants had a reduced likelihood of being diverted to TASC treatments. An increased likelihood of diversion was observed for defendants in the very young and middle age categories and for defendants charged with marijuana use or possession. Some change was noted over the two years examined, especially the greater likelihood of diversion for African-American and American Indian defendants found in the first year but not in the second year. Finally, the effects of some defendant characteristics are found to be conditioned by prior record, especially the effects of minority status. When a

record of prior arrest exists, minority status does not significantly effect the decision to divert. When, in contrast, the defendant has no record of prior arrest, the likelihood of diversion to treatment increases for American Indians and decreases for Hispanics.

VII. PROGRAM IMPACT ON RECIDIVISM

A. Introduction

Our analysis of program impact focuses attention on the effects of exposure to TASC treatment on recidivism, controlling for defendant characteristics and offense characteristics. However, a note of caution is warranted. We can not in this analysis rule out the effects of a self-selection bias. That is, the decision of which of the eligible defendants enter TASC and which do not is made by the defendants themselves (and not by some random assignment process), so it is possible that those who enter the treatment program differ from those who reject the treatment program in such unmeasured factors as self-motivation, pride, guilt, peer/family encouragement, readiness for treatment, or fear of legal sanctions. If those who enter treatment then outperform those who do not enter treatment, we can not determine how much of the improved behavior is due to those same factors which resulted in their entry into treatment and how much is due to the effects of the treatment program itself.

Consistent with earlier research on recidivism with right censoring (Visher et al., 1991; Schmidt and Witte, 1989, 1988, 1980; Wheeler and Hissong, 1988; Harris et al., 1981; Barton et al., 1981; Barton and Turnbull, 1981, 1979; Harris and Moitra, 1978; Witte and Schmidt, 1977; Stollmack and Harris, 1974; Maltz and McCleary, 1977), recidivism is defined as rearrest. Our analysis measures recidivism -- the outcome measure -- in terms of the length of time between the initial arrest, by which the

offender is brought to the attention of the Demand Reduction Program, and the first subsequent rearrest. This is a meaningful period of observation because offenders are not held in custody during this time. Analyses include only those cases of offenders who were eligible for diversion to the TASC treatment program.

The analysis estimates life tables of survival rates and regression equations of the length of time to recidivism. The regression equations are estimated using a survival analysis procedure appropriate for dependent variables with right censoring (Chung et al., 1991; Kalbfleisch and Prentice, 1980; Lee, 1980; Elandt-Johnson, 1980; Maltz, 1984). The analysis includes a nonparametric estimation of the survival distribution function using life tables, and a parametric estimation of the variables affecting length until recidivism using five distribution functions and a general nonparametric proportional hazard model found in earlier research on recidivism. Given our large sample size, we follow Lee's (1980) recommendation of using the life table method to estimate the survival distribution function instead of Kaplan and Meier's (1958) product limit estimator. As Lee (1980:76) notes, the two nonparametric (they do not depend on any parametric statistical model) estimators are essentially identical; the only difference is that the PL estimator is calculated on the individual survival time and the life-table method groups the data into specified intervals. The latter estimator is simply easier to display when the sample size is large.

B. Nonparametric Estimates of Treatment Effects on Recidivism

Figure 7-1 provides the survival distribution function for all TASC eligible offenders over the 810 day period of data collection. Following Chung et al. (1991), we assume the survival time T to be a random variable with some distribution characterized by a cumulative distribution function $F(t,0)$. 0 is a set of parameters to be estimated and $F(t,0)=P(T\leq t)$=the probability of failure at or before time t, for any $t\geq 0$. The fact that $F(t,0)$ is a cumulative distribution function implies that $F(t,0)$ approaches one as t approaches infinity. The survival function is defined as

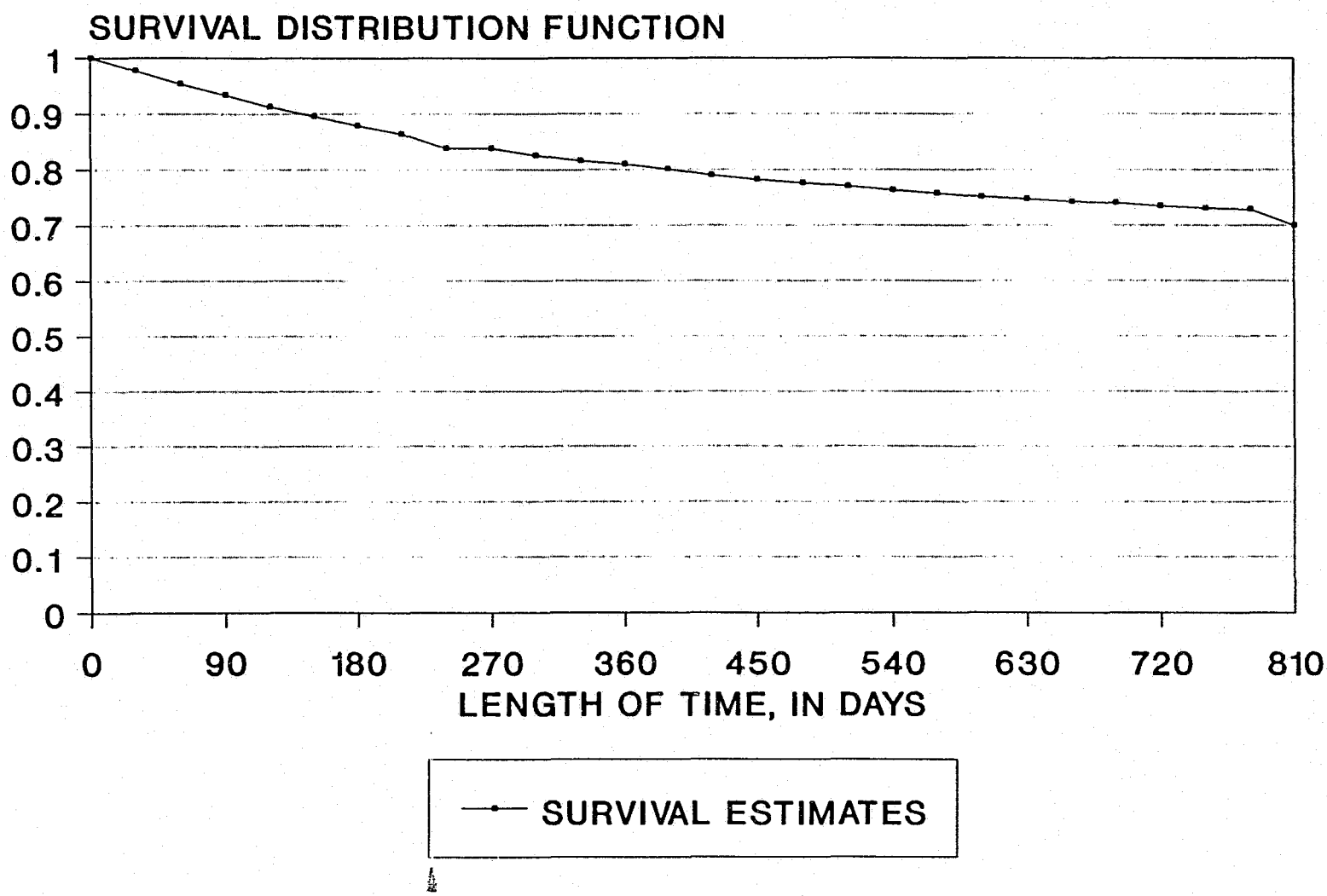
$$S(t,0) = 1-F(t,0) = P(T>t).$$

In our analysis, this formula gives the probability of survival -- that is, the probability of no rearrest until time t.

Table E-1 provides the life table survival estimates grouped into 30 day intervals. Data presented in Figure 7-1 (and Table E-1, Appendix E) indicate a declining rate of survival over time. That is to say, the survival rate is 1.00 immediately following arrest for the instant offense and then, with increased exposure to a "hazardous" environment, it decreases with only a slight to moderate decline throughout the follow-up period.

Given our interest in exploring the effect of TASC treatment on length until recidivism, we estimate the life table survival rates separately for the following four offender groups: (1) those eligible for diversion who were not exposed to TASC treatment, (2) those eligible for diversion who were exposed to TASC treatment, (3) those who were exposed to and successfully

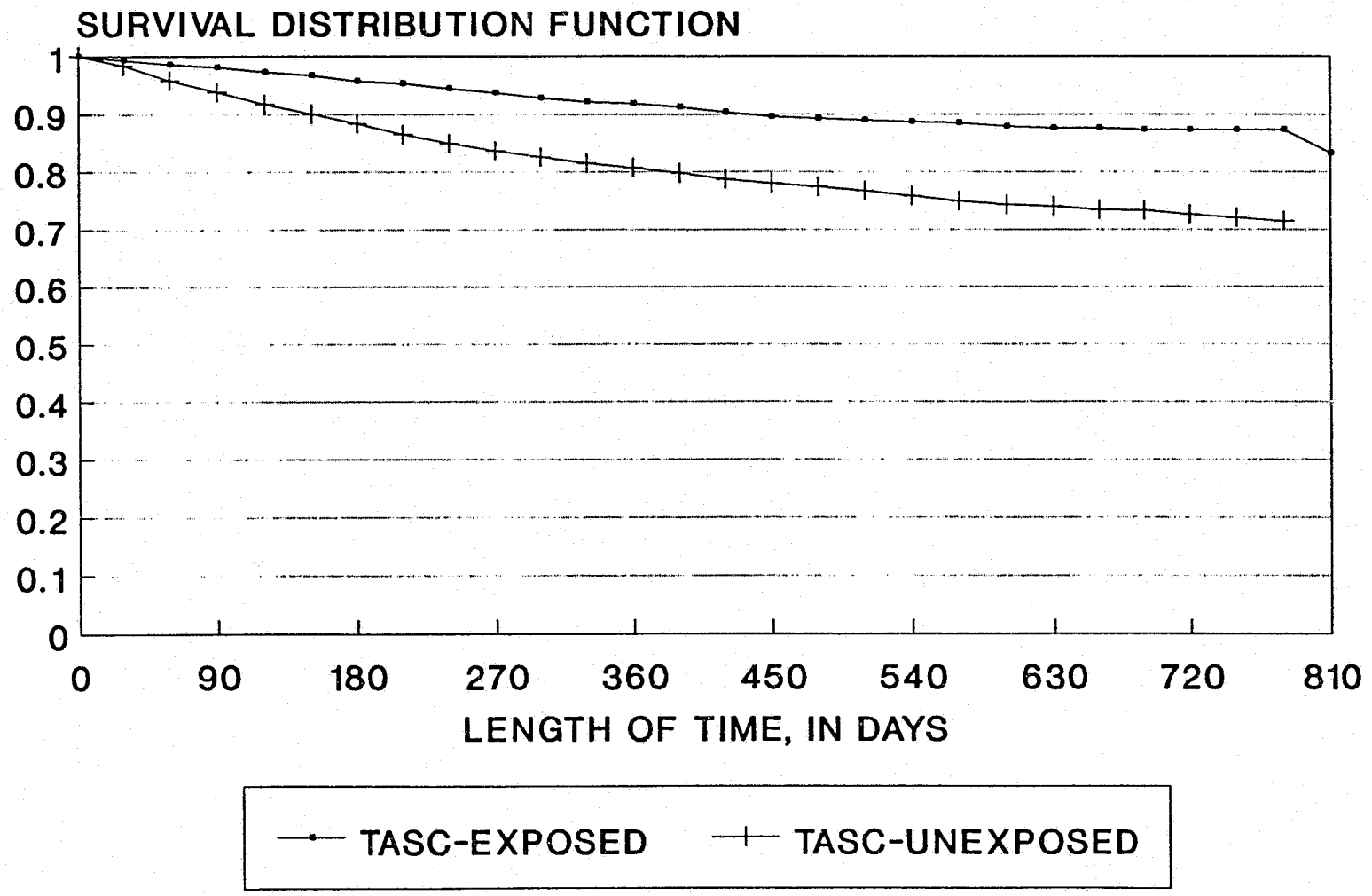
FIGURE 7-1
PLOT OF SURVIVAL DISTRIBUTION FUNCTION
FULL SAMPLE



completed TASC treatment, and (4) those who were exposed to and failed to complete TASC treatment. Figure 7-2 plots the survival distribution function for the offender group exposed to TASC and the group not exposed to TASC. Tables E-2 and E-3 (Appendix E) provide the separate life table estimates for both the exposed and the nonexposed offender groups, respectively. Figure 7-2 indicates that offenders who chose to participate in TASC treatment were more likely to avoid recidivism than offenders who were not exposed to TASC treatment. This pattern is confirmed in Tables E-2 and E-3. The logrank statistic (Lee, 1980) value of chi-square = 94.12 (1 d.f. p=.0001) for the test of equality across the two offender groups indicates that the observed difference in survival functions is statistically significant.

Of the offenders who were exposed to TASC treatment, we explore whether there is a significant difference in the survival function for offenders who successfully completed TASC treatment compared to offenders who failed TASC treatment. An examination of Figure 7-3 (and both Tables E-4 and E-5, Appendix E) indicates that the two groups are initially similar in their respective survival rates. However, at approximately 120 days after arrest (see Tables E-4 and E-5) the offenders failing TASC, relative to offenders successfully completing TASC, begin a substantial and prolonged decline in survival rates. The reported logrank test statistic (see Figure 7-3) value of chi-square = 51.83 (1 d.f.;p=.0001) indicates that the observed decline in survival rates for the group failing TASC is significantly different from the survival rate associated with the offender group successfully

FIGURE 7-2
PLOT OF TASC-EXPOSED/TASC-UNEXPOSED SURVIVAL DISTRIBUTION FUNCTION



TEST OF EQUALITY OVER STRATA

TEST	CHI-SQUARE	DF	APPROX P-VALUE
LOGRANK	94.124627	1	0.0001

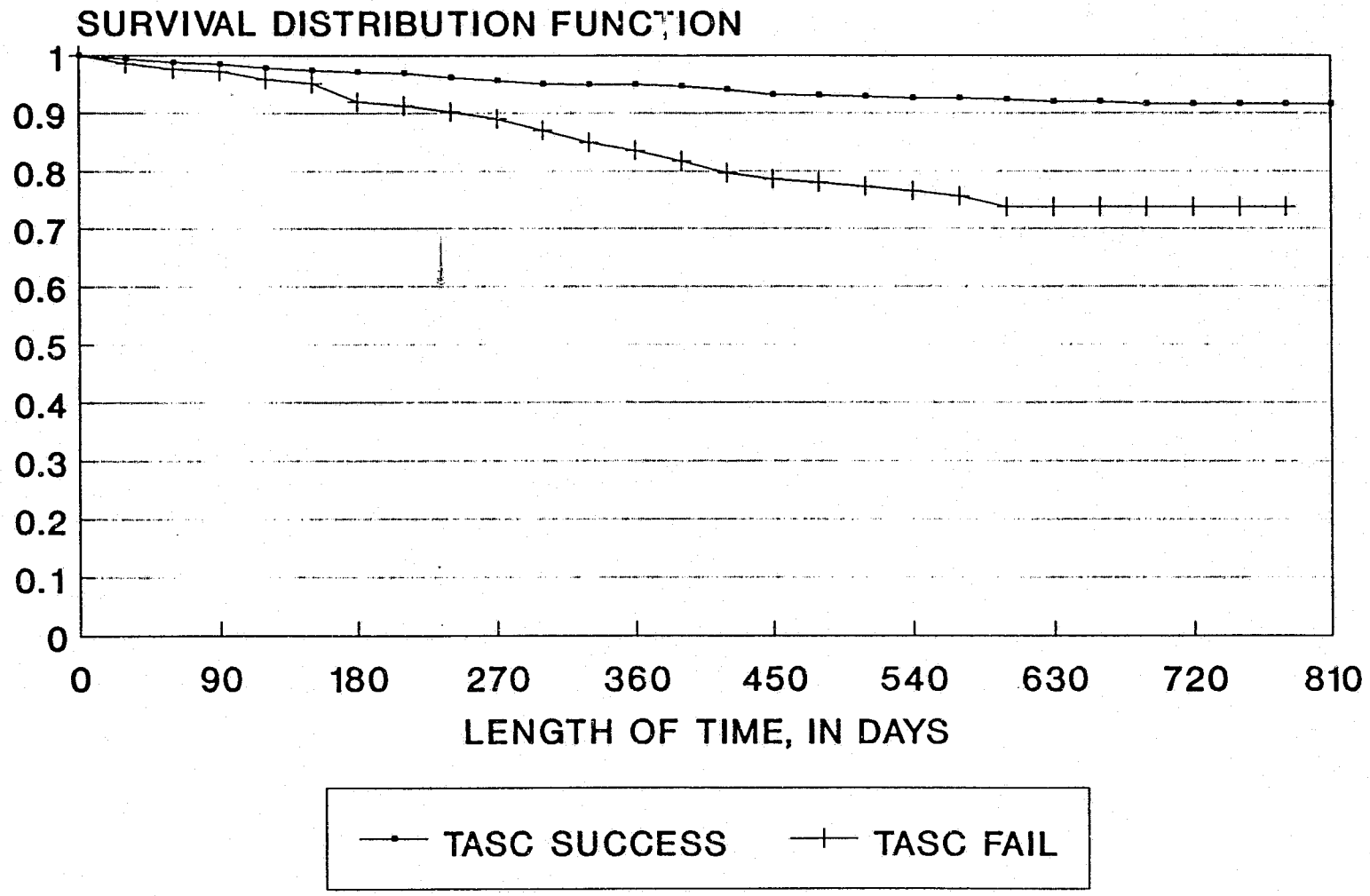
completing TASC treatment. Taken together, these finding suggest that drug offenders who successfully completed TASC, compared to offenders who entered and failed TASC treatment, are better able to avoid recidivism and to sustain that avoidance of recidivism throughout the follow-up period. Whether this is due to the effects of treatment or to self-selection bias is unknown.

C. Covariate Models of Length Until Recidivism

These findings call for further analysis of the effects of TASC treatment on length until recidivism. To explore this relationship, we first estimate a series of regression models of length until recidivism, including a dummy variable coded `1' if the offender was exposed to TASC and `0' if the offender was not exposed to TASC. Each model controls for selected defendant and offense characteristics that may alter the relationship between exposure/nonexposure to TASC and length until recidivism. The differences in survival rates noted above may be the result of a lack of homogeneity on important determinants of length until recidivism across the two offender groups. Statistical controls for potentially salient defendant characteristics and offense characteristics are introduced by using regression models of length until recidivism to rule out a rival hypothesis that any apparent effects of being exposed to TASC are, in fact, due to differences between the two offender groups.

Following earlier research on recidivism (Witte and Schmidt, 1977; Schmidt and Witte, 1989, 1980; Maltz, 1984; Wheeler and Hissong, 1988), we estimate separately the parametric regression

FIGURE 7-3
PLOT OF TASC-SUCCESS/TASC-FAIL
SURVIVAL DISTRIBUTION FUNCTION



TEST OF EQUALITY OVER STRATA

TEST	CHI-SQUARE	DF	APPROX P-VALUE
LOGRANK	51.834645	1	0.0001

models using the following distributional assumptions: exponential, gamma, lognormal, loglogistic, and Weibull. Using the log-likelihood estimate for each model, we identify which of the five distribution models offers the best fit to the data (Chung et al., 1991) and discuss the findings from that model. We then estimate a proportional hazard model (Cox, 1972) of length until recidivism. As noted by Schmidt and Witte (1984) and Chung et al. (1991), this general nonparametric model is potentially useful because the survival time distribution form is difficult to ascertain. Comparisons of the findings from the proportional hazard model with findings from the best fit parametric model are pointed out and inform our conclusions of the effect of exposure to TASC treatment on length until recidivism.

Finally, these analytical procedures also are used for estimating the net effect of the successful completion of TASC treatment on length until recidivism. For the series of regression models estimated for this purpose, we include a dummy variable code `1' if the defendant successfully completed TASC and `0' if the defendant failed TASC treatment. Again, our regression models control for a number of defendant characteristics and offense characteristics that may account for the observed differences in survival rates noted in Figure 7-3 across the two offender groups.

D. Exposure to Treatment

To examine the net effect of exposure to TASC treatment, we first turn to the findings reported in Table 7-1. Comparing the

log-likelihood value for each of the models (Chung et al., 1991), we observe that the model of length until recidivism estimated under the assumptions of a gamma distribution provides the best fit to the data. Essentially, the gamma distribution has the property of a constant failure rate and a distribution asymptotic value, the value to which it rises, equal to 1.00 (Maltz, 1984:87). Unfortunately, each of the distributions available for analysis assumes an asymptotic value of 1.00, which implies that all offenders will recidivate if given sufficient time. Maltz (1984), Schmidt and Witte (1984) and Chung et al., (1991) point out the potential difficulties of applying this assumption to models of recidivism. The better fit of the exponential distribution model should be understood as a better fit relative to the distributions available for this analysis using the SAS procedure under PROC LIFEREG.

Referring to the estimates for the variables affecting length to recidivism for the gamma model (Table 7-1), we note that exposure to TASC treatment produces a significant increase in the mean time to recidivism (b=.92, p<.01). This effect is obtained controlling for the effects of defendant's minority status, gender, prior record of arrests, age, the number of charges and the type of drug involved in the instant offense. Table 7-1 reveals that six of eight control variables produce significant effects on the mean time to recidivism. Having a prior record of arrests (b=1.10, p<.01) and being charged with the use or possession of marijuana (b=.39, p<.01) significantly increase the mean time to recidivism. The positive effect of

TABLE 1

REGRESSION ESTIMATES AND STANDARD ERROR OF THE VARIABLES INCLUDED IN THE LENGTH TO RECIDIVISM MODEL - ESTIMATED FOR FIVE DISTRIBUTIONAL FORMS OF SURVIVAL TIME (TASC-EXPOSED)

	DISTRIBUTIONAL FORM									
	EXPONENTIAL		GAMMA		LOGNORMAL		LOGLOGISTIC		WEIBULL	
	EST.	S.E	EST.	S.E	EST.	S.E	EST.	S.E	EST.	S.E
DEFENDANT CHARACTERISTICS										
Minority Status	.13	.08	.09	.11	.07	.11	.14	.10	.14	.10
Gender	-.33[a]	.11	-.44[a]	.13	-.45[a]	.13	-.41[a]	.13	-.38[a]	.12
Record of Prior Arrest	.88[a]	.08	1.10[a]	.12	1.11[a]	.12	1.05[a]	.11	.99[a]	.09
Age	.02[b]	.01	.02[b]	.01	.02[b]	.01	.02[b]	.01	.02[b]	.01
OFFENSE CHARACTERISTICS										
# of Charges	-.23[a]	.08	-.30[a]	.10	-.31[a]	.10	-.28[a]	.09	-.26[a]	.09
Marijuana	.31[a]	.11	.39[a]	.14	.39[a]	.14	.39[a]	.13	.35[a]	.12
Cocaine	-.17	.13	-.24	.17	-.24	.17	-.24	.16	-.21	.15
Paraphernalia	-.55[b]	.28	-.59	.34	-.59	.34	-.65	.33	-.63[b]	.32
PROGRAM EFFECT										
Exposed to TASC	.74[a]	.10	.92[a]	.11	.92[a]	.11	.87[a]	.11	.84[a]	.11
Intercept	7.22[a]	.35	7.40[a]	.44	7.40[a]	.44	7.08[a]	.42	7.38	.41
Log Likelihood	-2625.71		-2601.51		-2601.89		-2608.56		-2617.20	

a Significant at $P \leq .01$

b Significant at $.01 < P \leq .05$

having a prior record of arrests is unexpected and will be the subject of later discussion.

Older defendants have a significant, yet trivial, increase (b=.02, <.05). However, being male, being charged with more than one offense, and being charged with the use or possession of cocaine or drug paraphernalia significantly decrease the mean time to (or quicken the return to) recidivism. In summary, Table 7-1 suggests that there is a significant delay in recidivism among those who choose to enter TASC treatment. In addition, we note that this effect is obtained having controlled for defendant characteristics and offense characteristics which, for the most part, also produce a significant effect on length to recidivism.

Before concluding the examination of the effect of exposure to TASC treatment, we estimate a proportional hazard model that controls for the same defendant characteristics and offense characteristics included in the parametric models reported in Table 7-1. According to Cox (1972), the proportional hazard model assumes a hazard rate of the form

$$h(t\ x) = h_o(t)e^{xB}$$

where $h_o(t)$ is a completely arbitrary and unspecified baseline hazard function. This model assumes that the hazard functions of all individuals differ only be a factor of proportionality.

As noted earlier, we extend the analysis to include an estimation of the proportional hazard model because the model has the desirable property of being estimated free of distributional assumptions of survival time. Again, our interest is in estimating the effects of exposure to TASC treatment, controlling

for defendant characteristics and offense characteristics that may alter the relationship between exposure to TASC treatment and length to recidivism revealed in Figure 7-2.

Table 7-2 provides the estimates and standard errors for the variables included in the proportional hazard model of length to recidivism. Note that a positive coefficient for the proportional hazard model indicates an increase in the hazard rate and therefore a negative effect on the length of time to recidivism (Chung et al., 1991). With this change of interpretation, we note first that, consistent with Chung et al., 1991), most of the coefficient signs reported in Table 7-2 are opposite to those reported in Table 7-1.

Estimating the proportional hazard model reveals that being exposed to TASC decreases significantly ($b=-.75$, $p<.01$) the hazard rate, thus producing an increase in survival time, consistent with the findings from the gamma model. Similar to the gamma model, the proportional hazard model indicates that male defendants (compared to female defendants) and defendants charged with more than one offense (compared with persons with only one charge) are more likely to be rearrested quickly. Also consistent with the gammamodel, older defendants and defendants charged with the use or possession of marijuana are more likely to survive longer before rearrest.

One inconsistent finding across the two models is the effect of use or possession of drug paraphernalia on time to recidivism. The effect of this variable is to decrease time to recidivism in the gamma model but increase time to recidivism in the

TABLE 7-2
REGRESSION ESTIMATES FOR VARIABLES INCLUDED IN THE PROPORTIONAL HAZARD MODEL OF LENGTH TO RECIDIVISM (EXPOSED TO TASC)

	ESTIMATES	S.E
DEFENDANT CHARACTERISTICS		
Minority Status	.13	.08
Gender	.31[a]	.11
Record of Prior Arrest	.86[a]	.08
Age	-.02[a]	.01
OFFENSE CHARACTERISTICS		
# of Charges	.21[a]	.08
Marijuana	-.31[a]	.11
Cocaine	-.20	.13
Paraphernalia	-.57[b]	.28
PROGRAM EFFECT		
Exposed to TASC	-.75[a]	.09
-2 Log Likelihood	11336.53	
Model Chi Square	236.09 df= 9	p = .00

a Significant at $P \leq .01$

b Significant at $.01 < P \leq .05$

proportional hazard model. Another inconsistent finding reported in the gamma model is that a record of prior arrests significantly increases the hazard rate, and thus decreases the length of time until recidivism. We noted earlier in the discussion of the gamma model the unexpected positive coefficient associated with having a prior record of arrest. Differences in direction of the effect for this variable suggest that the gamma distribution, although clearly a better fitting model from the available parametric models, does not fit the data as well as a distribution free (nonparametric) proportional hazard model.

In summary, findings from the proportional hazard model adds further support for the effect of being exposed to TASC treatment on length until recidivism. Both models indicate that time to recidivism among those eligible offenders who agree to enter TASC is significantly longer than among eligible offenders who fail to enter TASC.

E. Successful Completion of TASC

Attention now turns to an examination of the net effect of the successful completion of TASC treatment on length of time until recidivism. Table 7-3 provides the regression estimates for the variables included in the model estimated for each of five survival distribution functions. Comparing the log-likelihood values for each distribution model reveals that the loglogistic distribution model provides the best fit to the data. This distribution form has been found to be useful for the

analysis of recidivism by Witte and Schmidt (1977).

Findings from the loglogistic equation (Table 7-3) indicate that successful completion of TASC treatment significantly increases ($b=1.24$, $p<.01$) the length until recidivism, controlling for selected defendant characteristics and offense characteristics. Three of the control variables also produce significant effects. For male defendants and for defendants charged with the use or possession of cocaine, the effect decreases significantly ($b=-.77$, $p<.05$; $b=-.93$, $p<.05$, respectively) the mean time to recidivism. For defendants with a record of prior arrests, however, the effect significantly increases ($b=1.12$, $p<.01$) the mean time to recidivism.

Before concluding this examination of the net effect of the successful completion of TASC treatment on length until recidivism, we again estimate a proportional hazard model and compare the findings with the findings reported above for the lognormal distribution model. Table 7-4 reports the regression estimates and standard errors for the proportional hazard model, where it is noted that successful completion of TASC treatment significantly decreases ($b=-1.16$, $p<.01$) the hazard rate, thus lengthening time to recidivism. This finding is consistent with the finding produced by the loglogistic distribution model.

Three control variables have a significant effect on the hazard rate. The hazard rate increases for male defendants ($b=.72$, $p<.05$), an effect which is consistent with the negative effect found in the loglogistic distribution model. However, the effects for two other control variables are inconsistent across

TABLE 7-3

REGRESSION ESTIMATES AND STANDARD ERROR OF THE VARIABLES INCLUDED IN THE LENGTH TO RECIDIVISM MODEL - ESTIMATED FOR FIVE DISTRIBUTIONAL FORMS OF SURVIVAL TIME (COMPLETE TASC)

	DISTRIBUTIONAL FORM									
	EXPONENTIAL		GAMMA		LOGNORMAL		LOGLOGISTIC		WEIBULL	
	EST.	S.E	EST.	S.E	EST.	S.E	EST.	S.E	EST.	S.E
DEFENDANT CHARACTERISTICS										
Minority Status	.20	.22	.22	.24	.20	.29	.24	.25	.22	.24
Gender	-.74b	.32	-.78[b]	.35	-.75[b]	.36	-.77[b]	.34	-.78[b]	.35
Record of Prior Arrest	.93[a]	.23	1.07[a]	.30	1.43[a]	.33	1.12[a]	.28	.98[a]	.26
Age	.01	.01	.01	.01	.00	.12	.01	.01	.01	.01
OFFENSE CHARACTERISTICS										
# of Charges	.41[b]	.20	.44[b]	.22	.48	.25	.43	.22	.43	.21
Marijuana	.31	.29	.33	.32	.37	.38	.31	.32	.33	.31
Cocaine	-.87[b]	.42	-.96[b]	.46	-1.15[b]	.52	-.93[b]	.46	-.92[b]	.45
Paraphernalia	-.99	.77	-1.09	.84	-1.36	.96	-1.11	.83	-1.03	.81
PROGRAM EFFECT										
Complete TASC Program	1.14[a]	.19	1.23[a]	.23	1.35[a]	.26	1.24[a]	.22	1.19[a]	.22
Intercept	8.47[a]	.99	8.63[a]	1.08	9.03[a]	1.21	8.27[a]	1.07	8.58[a]	1.05
Log Likelihood	-479.21		-478.81		-482.44		-478.30		-479.03	

a Significant at $P \leq .01$

b Significant at $.01 < P \leq .05$

TABLE 7-4
REGRESSION ESTIMATES AND STANDARD ERRORS FOR VARIABLES INCLUDED IN THE PROPORTIONAL HAZARD MODEL- (TASC SUCCESSFUL COMPLETION)

	ESTIMATES	S.E
DEFENDANT CHARACTERISTICS		
Minority Status	.20	.22
Gender	.72[b]	.32
Record of Prior Arrest	1.01[a]	.23
Age	-.01	.01
OFFENSE CHARACTERISTICS		
# of Charges	.35	.20
Marijuana	-.40	.29
Cocaine	-.95[b]	.41
Paraphernalia	-1.33	.82
PROGRAM EFFECT		
Complete TASC Program	-1.16[a]	.19
-2 Log Likelihood	1564.81	
Model Chi Square	78.05 df= 9	p = .00

a Significant at $P \leq .01$

b Significant at $.01 < P \leq .05$

the two models. Contrary to the effect suggested by the loglogistic distribution model, the proportional hazard model indicates that the effect of a record of prior arrests significantly increases ($b=1.01$, $p<.01$) the hazard rate, thereby indicating a decrease time to recidivism. Use or possession of cocaine significantly decreases the hazard rate ($b=-.95$, $p<.05$), thus lengthening the time to recidivism. Under the loglogistic distribution model, the effect is to decrease the mean length to recidivism. Because the distribution function for length to recidivism is not well understood, we again choose to place more validity in the findings obtained from the proportional hazard model because it does not impose a particular set of distribution assumptions on the model.

In summary, the analysis of the net effect of successful completion of TASC treatment is consistent for both the loglogistic distribution model and the proportional hazard model. From both models, one concludes that the time to recidivism is significantly more prolonged among those who enter and complete the TASC treatment than among those who enter but fail the treatment program.. In addition, findings from the proportional hazard model suggest the importance of controlling for prior record of arrests, defendant's gender, and whether the drug offense involves the use or possession of cocaine. Once again, however, the unknown selectivity bias prevents us from determining whether these findings are due to treatment effects or self-selection effects.

F. Summary and Conclusion

The effect of contact with, and successful completion of, the TASC treatment programs on length of time to recidivism is assessed using both the gamma model and the proportional hazard model. The effect of exposure to TASC, net the effect of select offender and offense characteristics, is to lengthen the offender's time to recidivism. Among persons who were eligible for diversion to TASC, those who had no exposure to the TASC program recidivated significantly more quickly than did those who had some contact with the program. This finding is independent of any differences in time to recidivism which are due to age, gender, drug offense type, number of charges, or record of prior arrests. Selectivity bias is likely, however, in that the same factors which lead some persons to accept the TASC treatment may be the same factors which lead to more favorable outcomes, independent of any effects of the treatment.

Length of time to recidivism also is significantly affected by whether the offender who enters TASC completes the program or fails the program. Those who fail the TASC program recidivated significantly more quickly than those who completed the TASC program, independent of any differences in time to recidivism which are found to be due to gender, drug offense type, or record of prior arrests. Again, we can not rule out the possiblity that these results are biased to some degree by the self-selection of defendants into TASC treatment.

VIII. SUMMARY AND CONCLUSION

A. Introduction

The concept of "User Accountability" asserts a new rationale for treating casual users as a serious legal problem. It redirects the discussion away from the longstanding debate over the harmfulness of drugs to their users and focuses instead on the argument that users must be seen as a legal threat because they provide the customer base for the criminogenic suppliers of illegal drugs. Although developed at the national level, the survival of "User Accountability" as a viable demand reduction strategy depends on local implementation. The Maricopa County Demand Reduction Program contains a rather comprehensive and integrated user accountability program, and it illustrates the general principles and criteria of such a program.

This evaluation of the Maricopa County Demand Reduction Program does not assess the larger policy issues involved in making the decision to enforce drug use laws. The debate over the best approach to prevent and deter drug use is beyond our scope. So too is the issue of whether casual drug use is a crime serious enough to warrant special attention by the criminal justice system. In a similar manner, this evaluation does not critically address the criteria determined by the Executive Board of the Demand Reduction Program for eligibility for treatment. The evaluation takes the Maricopa County Demand Reduction Program as a given and focuses on how well that Program has achieved its objectives by studying the operations and impact of the program

during the first twenty-four months of implementation. Aggregate data were used to study changes over time, and individual data were used to study the flow of cases through the Demand Reduction Program. The results provide a mixed assessment.

B. Internal Operations of the Program and Definitions of Success

A variety of indicators and outcomes suggest that the Demand Reduction Program has been successful. Local agencies and their representatives often define program success on the basis of raw numbers:

(1) the Program has received high visibility and positive publicity, aided by a strong commitment from the private sector and cooperative media coverage;

(2) there is a large volume of offenders processed through the program annually, reaching over 10,000 in the first two years;

(3) a vast amount of funds have been generated over the first two years in both the County Jail fees ($39,342) and Arizona Drug Enforcement Fund fees ($850,411). Personnel and resource costs of the Program are unknown, however.

In addition, this evaluation has produced findings which reflect positively on the Demand Reduction Program:

(1) of the cases deemed to be prosecutable, nearly three-fourths were eligible for deferred prosecution pending successful completion of the treatment program provided by TASC, indicating that the referrals and eligibility criteria were appropriate to generate a large volume of cases for diversion from prosecution;

(2) charges were filed against virtually all of the cases

which failed to enter the TASC treatment program;

(3) among those prosecuted cases which have been closed to date, a conviction was four-to-five times more likely than no conviction;

(4) persons who entered TASC were three times more likely to successfully complete the treatment program than to fail the treatment program (excluding unresolved or "open" cases), with marijuana cases being much more likely than cocaine and other drug cases to enter and to complete these programs;

(5) the length of time to recidivism was longer for offenders who chose to enter TASC than for offenders who did not enter TASC; Among those who did enter TASC, time to recidivism was longer for those who completed the treatment program than for those who failed the treatment program. These are "signal effects": while we can not determine whether this difference in recidivism is due to the treatment program or to the factors which motivated the defendants to enter the treatment program, their entry into the treatment program signals or identifies those defendants likely to have lower subsequent criminal activity.

Despite these positive indicators, there are other factors which raise serious questions about the successful operation of the Demand Reduction Program.

(1) fully three-fifths of those persons judged eligible for deferred prosecution do not enter the TASC treatment program, indicating that fewer cases than anticipated will be diverted from the prosecutorial and court caseloads;

(2) although charges are filed against virtually all persons who do not enter TASC, a very large percentage of these cases remain "open" for extended periods of time (with or without a warrant outstanding), with more than 25 percent of all cases still open after more than 15 months of their entrance to the program;

(3) decisions concerning which cases are prosecutable (versus not prosecutable) and which cases are eligible (versus ineligible) for deferred prosecution and referral to treatment are significantly related to extralegal factors, including the offender's ethnicity, gender, and age. The reason for these relationships is unknown.

C. **Program Impact**

Analyses of individual case data reveal that something is happening -- that there are large numbers of cases being processed through the stages of the Demand Reduction Program. Yet, a larger issue is explored by use of aggregate data to study the trends over a five-year period. These data allow us to ask "what has changed since the Program began?" The answer is "very little."

(1) there was no increase in the number of drug use cases submitted to the County Attorney by Phoenix police, and the increase by suburban departments was not sustained over time;

(2) there was no increase in the proportion of all cases formally booked at the County Jail;

(3) there was no change in the conviction rate of closed cases;

(4) the was an increased use of deferred prosecution and diversion to treatment, which corresponded to a decrease in the percentage of cases against which charges were filed or were turned down.

(5) there was no change in the percentage of all cases which are prosecuted (sooner or later) because so many deferred cases do not accept the TASC option.

D. **Summation**

In conclusion, what is the net effect of the Demand Reduction Program? Other than the inclusion of the pre-file diversion option, there are no changes in the level of enforcement or the resolution of these type of cases. There is no indication of increased enforcement by law enforcement, other than through the publicized, and largely symbolic, Task Force operations. Neither the number of cases submitted nor the percentage of cases formally booked at the County Jail were affected by the implementation of the Program. Similarly, there is no indication of increased enforcement by the County Attorney's Office.

Where change is observed is in the increased use of diversion to treatment as an option to either a case turndown or filing charges. In doing so, it has "widened the net" by bringing into treatment persons who otherwise would not have been retained in the criminal justice system. Since many of these cases would not have been prosecuted in the first place, they can not be said to be "diverted" from prosecution now. This finding is consistent with the Program's stated objective of a "zero-

tolerance" policy toward drug users: those cases which would have been actively prosecuted previously continue to be actively prosecuted within the Program; those cases which would have been rejected for prosecution previously now are accepted into the Program and diverted to treatment.

Further, our analysis indicates that those eligible defendants who choose to enter the TASC treatment program, especially those who then complete the treatment program, have a significantly slower return to recidivism than those eligible defendants who do not enter the TASC treatment. This difference may be due to the effects of treatment, but we can not rule out the likelihood that the difference also reflects those factors which motivate some people to agree to enter treatment while other people do not.

In conclusion, it appears that the Demand Reduction Program has succeeded in achieving the following:

(1) it has established a very high profile for itself and its "DO DRUGS.DO TIME." campaign, which may be viewed as a public education/general deterrence program;

(2) it has met its objective of net widening, by retaining within the criminal justice system cases which previously would have been turned down.

(3) it has expanded the use of diversion to treatment, largely with pre-file cases;

(4) it has generated funds (at unknown costs) through the collection of fees from persons who accept the option to treatment; and

(5) it has displayed a differential length of time to recidivism among those who have contact with the TASC treatment program, although it is unclear whether this difference is due to the effects of treatment or the effects of self-selection into treatment.

APPENDIX A

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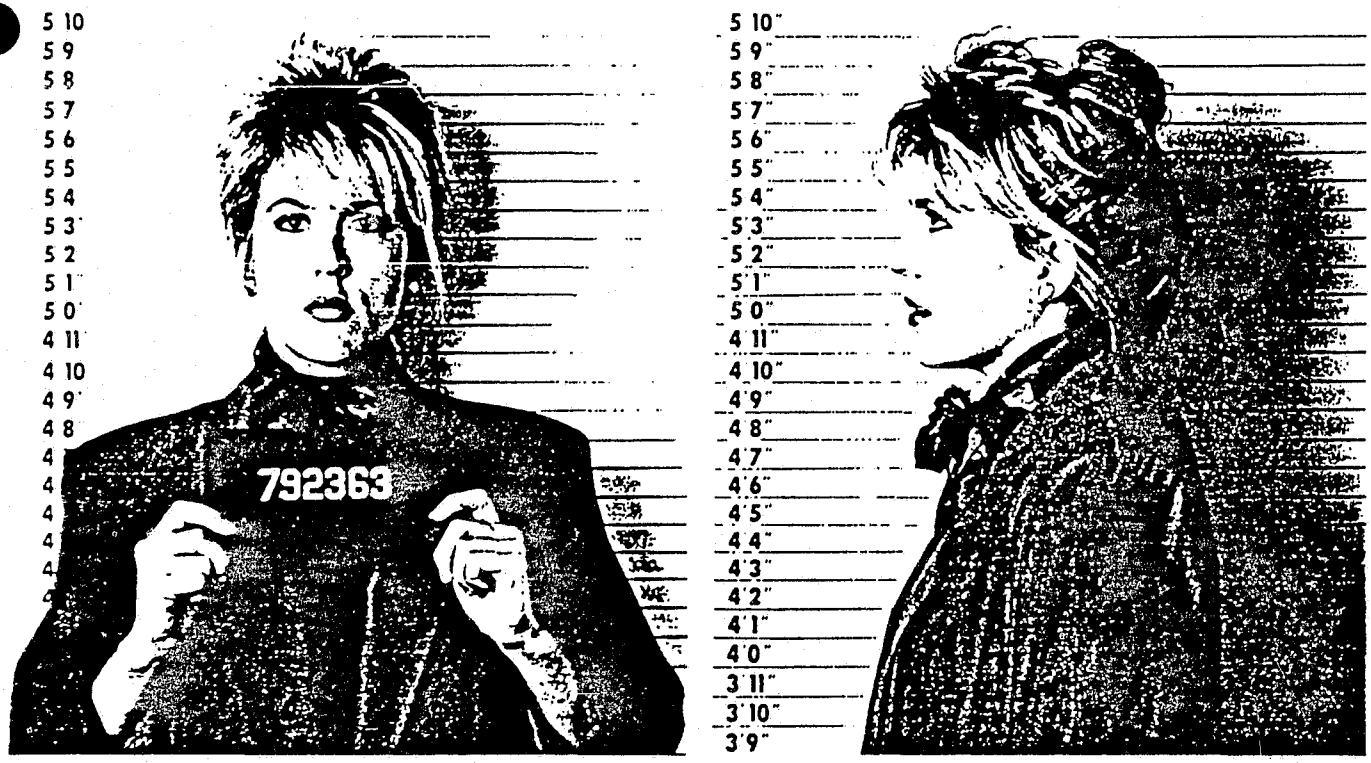
APPENDIX B

SAMPLE POSTERS FROM "DO DRUGS. DO TIME." CAMPAIGN

WE'RE TAKING A WHOLE NEW LOOK AT THE CASUAL DRUG USER.



In Maricopa County, you can no longer do drugs and expect to get away with it. A tough new anti-drug police task force is now on the streets. And if they catch you with drugs, they're taking you to jail. You then face felony charges, a prison sentence and stiff financial penalties. Or pay to enter a year-long rehab program. So before you do drugs, think about how they could make you look.

DO DRUGS. DO TIME.

Maricopa County Demand Reduction Program.

WHAT THE CASUAL DRUG USER WILL BE WEARING THIS SEASON.

A tough new anti-drug police task force is now on the streets in Maricopa County enforcing our already tough drug laws. And if they catch you with drugs, they're taking you to jail. You then face felony charges, a prison sentence and stiff financial penalties. Or pay to enter a year-long rehab program. All of which means drugs are no longer the fashionable thing to do.

DO DRUGS. DO TIME.

Maricopa County Demand Reduction Program.

APPENDIX C

METHODOLOGY OF THE UNIFORMED OFFICERS SURVEY

METHODOLOGY OF THE UNIFORMED OFFICERS SURVEY

A. Questionnaire Design and Sampling Decisions

A two-wave panel study was proposed as the best way to measure the important issues regarding implementation among uniformed officers. The initial survey of officers was completed in March, 1990, approximately one year after program implementation. The second survey of officers was completed in April, 1991. The 13-month period between administration of the questionnaires allows sufficient time for early problems to arise, be identified and resolved and for the program to stabilize and become institutionalized as an integral part of the police officer outlook.

Initially, we planned a two-wave panel study which would ask a sample of 500 uniformed police officers to respond to a confidential questionnaire. The questionnaire was designed to measure support for program goals, familiarity with the program, training about the program, and changes in the behavior of uniformed officers in the enforcement of narcotic drug laws. Design of the survey instrument began in December, 1989, shortly after the evaluation was begun. The initial stages of this process included a review of a number of scales used in measuring job satisfaction, punitiveness, role strain, self-estrangement, stress, organizational commitment, organizational support, cynicism, authority, rehabilitation and distributive justice. This review was conducted with the specific goals of the Demand Reduction Program in mind. A number of measures were selected to serve as controls in the study. For example, officers who are

highly cynical of their work in general are not very likely to be receptive to new programs. Similarly, officers who have high levels of commitment to their work are likely to be more supportive of new programs. By controlling on these more general attitudes and values, we hoped to learn more about just how the Demand Reduction program was being received by officers.

Constructing a survey instrument requires both extensive and intensive knowledge of programs and participants. This is especially the case for multi-agency, multi-goal programs such as the Demand Reduction Program. Therefore, interviews were conducted with law enforcement and prosecution personnel. Included in these interviews were Captain John Buchanan, Phoenix Police Department; Lieutenant Billie Joe Harris, Chandler Police Department; Lieutenant Ray Martinez, Glendale Police Department; Major John Koppick, Maricopa County Sherrif's Office; and Bud Parks, Prosecuting Attorney's Office. Because each of these agencies and individuals played a key role in the design and operation of the Demand Reduction Program, their input was sought for questionnaire design. These interviews focused on support for Demand Reduction Program goals, methods of communicating those goals, methods of evaluating the implementation of the Demand Reduction Program, and the mechanics of encouraging survey participation.

The results of these interviews were used to design a draft questionnaire, which was distributed to Phoenix Police Chief Ruben Ortega and Maricpoa County Sheriff Tom Agnos in January, 1990. Speaking on behalf of the Executive Committee, they refused

to allow nearly all questions which did not directly address the Demand Reduction program, thereby eliminating items we wished to use as controls for relevant factors. The resultant questionnaire, used for the first wave of the study, follows this summation. The follow-up survey was identical to the first, except for the addition of two questions asking whether the respondent has participated in the first-wave survey.

The nature of police assignments and the inability to obtain a sampling frame from the diverse police agencies participating in the Demand Reduction Program made the use of a random sampling strategy impossible. Consequently, we used a purposive sampling strategy that met several objectives. First, we sought to achieve a rather substantial sample size. Our initial goal of 500 officers assumed we would have a sampling frame and a random sample. Without that, we decided that a larger sample size would be appropriate and we sought to double the sample size. Second, our sampling strategy was designed to include <u>all</u> of the participating law enforcement agencies, including the smallest and the most remote. A third consideration in sampling was timing the survey. By administering the survey during a busy three-day period (Thursday, Friday, Saturday), we tried to select a time when the maximum number of officers would be present. By including all shifts within that three-day period, we wanted to acknowledge possible variations by shift in training, activity, and support for the Demand Reduction Program.

The mechanics of distributing the questionnaire also presented a considerable challenge. One option was to mail a

questionnaire to every "Nth" officer. Our discussions with officers in several departments, as well as two of the Valley coordinators of the Demand Reduction Program, indicated that our return from this method of questionnaire administration was likely to be low. We also considered distributing the instrument at the start of each shift with instructions that it was to be completed during the shift and returned to the sergeant at the end of the shift. This technique too, received little support. We finally determined that the best method of administration would be to use the briefing period which occurs before each shift begins. It was agreed that questionnaires were to be distributed during the briefing. Questionnaires were to be completed during the briefing period, if possible, or during the shift. In some cases, however, questionnaires were not returned immediately. A person in each department was identified as being responsible for collecting all of the questionnaires distributed at that department and forwarding them, using the stamped, addressed envelope provided, to the research team.

Using the sergeants as focal points for collecting completed questionnaires had the advantage of maximizing the return of questionnaires, since each supervisor would observe the process of distribution, completion and collection. However, this procedure had the disadvantage of making it impossible to calculate the non-response rate. Since the number of officers on duty varies daily, each shift was provided with more questionnaires than it was likely to need and instructed to return only those questionnaires which had been distributed --

whether or not the respondent completed the questionnaire. Some jurisdictions appeared to return only the questionnaires distributed, but some returned all questionnaires without indication of which were "refused" and which were "extras." Further, there is reason to believe that not all the forms were returned from officers who declined to participate; if these persons simply dumped their questionnaire in the garbage can, then our count of the number distributed and the percentage refused is biased. Nearly 70 percent of the returned questionnaires were complete, which indicates a sufficiently high level of response to have confidence in the results.

Each questionnaire contained a cover letter which explained the purpose of the survey, described the questionnaire in brief, and informed the respondent of his or her right to decline to participate. If the respondent consented to participate, the inclusion of her or his name and badge identification number were optional. In the first-wave survey, 590 (or 50 percent) of the 1,181 officers who completed the survey provided their name and identification number. In the second year, 620 (or about 51 percent) of the 1,216 respondents included this information. Unfortunately only 127 of the officers who provided a name during the first-wave survey also did so for the second-wave survey. This small number, approximately 10 percent of the respondents from each year, precludes analysis of this subgroup. This is a very high percentage of respondents willing to give personal identifiers on mailed questionnaires, and the figure is especially high among police. We feel that this speaks well for

the acceptance the researchers were able to gain by the police departments as well as for the officers' acceptance of the Demand Reduction Program.

The respondents to the survey are representative of the diversity of law enforcement agencies in Maricopa County. A summary of the agencies represented in the survey and the number of respondents from each department is presented in Table C-1. Three observations are most apparent from this table. First there is a great diversity of departments represented in the responses to the survey. The second observation is that while the distribution of responses is not perfectly proportional to the size of the various police departments in the Valley, they do mirror the rank ordering of these departments. Finally, changes between the 1990 and the 1991 surveys are very small for each department. This lends further confidence to the use of this sample as representative of police officers' views regarding the Demand Reduction Program.

B. Officer Characteristics

We now turn to a consideration of the demographic characteristics of the respondents. These include personal characteristics such as gender, ethnicity, age, marital status, and education. Law enforcement characteristics in this category include rank, shift, years at current rank and years on force. Two observations will be made for these data. The first is the simple distribution of cases across the categories of each variable. The second is the stability between the distributions for year one and year two of the police survey. These data are

TABLE C-1
SURVEY PARTICIPATION BY POLICE DEPARTMENT

DEPARTMENT	1990		1991	
	N	%	N	%
Avondale	9	1	7	1
Buckeye	9	1	0	0
Chandler	45	4	39	3
Gilbert	10	1	13	1
Glendale	67	6	66	5
Goodyear	8	1	11	1
Guadalupe[a]	4	*	NA	NA
Mesa	98	8	101	8
Paradise Valley	14	1	1	*
Peoria	27	2	18	2
Phoenix	571	48	622	51
Scottsdale	74	6	74	6
Surprise	7	1	8	1
Tempe	96	8	104	9
Tolleson	8	1	b	0
Wickenberg	3	*	6	1
Youngtown	3	*	0	0
Maricopa Co. Sheriff	128	11	146	12
Total	1181	100	1216	100

* less than .5

[a] Guadalupe ceased operation as an independent police agency and now is policed by the Maricopa County Sheriff's Office.

b Due to miscommunication, Tolleson copied and distributed the 1990 survery in 1991. The survey forms returned were not included in the 1991 analysis.

TABLE C-2
CHARACTERISTICS OF UNIFORMED OFFICER RESPONDENTS

	1990 (N=1181) %	1991 (N=1216) %
PERSONAL CHARACTERISTICS		
Age Group	($\bar{X}$ = 32.8) (St. Dev. = 7.2)	($\bar{X}$= 32.5) (St. Dev.= 7.1)
21 - 25	22	16
26 - 30	23	33
31 - 40	38	35
41 or Older	17	16
Gender		
Male	93	92
Female	7	8
Ethnicity		
Anglo	89	87
Hispanic	8	9
Other	4	4
Education		
High School Degree	11	13
Some College	48	47
AA	19	16
BA or Beyond	21	23
Marital Status		
Single	29	30
Married	71	70
WORK CHARACTERISTICS		
Shift		
Midnights	28	34
Days	35	30
Afternoons	37	35
Rank		
Patrol Officer	84	85
Sergeant	12	12
Other	4	3
Years at this Rank		
1 or Less	26	25
2	12	14
3	13	10
4 - 10	32	34
11 or More	17	17

TABLE C-2 (continued)
CHARACTERISTICS OF UNIFORMED OFFICER RESPONDENTS

	1990 %	1991 %
Years on the Department		
1 or Less	21	21
2 - 5	33	35
6 - 10	22	19
11 or More	24	25

presented in Table C-2.

The average age of police participants in the survey for each year was 32 years, with no significant difference in age between first and second wave participants. In the second year of the survey, however, there were somewhat fewer respondents in the youngest age category, 21-25. The distribution of respondents by gender remains constant, with males comprising the great majority of those sampled in each year. The data on ethnicity displayed similar patterns, with no significant differences between the ethnicity distribution in 1990 and 1991. Whites comprise the majority of the sample in each year, with Hispanics representing the next largest group (8% in 1990 and 9% in 1991), which is about twice the size of all other groups combined. The largest part of the sample in each year had finished some college, and there were no significant differences between the educational level of respondents for 1990 and 1991. Similarly, there is no significant difference between the proportion single or married; the majority of respondents, 70% in 1990 and 71% in 1991, were married.

In general, a similar picture emerges for officer characteristics. In this context, we consider the difference between 1990 and 1991 survey respondents for shift, rank, years at rank, and years on the force. No significant differences are found. Indeed, one is struck by the great similarity between these measures across time.

These data provide insight into two important issues for the data analysis. First, the absence of significant differences in

personal or professional characteristics between the two survey years gives us greater confidence that any differences observed in measures of program impact are not due to differences in the personal and organizational characteristics of the respondents sampled at each time. Second, these personal and organizational characteristics of the survey respondents generally mirror those for police departments in the Valley, lending greater support to our assumption that these respondents are representative of uniformed officers throughout Maricopa County.

C. Scale Construction

This section of the analysis considers four scales constructed to examine each of four complexes of attitudes regarding the Demand Reduction Program. These four areas include (1) a measure of the police effort in the Demand Reduction Program, (2) a measure of the cooperation among criminal justice agencies, (3) attitudes regarding the harm involved in drug use, and (4) support for the treatment component of the Demand Reduction Program. The construction of these scales permits a more in-depth look at these complex issues. Each of these scales is summarized in Table C-3.

The first scale, police effort, is comprised of 6 items, each of which measures some aspect of the police effort in the Demand Reduction Program, including knowledge of the program, training, support from supervisors, participation in Task Force operations, general drug enforcement effort and increased individual and departmental enforcement efforts against casual drug users. The scale's alpha coefficient of reliability is .68

TABLE C-3
SCALES CONSTRUCTED TO MEASURE PROGRAM SUPPORT

	1990	1991
Police Effort (6 Items)		
$\bar{X}$	9.90	9.90
St. Dev.	1.70	2.70
Alpha Coef.	.68	.64
Cooperation Among Criminal Justice Agencies (4 Items)		
$\bar{X}$	6.80	6.60
St. Dev.	1.30	1.40
Alpha Coef.	.56	.61
Attitudes Regarding Drug Harm (4 Items)		
$\bar{X}$	14.20	13.70
St. Dev.	2.00	2.10
Alpha Coef.	.78	.74
Support for the Treatment Component of the DRP (4 Items)		
$\bar{X}$	5.60	5.80
St. Dev.	1.30	1.50
Alpha Coef.	.70	.75

for 1990 and .64 in 1991, both sufficiently high for us to have confidence in this measure. A higher mean scale value indicates higher police effort, and the highest possible scale value was 14. There was no change in the mean value for this scale from the first to the second year of the program, indicating effective institutionalization of the program effort among police.

The second scale measures the level of cooperation among criminal justice agencies, including one's own department, other police departments, and the prosecutor's office. The highest possible scale value is 12 and a higher score indicates a higher level of perceived cooperation among criminal justice agencies. A slight decline in the mean values for this scale was observed from 1990 to 1991, but the difference is not significant.

The third scale was constructed to measures officers' attitudes regarding the harm that drugs can cause. It is comprised of four variables that measure the perceived physical and psychological harm attributable to drugs, as well as the level of seriousness of drug use in both moral and criminal terms. The alpha values are quite high for each of the scales, reaching .78 in 1990 and .74 in 1991, indicating a strong degree of agreement between the measures in the scale. The maximum scale value is 16, and this scale has the highest mean values: 14.2 in 1990 and 13.7 in 1991. Clearly, the strongest attitudes measured here are those reflecting officers' beliefs regarding the harm which drugs can cause.

The fourth scale measures support for the treatment component of the Demand Reduction Program. This four-variable

scale has a maximum value of 8. It includes such questions as whether officers believe first offenders deserve diversion, whether programs such as this are needed, whether treatment of casual users is as effective as punishment, and whether the program will help deter casual users. This is the only scale which shows an increase in the mean values from 1990 (5.6) to 1991 (5.8). Again, the alpha is strong for both scales, indicating reliability. The level of support for the treatment component of the Demand Reduction program as well as the modest increase in that level of support are indicators that information about the treatment component of the program had successfully reached the police.

APPENDIX D

PROSECUTORIAL DECISION MAKING, SUPPLEMENTAL TABLES

TABLE D-1

CORRELATION COEFFICIENTS FOR THE VARIABLES INCLUDED IN THE DECISION TO PROSECUTE EQUATION - FULL SAMPLE

	MINORITY STATUS	YOUNG	MIDDLE	GENDER	PRIOR RECORD	# OF CHARGES	MARIJUANA	COCAINE	PARAPHERNALIA	YEAR	BOOKED	BOOKEDM
MINORITY STATUS		-.02	-.002	-.06	-.11	.10	-.07	-.01	-.01	-.03	-.01	.01
YOUNG			.53	.001	.03	-.01	-.13	.01	-.03	.03	.007	.001
MIDDLE				.01	-.03	.01	-.07	-.01	-.02	.01	-.001	.001
GENDER					-.04	.06	-.14	-.06	.01	.01	-.003	.008
PRIOR RECORD						-.05	.05	.01	-.01	-.07	.001	.01
# OF CHARGES							-.13	-.14	-.02	-.02	-.009	.001
MARIJUANA								.69	.50	.01	-.002	-.01
COCAINE									.46	-.02	-.01	.001
PARAPHERNALIA										-.28	-.003	.01
YEAR											-.01	-.003
BOOKED												.98
BOOKEDM												

TABLE D-2
DESCRIPTIVE STATISTICS AND CODING FOR VARIABLES INCLUDED IN THE DECISION TO PROSECUTE EQUATION - ESTIMATED SEPARATELY BY YEAR

		YEAR = 0		YEAR = 1	
	CODING	N	%	N	%
DEFENDANT CHARACTERISTICS					
Minority Status	1 = African American, Hispanic, Indian, Asian, Other	1144	29	1016	34
	0 = Anglo	2806	71	2011	66
Age - Young	1 = 16-23 yrs	1330	34	901	30
	0 = other	2620	66	2126	70
Age - Middle	1 = 24-30 yrs	1405	36	1089	36
	0 = other	2545	64	1938	64
Gender	1 = male	3247	82	2475	82
	0 = female	703	18	552	18
Record of Prior	1 = yes	851	22	843	28
Arrest	0 = no	3099	78	2184	72
OFFENSE CHARACTERISTICS					
# of Charges	1 = 2 or more	1263	32	1056	35
	0 = 1 charge	2687	68	1971	65
Marijuana	1 = poss. marijuana	2412	61	1700	56
	0 = other drug type	1538	39	1327	44
Cocaine	1 = poss. cocaine	759	19	703	23
	0 = other drug type	3191	81	2324	77
Paraphernalia	1 = poss. paraph.	178	5	147	5
	0 = other drug type	3772	95	2880	95
PROCESS INFORMATION					
Booked	1 = defendant booked	2902	74	2377	79
	0 = not booked - other	1048	26	650	21
Booked-Missing	1 = def. booked-missing	556	14	343	11
	0 = not booked - other	3394	86	2684	89
DEPENDENT VARIABLE					
Decision to Prosecute	1 = prosecutable	3242	82	2484	82
	0 = turndown or further	708	18	543	18
Total		3950	100	3027	100

TABLE 3

CORRELATION COEFFICIENTS FOR THE VARIABLES INCLUDED IN THE DECISION TO PROSECUTE EQUATION - PROVIDED SEPARATELY BY YEAR *

	MINORITY STATUS	YOUNG	MIDDLE	GENDER	PRIOR RECORD	# OF CHARGES	MARIJUANA	COCAINE	PARARPHERNALIA	BOOKED	BOOKEDM
MINORITY STATUS		-.02	-.004	-.09	-.11	.10	-.08	-.21	.01	-.01	.01
YOUNG	-.03		-.02	-.04	.02	-.28	-.11	.04	-.01	.01	.000
MIDDLE	.002	.50		.003	-.03	.01	-.07	.01	-.02	.001	.002
GENDER	-.04	.02	.03		-.05	.07	-.16	-.08	-.04	-.002	-.008
PRIOR RECORD	-.10	.04	-.04	-.01		-.04	.05	.006	-.02	.006	.02
# OF CHARGES	.06	-.01	-.002	.04	-.06		-.12	-.14	-.28	-.01	-.005
MARIJUANA	-.06	-.15	-.07	-.12	.05	-.14		.66	.49	-.002	-.01
COCAINE	-.21	-.02	-.02	-.04	.02	-.12	.71		.44	-.003	.003
PARAPHERNALIA	-.03	-.05	-.02	.002	-.002	-.27	.50	.48		.002	.009
BOOKED	-.01	.004	-.006	-.006	-.003	-.007	-.007	-.01	-.007		.98
BOOKEDM	.01	-.000	-.003	.003	.008	.007	-.01	-.000	.004	.99	

* Coefficients to the top and right of the diagonal are for year = 0; coefficients to the bottom and left of the diagonal are for year = 1.

TABLE D-4
DESCRIPTIVE STATISTICS AND CODING FOR VARIABLES INCLUDED IN THE DECISION TO PROSECUTE EQUATION - DISAGGREGATED MINORITY STATUS VARIABLE - FULL SAMPLE

	CODING	N	%
DEFENDANT CHARACTERISTICS			
Hispanic	1 = Hispanic	1170	17
	0 = other	5784	83
African American	1 = African American	792	11
	0 = other	6162	89
American Indian	1 = American Indian	175	3
	0 = other	6779	97
Age - Young	1 = 16-23 yrs	2219	32
	0 = other	4735	68
Age - Middle	1 = 24-30 yrs	2487	36
	0 = other	4467	64
Gender	1 = male	5702	82
	0 = female	1252	18
Record of Prior	1 = yes	1692	24
Arrest	0 = no	5262	76
OFFENSE CHARACTERISTICS			
# of Charges	1 = 2 or more	2310	33
	0 = 1 charge	4644	67
Marijuana	1 = poss. marijuana	4098	59
	0 = other drug type	2856	41
Cocaine	1 = poss. cocaine	1457	21
	0 = other drug type	5497	79
Paraphernalia	1 = poss. paraph.	325	5
	0 = other drug type	6629	95
PROCESS INFORMATION			
Year of Arrest	1 = 2nd year	3020	43
	0 = 1st year	3934	57
Booked	1 = defendant booked	5260	76
	0 = not booked - other	1694	24
Booked-Missing	1 = def. booked-missing	896	13
	0 = not booked - other	6058	87
DEPENDENT VARIABLE			
Decision to Prosecute	1 = Prosecutable	5710	82
	0 = turndown or further	1244	18
Total		6954	100

TABLE D-5
DESCRIPTIVE STATISTICS AND CODING FOR VARIABLES INCLUDED IN THE DECISION TO PROSECUTE EQUATION - DISAGGREGATED MINORITY STATUS VARIABLE - ESTIMATED SEPARATELY BY YEAR

		YEAR = 0		YEAR = 1	
	CODING	N	%	N	%
DEFENDANT CHARACTERISTICS					
Hispanic	1 = Hispanic	636	16	534	18
	0 = other	3298	84	2486	82
African American	1 = African American	394	10	398	13
	0 = other	3540	90	2622	87
American Indian	1 = American Indian	98	3	77	3
	0 = other	3836	97	2943	97
Age - Young	1 = 16-23 yrs	1322	34	897	30
	0 = other	2612	66	2123	70
Age - Middle	1 = 24-30 yrs	1398	36	1089	36
	0 = other	2536	64	1931	64
Gender	1 = male	3234	82	2468	82
	0 = female	700	18	552	18
Record of Prior	1 = yes	850	22	842	28
Arrest	0 = no	3084	78	2178	72
OFFENSE CHARACTERISTICS					
# of Charges	1 = 2 or more	1257	32	1053	35
	0 = 1 charge	2677	68	1967	65
Marijuana	1 = poss. marijuana	2402	61	1696	56
	0 = other drug type	1532	39	1324	44
Cocaine	1 = poss. cocaine	756	19	701	23
	0 = other drug type	3178	81	2319	77
Paraphernalia	1 = poss. paraph.	178	5	147	5
	0 = other drug type	3756	95	2813	95
PROCESS INFORMATION					
Booked	1 = defendant booked	2890	74	2370	78
	0 = not booked - other	1044	26	650	22
Booked-Missing	1 = def. booked-missing	553	14	343	11
	0 = not booked - other	3381	86	2677	89
DEPENDENT VARIABLE					
Decisison to Prosecute	1 = prosecutable	3232	82	2478	82
	0 = turndown or further	702	18	542	18
Total		3934	100	3020	100

TABLE D-

CORRELATION COEFFICIENTS FOR THE VARIABLES INCLUDED IN THE DECISION TO DIVERT EQUATION - FULL SAMPLE

	MINORITY STATUS	YOUNG	MIDDLE	GENDER	PRIOR RECORD	# OF CHARGES	MARIJUANA	COCAINE	PARAPHERNALIA	YEAR	BOOKED	BOOKEDM
MINORITY STATUS		.03	-.01	-.05	-.10	.13	-.07	-.21	-.02	-.04	-.07	.01
YOUNG			.45	-.02	-.03	-.03	-.09	.03	-.02	.01	.04	.01
MIDDLE				-.01	-.07	-.01	-.06	.01	-.01	-.002	-.01	.01
GENDER					-.01	.09	-.14	-.05	-.01	.01	-.04	.001
PRIOR RECORD						.002	-.03	-.01	-.001	-.02	-.01	.004
# OF CHARGES							-.18	-.14	-.25	-.02	-.06	-.003
MARIJUANA								.66	.43	.02	.004	-.002
COCAINE									.36	.01	-.05	.002
PARAPHERNALIA										.002	-.03	.01
YEAR											-.05	-.01
BOOKED												.14
BOOKEDM												

TABLE D-7
DESCRIPTIVE STATISTICS AND CODING FOR VARIABLES INCLUDED IN THE DECISION TO DIVERT EQUATION - ESTIMATED SEPARATELY BY YEAR

		YEAR = 0		YEAR = 1	
	CODING	N	%	N	%
DEFENDANT CHARACTERISTICS					
Minority Status	1 = African American, Hispanic, Indian, Asian, Other	904	28	806	32
	0 = Anglo	2338	72	1678	68
Age - Young	1 = 16-23 yrs	1079	33	723	29
	0 = other	2163	67	1761	71
Age - Middle	1 = 24-30 yrs	1153	36	902	36
	0 = other	2089	64	1582	64
Gender	1 = male	2660	82	2026	82
	0 = female	582	18	458	18
Record of Prior	1 = yes	671	21	669	27
Arrest	0 = no	2571	79	1815	73
OFFENSE CHARACTERISTICS					
# of Charges	1 = 2 or more	1067	33	876	35
	0 = 1 charge	2175	67	1608	65
Marijuana	1 = poss. marijuana	2053	63	1448	58
	0 = other drug type	1189	37	1036	42
Cocaine	1 = poss. cocaine	593	18	524	21
	0 = other drug type	2649	82	1960	79
Paraphernalia	1 = poss. paraph.	107	3	109	4
	0 = other drug type	3135	97	2375	96
PROCESS INFORMATION					
Booked	1 = defendant booked	2429	75	1967	79
	0 = not booked - other	813	25	517	21
Booked-Missing	1 = fef. booked-missing	323	10	211	9
	0 = not booked - other	2919	90	2273	91
DEPENDENT VARIABLE					
Decision to Divert to TASC	1 = does divert	2507	77	1657	67
	0 = does not divert	735	23	827	33
Total		3242	100	2484	100

TABLE D-8

CORRELATION COEFFICIENTS FOR THE VARIABLES INCLUDED IN THE DECISION TO DIVERT EQUATION - PROVIDED SEPARATELY BY YEAR *

	MINORITY STATUS	YOUNG	MIDDLE	GENDER	PRIOR RECORD	# OF CHARGES	MARIJUANA	COCAINE	PARAPHERNALIA	BOOKED	BOOKEDM
MINORITY STATUS		-.01	.01	-.03	-.10	.11	-.04	-.20	-.02	-.08	.01
YOUNG	-.04		.44	-.03	-.06	-.04	-.12	.004	-.05	-.04	.01
MIDDLE	-.01	.46		.004	-.10	-.002	-.06	.003	-.03	-.03	.007
GENDER	-.07	-.02	-.01		-.002	.08	-.12	-.04	-.01	-.06	-.002
PRIOR RECORD	-.01	-.02	-.05	-.02		-.005	.01	.01	-.03	-.004	-.04
# OF CHARGES	.14	-.02	.01	.11	.01		-.18	-.11	-.26	-.07	.001
MARIJUANA	-.09	-.05	-.05	-.15	-.04	-.18		.65	.43	-.03	.01
COCAINE	-.22	.05	.02	-.05	-.02	-.16	.67		.36	-.09	-.005
PARAPHERNALIA	-.03	.004	-.004	-.01	-.03	-.25	.42	.37		-.04	.003
BOOKED	-.07	.05	.01	-.02	.02	-.06	.04	-.02	-.02		.11
BOOKEDM	.01	.003	.01	.003	.01	-.003	.01	.01	.01	.17	

* Coefficients to the top and right of the diagonal are for year = 1; coefficients to the bottom and left of the diagonal are for year = 0.

TABLE D-9
DESCRIPTIVE STATISTICS AND CODING FOR VARIABLES INCLUDED IN THE DECISION TO DIVERT EQUATION - ESTIMATED SEPARATELY BY PRIOR RECORD

		YES PRIOR RECORD		NO PRIOR RECORD	
	CODING	N	%	N	%
DEFENDANT CHARACTERISTICS					
Minority Status	1 = African American, Hispanic, Indian, Asian, Other	535	40	1175	27
	0 = Anglo	805	60	3211	73
Age - Young	1 = 16-23 yrs	349	26	1453	33
	0 = other	991	74	2933	67
Age - Middle	1 = 24-30 yrs	549	41	1506	34
	0 = other	791	59	2880	66
Gender	1 = male	1134	85	3552	81
	0 = female	206	15	834	19
OFFENSE CHARACTERISTICS					
# of Charges	1 = 2 or more	489	37	1454	33
	0 = 1 charge	851	63	2932	67
Marijuana	1 = poss. marijuana	734	55	2764	63
	0 = other drug type	606	45	1619	37
Cocaine	1 = poss. cocaine	324	24	793	18
	0 = other drug type	1016	76	3593	82
Paraphernalia	1 = poss. paraph.	70	5	146	3
	0 = other drug type	1270	95	4240	97
PROCESS INFORMATION					
Year of Arrest	1 = 2nd year	669	50	1815	41
	0 = 1st year	671	50	2571	59
Booked	1 = defendant booked	1105	83	3291	75
	0 = not booked - other	235	17	1095	25
Booked-Missing	1 = def. booked-missing	47	4	487	11
	0 = not booked - other	1293	96	3899	89
DEPENDENT VARIABLE					
Decision to Divert to TASC	1 = does divert	685	51	3479	79
	0 = does not divert	655	49	907	21
Total		1340	100	4386	100

TABLE D-10

CORRELATION COEFFICIENTS FOR THE VARIABLES INCLUDED IN THE DECISION TO DIVERT EQUATION - ESTIMATED SEPARATELY BY PRIOR RECORD *

	MINORITY STATUS	YOUNG	MIDDLE	GENDER	# OF CHARGES	MARIJUANA	COCAINE	PARAPHERNALIA	YEAR	BOOKED	BOOKEDM
MINORITY STATUS		-.05	-.002	-.05	.14	-.07	-.23	-.03	-.05	-.07	.01
YOUNG	.01		.43	-.003	-.03	-.09	.04	-.03	.02	.05	.004
MIDDLE	.004	.50		.01	.02	-.05	.02	-.01	.01	-.002	.01
GENDER	-.04	-.07	-.04		.08	-.14	.05	-.01	.01	-.06	.001
# OF CHARGES	.11	-.03	-.03	.12		-.19	-.13	-.25	-.01	-.06	.003
MARIJUANA	-.07	-.09	-.08	-.15	-.16		.64	.43	.004	-.02	-.005
COCAINE	-.18	-.01	-.01	-.04	-.15	.68		.36	-.004	-.06	.002
PARAPHERNALIA	-.01	-.02	-.03	-.02	-.26	.44	.39		-.02	-.03	.003
YEAR	-.02	-.01	-.03	.02	-.04	.06	.04	.05		-.02	-.005
BOOKED	-.08	.02	-.03	.01	-.05	.07	-.03	-.03	-.10		.09
BOOKEDM	.01	.003	.01	-.003	-.02	.01	-.000	.01	-.04	.22	

* Coefficients to the top and right of the diagonal are for prior record = 1; coefficients to the bottom and left are for prior record = 0.

TABLE D-11
DESCRIPTIVE STATISTICS AND CODING FOR VARIABLES INCLUDED IN THE DECISION TO DIVERT EQUATION - DISAGGREGATED MINORITY STATUS VARIABLES - FULL SAMPLE

	CODING	N	%
DEFENDANT CHARACTERISTICS			
Hispanic	1 = Hispanic	932	16
	0 = other	4778	84
African American	1 = African American	606	11
	0 = other	5104	89
American Indian	1 = American Indian	156	3
	0 = other	5554	97
Age - Young	1 = 16-23 yrs	1794	31
	0 = other	3916	69
Age - Middle	1 = 24-30 yrs	2051	36
	0 = other	3659	64
Gender	1 = male	4672	82
	0 = female	1038	18
Record of Prior	1 = yes	1339	24
Arrest	0 = no	4371	76
OFFENSE CHARACTERISTICS			
# of Charges	1 = 2 or more	1936	34
	0 = 1 charge	3774	66
Marijuana	1 = poss. marijuana	3492	61
	0 = other drug type	2218	38
Cocaine	1 = poss. cocaine	1113	20
	0 = other drug type	4597	80
Paraphernalia	1 = poss. paraph.	216	4
	0 = other drug type	5494	96
PROCESS INFORMATION			
Year of Arrest	1 = 2nd year	2478	43
	0 = 1st year	3232	57
Booked	1 = defendant booked	4381	77
	0 = not booked - other	1329	23
Booked-Missing	1 = def. booked-missing	534	9
	0 = not booked - other	5176	91
DEPENDENT VARIABLE			
Decision to Divert	1 = does divert	4150	73
to TASC	0 = does not divert	1560	27
Total		5710	100

TABLE D-12
DESCRIPTIVE STATISTICS AND CODING FOR VARIABLES INCLUDED IN THE DECISION TO DIVERT EQUATION - ESTIMATED SEPARATELY BY YEAR - DISAGGREGATED MINORITY STATUS

		YEAR = 0		YEAR = 1	
	CODING	N	%	N	%
DEFENDANT CHARACTERISTICS					
Hispanic	1 = Hispanic	500	16	432	17
	0 = other	2732	84	2046	83
African American	1 = African American	309	10	297	12
	0 = other	2923	90	2181	88
American Indian	1 = American Indian	85	3	71	3
	0 = other	3147	97	2407	97
Age - Young	1 = 16-23 yrs	1074	33	720	29
	0 = other	2158	67	1758	71
Age - Middle	1 = 24-30 yrs	1149	36	902	36
	0 = other	2083	64	1576	64
Gender	1 = male	2652	82	2020	82
	0 = female	580	18	458	18
Record of Prior	1 = yes	671	21	668	27
Arrest	0 = no	2561	79	1810	73
OFFENSE CHARACTERISTICS					
# of Charges	1 = 2 or more	1063	33	873	35
	0 = 1 charge	2169	67	1605	65
Marijuana	1 = poss. marijuana	2047	63	1445	58
	0 = other drug type	1185	37	1033	42
Cocaine	1 = poss. cocaine	591	18	522	21
	0 = other drug type	2641	82	1956	79
Paraphernalia	1 = poss. paraph.	107	3	109	4
	0 = other drug type	3125	97	2369	96
PROCESS INFORMATION					
Booked	1 = defendant booked	2420	75	1961	79
	0 = not booked - other	812	25	517	21
Booked-Missing	1 = fef. booked-missing	323	10	211	9
	0 = not booked - other	2909	90	2267	91
DEPENDENT VARIABLE					
Decision to Divert	1 = does divert	2499	77	1651	67
to TASC	0 = does not divert	733	23	827	33
Total		3232	100	2478	100

TABLE D-13
DESCRIPTIVE STATISTICS AND CODING FOR VARIABLES INCLUDED IN THE DECISION TO DIVERT EQUATION - ESTIMATED SEPARATELY BY PRIOR RECORD - DISAGGREGATED MINORITY STATUS

		YES PRIOR RECORD		NO PRIOR RECORD	
	CODING	N	%	N	%
DEFENDANT CHARACTERISTICS					
Hispanic	1 = Hispanic	643	15	289	22
	0 = other	3728	85	1050	78
African American	1 = African American	397	9	209	16
	0 = other	3974	91	1130	84
American Indian	1 = American Indian	120	3	36	3
	0 = other	4251	97	1303	97
Age - Young	1 = 16-23 yrs	1446	33	348	26
	0 = other	2925	67	991	74
Age - Middle	1 = 24-30 yrs	1502	34	549	41
	0 = other	2869	66	790	59
Gender	1 = male	3539	81	1133	85
	0 = female	832	19	206	15
OFFENSE CHARACTERISTICS					
# of Charges	1 = 2 or more	1448	33	488	36
	0 = 1 charge	2923	67	851	64
Marijuana	1 = poss. marijuana	2759	63	733	55
	0 = other drug type	1612	37	606	45
Cocaine	1 = poss. cocaine	789	18	324	24
	0 = other drug type	3582	82	1015	76
Paraphernalia	1 = poss. paraph.	146	3	70	5
	0 = other drug type	4225	97	1269	95
PROCESS INFORMATION					
Year of Arrest	1 = 2nd year	1810	41	668	50
	0 = 1st year	2561	59	671	50
Booked	1 = defendant booked	3277	75	1104	85
	0 = not booked - other	1094	25	235	18
Booked-Missing	1 = def. booked-missing	487	11	47	3
	0 = not booked - other	3884	89	1292	97
DEPENDENT VARIABLE					
Decision to Divert	1 = does divert	3466	79	684	51
to TASC	0 = does not divert	905	23	655	49
Total		4371	100	1339	100

APPENDIX E

RECIDIVISM, SUPPLEMENTAL TABLES

TABLE E-1 LIFETIME FOR RECIDIVISM - ARIZONA

LIFE TABLE SURVIVAL ESTIMATES

INTERVAL	MIDPOINT	EVENTS	WITHDRAWALS	EFFECTIVE SIZE	CONDITIONAL PROBABILITY	PROBABILITY STD ERROR	SURVIVAL	FAILURE
0	15	162	0	6995.0	0.02316	0.00180	1.0000	0.0000
30	45	165	0	6833.0	0.02415	0.00186	0.9768	0.0232
60	75	135	172	6582.0	0.02051	0.00175	0.9533	0.0467
90	105	139	167	6277.5	0.02214	0.00186	0.9337	0.0663
120	135	110	241	5934.5	0.01854	0.00175	0.9130	0.0870
150	165	103	204	5602.0	0.01839	0.00179	0.8961	0.1039
180	195	92	194	5300.0	0.01736	0.00179	0.8796	0.1204
210	225	84	163	5029.5	0.01670	0.00181	0.8644	0.1356
240	255	65	180	4774.0	0.01362	0.00168	0.8499	0.1501
270	285	71	193	4522.5	0.01570	0.00185	0.8383	0.1617
300	315	50	189	4260.5	0.01174	0.00165	0.8252	0.1748
330	345	29	214	4009.0	0.00723	0.00134	0.8155	0.1845
360	375	42	270	3738.0	0.01124	0.00172	0.8096	0.1904
390	405	43	309	3406.5	0.01262	0.00191	0.8005	0.1995
420	435	32	291	3063.5	0.01045	0.00184	0.7904	0.2096
450	465	21	217	2777.5	0.00756	0.00164	0.7821	0.2179
480	495	20	301	2497.5	0.00801	0.00178	0.7762	0.2238
510	525	18	227	2213.5	0.00813	0.00191	0.7700	0.2300
540	555	17	223	1970.5	0.00863	0.00208	0.7638	0.2362
570	585	14	224	1730.0	0.00809	0.00215	0.7572	0.2428
600	615	7	213	1497.5	0.00467	0.00176	0.7510	0.2490
630	645	8	193	1287.5	0.00621	0.00219	0.7475	0.2525
660	675	4	220	1073.0	0.00373	0.00186	0.7429	0.2571
690	705	6	247	835.5	0.00718	0.00292	0.7401	0.2599
720	735	3	296	558.0	0.00538	0.00310	0.7348	0.2652
750	765	1	268	273.0	0.00366	0.00366	0.7308	0.2692
780	795	2	135	70.5	0.02837	0.01977	0.7282	0.2718
810	.	1	0	1.0	1.00000	.	0.7075	0.2925

		SURVIVAL STD ERROR	PDF	PDF STD ERROR	HAZARD	HAZARD STD ERROR	CONDITIONAL MEDIAN	MEDIAN STD ERROR
0	15	0.0000	7.7E-04	6.0E-05	7.8E-04	6.1E-05	.	.
30	45	0.0018	7.9E-04	6.0E-05	8.1E-04	6.3E-05	.	.
60	75	0.0025	6.5E-04	5.6E-05	6.9E-04	5.9E-05	.	.
90	105	0.0030	6.9E-04	5.8E-05	7.5E-04	6.3E-05	.	.
120	135	0.0034	5.6E-04	5.3E-05	6.2E-04	5.9E-05	.	.
150	165	0.0037	5.5E-04	5.4E-05	6.2E-04	6.1E-05	.	.
180	195	0.0040	5.1E-04	5.3E-05	5.8E-04	6.1E-05	.	.
210	225	0.0042	4.8E-04	5.2E-05	5.6E-04	6.1E-05	.	.
240	255	0.0044	3.9E-04	4.8E-05	4.6E-04	5.7E-05	.	.
270	285	0.0046	4.4E-04	5.2E-05	5.3E-04	6.3E-05	.	.
300	315	0.0048	3.2E-04	4.5E-05	3.9E-04	5.6E-05	.	.
330	345	0.0049	2.0E-04	3.6E-05	2.4E-04	4.5E-05	.	.
360	375	0.0050	3.0E-04	4.7E-05	3.8E-04	5.8E-05	.	.
390	405	0.0051	3.4E-04	5.1E-05	4.2E-04	6.5E-05	.	.
420	435	0.0053	2.8E-04	4.8E-05	3.5E-04	6.2E-05	.	.
450	465	0.0054	2.0E-04	4.3E-05	2.5E-04	5.5E-05	.	.
480	495	0.0055	2.1E-04	4.6E-05	2.7E-04	6.0E-05	.	.
510	525	0.0057	2.1E-04	4.9E-05	2.7E-04	6.4E-05	.	.
540	555	0.0058	2.2E-04	5.3E-05	2.9E-04	7.0E-05	.	.
570	585	0.0060	2.0E-04	5.4E-05	2.7E-04	7.2E-05	.	.

		SURVIVAL STD ERROR	PDF	PDF STD ERROR	HAZARD	HAZARD STD ERROR	CONDITIONAL MEDIAN	MED STD ERROR
600	615	0.0062	1.2E-04	4.4E-05	1.6E-04	5.9E-05	.	.
630	645	0.0063	1.5E-04	5.5E-05	2.1E-04	7.3E-05	.	.
660	675	0.0064	9.2E-05	4.6E-05	1.2E-04	6.2E-05	.	.
690	705	0.0066	1.8E-04	7.2E-05	2.4E-04	9.8E-05	.	.
720	735	0.0069	1.3E-04	7.6E-05	1.8E-04	1.0E-04	.	.
750	765	0.0072	8.9E-05	8.9E-05	1.2E-04	1.2E-04	.	.
780	795	0.0077	6.9E-04	4.8E-04	9.6E-04	6.8E-04	.	.
810	.	0.0162	.	.	.	.	.	.

EVENTS	CENSORED	TOTAL	%CENSORED
1444	5551	6995	79.3567

NOTE: THERE WERE 17 OBSERVATIONS WITH MISSING VALUES.

LIFETIME FOR RECIDIVISM - ARIZONA

LIFE TABLE SURVIVAL ESTIMATES
EXPOSED=1

INTERVAL	MIDPOINT	EVENTS	WITHDRAWALS	EFFECTIVE SIZE	CONDITIONAL PROBABILITY	PROBABILITY STD ERROR	SURVIVAL	FAILURE
0	15	10	0	1452.0	0.00689	0.00217	1.0000	0.0000
30	45	10	0	1442.0	0.00693	0.00219	0.9931	0.0069
60	75	7	28	1418.0	0.00494	0.00186	0.9862	0.0138
90	105	12	41	1376.5	0.00872	0.00251	0.9814	0.0186
120	135	7	48	1320.0	0.00530	0.00200	0.9728	0.0272
150	165	14	36	1271.0	0.01101	0.00293	0.9676	0.0324
180	195	5	47	1215.5	0.00411	0.00184	0.9570	0.0430
210	225	10	43	1165.5	0.00858	0.00270	0.9530	0.0470
240	255	9	36	1116.0	0.00806	0.00268	0.9449	0.0551
270	285	10	37	1070.5	0.00934	0.00294	0.9373	0.0627
300	315	7	52	1016.0	0.00689	0.00260	0.9285	0.0715
330	345	3	48	959.0	0.00313	0.00180	0.9221	0.0779
360	375	6	66	899.0	0.00667	0.00272	0.9192	0.0808
390	405	8	81	819.5	0.00976	0.00343	0.9131	0.0869
420	435	7	62	740.0	0.00946	0.00356	0.9042	0.0958
450	465	2	59	672.5	0.00297	0.00210	0.8956	0.1044
480	495	2	71	605.5	0.00330	0.00233	0.8929	0.1071
510	525	2	55	540.5	0.00370	0.00261	0.8900	0.1100
540	555	1	55	483.5	0.00207	0.00207	0.8867	0.1133
570	585	3	54	428.0	0.00701	0.00403	0.8849	0.1151
600	615	1	62	367.0	0.00272	0.00272	0.8787	0.1213
630	645	0	45	312.5	0.00000	.	0.8763	0.1237
660	675	1	61	259.5	0.00385	0.00385	0.8763	0.1237
690	705	0	66	195.0	0.00000	.	0.8729	0.1271
720	735	0	66	129.0	0.00000	.	0.8729	0.1271
750	765	0	55	68.5	0.00000	.	0.8729	0.1271
780	795	1	39	21.5	0.04651	0.04542	0.8729	0.1271
810	.	1	0	1.0	1.00000	.	0.8323	0.1677

		SURVIVAL STD ERROR	PDF	PDF STD ERROR	HAZARD	HAZARD STD ERROR	CONDITIONAL MEDIAN	MEDIAN STD ERROR
0	15	0.0000	2.3E-04	7.2E-05	2.3E-04	7.3E-05	.	.
30	45	0.0022	2.3E-04	7.2E-05	2.3E-04	7.3E-05	.	.
60	75	0.0031	1.6E-04	6.1E-05	1.6E-04	6.2E-05	.	.
90	105	0.0036	2.9E-04	8.2E-05	2.9E-04	8.4E-05	.	.
120	135	0.0043	1.7E-04	6.5E-05	1.8E-04	6.7E-05	.	.
150	165	0.0047	3.6E-04	9.4E-05	3.7E-04	9.9E-05	.	.
180	195	0.0054	1.3E-04	5.9E-05	1.4E-04	6.1E-05	.	.
210	225	0.0057	2.7E-04	8.6E-05	2.9E-04	9.1E-05	.	.
240	255	0.0062	2.5E-04	8.4E-05	2.7E-04	9.0E-05	.	.
270	285	0.0067	2.9E-04	9.2E-05	3.1E-04	9.9E-05	.	.
300	315	0.0071	2.1E-04	8.0E-05	2.3E-04	8.7E-05	.	.
330	345	0.0075	9.6E-05	5.5E-05	1.0E-04	6.0E-05	.	.
360	375	0.0077	2.0E-04	8.3E-05	2.2E-04	9.1E-05	.	.
390	405	0.0080	3.0E-04	1.0E-04	3.3E-04	1.2E-04	.	.
420	435	0.0085	2.9E-04	1.1E-04	3.2E-04	1.2E-04	.	.
450	465	0.0090	8.9E-05	6.3E-05	9.9E-05	7.0E-05	.	.
480	495	0.0092	9.8E-05	6.9E-05	1.1E-04	7.8E-05	.	.
510	525	0.0094	1.1E-04	7.7E-05	1.2E-04	8.7E-05	.	.
540	555	0.0097	6.1E-05	6.1E-05	6.9E-05	6.9E-05	.	.

		SURVIVAL STD ERROR	PDF	PDF STD ERROR	HAZARD	HAZARD STD ERROR	CONDITIONAL MEDIAN	MEDIAN STD ERROR
570	585	0.0098	2.1E-04	1.2E-04	2.3E-04	1.4E-04	.	.
600	615	0.0104	8.0E-05	8.0E-05	9.1E-05	9.1E-05	.	.
630	645	0.0106	0	.	0	.	.	.
660	675	0.0106	1.1E-04	1.1E-04	1.3E-04	1.3E-04	.	.
690	705	0.0111	0	.	0	.	.	.
720	735	0.0111	0	.	0	.	.	.
750	765	0.0111	0	.	0	.	.	.
780	795	0.0111	.0013533	.0013216	.0015873	.0015869	.	.
810	.	0.0410	.	.	.	.	.	.

EVENTS	CENSORED	TOTAL	%CENSORED	STRATA
588	2121	2709	78.2946	0
139	1313	1452	90.4270	1
727	3434	4161	82.5282	TOTAL

NOTE: THERE WERE 2851 OBSERVATIONS WITH MISSING VALUES.

LIFE TABLE SURVIVAL ESTIMATES
EXPOSED=0

INTERVAL	MIDPOINT	EVENTS	WITHDRAWALS	EFFECTIVE SIZE	CONDITIONAL PROBABILITY	PROBABILITY STD ERROR	SURVIVAL	FAILURE
0	15	43	0	2709.0	0.01587	0.00240	1.0000	0.0000
30	45	69	0	2666.0	0.02588	0.00308	0.9841	0.0159
60	75	54	45	2574.5	0.02097	0.00282	0.9587	0.0413
90	105	56	48	2474.0	0.02264	0.00299	0.9385	0.0615
120	135	41	73	2357.5	0.01739	0.00269	0.9173	0.0827
150	165	43	66	2247.0	0.01914	0.00289	0.9014	0.0986
180	195	45	70	2136.0	0.02107	0.00311	0.8841	0.1159
210	225	38	53	2029.5	0.01872	0.00301	0.8655	0.1345
240	255	29	67	1931.5	0.01501	0.00277	0.8493	0.1507
270	285	24	60	1839.0	0.01305	0.00265	0.8365	0.1635
300	315	23	65	1752.5	0.01312	0.00272	0.8256	0.1744
330	345	15	82	1656.0	0.00906	0.00233	0.8148	0.1852
360	375	19	111	1544.5	0.01230	0.00280	0.8074	0.1926
390	405	19	113	1413.5	0.01344	0.00306	0.7975	0.2025
420	435	10	115	1280.5	0.00781	0.00246	0.7867	0.2133
450	465	9	84	1171.0	0.00769	0.00255	0.7806	0.2194
480	495	10	140	1050.0	0.00952	0.00300	0.7746	0.2254
510	525	11	87	926.5	0.01187	0.00356	0.7672	0.2328
540	555	10	83	830.5	0.01204	0.00378	0.7581	0.2419
570	585	5	103	727.5	0.00687	0.00306	0.7490	0.2510
600	615	3	83	629.5	0.00477	0.00274	0.7438	0.2562
630	645	4	80	545.0	0.00734	0.00366	0.7403	0.2597
660	675	1	88	457.0	0.00219	0.00219	0.7349	0.2651
690	705	3	104	360.0	0.00833	0.00479	0.7332	0.2668
720	735	2	134	238.0	0.00840	0.00592	0.7271	0.2729
750	765	1	107	115.5	0.00866	0.00862	0.7210	0.2790
780	.	1	60	31.0	0.03226	0.03173	0.7148	0.2852

		SURVIVAL STD ERROR	PDF	PDF STD ERROR	HAZARD	HAZARD STD ERROR	CONDITIONAL MEDIAN	MEDIAN STD ERROR
0	15	0.0000	5.3E-04	8.0E-05	5.3E-04	8.1E-05	.	.
30	45	0.0024	8.5E-04	1.0E-04	8.7E-04	1.1E-04	.	.
60	75	0.0038	6.7E-04	9.0E-05	7.1E-04	9.6E-05	.	.
90	105	0.0046	7.1E-04	9.4E-05	7.6E-04	1.0E-04	.	.
120	135	0.0053	5.3E-04	8.2E-05	5.8E-04	9.1E-05	.	.
150	165	0.0058	5.7E-04	8.7E-05	6.4E-04	9.8E-05	.	.
180	195	0.0062	6.2E-04	9.2E-05	7.1E-04	1.1E-04	.	.
210	225	0.0067	5.4E-04	8.7E-05	6.3E-04	1.0E-04	.	.
240	255	0.0071	4.3E-04	7.8E-05	5.0E-04	9.4E-05	.	.
270	285	0.0073	3.6E-04	7.4E-05	4.4E-04	8.9E-05	.	.
300	315	0.0076	3.6E-04	7.5E-05	4.4E-04	9.2E-05	.	.
330	345	0.0078	2.5E-04	6.3E-05	3.0E-04	7.8E-05	.	.
360	375	0.0080	3.3E-04	7.6E-05	4.1E-04	9.5E-05	.	.
390	405	0.0082	3.6E-04	8.2E-05	4.5E-04	1.0E-04	.	.
420	435	0.0084	2.0E-04	6.5E-05	2.6E-04	8.3E-05	.	.
450	465	0.0086	2.0E-04	6.6E-05	2.6E-04	8.6E-05	.	.
480	495	0.0088	2.5E-04	7.7E-05	3.2E-04	1.0E-04	.	.
510	525	0.0090	3.0E-04	9.1E-05	4.0E-04	1.2E-04	.	.
540	555	0.0093	3.0E-04	9.6E-05	4.0E-04	1.3E-04	.	.
570	585	0.0096	1.7E-04	7.7E-05	2.3E-04	1.0E-04	.	.

		SURVIVAL STD ERROR	PDF	PDF STD ERROR	HAZARD	HAZARD STD ERROR	CONDITIONAL MEDIAN	MEDIAN STD ERROR
600	615	0.0098	1.2E-04	6.8E-05	1.6E-04	9.2E-05	.	.
630	645	0.0100	1.8E-04	9.0E-05	2.5E-04	1.2E-04	.	.
660	675	0.0103	5.4E-05	5.4E-05	7.3E-05	7.3E-05	.	.
690	705	0.0104	2.0E-04	1.2E-04	2.8E-04	1.6E-04	.	.
720	735	0.0109	2.0E-04	1.4E-04	2.8E-04	2.0E-04	.	.
750	765	0.0116	2.1E-04	2.1E-04	2.9E-04	2.9E-04	.	.
780	.	0.0131	7.7E-04	7.6E-04	.0010929	.0010927	.	.

LIFETIME FOR RECIDIVISM - ARIZONA

LIFE TABLE SURVIVAL ESTIMATES
TASCSUC=1

INTERVAL	MIDPOINT	EVENTS	WITHDRAWALS	EFFECTIVE SIZE	CONDITIONAL PROBABILITY	PROBABILITY STD ERROR	SURVIVAL	FAILURE
0	15	5	0	859.0	0.00582	0.00260	1.0000	0.0000
30	45	5	0	854.0	0.00585	0.00261	0.9942	0.0058
60	75	3	0	849.0	0.00353	0.00204	0.9884	0.0116
90	105	6	1	845.5	0.00710	0.00289	0.9849	0.0151
120	135	3	5	836.5	0.00359	0.00207	0.9779	0.0221
150	165	3	6	828.0	0.00362	0.00209	0.9744	0.0256
180	195	1	7	818.5	0.00122	0.00122	0.9708	0.0292
210	225	7	10	809.0	0.00865	0.00326	0.9697	0.0303
240	255	4	9	792.5	0.00505	0.00252	0.9613	0.0387
270	285	5	16	776.0	0.00644	0.00287	0.9564	0.0436
300	315	1	28	749.0	0.00134	0.00133	0.9502	0.0498
330	345	0	32	718.0	0.00000	.	0.9490	0.0510
360	375	2	47	678.5	0.00295	0.00208	0.9490	0.0510
390	405	4	53	626.5	0.00638	0.00318	0.9462	0.0538
420	435	5	43	574.5	0.00870	0.00388	0.9401	0.0599
450	465	1	46	525.0	0.00190	0.00190	0.9320	0.0680
480	495	1	50	476.0	0.00210	0.00210	0.9302	0.0698
510	525	1	43	428.5	0.00233	0.00233	0.9282	0.0718
540	555	0	42	385.0	0.00000	.	0.9261	0.0739
570	585	1	44	342.0	0.00292	0.00292	0.9261	0.0739
600	615	1	52	293.0	0.00341	0.00341	0.9234	0.0766
630	645	0	35	248.5	0.00000	.	0.9202	0.0798
660	675	1	51	205.5	0.00487	0.00485	0.9202	0.0798
690	705	0	54	152.0	0.00000	.	0.9157	0.0843
720	735	0	47	101.5	0.00000	.	0.9157	0.0843
750	765	0	43	56.5	0.00000	.	0.9157	0.0843
780	795	0	34	18.0	0.00000	.	0.9157	0.0843
810	.	1	0	1.0	1.00000	.	0.9157	0.0843

		SURVIVAL STD ERROR	PDF	PDF STD ERROR	HAZARD	HAZARD STD ERROR	CONDITIONAL MEDIAN	MEDIAN STD ERROR
0	15	0.0000	1.9E-04	8.7E-05	1.9E-04	8.7E-05	.	.
30	45	0.0026	1.9E-04	8.7E-05	2.0E-04	8.8E-05	.	.
60	75	0.0037	1.2E-04	6.7E-05	1.2E-04	6.8E-05	.	.
90	105	0.0042	2.3E-04	9.5E-05	2.4E-04	9.7E-05	.	.
120	135	0.0050	1.2E-04	6.7E-05	1.2E-04	6.9E-05	.	.
150	165	0.0054	1.2E-04	6.8E-05	1.2E-04	7.0E-05	.	.
180	195	0.0057	4.0E-05	4.0E-05	4.1E-05	4.1E-05	.	.
210	225	0.0059	2.8E-04	1.1E-04	2.9E-04	1.1E-04	.	.
240	255	0.0066	1.6E-04	8.1E-05	1.7E-04	8.4E-05	.	.
270	285	0.0070	2.1E-04	9.2E-05	2.2E-04	9.6E-05	.	.
300	315	0.0075	4.2E-05	4.2E-05	4.5E-05	4.5E-05	.	.
330	345	0.0076	0	.	0	.	.	.
360	375	0.0076	9.3E-05	6.6E-05	9.8E-05	7.0E-05	.	.
390	405	0.0078	2.0E-04	1.0E-04	2.1E-04	1.1E-04	.	.
420	435	0.0083	2.7E-04	1.2E-04	2.9E-04	1.3E-04	.	.
450	465	0.0090	5.9E-05	5.9E-05	6.4E-05	6.4E-05	.	.
480	495	0.0092	6.5E-05	6.5E-05	7.0E-05	7.0E-05	.	.
510	525	0.0094	7.2E-05	7.2E-05	7.8E-05	7.8E-05	.	.
540	555	0.0096	0	.	0	.	.	.

LIFE TABLE SURVIVAL ESTIMATES
TASCSUC=0

INTERVAL	MIDPOINT	EVENTS	WITHDRAWALS	EFFECTIVE SIZE	CONDITIONAL PROBABILITY	PROBABILITY STD ERROR	SURVIVAL	FAILURE
0	15	4	0	289.0	0.01384	0.00687	1.0000	0.0000
30	45	3	0	285.0	0.01053	0.00605	0.9862	0.0138
60	75	1	0	282.0	0.00355	0.00354	0.9758	0.0242
90	105	4	0	281.0	0.01423	0.00707	0.9723	0.0277
120	135	2	3	275.5	0.00726	0.00511	0.9585	0.0415
150	165	9	2	271.0	0.03321	0.01088	0.9515	0.0485
180	195	2	9	256.5	0.00780	0.00549	0.9199	0.0801
210	225	3	5	247.5	0.01212	0.00696	0.9127	0.0873
240	255	3	9	237.5	0.01263	0.00725	0.9017	0.0983
270	285	5	11	224.5	0.02227	0.00985	0.8903	0.1097
300	315	5	14	207.0	0.02415	0.01067	0.8705	0.1295
330	345	3	8	191.0	0.01571	0.00900	0.8494	0.1506
360	375	4	11	178.5	0.02241	0.01108	0.8361	0.1639
390	405	4	17	160.5	0.02492	0.01230	0.8174	0.1826
420	435	2	12	142.0	0.01408	0.00989	0.7970	0.2030
450	465	1	7	130.5	0.00766	0.00763	0.7858	0.2142
480	495	1	19	116.5	0.00858	0.00855	0.7797	0.2203
510	525	1	9	101.5	0.00985	0.00980	0.7731	0.2269
540	555	1	12	90.0	0.01111	0.01105	0.7654	0.2346
570	585	2	9	78.5	0.02548	0.01778	0.7569	0.2431
600	615	0	8	68.0	0.00000	.	0.7376	0.2624
630	645	0	9	59.5	0.00000	.	0.7376	0.2624
660	675	0	8	51.0	0.00000	.	0.7376	0.2624
690	705	0	12	41.0	0.00000	.	0.7376	0.2624
720	735	0	17	26.5	0.00000	.	0.7376	0.2624
750	765	0	12	12.0	0.00000	.	0.7376	0.2624
780	.	1	5	3.5	0.28571	0.24147	0.7376	0.2624

		SURVIVAL STD ERROR	PDF	PDF STD ERROR	HAZARD	HAZARD STD ERROR	CONDITIONAL MEDIAN	MEDIAN STD ERROR
0	15	0.0000	4.6E-04	2.3E-04	4.6E-04	2.3E-04	.	.
30	45	0.0069	3.5E-04	2.0E-04	3.5E-04	2.0E-04	.	.
60	75	0.0090	1.2E-04	1.2E-04	1.2E-04	1.2E-04	.	.
90	105	0.0097	4.6E-04	2.3E-04	4.8E-04	2.4E-04	.	.
120	135	0.0117	2.3E-04	1.6E-04	2.4E-04	1.7E-04	.	.
150	165	0.0126	.0010533	3.5E-04	.0011257	3.8E-04	.	.
180	195	0.0160	2.4E-04	1.7E-04	2.6E-04	1.8E-04	.	.
210	225	0.0167	3.7E-04	2.1E-04	4.1E-04	2.3E-04	.	.
240	255	0.0177	3.8E-04	2.2E-04	4.2E-04	2.4E-04	.	.
270	285	0.0186	6.6E-04	2.9E-04	7.5E-04	3.4E-04	.	.
300	315	0.0202	7.0E-04	3.1E-04	8.1E-04	3.6E-04	.	.
330	345	0.0218	4.4E-04	2.5E-04	5.3E-04	3.0E-04	.	.
360	375	0.0228	6.2E-04	3.1E-04	7.6E-04	3.8E-04	.	.
390	405	0.0241	6.8E-04	3.4E-04	8.4E-04	4.2E-04	.	.
420	435	0.0256	3.7E-04	2.6E-04	4.7E-04	3.3E-04	.	.
450	465	0.0264	2.0E-04	2.0E-04	2.6E-04	2.6E-04	.	.
480	495	0.0269	2.2E-04	2.2E-04	2.9E-04	2.9E-04	.	.
510	525	0.0275	2.5E-04	2.5E-04	3.3E-04	3.3E-04	.	.
540	555	0.0282	2.8E-04	2.8E-04	3.7E-04	3.7E-04	.	.
570	585	0.0292	6.4E-04	4.5E-04	8.6E-04	6.1E-04	.	.

		SURVIVAL STD ERROR	PDF	PDF STD ERROR	HAZARD	HAZARD STD ERROR	CONDITIONAL MEDIAN	MEDIA STD ERRO
570	585	0.0096	9.0E-05	9.0E-05	9.8E-05	9.8E-05	.	.
600	615	0.0099	1.1E-04	1.0E-04	1.1E-04	1.1E-04	.	.
630	645	0.0104	0	.	0	.	.	.
660	675	0.0104	1.5E-04	1.5E-04	1.6E-04	1.6E-04	.	.
690	705	0.0113	0	.	0	.	.	.
720	735	0.0113	0	.	0	.	.	.
750	765	0.0113	0	.	0	.	.	.
780	795	0.0113	0	.	0	.	.	.
810	.	0.0113	.	.	.	.	.	.

EVENTS	CENSORED	TOTAL	%CENSORED	STRATA
61	228	289	78.8927	0
61	798	859	92.8987	1
122	1026	1148	89.3728	TOTAL

NOTE: THERE WERE 5864 OBSERVATIONS WITH MISSING VALUES.

		SURVIVAL STD ERROR	PDF	PDF STD ERROR	HAZARD	HAZARD STD ERROR	CONDITIONAL MEDIAN	MEDIAN STD ERROR
600	615	0.0315	0	.	0	.	.	.
630	645	0.0315	0	.	0	.	.	.
660	675	0.0315	0	.	0	.	.	.
690	705	0.0315	0	.	0	.	.	.
720	735	0.0315	0	.	0	.	.	.
750	765	0.0315	0	.	0	.	.	.
780	.	0.0315	.0070252	.0059449	0.0111	0.0110	.	.